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## Academic Calendar

Columbia University reserves the right to revise or amend this academic calendar, in whole or in part, at any time. Registration and Change of Program period are tentative, and students should read all messages from the Registrar's Office or consult their advising dean in the Berick Center for Student Advising to confirm up-to-date deadlines. Updated calendar information is also available from the Registrar.

### Summer Registration Dates for Fall 2021

<table>
<thead>
<tr>
<th>Date</th>
<th>Events</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 7–11</td>
<td>Monday–Friday. Online registration for Fall 2021 via SSOL appointment: continuing students only.</td>
</tr>
<tr>
<td>14–18</td>
<td>Monday–Friday. Online registration for Fall 2021 via SSOL appointment: continuing students only.</td>
</tr>
<tr>
<td>July 26–30</td>
<td>Monday–Friday. Online registration for Fall 2021 via SSOL appointment: continuing students only.</td>
</tr>
<tr>
<td>August 2–6</td>
<td>Monday–Friday. Online registration for Fall 2021 via SSOL appointment: continuing students only.</td>
</tr>
<tr>
<td>24–26</td>
<td>Tuesday–Thursday. Online registration for Fall 2021 via SSOL appointment: continuing students only.</td>
</tr>
</tbody>
</table>

### Fall Term 2021

<table>
<thead>
<tr>
<th>Date</th>
<th>Events</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 2</td>
<td>Monday. Last day for new students entering in Fall 2021 to submit vaccination documentation for measles, mumps, and rubella and COVID-19 and to certify meningitis decision via the Columbia Health Patient Portal (secure.health.columbia.edu). Vaccination documentation is due 30 days prior to registration; students are not permitted to register for classes without this documentation.</td>
</tr>
<tr>
<td>30</td>
<td>Monday. New Student Orientation Program begins for new students entering in Fall 2021.</td>
</tr>
<tr>
<td>September 1</td>
<td>Wednesday. Last day to apply or reapply for the B.A. degree to be awarded in October 2021. Applications received after this date are automatically applied to the next conferral date.</td>
</tr>
<tr>
<td>3–4</td>
<td>Friday–Saturday. Fall 2021 online registration for first-year students via SSOL appointment.</td>
</tr>
<tr>
<td>4</td>
<td>Saturday. Fall 2021 online registration for continuing and transfer students via SSOL appointment.</td>
</tr>
<tr>
<td>8</td>
<td>Wednesday. Last day for new Fall 2021 students to submit Student Health History form using the Columbia Health Portal.</td>
</tr>
<tr>
<td>9</td>
<td>Thursday. Classes begin (on a Thursday schedule) for the 268th academic year.</td>
</tr>
<tr>
<td>9–21</td>
<td>Weekdays only. Fall 2021 Change of Program period by online appointment via SSOL; all students.</td>
</tr>
<tr>
<td>10; 13</td>
<td>Friday; Monday. Deferred examination dates.</td>
</tr>
<tr>
<td>16</td>
<td>Thursday. Soft deadline to submit a request for a waiver (domestic students) or exception (international students) from the Columbia Student Health Insurance Plan.</td>
</tr>
<tr>
<td>21</td>
<td>Tuesday. End of Change of Program period. Students must be registered for a minimum of 12 points. Last day to add courses. Last day to drop a Core Curriculum course. Last day to uncover grade for Spring or Summer 2021 course taken Pass/D/Fail.</td>
</tr>
<tr>
<td>21–October 8</td>
<td>Weekdays only. Post Change of Program Add/Drop period by online appointment via SSOL.</td>
</tr>
<tr>
<td>30</td>
<td>Thursday. Last day to confirm, enroll dependents, or request a waiver (domestic students only) from the Columbia Student Health Insurance Plan.</td>
</tr>
<tr>
<td>October 12</td>
<td>Tuesday. Last day for students to drop Fall courses via SSOL.</td>
</tr>
<tr>
<td>20</td>
<td>Wednesday. Award of October degrees.</td>
</tr>
<tr>
<td>21</td>
<td>Thursday. Midterm Date.</td>
</tr>
</tbody>
</table>
### November
- **1** Monday. Academic Holiday. No classes held. Administrative offices open. Last day to apply or reapply for the B.A. degree to be awarded in February. Applications received after this date are automatically applied to the next conferral date.
- **2** Tuesday. Election Day. University holiday.
- **15-19** Monday–Friday. Online registration for Spring 2022 via Student Services Online (SSOL) appointment: continuing students only.
- **24** Wednesday. Academic holiday. No classes held. Administrative offices open.

### December
- **1** Tuesday. Last day to apply or reapply for the B.A. degree to be awarded in May. Applications received after this date are automatically applied to the next conferral date.
- **6** Monday. For Fall 2021, the deadline to withdraw from a course (and receive a notation of “W” on the transcript in place of a letter grade) was extended to Monday, December 6, 2021, one week before the last day of classes.
- **6-10** Monday–Friday. Online registration for Spring 2022 courses via Student Services Online (SSOL) appointment: continuing students only.
- **10** Last day for new Spring 2022 students to submit vaccination documentation for measles, mumps, and rubella, COVID-19, and seasonal influenza, and to certify meningitis decision online via the Columbia Health Patient Portal (secure.health.columbia.edu) Vaccination documentation is due 30 days prior to registration; students are not permitted to register for classes without this documentation.
- **13** Monday. Last day of classes.
- **14-15** Tuesday–Wednesday. Study days.
- **15** Wednesday. For Fall 2021, the deadline for declaring the Pass/D/Fail option for a course was extended to December 15, 2021, the end of the reading period. Last day to change a regular course to a Pass/D/Fail course or a Pass/D/Fail course to a regular course. Last day for students to register for R credit.

### Spring Term 2022
- **January**
  - **1** Saturday. Last day for applicants to the Class of 2026 to apply for admission.
  - **10-14** Weekdays only. Online registration for Spring 2022 via Student Services Online (SSOL) appointment: continuing and transfer students only.
  - **10** Monday. Last day for new Spring 2022 students to submit Student Health History form using the Columbia Health Patient Portal.
- **February**
  - **1** Soft deadline to submit a request for a waiver (domestic students) or exception (international students) from the Columbia Student Health Insurance Plan for Spring new incoming students.
  - **9** Wednesday. Award of February 2022 degrees.
- **March**
  - **7** Monday. Midterm date.
  - **8-11** Tuesday-Friday. Major Declaration.
  - **14-18** Monday–Friday. Spring recess.
<table>
<thead>
<tr>
<th>April</th>
<th>18-22</th>
<th>Monday-Friday. Online registration for Fall 2022 via Student Services Online (SSOL) appointment: continuing students only.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>25</td>
<td>Monday. For Spring 2022, the deadline to withdraw from a course (and receive a notation of “W” on the transcript in place of a letter grade) was extended to Monday, April 25, 2022, one week before the last day of classes.</td>
</tr>
<tr>
<td>May</td>
<td>2</td>
<td>Monday. Last day of classes. For Spring 2022, the deadline for declaring the Pass/D/Fail option for a course was extended to May 2, 2022, the last day of classes. Last day to change a regular course to a Pass/D/Fail course or a Pass/D/Fail course to a regular course. Last day for students to register for R credit.</td>
</tr>
<tr>
<td></td>
<td>3-5</td>
<td>Tuesday-Thursday. Study days.</td>
</tr>
<tr>
<td></td>
<td>6-13</td>
<td>Friday–Friday. Final examinations.</td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>Wednesday. Commencement.</td>
</tr>
</tbody>
</table>
THE ADMINISTRATION AND FACULTY OF COLUMBIA COLLEGE

Lee Bollinger, J.D.
President of the University

Mary C. Boyce, Ph.D.
Provost of the University

Amy Hungerford, Ph.D.
Executive Vice President for Arts and Sciences and Dean of the Faculty of Arts and Sciences

James J. Valentini, Ph.D.
Dean of Columbia College and Vice President for Undergraduate Education

UNIVERSITY PROFESSORS

Richard Axel
B.A., Columbia University, 1967; M.D., Johns Hopkins University, 1970

Jagdish Bhagwati
B.Com., Bombay University (India), 1954; M.A., University of Cambridge, 1956; Ph.D., Massachusetts Institute of Technology, 1967

Martin Chalfie
A.B., Harvard University, 1969; Ph.D., 1976

Ruth S. DeFries
B.A., Washington University in St. Louis, 1976; Ph.D., Johns Hopkins University, 1980

Michael W. Doyle
A.B., Harvard University, 1970; Ph.D., 1977

Nabila El-Bassel
B.S.W., Tel Aviv University (Israel), 1980; M.S.W., Hebrew University of Jerusalem (Israel), 1983; Ph.D., Columbia University, 1989

Wafaa El-Sadr
M.D., Cairo University (Egypt), 1974; M.P.H., Columbia University, 1991; M.P.A., Harvard University, 1996

R. Kent Greenawalt

Saidiya V. Hartman
B.A., Wesleyan University, 1984; Ph.D., Yale University, 1992

Wayne A. Hendrickson
B.A., University of Wisconsin-River Falls, 1963; Ph.D., Johns Hopkins University, 1968

Eric R. Kandel
A.B., Harvard University, 1952; M.D., New York University, 1956

Rosalind E. Krauss

Robert A. Mundell (emeritus)
B.A., University of British Columbia (Canada), 1953; Ph.D., Massachusetts Institute of Technology, 1956

Jeffrey D. Sachs

Simon Schama
B.A., University of Cambridge, 1966; M.A., 1969

Gayatri Chakravorty Spivak
B.A., University of Calcutta (India), 1959; M.A., Cornell University, 1962; Ph.D., 1967

Joseph Stiglitz
B.A., Amherst College, 1964; Ph.D., Massachusetts Institute of Technology, 1967; M.A., University of Oxford 1976

Gordana Vunjak-Novakovic
Ph.D., University of Belgrade, 1980

FACULTY A-Z LISTING


A

Ryan P. Abernathey
Associate Professor of Earth and Environmental Sciences
B.A., Middlebury College, 2004; Ph.D., Massachusetts Institute of Technology, 2012

Ishmail Abdus-Saboor
Assistant Professor of Biological Sciences
Mohammed Abouzaid  
*Professor of Mathematics*  
B.S., University of Richmond, 2002; M.S., University of Chicago, 2004; Ph.D., 2007

Lee B. Abraham  
*Senior Lecturer in Latin American and Iberian Cultures*  
B.A., Temple University, 1993; M.A., Arizona State University, 1996; Ph.D., University of New Mexico, 2001

Ouijdane Absi  
*Lecturer in Middle Eastern, South Asian, and African Studies*  
B.A., Paris-IV La Sorbonne University, 2001; M.A., 2002

Lila Abu-Lughod  
*Joseph L. Buttenwieser Professor of Social Science*  
B.A., Carleton University (Canada), 1974; A.M., Harvard University, 1978; Ph.D., 1984

James Eli Adams  
*Professor of English and Comparative Literature*  
B.S., Massachusetts Institute of Technology, 1977; B.A., University of Oxford, 1979; M.A., Cornell University, 1983; Ph.D., 1987

Rachel E. Adams  
*Professor of English and Comparative Literature*  
B.A., University of California, Berkeley, 1990; M.A., University of Michigan, 1992; Ph.D., University of California, Santa Barbara, 1997

Hassan Afrouzi Khosroshahi  
*Assistant Professor of Economics*  
B.S., Sharif University of Technology (Iran), 2011; M.S., University of Texas at Austin, 2013; Ph.D., 2017

Vanessa Agard-Jones  
*Assistant Professor of Anthropology*  
B.A., Yale University, 2000; M.A., Columbia University, 2006; Ph.D., New York University, 2013

Amol Aggarwal  
*Assistant Professor of Mathematics*  
S.B., Massachusetts Institute of Technology, 2015; Ph.D., Harvard University, 2020

Marcel A. Agüeros  
*Associate Professor of Astronomy*  
B.A., Columbia University, 1996; M.Phil., University of Cambridge, 1998; M.S., University of Washington, 2002; Ph.D., 2006

Francisca Aguiló Mora  
*Lecturer in Latin American and Iberian Cultures*  
B.A., University of Barcelona, 2002; M.A., University of the Balearic Islands (Spain), 2009; Ph.D., University of Miami, 2016

Aftab Ahmad  
*Senior Lecturer in Middle Eastern, South Asian, and African Studies*  
B.A., Aligarh Muslim University (India), 1990; M.A., Jawaharlal Nehru University (India), 1993; M.Phil., 1996; Ph.D., 2000

May E. Ahmar  
*Senior Lecturer in Middle Eastern, South Asian, and African Studies*  
B.A., American University of Beirut, 1995; M.A., 2001

Manan Ahmed  
*Associate Professor of History*  
B.Sc., University of Punjab (Pakistan), 1991; B.A., Miami University, 1997; Ph.D., University of Chicago, 2008

Alfred V. Aho  
*Lawrence Gussman Professor of Computer Science*  
B.A., University of Toronto, 1963; M.A., Princeton University, 1965; Ph.D., 1967

Allison Aitken  
*Assistant Professor of Philosophy*  
A.B., Harvard University, 2013; Ph.D., 2020

Joseph Albernaz  
*Assistant Professor of English and Comparative Literature*  
B.A., University of North Carolina at Chapel Hill, 2012; Ph.D., University of California, Berkeley, 2018

David Z. Albert  
*Frederick E. Woodbridge Professor of Philosophy*  
B.S., Columbia University, 1976; Ph.D., Rockefeller University, 1981

Igor L. Aleiner  
*Professor of Physics*  
Ph.D., University of Minnesota, 1996

Zeynep Çelik Alexander  
*Associate Professor of Art History and Archaeology*  
Ph.D., Massachusetts Institute of Technology, 2007

Peter K. Allen  
*Professor of Computer Science*  

Douglas V. Almond  
*Professor of Economics and of International and Public Affairs*  
B.A., Carleton University, 1993; Ph.D., University of California, Berkeley, 2002

Muhsin Jassim Al-Musawi  
*Professor of Middle Eastern, South Asian, and African Studies*  
B.A., University of Baghdad, 1966; M.A., Dalhousie University (Canada), 1975; Ph.D., 1978

Carlos J. Alonso  
*Morris A. and Alma Schapiro Professor in the Humanities*
B.A., Cornell University, 1975; M.A., Yale University, 1977; Ph.D., 1983

**Irasema Alonso**  
*Lecturer in Economics*  
B.A., Universidad Complutense de Madrid (Spain), 1981; M.A., Universitat Autonoma de Barcelona (Spain), 1986; Ph.D., University of Minnesota, 1992

**Isabel Huacuja Alonso**  
*Assistant Professor of Middle Eastern, South Asian and African Studies*  
B.A., Cornell University, 2005; M.A., University of Texas at Austin, 2009; Ph.D., 2015

**Irene Alonso-Aparicio**  
*Lecturer in Latin American and Iberian Cultures*  
B.A., University of Granada (Spain), 2001; M.A., Open University of Spain, 2005; Ph.D., University of Granada (Spain) and University of Aachen (Germany), 2011

**Hilton Als**  
*Associate Professor of Writing in the Faculty of the Arts*

**Boris Altshuler**  
*Professor of Physics*  
B.A., Leningrad State University (Russia), 1976; Ph.D., Leningrad Institute for Nuclear Physics (Russia), 1979

**Maria Jose Alves De Abreu**  
*Assistant Professor of Anthropology*  
B.A., University of Coimbra (Portugal), 1998; M.A., SOAS, University of London, 1999; Ph.D., University of Amsterdam, 2009

**Mariam Aly**  
*Assistant Professor of Psychology*  
H.B.Sc., University of Toronto, 2008; M.A., University of California, Davis, 2010; Ph.D., 2013

**Tarik Amar**  
*Associate Professor of History*  
B.A., University of Oxford, 1995; M.Sc., London School of Economics, 1997; Ph.D., Princeton University, 2006

**Gregory A. Amenoff**  
*Eve and Herman Gelman Professor of Professional Practice of the Visual Arts in the Faculty of the Arts*  
B.A., Beloit College, 1970

**Dima Amso**  
*Professor of Psychology*  
B.S., Tufts University, 1999; Ph.D., New York University, 2005

**Mark M. Anderson**  
*Professor of Germanic Languages*  

**Peter Andolfatto**  
*Professor of Biological Sciences*  
B.Sc., Simon Fraser University (Canada), 1992; Ph.D., University of Chicago, 1999

**Alexandr Andoni**  
*Associate Professor of Computer Science*  
B.S., Massachusetts Institute of Technology, 2004; M.Eng., 2005; Ph.D., 2009

**Stefan Andriopoulos**  
*Professor of Germanic Languages*  
B.A., University of Regensburg (Germany), 1990; M.A., University of Hamburg, 1994; Ph.D., 1998

**Gil Anidjar**  
*Professor of Religion*  
B.A., Hebrew University of Jerusalem, 1988; M.A., Graduate Theological Union, 1994; Ph.D., University of California, Berkeley, 1998

**Bogdan George Apetri**  
*Assistant Professor of Film in the Faculty of Arts*  
M.F.A., Columbia University, 2006

**James H. Applegate**  
*Professor of Astronomy*  
B.S., Michigan State University, 1976; M.S., Stony Brook University - SUNY, 1978; Ph.D., 1980

**Elena Aprile**  
*Centennial Professor of Physics*  
Laurea, Universita degli Studi (Italy), 1978; Ph.D., University of Geneva, 1982

**Branka Arsic**  
*Charles and Lynn Zhang Professor of English and Comparative Literature*  
B.A., University of Belgrade, 1990; M.A., 1995; Ph.D., 1999

**Jacqueline Austermann**  
*Assistant Professor in Earth and Environmental Sciences*  
B.Sc., Technische Universität Darmstadt (Germany), 2009; M.Sc., Ludwig Maximilians Universität München (Germany), 2011; Ph.D., Harvard University, 2016

**Marco Andres Avella Medina**  
*Assistant Professor of Statistics*  

**Luis A. Avila**  
*Senior Lecturer in Chemistry*  
M.S., Babes-Bolyai Universitiy (Romania), 1982; M.S., Columbia University, Teachers College, 2004; Ph.D., 2006

**Richard Axel**  
*University Professor*  
B.A., Columbia University, 1967; M.D., Johns Hopkins University, 1970

**B**  
**Ramin Bahrani**
Professor of Professional Practice in Film
B.A., Columbia University, 1997

Zainab Bahrani
Edith Porada Professor of Ancient and Near Eastern Art History and Archaeology

Jushan Bai
Professor of Economics
B.S., Nankai University (China), 1982; M.A., 1985; M.A., Pennsylvania State University, 1988; Ph.D., University of California, Berkeley, 1992

Christopher Baldassano
Assistant Professor of Psychology
B.S.E., Princeton University, 2009; Ph.D., Stanford University, 2015

Dolores Barbazán-Capeáns
Lecturer in Spanish
B.A., University of Santiago de Compostela (Spain), 2005; Ph.D., University of Barcelona (Spain), 2014

Elazar Barkan
Professor of International and Public Affairs
Ph.D., Brandeis University, 1988

Erin Barnhart
Assistant Professor Biological Sciences
A.B., Harvard University, 2003; Ph.D., Stanford University, 2010

Teodolinda Barolini
Lorenzo Da Ponte Professor of Italian

Lorena Garcia Barroso
Lecturer in Spanish
B.A., University of Seville (Spain), 2004; B.A., University of Huelva (Spain), 2007; M.Phil., Menéndez Pelayo International University and Cervantes Institute (Spain), 2008; M.A., Complutense University of Madrid (Spain), 2009; B.A., Universidad Complutense de Madrid (Spain), 2011; Ph.D., Graduate Center - CUNY, 2017

Scott Barrett
Lenfest-Earth Institute Professor of Natural Resource Economics
B.A., University of Massachusetts, 1979; M.A., University of British Columbia, 1983; Ph.D., London School of Economics, 1989

Nicholas Baumbach
Associate Professor of Film in the Faculty of the Arts
B.A., Brown University, 1998; Ph.D., Duke University, 2009

Frederique Baumgartner
Lecturer in Art History and Archaeology
B.A., École du Louvre (France), 1997; M.A., Columbia University, 2003; Ph.D., Harvard University, 2011

Banu Baydil
Lecturer in Statistics
B.S., Bogazici University (Turkey), 1999; M.S., Sabanci University (Turkey), 2002; M.A., Indiana University-Bloomington, 2005; M.S., Rensselaer Polytechnic Institute, 2010; Ph.D., 2010

Peter Shawn Bearman
Jonathan R. Cole Professor of Sociology

Paul Beatty
Associate Professor of Professional Practice of Writing in the Faculty of the Arts
B.A., University at Buffalo - SUNY, 1968; Ph.D., University of California, San Diego, 1975

Carol Becker
Professor of the Arts
B.A., University at Buffalo - SUNY, 1968; Ph.D., University of California, San Diego, 1975

Peter N. Belhumeur
Professor of Computer Science
B.S., Brown University, 1985; S.M., Harvard University, 1991; Ph.D., 1993

Steven M. Bellovin
Professor of Computer Science
B.A., Columbia University, 1972; M.S., University of North Carolina at Chapel Hill, 1977; Ph.D., 1982

Andrei M. Beloborodov
Professor of Physics
M.Sc., Moscow Institute of Physics and Technology (Russia), 1991; Ph.D., Lebedev Physical Institute (Russia), 1995

Felice Italo Beneduce
Senior Lecturer in Italian
M.A., University of Connecticut, 2003; Ph.D., 2012

Naor H. Ben-Yehoyada
Assistant Professor of Anthropology
M.A., Tel Aviv University, 2005; Ph.D., Harvard University, 2011

Courtney J. Bender
Tremaine Professor of Religion
B.A., Swarthmore College, 1991; Ph.D., Princeton University, 1997
Andres Bendesky  
Assistant Professor of Ecology, Evolution, and Environmental Biology  
M.D., Universidad Nacional Autónoma de México, 2006; Ph.D., Rockefeller University, 2011

Barry George Bergdoll  
Meyer Schapiro Professor of Art History and Archaeology  
B.A., Columbia University, 1977; B.A., University of Cambridge, 1979; M.A., 1982; Ph.D., Columbia University, 1986

Volker Berghahn  
Seth Low Professor Emeritus of History  
M.A., University of North Carolina at Chapel Hill, 1961; Ph.D., University of London, 1964; Habilitation, University of Mannheim (Germany), 1970

Timothy Berkelbach  
Associate Professor of Chemistry  
B.A., New York University, 2009; Ph.D., Columbia University, 2014

Susan Bernofsky  
Associate Professor of Writing in the Faculty of the Arts  

Michael Carlos Best  
Assistant Professor of Economics  
B.Sc., London School of Economics, 2006; M.Phil, University of Oxford, 2008; Ph.D., London School of Economics, 2014

Rym Bettaieb  
Lecturer in Middle Eastern, South Asian, and African Studies  
M.A., College of Staten Island, 1999; M.Phil., Drew University, 2007; Ph.D., 2013

Richard K. Betts  
Leo A. Schifrin Professor of War and Peace Studies and Arnold A. Saltzman Professor of War and Peace Studies  
A.B., Harvard University, 1969; A.M., 1971; Ph.D., 1975

Jagdish N. Bhagwati  
University Professor  
B.Com., Bombay University, 1954; Ph.D., Massachusetts Institute of Technology, 1967

Leyre Alejalдрre Biel  
Lecturer, Department of Latin American and Iberian Cultures  
B.A., University of Zaragoza (Spain), 2002; M.A., Universität Oberta de Catalunya (Spain), 2008; M.A., University de Pablo Olavide (Spain), 2012; Ph.D., 2016

Andrew S. Bienen  
Associate Professor of Professional Practice in Film in the Faculty of the Arts  
M.F.A., Columbia University, 1996

Akeel Bilgrami  
Sidney Morgenbesser Professor of Philosophy  
B.A., Bombay University, 1970; B.A., University of Oxford, 1974; Ph.D., University of Chicago, 1983

Richard A. Billows  
Professor of History  
B.A., University of Oxford, 1978; M.A., King’s College London, 1979; Ph.D., University of California, Berkeley, 1985

Sarah Rabea Yeslam Bintyeer  
Assistant Professor of Middle Eastern, South Asian, and African Studies  
Ph.D., SOAS, University of London, 2010

Alison Breton Bishop  
Assistant Professor of Computer Science  
A.B., Princeton University, 2006; Ph.D., The University of Texas at Austin, 2012

Sandra Black  
Professor of Economics  
B.A., University of California, Berkley, 1991; Ph.D., Harvard University, 1997

Elizabeth S. Blackmar  
Professor of History  
B.A., Smith College, 1972; Ph.D., Harvard University, 1981

Allan Blaer  
Professor Emeritus of Physics  
Ph.D. Columbia University, 1977

Casey N. Blake  
Professor of American Studies  
B.A., Wesleyan University, 1978; M.A., University of Rochester, 1981; Ph.D., 1987

Jose Blanchet Mancilla  
Professor of Industrial Engineering and Operations Research and of Statistics  
B.Sc., The Instituto Tecnológico Autónomo de México, 2000; M.S., Stanford University, 2001; Ph.D., 2004

David M. Blei  
Professor of Statistics and of Computer Science  
B.S., Brown University, 1997; Ph.D., University of California, Berkeley, 2004

Andrew Blumberg  
Professor of Mathematics and of Computer Science; Herbert and Florence Irving Professor of Cancer Data Research  
A.B., Harvard University, 1994; A.M., 1998; Ph.D., University of Chicago, 2005

Walter J. Bock  
Professor Emeritus of Biological Sciences  
B.S., Cornell University, 1955; A.M., Harvard University, 1957; Ph.D., 1959

Diane Bodart
David Rosand  
Associate Professor of Italian Renaissance Art History  
B.A./M.A., Università la Sapienza (Italy), 1994; Ph.D., École des Hautes Études en Sciences Sociales (France), 2003

Anne D. Bogart  
Professor of Theatre Arts in the Faculty of the Arts  
M.A., New York University, 1977

Niall P. Bolger  
Professor of Psychology  
B.A., Trinity College Dublin, 1980; M.S., Cornell University, 1984; Ph.D., 1987

Patrick Bolton  
Barbara and David Zalaznick Professor of Business and Professor of Economics  

Jason E. Bordoff  
Professor of Professional Practice in the Faculty of International and Public Affairs  

Alexandra Borer  
Lecturer in French and Romance Philology  
M.A., New York University, 2003; M.Phil., 2007; Ph.D., 2001

Aleksandar Boskovic  
Lecturer in Slavic Languages  
B.A., University of Belgrade (Serbia), 2003; M.A., 2006; Ph.D., University of Michigan, 2013

Bruno G. Bosteels  
Professor of Latin American and Iberian Cultures  
B.A., Katholieke Universiteit Leuven, Belgium, 1989; Ph.D., University of Pennsylvania, 1995

Clémence Boulouque  
Carl and Bernice Witten Associate Professor of Jewish and Israel Studies  
Ph.D., New York University, 2014

Susan Leslie Boynton  
Professor of Music  
B.A., Yale University, 1988; M.A., 1991; Diplôme d’études médiévales avec grande distinction, Université Catholique de Louvain (Belgium), 1992; Ph.D., Brandeis University, 1997

Travis E. Bradford  
Professor of Professional Practice in the Faculty of International and Public Affairs  
B.A., Georgia State University, 1992; M.B.A., New York University, 1996; M.P.A., Harvard University, 2006

Lisbeth Kim Brandt  
Associate Professor of East Asian Languages and Cultures  
B.A., Smith College, 1984; Ph.D., Columbia University, 1996

Claudia Breger  
Villard Professor of German and Comparative Literature  
Ph.D., Humboldt University, 1996

Simon A. Brendle  
Professor of Mathematics  
Diplom., University of Tübingen (Germany), 1999; Ph.D., 2001

Gustaf H. Brooijmans  
Professor of Physics  
B.S., Université Catholique de Louvain (Belgium), 1991; M.S., 1994; Ph.D., 1998

Hilary Brougher  
Associate Professor of Professional Practice in Film in the Faculty of the Arts  
B.A., School of the Visual Arts, 1990

Christopher L. Brown  
Professor of History  
B.A., Yale University, 1990; D.Phil., University of Oxford, 1994

Louis E. Brus  
Samuel Latham Mitchell Professor of Chemistry and Professor of Chemical Engineering  
B.S., Rice University, 1965; Ph.D., Columbia University, 1969

Greg L. Bryan  
Professor of Astronomy  
B.Sc., University of Calgary (Canada), 1989; Ph.D., University of Illinois at Urbana-Champaign, 1996

Matthew E. Buckingham  
Associate Professor of Professional Practice in Visual Arts in the Faculty of the Arts  
B.A., University of Iowa, 1988; M.F.A., Bard College, 1996

Richard W. Bulliet  
Professor Emeritus of History  
A.B., Harvard University, 1962; A.M., 1964; Ph.D., 1967

Harmen J. Bussemaker  
Professor of Biological Sciences and Systems Biology  
B.A., Utrecht University (Netherlands), 1989; M.Sc., 1991; Ph.D., 1995

C

Angelo Cacciuto  
Associate Professor of Chemistry  
B.S., University of Cagliari (Italy), 1996; M.S., Syracuse University, 2000; Ph.D., 2002

Christopher J. Caes  
Lecturer in Slavic Languages  
B.A., Ohio State University, 1993; M.A., 1997; Ph.D., University of California, Berkeley, 2004

James Calleri
Associate Professor of Professional Practice in Theatre Arts in the Faculty of the Arts
B.A., Trinity University; M.F.A., University of California, Irvine, 1990

Charles W. Calomiris
Henry Kaufman Professor of Financial Institutions in the Faculty of Business and Professor of International and Public Affairs
Ph.D., Stanford University, 1985

Guillermo A. Calvo
Professor of International and Public Affairs
M.A., Yale University, 1965; M.Phil., 1967; Ph.D., 1974

Euan Cameron
Professor of Religion
B.A., University of Oxford, 1979; D.Phil., 1982

Luis M. Campos
Associate Professor of Chemistry
Ph.D., University of California, Los Angeles, 2006

Elisheva Carlebach
Salo Wittmayer Baron Professor of Jewish History, Culture, and Society
B.A., Brooklyn College - CUNY, 1976; M.Phil., Columbia University, 1980; Ph.D., 1986

Luca Carloni
Associate Professor of Computer Science
B.S., University of Bologna (Italy), 1995; M.S., University of California, Berkeley, 1997; Ph.D., 2004

Allison Jean Carnegie
Associate Professor of Political Science
B.A., University of Southern California, 2006; M.Phil., Yale University, 2011; Ph.D., 2014

Alessandra M. Casella
Professor of Economics and Political Science
B.A., Bocconi University (Italy), 1983; Ph.D., Massachusetts Institute of Technology, 1988

Jose A. Castellanos-Pazos
Senior Lecturer in Latin American and Iberian Cultures
M.D., Universidad Veracruzana (Mexico), 1982; M.A., State University of New York at Albany, 1996; M.Phil., New York University, 2007

Jo Ann Cavallo
Professor of Italian
B.A., Rutgers University, 1981; M.A., Yale University, 1984; Ph.D., 1987

Steven E. Chaikelson
Professor of Professional Practice in the Theatre Arts in the Faculty of the Arts
J.D., Columbia University, 1993

Augustin Chaintreau
Associate Professor of Computer Science
B.Sc., École Normale Supérieure (France), 2001; M.S., Université Pierre-et-Marie-Curie (France), 2002; Ph.D., INRIA-École Normale Supérieure (France), 2006

Martin Chalfie
University Professor
A.B., Harvard University, 1969; Ph.D., 1976

Douglas A. Chalmers
Professor Emeritus of Political Science
B.A., Bowdoin College, 1953; M.A., Yale University, 1958; Ph.D., 1962

Paul Thomas Chamberlin
Associate Professor of History
B.A., Indiana University, 2002; M.A., Ohio State University, 2005; Ph.D., 2009

Shih-Fu Chang
Richard Dicker Professor of Telecommunications and Professor of Computer Science
B.S., National Taiwan University (Taiwan), 1985; M.S., University of California, Berkeley, 1991; Ph.D., 1993

Lawrence A. Chasin
William R. Kenan, Jr. Professor of Biological Sciences
B.S., Brown University, 1962; Ph.D., Massachusetts Institute of Technology, 1967

George A. Chauncey
DeWitt Clinton Professor of American History
B.A., Yale University, 1977; Ph.D., 1989

Hannah R. Chazin
Assistant Professor of Anthropology
B.A., University of Chicago, 2008; M.A., 2011; Ph.D., 2016

Amy Chazkel
Bernard Hirschhorn Associate Professor of Urban Studies
B.A., George Washington University, 1991; M.A., Yale University, 1996; Ph.D., 2002

Yeon-Koo Che
Kelvin J. Lancaster Professor of Economic Theory
B. Economics, Seoul National University, 1984; M.A., University of Toronto, 1986; Ph.D., Stanford University, 1991

Xi Chen
Associate Professor of Computer Science
B.S., Tsinghua University (China), 2003; Ph.D., 2007

Pierre-André Chiappori
E. Rowan and Barbara Steinschneider Professor of Economics

Graciela Chichilnisky
Professor of Economics
M.A., University of California, Berkeley, 1970; Ph.D., 1971; Ph.D., 1976
Lydia B. Chilton  
*Assistant Professor of Computer Science*  
S.B., Massachusetts Institute of Technology, 2007; M.Eng., 2009; Ph.D., University of Washington, 2015

Norman H. Christ  
*Ephraim Gildor Professor of Computational Theoretical Physics*  
B.A., Columbia University, 1965; Ph.D., 1966

Nicholas Christie-Blick  
*Professor of Earth and Environmental Sciences*  
B.A., University of Cambridge, 1974; M.A., 1978; Ph.D., University of California, Santa Barbara, 1979

Nicholas J. Christopher  
*Professor of Professional Practice in Writing in the Faculty of the Arts*  
A.B., Harvard University, 1973

James Chu  
*Assistant Professor of Sociology*  
B.A., M.A., Stanford University, 2011; Ph.D., 2020

Eunice Chung  
*Lecturer in East Asian Languages and Cultures*  
B.A., Korea University, 2006; M.A., Columbia University, 2011

Alessandra Ciucci  
*Assistant Professor of Music*  
Diploma in Music, Brooklyn Conservatory of Music, 1998; B.A., Columbia University, 1995; Ph.D., Graduate Center - CUNY, 2008

Richard H. Clarida  
*C. Lowell Harriss Professor of Economics and Professor of International and Public Affairs*  
B.S., University of Illinois, 1979; S.M., Harvard University, 1983; Ph.D., 1983

Justin Clarke Doane  
*Associate Professor of Philosophy*  
B.A., New College of Florida, 2005; Ph.D., New York University, 2011

John H. Coatsworth  
*Professor of International Affairs and Public Affairs and of History*  
B.A., Wesleyan University, 1963; M.A., University of Wisconsin-Madison, 1967; Ph.D., 1972

Edward Coffman  
*Professor Emeritus of Electrical Engineering and Computer Science*  
Ph.D., University of California, Los Angeles, 1966

Jean Louise Cohen  
*Nell and Herbert M. Singer Professor of Contemporary Civilization in the Core Curriculum*  
B.A., Boston University, 1968; M.A., New School for Social Research, 1972; Ph.D., 1979

Joel E. Cohen  
*Professor of Earth and Environmental Sciences and of International and Public Affairs*  
Ph.D., Harvard University, 1970

Myron L. Cohen  
*Professor of Anthropology*  
B.A., Columbia University, 1958; M.A., 1963; Ph.D., 1967

Steven Alan Cohen  
*Professor of Professional Practice in the Faculty of International and Public Affairs*  
Ph.D., University at Buffalo - SUNY, 1979

Yinon Cohen  
*Yosef Hayim Yerushalmi Professor of Israel and Jewish Studies*  
B.A., Hebrew University of Jerusalem, 1978; M.A., Stony Brook - SUNY, 1980; Ph.D., 1983

Zuleyha Colak  
*Lecturer in Middle Eastern, South Asian, and African Studies*  
B.A., Istanbul University (Turkey), 1998; M.A., Marmara University (Turkey), 2000; M.A., Indiana University, 2004; Ph.D., 2010

Brian A. Cole  
*Professor of Physics*  
B.S., Massachusetts Institute of Technology, 1985; Ph.D., 1992

Jonathan R. Cole  
*John Mitchell Mason Professor of the University*  
Ph.D., Columbia University, 1969

Michael Cole  
*Howard McP. Davis Professor of Art History*  
B.A., Williams College, 1991; M.A., Princeton University, 1995; Ph.D., 1999

Sarah Cole  
*Parr Professor of English and Comparative Literature*  
B.A., Williams College, 1989; Ph.D., University of California, Berkeley, 1997

Charly J. Coleman  
*Associate Professor of History*  
B.A., Trinity University, 1998; Ph.D., Stanford University, 2005

John D. Collins  
*Associate Professor of Philosophy*  
B.A., University of Sydney (Australia), 1982; Ph.D., Princeton University, 1991

Michael J. Collins  
*Vikram S. Pandit Professor of Computer Science*  
B.A., University of Cambridge, 1992; M.Phil., 1993; Ph.D., University of Pennsylvania, 1999

Juan Pablo Cominiguez  
*Lecturer in Latin American and Iberian Cultures*
Roisin Commane  
*Assistant Professor of Earth and Environmental Sciences*  
B.A., Universidad Nacional de Buenos Aires (Argentina), 2005; M.A., Rutgers University, 2012; Ph.D., University of Leeds (U.K.), 2009

Michael I. Como  
*Toshu Fukami Associate Professor of Shinto Studies*  
A.B., Harvard University, 1985; Ph.D., Stanford University, 2000

Antoine Marcel Compagnon  
*Blanche W. Knopf Professor of French and Comparative Literature*  
Docteur ès Lettres, Paris Diderot University, 1985

Matthew J. Connelly  
*Professor of History*  
B.A., Columbia University, 1990; Ph.D., Yale University, 1997

Kathleen McKeown Cooper  
*Henry and Gertrude Rothschild Professor of Computer Science*  
Ph.D., University of Pennsylvania, 1982

Marina Cords  
*Professor of Ecology, Evolution, and Environmental Biology and of Anthropology*  
B.S., Yale University, 1978; Ph.D., University of California, Berkeley, 1984

Virginia W. Cornish  
*Helena Rubinstein Professor of Chemistry*  
B.A., Columbia University, 1991; Ph.D., University of California, Berkeley, 1996

Daniel M. Corstange  
*Associate Professor of Political Science and of International and Public Affairs*  
B.A., Northwestern University, 2000; Ph.D., University of Michigan, 2008

Ivan Z. Corwin  
*Professor of Mathematics*  
A.B., Harvard University, 2006; Ph.D., Courant Institute, New York University, 2011

Angelina Craig-Florez  
*Senior Lecturer in Latin American and Iberian Cultures*  
B.A., Fordham University, 1989; M.A., Columbia University, 1991; M.Phil., 1995; Ph.D., 2002

Jonathan K. Crary  
*Meyer Schapiro Professor of Modern Art and Theory*  

Julie A. Crawford  
*Mark Van Doren Professor of Humanities; Paul Brooke Program Chair for Literature and Humanities*  
B.A., McGill University (Canada), 1990; Ph.D., University of Pennsylvania, 1998

Pascale F. Crepon  
*Lecturer in French and Romance Philology*  
M.A., University of Lausanne (Switzerland), 1998; M.A., University of Minnesota, 2002; Ph.D., 2009

Zoë Crossland  
*Professor of Anthropology*  
B.A., University of Cambridge, 1993; M.A., Michigan State University, 1995; Ph.D., University of Michigan, 2001

Denise Cruz  
*Professor of English and Comparative Literature*  
Ph.D., University of California, Los Angeles, 2007

John P. Cunningham  
*Associate Professor of Statistics*  
B.A., Dartmouth College, 2002; M.S., Stanford University, 2006; Ph.D., 2009

Gerald Leon Curtis  
*Burgess Professor of Political Science*  
B.A., University of New Mexico, 1962; M.A., Columbia University, 1964; Ph.D., 1969

Hamid Dabashi  
*Hagop Kevorkian Professor of Iranian Studies*  
B.A., University of Tehran, 1976; M.A., University of Pennsylvania, 1981; Ph.D., 1984

Patricia A. Dailey  
*Associate Professor of English and Comparative Literature*  
B.A., Sarah Lawrence College, 1988; M.A., University of California, Irvine, 1993; Ph.D., 2002

Terence N. D’Altroy  
*Loubat Professor of American Archaeology*  
B.A., University of Michigan, 1972; M.A., University of California, Los Angeles, 1975; Ph.D., 1981

Lisa Allyn Dale  
*Lecturer in the Discipline of Ecology, Evolution and Environmental Biology*  
B.A., Cornell University, 1991; M.A., Regis University, 1997; Ph.D., Colorado State University, 2003

Sarah Zukerman Daly  
*Assistant Professor of Political Science*  
B.A., Stanford University, 2002; M.S., London School of Economics, 2004; Ph.D., Massachusetts Institute of Technology, 2011

Nicholas J. Dames  
*Theodore Kahan Professor of Humanities*  
B.A., Washington University in St. Louis, 1992; Ph.D., Harvard University, 1998
Tri Vi Dang  
Lecturer in Economics  
B.A., University of Frankfurt (Germany), 1996; M.A., 1998; Ph.D., University of Mannheim (Germany), 2005

E. Valentine Daniel  
Professor of Anthropology  
B.A., Amherst College, 1971; M.A., University of Chicago, 1973; Ph.D., 1979

Samuel J. Danishefsky  
Centennial Professor Emeritus of Chemistry  
B.S., Yeshiva University, 1956; Ph.D., Harvard University, 1962

Panagiota Daskalopoulos  
Professor of Mathematics  
B.A., National and Kapodistrian University of Athens, 1986; Ph.D., University of Chicago, 1992

Jeremy A. Dauber  
Atran Professor of Yiddish Language, Literature, and Culture  
A.B., Harvard University, 1995; Ph.D., University of Oxford, 1999

Lila Davachi  
Professor of Psychology  
B.A., Barnard College, 1992; Ph.D., Yale University, 1999

Jenny M. Davidson  
Professor of English and Comparative Literature  
B.A., Radcliffe College, 1993; Ph.D., Yale University, 1999

Donald R. Davis  
Ragnar Nurske Professor of Economics  
B.A., University of California, Berkeley, 1981; M.A., Columbia University, 1989; Ph.D., 1992

Richard A. Davis  
Howard Levene Professor of Statistics  
B.A., University of California, San Diego, 1974; Ph.D., 1979

Francesco de Angelis  
Professor of Art History and Archaeology  
Ph.D., Scuola Normale Superiore (Italy), 2003

Victoria De Grazia  
Moore Collegiate Professor of History  
B.A., Smith College, 1968; Ph.D., Columbia University, 1976

Aise Johan de Jong  
Professor of Mathematics  
B.S., Leiden University (Netherlands), 1987; Ph.D., Radboud University Nijmegen (Netherlands), 1992

Rodolfo O. de la Garza  
Eaton Professor of Administrative Law and Municipal Science and Professor of International and Public Affairs  
B.S., University of Arizona, 1964; B.F.T., American Institute of Foreign Trade, 1965; M.A., University of Arizona, 1967; Ph.D., 1972

Victor H. de la Peña  
Professor of Statistics  
B.S., University of Texas at El Paso, 1981; M.A., University of California, Berkeley, 1984; Ph.D., 1988

Cory R. Dean  
Associate Professor of Physics  
B.Sc., Queen’s University (Canada), 2000; B.Sc., 2001; M.Sc., 2004; Ph.D., McGill University (Canada), 2009

Mark Dean  
Associate Professor of Economics  
B.A., University of Cambridge, 1999; M.Sc., University College London, 2000; Ph.D., New York University, 2009

Ruth S. DeFries  
University Professor  
B.A., Washington University in St. Louis, 1976; Ph.D., Johns Hopkins University, 1980

Wijnie E. De Groot  
Senior Lecturer in Germanic Languages  
M.A., University of Amsterdam (Netherlands), 1982; M.A., 1985

Andrew Delbanco  
Alexander Hamilton Professor of American Studies and Julian Clarence Levi Professor in the Humanities  

Milan Delor  
Assistant Professor of Chemistry  
Ph.D., University of Sheffield (England), 2014

Peter B. deMenocal  
Thomas Alva Edison/Con Edison Professor of Earth and Environmental Sciences  
B.S., St. Lawrence University, 1982; M.S., University of Rhode Island, 1986; Ph.D., Columbia University, 1991

Frederik M. Denef  
Professor of Physics  
Ph.D., KU Leuven (Belgium), 1999

Glenn L. Denning  
Professor of Professional Practice in the Faculty of International and Public Affairs  
Ph.D., University of Reading (Berkshire), 1985

Padma B. Desai  
Gladys and Roland Harriman Professor Emerita of Comparative Economic Systems  
B.A., University of Bombay, 1951; M.A., 1953; Ph.D., Harvard University, 1960

Ira J. Deutchman  
Professor of Professional Practice in Film in the Faculty of the Arts  
B.S., Northwestern University, 1975

Phoebus J. Dhrymes
Edwin P. Rickert Professor Emeritus of Economics  
B.A., University of Texas, 1957; Ph.D., Massachusetts Institute of Technology, 1961

Sophia C. Di Castri  
Francis Goellet Assistant Professor of Music Composition  
M.A., Columbia University, 2010; D.M.A., 2014

Souleymane Bachir Diagne  
Professor of French and Romance Philology  
B.A., University of Sorbonne, Paris, 1977; Ph.D., 1988

Margaret K. Dieckmann  
Professor of Professional Practice in Film in the Faculty of the Arts  
M.A., New York University, 1986

Lars Dietrich  
Associate Professor of Biological Sciences  
B.A., University of Konstanz (Germany), 2000; Ph.D., Heidelberg University (Germany), 2004

Mamadou Diouf  
Leitner Family Professor of African Studies  
B.A., University of Paris-Sorbonne, 1975; Ph.D., 1981

Thomas A. DiPrete  
Giddings Professor of Sociology  
B.S., Massachusetts Institute of Technology, 1972; M.A., Columbia University, 1975; Ph.D., 1978

Maria Diuk-Wasser  
Professor of Ecology, Evolution, and Environmental Biology  
B.A., Universidad de Buenos Aires, 1996; Ph.D., University of California, Los Angeles, 2003

Madeleine Dobie  
Professor of French and Romance Philology  
B.A., University of Oxford, 1988; M.A., Yale University, 1991; Ph.D., 1994

Jeremy R. Dodd  
Senior Lecturer in Physics  
B.S., University of Edinburgh (United Kingdom), 1985; Ph.D., University College London, 1990

Thomas W. Dodman  
Assistant Professor of French and Romance Philology  
B.A., University College London, 2001; M.A., 2002; Ph.D., University of Chicago, 2011

Julia Doe  
Assistant Professor of Music  
B.A., Whitman College, 2006; M.A., Yale University, 2010; Ph.D., 2013

Timothy B. Donnelly  
Professor of Writing in the Faculty of the Arts  
M.F.A., Columbia University, 1998

Gary Dorrien  
Professor of Religion  
Ph.D., Union Graduate School, 1989

Michael W. Doyle  
University Professor  
A.B., Harvard University, 1970; Ph.D., 1977

Geraldine Downey  
Niven Professor of Human Letters  
B.S., University College Dublin, 1979; M.A., Cornell University, 1983; Ph.D., 1986

Jerónimo Duarte-Riascos  
Assistant Professor of Latin American and Iberian Studies  
B.Sc., Universidad de los Andes (Columbia), 2009; B.A., 2009; M.A., 2010; M.A., Harvard University, 2012, Ph.D., 2018

Julien Dubedat  
Professor of Mathematics  
Ph.D., University of Paris-Sud, 2004

Joseph P. Dubiel  
Professor of Music  
A.B., Princeton University, 1974; M.F.A., 1976; Ph.D., 1980

Prajit Kumar Dutta  
Professor of Economics  
B.A., St. Stephen’s College (India), 1980; M.A., Delhi School of Economics, 1982; M.A., Cornell University, 1985; Ph.D., 1987

Laura Duvall  
Assistant Professor of Biological Sciences  
B.A., University of Pennsylvania, 2007; Ph.D., Washington University in St. Louis, 2012

Sonya T. Dyhrman  
Professor of Earth and Environmental Sciences  
B.A., Dartmouth College, 1994; Ph.D., University of California, San Diego, 1999

Ofer Dynes  
Leonard Kaye Assistant Professor of Hebrew and Comparative Literature  
Ph.D., Harvard University, 2016

E  
Deren Eaton  
Assistant Professor of Ecology, Evolution, and Environmental Biology  
B.Sc., University of Minnesota, 2007; Ph.D., University of Chicago, 2014

Kathy Hannah Eden  
Chavkin Family Professor of English Literature; Professor of Classics; Paul Brooke Program Chair for Literature Humanities  
B.A., Smith College, 1974; Ph.D., Stanford University, 1980

Lena Edlund  
Associate Professor of Economics
B.A., Stockholm School of Economics, 1989; Ph.D., 1996

Brent Hayes Edwards
Peng Family Professor of English and Comparative Literature
B.A., Yale University, 1990; M.A., Columbia University, 1992; Ph.D., 1998

Stephen A. Edwards
Associate Professor of Computer Science
B.S., California Institute of Technology, 1992; M.S., University of California, Berkeley, 1994; Ph.D., 1997

Naoki Egami
Assistant Professor of Political Science
B.A., University of Tokyo (Japan), 2015; Ph.D., Princeton University, 2020

Shigeru Eguchi
Senior Lecturer in East Asian Languages and Cultures
B.A., Ibaraki University (Japan), 1989; M.A., University of Iowa, 1994

William B. Eimicke
Professor of Professional Practice in the Faculty of International and Public Affairs
Ph.D., Syracuse University, 1973

Gregory M. Eirich
Senior Lecturer in Sociology
B.A., Fordham University, 2000; M.A., Columbia University, 2005; M.Phil., 2006; Ph.D., 2010

Peter M. Eisenberger
Professor of Earth and Environmental Sciences
A.B., Princeton University, 1963; Ph.D., Harvard University, 1967

Goran Ekstrom
Professor of Earth and Environmental Sciences
B.A., Swarthmore College, 1981; Ph.D., Harvard University, 1987

Wafaa El-Sadr
University Professor
M.D., Cairo University, 1974; M.P.H., Columbia University, 1991; M.P.A., Harvard University, 1996

Noam M. Elcott
Associate Professor of Art History and Archaeology
B.A., Columbia University, 2000; M.A., Princeton University, 2004; Ph.D., 2008

William A. Ellis
Professor of Professional Practice in Film in the Faculty of the Arts
B.A., Stanford University, 1984

Susan Elmes
Andrew Barth Senior Lecturer in the Discipline of Economics
B.A., New York University, 1984; Ph.D., Princeton University, 1991

Marwa Elshakry
Associate Professor of History
B.A., Rutgers University, 1995; M.A., Princeton University, 1997; Ph.D., 2003

Jon Elster
Robert K. Merton Professor of the Social Sciences
M.A., University of Oslo, 1966; Ph.D., University of Paris, 1972

Matthew Engelke
Professor of Religion
Ph.D., University of Virginia, 2002

Seyhan Erden
Lecturer in Economics

Robert S. Erikson
Professor of Political Science
B.A., Lake Forest College, 1963; M.A., University of Illinois, 1966; Ph.D., 1969

Yaniv Erlich
Assistant Professor of Computer Science
B.S., Tel Aviv University, 2006; Ph.D., Cold Spring Harbor Laboratory, 2010

Catherine Evtuhov
Professor of History

Katherine Ewing
Professor of Religion
B.A., Tufts University, 1971; M.A., Boston University, 1973; Ph.D., University of Chicago, 1980

Gil Eyal
Professor of Sociology
B.A., Tel Aviv University, 1989; M.A., 1991; M.A., University of California, Los Angeles, 1992; Ph.D., 1997

Laura Fair
Professor of Middle Eastern, South Asian and African Studies
B.A., Northern Illinois University, 1985; M.A., University of Wisconsin-Madison, 1988; Ph.D., University of Minnesota, 1994

Reem Faraj-Kanjawi
Lecturer in Middle Eastern, South Asian, and African Studies
B.A., Damascus University (Syria), 1993; M.A., Montclair State University, 2006
Hannah A. Farber  
*Assistant Professor of History*  
B.A., Yale University, 2005; M.A., University of California, Berkeley, 2010; Ph.D., 2014

Bernard R. Faure  
*Kao Professor of Japanese Religions*  
Ph.D., University of Paris, 1984

Steven K. Feiner  
*Professor of Computer Science*  
B.A., Brown University, 1973; Ph.D., 1987

Kevin A. Fellezs  
*Associate Professor of Music and of African American and African Diaspora Studies*  
B.A., San Francisco State, 1998; M.A., 2000; Ph.D., University of California, Santa Cruz, 2004

Maria Q. Feng  
*Rewick Professor of Civil Engineering*  
B.S., Southeast University (China), 1982; M.S., University of Electro-Communications (Japan), 1987; Ph.D., University of Tokyo (Japan), 1992

Catherine Fennell  
*Associate Professor of Anthropology*  
B.S., Georgetown University, 1999; M.A., University of Chicago, 2003; Ph.D., 2009

Priscilla P. Ferguson  
*Professor Emerita of Sociology*  
B.A., Mount Holyoke College, 1962; M.A., Columbia University, 1964; Ph.D., 1967

Peter Jay Fernandez  
*Assistant Professor of Theatre Arts in the Faculty of the Arts*  
B.F.A., Boston University

Ana M. Fernandez-Cebrian  
*Assistant Professor of Latin American and Iberian Cultures*  
B.A., Universidad de Zaragoza (Spain), 2000; M.A., Princeton University, 2013; Ph.D., 2017

Barbara J. Fields  
*Professor of History*  
A.B., Harvard University, 1968; A.M., Yale University, 1972; Ph.D., 1978

Ronald E. Findlay  
*Ragnar Nurkse Professor Emeritus of Economics*  
B.A., University of Rangoon (Burma), 1954; Ph.D., Massachusetts Institute of Technology, 1960

Stuart J. Firestein  
*Professor of Biological Sciences*  
B.S., San Francisco State University, 1983; Ph.D., University of California, Berkeley, 1988

Albert Fishlow  
*Professor Emeritus of International and Public Affairs*  
Ph.D., Harvard University, 1963

Marcus Folch  
*Associate Professor of Classics*  
B.A., Cornell University, 2000; Ph.D., Stanford University, 2006

Eric Foner  
*DeWitt Clinton Professor of History*  

Pierre Force  
*Professor of French and Romance Philology*  
Ph.D., University of Paris-Sorbonne, 1987

Richard C. Ford  
*Emmanuel Roman and Barrie Sardoff Roman Professor of the Humanities*  
B.A., Michigan State University, 1966; M.F.A., University of California, Irvine, 1970

V. Page Fortna  
*Harold Brown Professor of U.S. Foreign and Security Policy*  

Aaron Andrew Fox  
*Associate Professor of Music*  
A.B., Harvard University, 1988; Ph.D., University of Texas at Austin, 1995

Katherine T. Fox-Glassman  
*Lecturer in Psychology*  
B.A., Harvard University, 2005; M.A., M.Phil., Columbia University, 2012; Ph.D., 2015

Joachim Frank  
*Professor of Biochemistry and Molecular Biophysics and of Biological Sciences*  
Ph.D., Technische Universität München (Germany), 1970

Carmela V. Franklin  
*Professor of Classics*  
B.A., Radcliffe College, 1971; Ph.D., Harvard University, 1977

Federica Franze  
*Senior Lecturer in Italian*  
B.A., University of Urbino (Italy), 1999; M.A., Rutgers University, 2003; M.A., 2009; Ph.D., 2009

David A. Freedberg  
*Pierre Matisse Professor of Art History*  
B.A., Yale University, 1969; Ph.D., University of Oxford, 1973

Robert David Friedman  
*Professor of Mathematics*  
A.B., Harvard University, 1976; Ph.D., 1981

Richard A. Friesner  
*William P. Schweitzer Professor of Chemistry*
Walter M. Frisch  
*H. Harold Gumm/Harry and Albert von Tilzer Professor of Music*  
B.A., Yale University, 1973; M.A., University of California, Berkeley, 1977; Ph.D., 1981

Timothy M. Frye  
*Marshall D. Shulman Professor of Post-Soviet Foreign Policy*  

Ester Fuchs  
*Professor of International and Public Affairs*  
Ph.D., University of Chicago, 1984

Melissa Fusco  
*Assistant Professor of Philosophy*  
B.A., Stanford University, 2006; Ph.D., University of California, Berkeley, 2015

Aubrey Gabel  
*Associate Professor of French and Romance Philology*  
M.A., University of Colorado Boulder, 2009; Ph.D., University of California, Berkeley, 2016

Haim Gaifman  
*Professor of Philosophy*  
M.Sc., Hebrew University of Jerusalem, 1958; Ph.D., University of California, Berkeley, 1962

Jane M. Gaines  
*Professor of Film in the Faculty of the Arts*  
B.S., Northwestern University, 1975; M.A., 1977, Ph.D., 1982

Meredith Jane Gamer  
*Assistant Professor of Art History and Archaeology*  
Ph.D., Yale University, 2015

Bradford G. Garton  
*Professor of Music*  
B.S., Purdue University, 1979; M.F.A., Princeton University, 1985; Ph.D., 1989

Tamrat Gashaw  
*Lecturer in the Discipline of Economics*  
B.S., Alemaya University (Ethiopia), 1999; M.A., Addis Ababa University (Ethiopia), 2005; M.A., Western Michigan University, 2008; Ph.D., 2012

Racquel Gates  
*Associate Professor of Film*  
B.S., Georgetown University, 2002; M.A., University of Chicago, 2003; Ph.D., Northwestern University, 2010

Roxana Geambasu  
*Associate Professor of Computer Science*  
B.S., Polytechnic University of Bucharest (Romania), 2005; M.S., University of Washington, 2007; Ph.D., 2011

Andrew E. Gelman  
*Higgins Professor of Statistics and Professor of Political Science*  
S.B., Massachusetts Institute of Technology, 1986; A.M., Harvard University, 1987; Ph.D., 1990

Pierre Gentine  
*Professor of Earth and Environmental Engineering and of Earth and Environmental Sciences*  
M.Eng., French National Aeronautical and Space Engineering School, Toulouse, France, 2002; M.Sc., Massachusetts Institute of Technology, 2006; Ph.D., 2010

Giuseppe Gerbino  
*Associate Professor of Music*  
M.A., Duke University, 1996; Ph.D., 2001

Anna Ghurbanyan  
*Associate in Chemistry*  
B.S., Northern Arizona University, 2004; M.S., 2007

Elena Giorgi  
*Assistant Professor of Mathematics*  
B.Sc., Università di Pisa (Italy), 2013; M.Sc., Université Paris Sud (France), 2014; M.Sc., École Normale Supérieure de Lyon (France), 2015; Ph.D., Columbia University, 2019

Carol Gluck  
*George Sansom Professor of History and Professor of East Asian Languages and Cultures*  

Lydia D. Goehr  
*Professor of Philosophy*  
B.A., Manchester University (U.K), 1982; Ph.D., University of Cambridge, 1987

Dorian Goldfeld  
*Professor of Mathematics*  
B.S., Columbia University, 1967; Ph.D., 1969

Steven L. Goldstein  
*Higgins Professor of Earth and Environmental Sciences*  

Michael Bernhard Golston  
*Professor of English and Comparative Literature*  
B.A., University of New Mexico, 1979; M.A., University of California, Berkeley, 1989; Ph.D., Stanford University, 1998

Mattieu Gomez  
*Assistant Professor of Economics*  
B.S., École Polytechnique (France), 2010; M.Sc. Paris School of Economics and ENSAE, 2011; Ph.D., Princeton University, 2017
Adela J. Gondek  
*Lecturer in the Discipline of Ecology, Evolution and Environmental Biology*  
B.A., Goucher College, 1970; Ph.D., Harvard University, 1981

Ruben L. Gonzalez  
*Professor of Chemistry*  
B.S., Florida International University, 1995; Ph.D., University of California, Berkeley, 2000

Robert J. Gooding-Williams  
*M. Moran Weston/Black Alumni Council Professor of African-American Studies*  
B.A., Yale University, 1975; Ph.D., 1982

Arnold L. Gordon  
*Professor of Earth and Environmental Sciences*  
B.A., Herbert Lehman College - CUNY, 1961; Ph.D., Columbia University, 1965

Bette R. Gordon  
*Professor of Professional Practice in Film in the Faculty of the Arts*  
M.F.A., University of Wisconsin-Madison, 1976

Emilien Gouin-Bonenfant  
*Assistant Professor Economics*  
B.Sc., Université de Montréal, 2013; M.A., University of California San Diego, 2019; Ph.D., University of California San Diego, 2019

Stathis Gourgouris  
*Professor of Classics and of English and Comparative Literature*  
B.A., University of California, Los Angeles, 1981; M.A., 1984; Ph.D., 1990

Gautam Gowrisankaran  
*Professor of Economics*  
B.A., Swarthmore College, 1991; M.A., Yale University, 1992; M.Phil., 1993; Ph.D., 1995

Maria Luisa Gozzi  
*Senior Lecturer in Italian*  
B.A. University of Florence (Italy), 1986; Ph.D., Rutgers University, 1996; M.A., Columbia University, 2012

Norma V. Graham  
*Centennial Professor of Psychology*  
B.S., Stanford University, 1966; Ph.D., University of Pennsylvania, 1970

Thomas Austin Graham  
*Associate Professor of English and Comparative Literature*  
B.A., University of Virginia, 2000; Ph.D., University of California, Los Angeles, 2010

Luis A. Gravano  
*Professor of Computer Science*  
B.S., National University of Lujan (Argentina), 1990; M.S., Stanford University, 1994; Ph.D., 1997

Erik I. Gray  
*Professor of English and Comparative Literature*  
B.A., University of Cambridge, 1994; M.A., Princeton University, 1997; Ph.D., 2000

Donald P. Green  
*Burgess Professor of Political Science*  
B.A., University of California, Los Angeles, 1983; M.A., University of California, Berkeley, 1984; Ph.D., 1988

R. Kent Greenawalt  
*University Professor*  
A.B., Harvard University, 1984; D.Phil., University of Oxford, 1987

Iva Greenwald  
*Professor of Biochemistry and Molecular Biophysics and Genetics and Development*  
Ph.D., Massachusetts Institute of Technology, 1982

Patricia E. Grieve  
*Nancy and Jeffrey Marcus Professor of the Humanities*  
B.A., Purdue University, 1975; M.A., 1977; Ph.D., Princeton University, 1983

Farah Jasmine Griffin  
*William B. Ransford Professor of English and Comparative Literature and African-American Studies*  
A.B., Harvard University, 1985; Ph.D., Yale University, 1992

Kevin L. Griffin  
*Professor of Earth and Environmental Sciences and of Ecology, Evolution, and Environmental Biology*  
B.A., Whittier College, 1985; M.E.S., Yale University, 1987; Ph.D., Duke University, 1994

Eitan Grinspun  
*Associate Professor of Computer Science*  
B.A., University of Toronto, 1997; M.S., California Institute of Technology, 2000; Ph.D., 2003

Jonathan L. Gross  
*Professor of Computer Science and of Statistics*  
B.S., Massachusetts Institute of Technology, 1964; M.A., Dartmouth College, 1966; Ph.D., 1968

Yuqi Gu  
*Assistant Professor of Statistics*  
B.S., Tsinghua University (China), 2015; Ph.D., University of Michigan, 2020

Sunil K. Gulati
Michael K. Dakolias
Senior Lecturer in the Discipline of Economics
B.A., Bucknell University, 1981; M.A., Columbia University, 1983; M.Phil. 1986

Frank A. Guridy
Associate Professor of History
B.A., Syracuse University, 1993; M.A., University of Illinois at Chicago, 1996; Ph.D., University of Michigan, Ann Arbor, 2002

Miklos Gyulassy
Professor of Physics
B.A., University of California, Berkeley, 1970; Ph.D., 1974

Georg Friedrich Haas
MacDowell Professor of Music
Diploma in Composition, Hochschule für Musik (Austria), 1979

Charles J. Hailey
Pupin Professor of Physics
B.A., Cornell University, 1977; Ph.D., Columbia University, 1983

Zoltan Haiman
Professor of Astronomy
B.S., Massachusetts Institute of Technology, 1993; A.M., Harvard University, 1994; Ph.D., 1998

Jack Halberstam
Professor of English and Comparative Literature
B.A., University of California, Berkeley, 1985; M.A., University of Minnesota, 1989; Ph.D., University of Minnesota, 1991

Sarah Haley
Professor of History
B.A., Vassar College, 2001; M.A., Yale University, 2007; Ph.D., 2010

Wael Hallaq
Avalon Foundation Professor in the Humanities
B.A., University of Haifa (Israel), 1978; M.A., University of Washington, 1979; Ph.D., 1983

Hilary Anne Hallett
Mendelson Family Associate Professor of American Studies; Associate Professor of History
B.F.A., New York University, 1990; Ph.D., Graduate Center - CUNY, 2005

Alexander Halliday
Professor of Earth and Environmental Sciences
Ph.D., Newcastle University (U.K.), 1977

Jules Paul Halpern
Professor of Astronomy
S.B., Massachusetts Institute of Technology, 1976; A.M., Harvard University, 1978; Ph.D., 1982

Richard S. Hamilton

Davies Professor of Mathematics
B.A., Yale University, 1963; Ph.D., Princeton University, 1966

Sarah Hansen
Senior Lecturer in Chemistry
B.A., Earlham College, 2001; M.A., Columbia University, 2009; Ph.D., 2014

Naama Harel
Senior Lecturer in Middle Eastern, South Asian, and African Studies
B.A., Tel Aviv University (Israel), 1999; M.A., 2004; Ph.D., University of Haifa (Israel), 2010

Fredrick C. Harris
Professor of Political Science
B.A., University of Georgia, 1985; M.A., Northwestern University, 1988; Ph.D., 1994

Michael Harris
Professor of Mathematics
A.B., Princeton University, 1973; A.M., Harvard University, 1976; Ph.D., 1977

Phyllis Harris
Associate Professor of Professional Practice in the Faculty of the Arts
B.A., Bennington College, 1961

Robert E. Harrist, Jr.
Jane and Leopold Swergold Professor of Chinese Art History
B.S., Indiana University, 1975; M.A., 1978; M.A., Columbia University, 1980; Ph.D., Princeton University, 1989

Carl Hart
Dirk Ziff Professor of Psychology (in Psychiatry)
B.S., University of Maryland, 1991; M.S., University of Wyoming, 1994, Ph.D., 1996

Matthew Hart
Associate Professor of English and Comparative Literature
M.A. (Hons.), University of Edinburgh (U.K.), 1996; M.A., University of Sussex (U.K.), 1997; Ph.D., University of Pennsylvania, 2004

Saidiya V. Hartman
Professor of English and Comparative Literature
B.A., Wesleyan University, 1984; Ph.D., Yale University, 1992

Christopher W. Harwood
Senior Lecturer in Slavic Languages
B.A., Columbia University, 1990; M.A., 1992; M.Phil., 1995; Ph.D., 2000

Tulle I. Hazelrigg
Professor of Biological Sciences
B.A., Oberlin College, 1971; Ph.D., Indiana University, 1982

Claire Elise Hazen
Senior Lecturer in Biological Sciences
B.A., Colorado College, 1967

**Geoffrey M. Heal**  
*Donald C. Waite III Professor of Social Enterprise in the Faculty of Business and Professor of International and Public Affairs*  
B.A., University of Cambridge, 1966; M.A., 1968; Ph.D., 1968

**Alice Heicklen**  
*Senior Lecturer in Biological Sciences*  
B.A., Penn State University, 1988; M.S., Tel Aviv University (Israel), 1991; Ph.D., Weizmann Institute of Science (Israel), 2000

**Larisa A. Heiphetz**  
*Assistant Professor of Psychology*  
B.A., Pennsylvania State University, 2008; A.M., Harvard University, 2010; Ph.D., 2013

**David John Helfand**  
*Professor of Astronomy*  
B.A., Amherst College, 1973; M.S., University of Massachusetts, 1973; Ph.D., 1977

**Sidney R. Hemming**  
*Professor of Earth and Environmental Sciences*  
B.S., Midwestern University, 1983; M.S., Tulane University, 1986; Ph.D., Stony Brook University - SUNY, 1994

**Wayne A. Hendrickson**  
*University Professor*  
B.A., University of Wisconsin-River Falls, 1963; Ph.D., Johns Hopkins University, 1968

**Alexander W. Hertel-Fernandez**  
*Assistant Professor of International and Public Affairs*  
B.A., Northwestern University, 2008; Ph.D., Harvard University, 2016

**Henry S. Hess**  
*Professor of Biomedical Engineering*  
B.S., Technische Universität Clausthal (Germany), 1993; M.S., Technische Universität Berlin, 1996; Ph.D., Freie Universität Berlin, 1999

**E. Tory Higgins**  
*Stanley Schachter Professor of Psychology and Professor of Business*  
B.A., McGill University (Canada), 1967; M.A., London School of Economics and Political Science, 1968; Ph.D., Columbia University, 1973

**Elizabeth M.C. Hillman**  
*Associate Professor of Biomedical Engineering and of Radiology (Physics)*  
M.Sc., University College London, 1998; Ph.D., 2002

**Shigeo Hirano**  
*Professor of Political Science*  
A.B., Harvard University, 1994; Ph.D., 2003

**Marianne Hirsch**  
*William Peterfield Trent Professor of English*  
B.A., Brown University, 1970; Ph.D., 1975

**Julia Bell Hirschberg**  
*Percy K. and Vida L. W. Hudson Professor of Computer Science*  
B.A., Eckert College, 1968; Ph.D., University of Michigan, Ann Arbor, 1976; MSEE, University of Pennsylvania, 1982; Ph.D., 1985

**Oliver Hobert**  
*Professor of Biological Sciences and Systems Biology*  
Ph.D., Planck Institute (Germany) 1995

**Gil Hochberg**  
*Ransford Professor of Hebrew, Comparative Literature and Middle Eastern Studies*  
Ph.D., University of California, Berkeley, 2002

**Baerbel Hoenisch**  
*Professor of Earth and Environmental Sciences*  
Vordipl., Bielefeld University (Germany), 1995; Dipl., University of Bremen (Germany), 1999; Ph.D., 2002

**Heidi L. Holst-Knudsen**  
*Senior Lecturer in French and Romance Philology*  

**Saeed Honarmand**  
*Senior Lecturer in Middle Eastern, South Asian, and African Studies*  
B.A., University of Isfahan (Iran), 1980; M.A., Ohio State University, 2004; Ph.D., 2011

**Harrison G. Hong**  
*John R. Eckel Jr. Professor of Financial Economics*  
B.A., University of California, Berkeley, 1992; Ph.D., Massachusetts Institute of Technology, 1997

**Axel Honneth**  
*Jack B. Weinstein Professor of the Humanities*  
Ph.D., Freie Universität Berlin, 1982

**Jean E. Howard**  
*George Delacorte Professor in the Humanities*  
B.A., Brown University, 1970; M.Phil., University of London, 1972; Ph.D., Yale University, 1975

**Joseph A. Howley**  
*Associate Professor of Classics*  
B.A., University of Maryland, Baltimore County, 2006; M.Litt., University of St. Andrews (Scotland), 2007; Ph.D., 2011

**Daniel J. Hsu**  
*Assistant Professor of Computer Science*  
B.S., University of California, Berkeley, 2004; M.S., University of California, San Diego, 2007; Ph.D., 2010

**Lingjun Hu**  
*Senior Lecturer in East Asian Languages and Cultures*
B.A., Xi’an Foreign Language University (China), 2000; M.A., Ohio State University, 2003; M.A., Columbia University, 2018

Ana Paula da Silva Huback
Senior Lecturer in Latin American and Iberian Cultures
B.A., Faculdade de Filosofia Santa Doroteia (Brazil), 1997; M.A., Universidade Federal de Minas Gerais (Brazil), 2003; Ph.D., Universidade Federal de Minas Gerais and University of New Mexico, 2007

Robert Glenn Hubbard
Russell L. Carson Professor of Finance and Professor of Economics

John D. Huber
Professor of Political Science
B.A., Lawrence University, 1984; M.A., University of Rochester, 1989; Ph.D., 1991

Pascale Hubert-Leibler
Senior Lecturer in French and Romance Philology
B.A., University of Paris III (France), 1979; M.A., 1980; Ph.D., 1984

Emlyn W. Hughes
Professor of Physics
B.S., Stanford University, 1982; M.A., Columbia University, 1984; Ph.D., 1987

Ivana Nikolic Hughes
Senior Lecturer in Chemistry
B.S., California Institute of Technology, 1999; M.S., Stanford University, 2000; Ph.D., 2005

Theodore Q. Hughes
The Korea Foundation Professor of Korean Studies in the Humanities in the Department of East Asian Languages and Cultures
B.A., University of California, San Diego, 1990; M.A., University of California, Los Angeles, 1997; Ph.D., 2000

Lam Hui
Professor of Physics
B.A., University of California, Berkeley, 1990; Ph.D., Massachusetts Institute of Technology, 1996

Macartan N. Humphreys
Professor of Political Science
B.A., Trinity College Dublin, 1994; M.Phil., University of Oxford, 2000; Ph.D., Harvard University, 2003

Amy Hungerford
Ruth Fulton Benedict Professor of English and Comparative Literature
B.A./M.A., Johns Hopkins University, 1992; M.A., 1993; Ph.D., 1999

John F. Hunt
Professor of Biological Sciences
A.B., Harvard University, 1982; Ph.D., Yale, 1993

David H. Hwang
Associate Professor of Theatre Arts in the Faculty of the Arts
B.A., Stanford University, 1979

Robert P. Hymes
Horace Walpole Carpentier Professor of Oriental Studies

I

Annette Insdorf
Professor of Film
B.A., Queens College - CUNY, 1972; Ph.D., Yale University, 1975

Elizabeth K. Irwin
Associate Professor of Classics

N. Turkuler Isiksel
James P. Shenton Associate Professor of the Core Curriculum
M.A., University of Edinburgh, 2003; M.A., Yale University, 2004; M.Phil., 2006; Ph.D., 2010

Jenann Ismael
Professor of Philosophy
B.A., Reed College, 1989; M.A., Princeton University, 1994; Ph.D., 1997

Takatoshi Ito
Professor of International and Public Affairs
Ph.D., Harvard University, 1979

Marilyn J. Ivy
Associate Professor of Anthropology
B.A., University of Oklahoma, 1975; M.A., University of Hawaii, 1979; M.A., Cornell University, 1982; Ph.D., 1988

Valentina B. Izmirlieva
Professor of Slavic Languages
B.A., Sofia University, 1986; M.A., 1987; M.A., Ohio State University; Ph.D., University of Chicago, 1999

Karl H. Jacoby
Allan Nevins Professor of American Economic History
A.B., Brown University, 1987; M.A., Yale University, 1992; Ph.D., 1997

Dhananjay Jagannathan
Assistant Professor of Philosophy
B.A., University of Texas at Austin, 2009; M.Phil., University of Cambridge, 2011; Ph.D., University of Chicago, 2017

Leslie Jamison
Associate Professor of Writing in the Faculty of the Arts
A.B., Harvard University, 2004; M.F.A., University of Iowa, 2006; M.A., Yale University, 2012

Suman Jana
Assistant Professor of Computer Science
B.E., Jadavpur University (India), 2003; M.S., University of Utah, 2009; Ph.D., University of Texas at Austin, 2014

Merit E. Janow
Professor of Professional Practice in the Faculty of International and Public Affairs
J.D., Columbia University, 1988

Tony Jehara
Associate Professor of Computer Science
B.S., McGill University (Canada), 1996; M.S., Massachusetts Institute of Technology, 1998; Ph.D., 2002

Margo L. Jefferson
Professor of Professional Practice in Writing in the Faculty of the Arts
M.S., Columbia University, 1971

Robert L. Jervis
Adlai E. Stevenson Professor and Professor of International and Public Affairs
B.A., Oberlin College, 1962; M.A., University of California, Berkeley, 1963; Ph.D., 1968

Songtao Jia
B.S., Nankai University (China), 1994; Ph.D., University of California, Los Angeles, 2003

Junyan Jiang
Assistant Professor of Political Science
B.A., University of Hong Kong, 2009; M.A., University of Chicago, 2011; Ph.D., 2016

Juan P. Jimenez
Lecturer in Latin American and Iberian Cultures
B.A., Universidad del Valle (Colombia), 1996; M.A., Washington State University, 2001

Bradley R. Johnson
Assistant Professor of Physics
B.S. Bethel College, 1996; M.S. University of Minnesota, 1998; Ph.D. University of Minnesota, 2004

Eleanor B. Johnson
Associate Professor of English and Comparative Literature
B.A., Yale University, 2001; M.A., University of California, Berkeley, 2006; Ph.D., 2009

David C. Johnston
Professor of Political Science
B.A., Swarthmore College, 1972; Ph.D., Princeton University, 1981

Kathryn V. Johnston
Professor of Astronomy
B.A., University of Cambridge, 1991; M.S., University of California, Santa Cruz, 1996; Ph.D., 1996

Kellie E. Jones
Professor of Art History and of African American and African Diaspora Studies
Ph.D., Yale University, 1999

Matthew L. Jones
James R. Barker Professor of Contemporary Civilization
A.B., Harvard University, 1994; M.Phil., University of Cambridge, 1995; Ph.D., Harvard University, 2000

Troels Jorgensen
Professor Emeritus of Mathematics
Ph.D., University of Copenhagen, 1970

Branden W. Joseph
Frank Gallipoli Professor of Modern and Contemporary Art
B.A., Stanford University, 1989; A.M., Harvard University, 1993; Ph.D., 1999

Jamal Joseph
Professor of Professional Practice in Film in the Faculty of the Arts
B.A., University of Kansas, 1987

Marko Jovanovic
Assistant Professor of Biological Sciences
M.Sc., University of Vienna, 2004; Ph.D., University of Zurich, 2010

Reka Juhasz
Assistant Professor of Economics
M.A., Corvinus University of Budapest Rajk László College for Advanced Studies, 2009; M.Sc. London School of Economics, 2010; Ph.D., 2015

Heidi S. Julavits
Associate Professor of Professional Practice in Writing in the Faculty of the Arts
M.F.A., Columbia University, 1996

Ji-Young Jung
Lecturer in Korean
B.A., Kyungpook National University (South Korea), 1996; M.A., Columbia University, Teachers College, 2001; Ed.M., 2002; Ed.D., 2009

K

Gail E. Kaiser
Professor of Computer Science
B.S., Massachusetts Institute of Technology, 1979; M.S., Carnegie Mellon University, 1980; Ph.D., 1985

Nikolas P. Kakkoufa
Lecturer in Classics
B.A., University of Cyprus, 2008; M.A., 2010; Ph.D., King’s College London, 2015
Daniel D. Kalderon  
*R Professor of Biological Sciences  
B.A., University of Cambridge, 1980; M.A., 1984; Ph.D., University of London, 1984

Thomas S. Kalin  
*R Professor of Professional Practice of Film in the Faculty of the Arts  
M.F.A., Art Institute of Chicago, 1986

Eric R. Kandel  
*University Professor  
A.B., Harvard University, 1952; M.D., New York University, 1956

Georgia Stelios Karagiorgi  
*Associate Professor of Physics  
B.Sc., Florida Institute of Technology, 2004; M.A., Columbia University, 2007; Ph.D., Massachusetts Institute of Technology, 2010

Charry Karamanoukian  
*Lecturer in Middle Eastern, South Asian, and African Studies  
B.A., Concordia University (Canada), 1996; M.A., McGill University (Canada), 1998; Ph.D., 2001

Ioannis Karatzas  
*L Higgins Professor of Applied Probability and Professor of Statistics  
M.S., Columbia University, 1976; M.Phil., 1979; Ph.D., 1980

Navin Kartik  
*Professor of Economics  
B.A., Brandeis University, 1999; Ph.D., Stanford University, 2004

Kimuli K. Kasara  
*Associate Professor of Political Science  
B.A., University of Oxford, 1999; Ph.D., Stanford University, 2006

Rebecca Kastleman  
*Assistant Professor of English and Comparative Literature  
A.B., Harvard University, 2006; A.M., 2014; Ph.D., 2017

Ira I. Katznelson  
*Ruggles Professor of Political Science and History  
B.A., Columbia University, 1966; Ph.D., University of Cambridge, 1969

Laura J. Kaufman  
*Professor of Chemistry  
B.A., Columbia University, 1997; Ph.D., University of California, Berkeley, 2002

Sudipta Kaviraj  
*Professor of Middle Eastern, South Asian, and African Studies  
B.A., Presidency University (India), 1966; M.A., University of Calcutta (India), 1969; Ph.D., Jawaharlal Nehru University (India), 1979

Peter B. Kelemen  
*Arthur D. Storke Memorial Professor of Earth and Environmental Sciences  
A.B., Dartmouth College, 1980; M.S., University of Washington, 1985; Ph.D., 1987

Darcy B. Kelley  
*Harold Weintraub Professor of Biological Sciences  
B.A., Barnard College, 1970; Ph.D., Rockefeller University, 1975

John R. Kender  
*Professor of Computer Science  
B.S., University of Detroit, 1970; M.S., University of Michigan, 1972; Ph.D., Carnegie Mellon University, 1980

Jon Kessler  
*Professor of Visual Arts  
B.F.A., Purchase College - SUNY, 1980

Alice Kessler-Harris  
*R. Gordon Hoxie Professor of American History in Honor of Dwight D. Eisenhower  
B.A., Goucher College, 1961; M.A., Rutgers University, 1963; Ph.D., 1968

Kerry William Key  
*Associate Professor of Earth and Environmental Sciences  
B.S., University of California, San Diego, 1998; Ph.D., 2003

Rashid Khalidi  
*Edward Said Professor of Modern Arab Studies and Literature  
B.A., Yale University, 1970; D.Phil., University of Oxford, 1974

Mikhail G. Khovanov  
*Professor of Mathematics  
B.S., Moscow State University (Russia), 1991; Ph.D., Yale University, 1997

Mana Kia  
*Associate Professor of Middle Eastern, South Asian, and African Studies  
B.A., Vassar College, 1997; M.A., New York University, 2001; Ph.D., Harvard University, 2011

Jungwon Kim  
*King Sejong Assistant Professor of Korean Studies  
A.M., Harvard University, 2001; Ph.D., 2007

Martha A. Kim  
*Associate Professor of Computer Science  
A.B., Harvard University, 2002; M.S., University of Washington, 2005; Ph.D., 2008

Seong Uk Kim  
*Il Hwan and Soon Ja Cho Assistant Professor of Korean Culture and Religion  
B.A., Sogang University (South Korea), 1996; M.A., University of Georgia, 2007; Ph.D., University of California, Los Angeles, 2013
Seth R. Kimmel  
*Associate Professor of Latin American and Iberian Cultures*  
B.A., Columbia University, 2001; Ph.D., University of California, Berkeley, 2010

Robert J. King  
*Professor of Film*  
B.A., University of Oxford, 1997; Ph.D., University of California, Los Angeles, 2004

Jonathan Kingslake  
*Associate Professor of Earth and Environmental Sciences*  
Ph.D. University of Sheffield (U.K.), 2013

David Kipping  
*Assistant Professor of Astronomy*  
M.A., University of Cambridge, 2006; M.Sc., 2007; Ph.D., 2011

Binnie Kirshenbaum  
*Professor of Professional Practice in Writing in the Faculty of the Arts*  
M.F.A., Brooklyn College - CUNY, 1984

David A. Klass  
*Assistant Professor of Professional Practice in Film in the Faculty of the Arts*  
B.A., Yale University, 1982; M.A., University of Southern California, 1988

Alexandra G. Kleeman  
*Assistant Professor of Writing in the Faculty of the Arts*  

Holger A. Klein  
*Lisa and Bernard Selz Professor of Medieval Art History and Archaeology*  
M.A., Courtauld Institute, 1994; Ph.D., University of Bonn (Germany), 2000

Liza Knapp  
*Professor of Slavic Languages*  
A.B., Harvard University, 1977; Ph.D., Columbia University, 1985

Jeffrey T. Koberstein  
*Percy K. and Vida L.W. Hudson Professor of Chemical Engineering*  
B.S., University of Wisconsin, 1974; Ph.D., University of Massachusetts, 1979

Rebecca A. Kobrin  
*Russell and Bettina Knapp Associate Professor of American Jewish History*  
B.A., Yale University, 1994; Ph.D., University of Pennsylvania, 2002

Bruce M. Kogut  
*Sanford C. Bernstein & Co. Professor of Leadership and Ethics*  
B.A., University of California, Berkeley, 1975; M.I.A., Columbia University, 1978; Ph.D., Massachusetts Institute of Technology, 1983

Wojciech Kopczuk  
*Professor of Economics and of International and Public Affairs*  
B.A., University of Warsaw, 1996; M.Sc., 1996; M.A., University of Michigan, 1998; Ph.D., 2001

Adam J. Kosto  
*Professor of History*  
B.A., Yale University, 1989; Ph.D., Harvard University, 1996

Mariusz S. Kozak  
*Associate Professor of Music*  
B.M., University of New Mexico, 2006; M.M., Eastman School of Music, 2002; M.M., University of New Mexico, 2006; Ph.D., University of Chicago, 2012

Samory Kpotufe  
*Associate Professor of Statistics*  
B.A., University of Denver, 1999; Ph.D., University of California, San Diego, 2010

Rosalind E. Krauss  
*University Professor*  
Ph.D., Harvard University, 1969

Janet L. Kraynak  
*Senior Lecturer in Art History and Archaeology*  
B.A., Vassar College, 1987; Ph.D., The Graduate Center, City University of New York, 1993; Ph.D., Massachusetts Institute of Technology, 2001

Paul B. Kreitman  
*Assistant Professor of East Asian Languages and Cultures*  
B.A., University of Oxford, 2006; Ph.D., Princeton University, 2015

Igor M. Krichever  
*Adrain Professor of Mathematics*  
Ph.D., Moscow State University (Russia), 1972

Nikolaus Kriegeskorte  
*Professor of Psychology*  
M.A., Universität zu Köln (Germany), 1999; Ph.D., Universiteit Maastricht (Netherlands), 2004

Sara Mae Kross  
*Lecturer in the Discipline of Ecology, Evolution and Environmental Biology*  
B.Sc., Cornell University, 2005; Ph.D. University of Canterbury (New Zealand), 2012

Brian H. Kulick  
*Professor of Professional Practice in the Faculty of the Arts*  
M.F.A., Carnegie Mellon University, 1987

Elisabeth A. Ladenson
Professor of French and Romance Philology
B.A., University of Pennsylvania, 1982; M.A., Columbia University, 1988; Ph.D., 1994

Paul F. Lagunes
Assistant Professor of International and Public Affairs
Ph.D., Yale University, 2012

Meredith Landman
Lecturer in Slavic Languages
B.A., University of California, Santa Cruz, 1997; Ph.D., University of Massachusetts Amherst, 2006

Tamar Lando
Associate Professor of Philosophy
B.A., Stanford University, 2002; M.A., University of California, Berkeley, 2008; Ph.D., 2012

Jennifer La'O
Associate Professor of Economics
S.B., Massachusetts Institute of Technology, 2005; Ph.D., 2010

Laura Landwebber
Professor of Biochemistry and Molecular Biophysics and of Biological Sciences (in Systems Biology)
A.B., Princeton University, 1989; M.A., Harvard University, 1991; Ph.D., 1993

Dorothea S. Lasky
Associate Professor of Writing in the Faculty of the Arts

Victor D. Lavalle
Associate Professor of Practice in Writing in the Faculty of the Arts
M.F.A., Columbia University, 1998

Jeffrey R. Lax
Professor of Political Science
B.A., Yale University, 1995; M.A., New York University, 1996; Ph.D., 2001

Elizabeth Leake
Professor of Italian
B.A., University of California, Berkeley, 1989; M.A., 1993; Ph.D., 1998

Eugenia Y. Lean
Professor of East Asian Languages and Cultures
B.A., Stanford University, 1990; M.A., University of California, Los Angeles, 1996; Ph.D., 2001

Jack Lechner
Associate Professor of Professional Practice in Film in the Faculty of the Arts
B.A. Yale University, 1984

Ana Paulina Lee
Assistant Professor of Latin American and Iberian Cultures
B.A., Binghampton University - SUNY, 2001; M.A., New York University, 2007; Ph.D., University of Southern California, 2014

Beom Lee
Lecturer in East Asian Languages and Cultures

Jennifer Lee
Julian Clarence Levi Professor of Social Sciences

Sokbae Lee
Professor of Economics
B.A., Seoul National University, 1996; M.A., 1998; Ph.D., University of Iowa, 2002

Adam Leeds
Assistant Professor of Slavic Languages
B.A., University of Chicago, 2005; Ph.D., University of Pennsylvania, 2016

Agnieska Legutko
Lecturer in Germanic Languages
M.A., Jagiellonian University (Poland), 2002; M.A., Columbia University, 2006; M.Phil., 2008; Ph.D., 2012

James L. Leighton
Professor of Chemistry
B.S., Yale University, 1987; Ph.D., Harvard University, 1994

Yuri Levin
Professor of Physics
B.Sc., University of Melbourne (Australia), 1993; Ph.D., California Institute of Technology, 1999

George E. Lewis
Edwin H. Case Professor of Music
B.A., Yale University, 1974

Allison B. Lewko
Assistant Professor of Computer Science
A.B., Princeton University, 2006; Ph.D., University of Texas at Austin, 2012

Chao Li
Associate Professor of Mathematics
B.S., Tsinghua University (China), 2010; Ph.D., Harvard University, 2015

Feng Li
Professor of East Asian Languages and Cultures
M.A., Institute of Archaeology (China), 1986; Ph.D., University of Chicago, 2000

Natasha J. Lightfoot
Associate Professor of History
B.A., Yale University, 1999; M.A., New York University, 2002; Ph.D., 2007

Mark Lilla
Professor of the Humanities
B.A., University of Michigan, 1978; M.P.P., Harvard University, 1980; Ph.D., 1990

Francesco Lin
Assistant Professor of Mathematics
B.Sc., Università di Pisa (Italy), 2012; M.Sc., 2012; Ph.D., Massachusetts Institute of Technology, 2016

Mark E. Lincicome
Associate Professor of East Asian Languages and Cultures
B.A. Bowdoin College, 1976; Ph.D. University of Chicago, 1985

Patricia G. Lindemann
Lecturer in Psychology
B.A., Wesleyan University, 1987; Ph.D., Columbia University, 2000

Elliot Lipnowski
Assistant Professor of Economics
B.Math., University of Waterloo (Canada), 2010; M.A., New York University, 2014; Ph.D., 2016

Mark Lipovetsky (Liederman)
Professor of Slavic Languages
B.A. /M.A., Ural State University (Russia), 1986; Ph.D., Ural State University (Russia), 1989; D.Sc., Ural State Pedagogical University (Russia), 1996

Samuel P. Lipsyte
Associate Professor of Professional Practice in the Faculty of the Arts
B.A., Brown University, 1990

Chiu-Chu Melissa Liu
Professor of Mathematics
B.S., National Taiwan University, 1996; Ph.D., Harvard University, 2002

Jingchen Liu
Professor of Statistics
B.S., Peking University (China), 2003; Ph.D., Harvard University, 2008

Lening Liu
Professor of East Asian Languages and Cultures

Lydia H. Liu
Wun Tsun Tam Professor in the Humanities
B.A., Northwestern Normal University (China), 1979; M.A., Shandong University (China), 1983; Ph.D., Harvard University, 1990

Qingmin Liu
Professor of Economics
B.A., Peking University (China), 2002; Ph.D., Stanford University, 2007

Reyes Llopis-Garcia
Senior Lecturer in Latin American and Iberian Cultures
B.A., Universidad Nebrija (Spain), 2002; M.A., 2002; Ph.D., 2009

Shaw-Hwa Lo
Professor of Statistics and of Biostatistics
B.S., National Taiwan University, 1975; M.A., University of California, Santa Barbara, 1978; Ph.D., University of California, Berkeley, 1981

Richard Locke
Professor of Professional Practice in the Faculty of the Arts
B.A., Columbia University, 1962; B.A., University of Cambridge, 1964

Kyoko Loetscher
Lecturer in East Asian Languages and Cultures
B.A., Aoyama Gakuin University (Japan), 1987; M.A., Ohio State University, 1993

Po-Ling Loh
Associate Professor of Statistics
B.S., California Institute of Technology, 2009; M.S., University of California, Berkeley, 2013; Ph.D., 2014

Claudio W. Lomnitz
Campbell Family Professor of Anthropology
B.A., Universidad Autónoma Metropolitana Iztapalapa (Mexico), 1978; M.A., Stanford University, 1979; Ph.D., 1987

Austin Long
Associate Professor of International and Public Affairs
B.S., Georgia Institute of Technology, 1998; M.S., 2002; Ph.D., Massachusetts Institute of Technology, 2010

Phillip Lopate
Professor of Professional Practice in the Faculty of the Arts and in the Graduate School of Journalism
B.A., Columbia University, 1964; Ph.D., Union Graduate School, 1979

Nicola G. López
Associate Professor of Professional Practice in Visual Arts in the Faculty of the Arts
B.A., Columbia University, 1998; M.F.A., 2004

Yao Lu
Professor of Sociology
B.A., Fudan University (China), 2003; M.A., University of California, Los Angeles, 2005; Ph.D., 2008

Edward Luck
Professor of Professional Practice in the Faculty of International and Public Affairs
Ph.D. Columbia University, 2001

David B. Lurie
Associate Professor of East Asian Languages and Cultures
A.B., Harvard University, 1993; M.A., Columbia University, 1996; Ph.D., 2001

M

John Ma
Professor of Classics

W. Bentley MacLeod
Sami Mhnaymneh Professor of Economics and Professor of International and Public Affairs
B.A., Queen’s University (Canada), 1975; M.Sc., 1979; Ph.D., University of British Columbia (Canada), 1984

Mohammad Ali Arian Maleki
Associate Professor of Statistics
M.S., Stanford University, 2010; Ph.D., 2010

Tal G. Malkin
Associate Professor of Computer Science
Ph.D., Massachusetts Institute of Technology, 2000

Mahmood Mamdani
Herbert Lehman Professor of Government and Professor of Anthropology
B.A., University of Pittsburgh, 1967; M.A., Fletcher School of Law, 1968; M.A.L.D., 1969; Ph.D., Harvard University, 1974

Sita Mani
Lecturer in the Discipline of Theatre Arts in the Faculty of the Arts

James L. Manley
Julian Clarence Levi Professor of the Life Sciences
B.S., Columbia University, 1971; Ph.D., Stony Brook University - SUNY, 1976

Gregory Mann
Professor of History
B.A., University of Georgia, 1993; Ph.D., Northwestern University, 2000

Wolfgang Rainer Mann
Professor of Philosophy
A.B., Princeton University, 1978; Ph.D., 1987

Karuna Mantena
Professor of Political Science
B.S.c, London School of Economics, 1995; M.A., University of Essex, 1996; Ph.D., Harvard University, 2004

Ellen L. Marakowitz
Senior Lecturer in Anthropology
B.A., Michigan State University, 1980; M.A., Columbia University, 1987; Ph.D., 1993

Benjamin M. Marcus
Professor of Writing in the Faculty of the Arts
M.F.A., Brown University, 1991

Sharon Marcus
Orlando Harriman Professor of English
B.A., Brown University, 1986; Ph.D., Johns Hopkins University, 1995

Szabolcs Marka
Walter O. LeCroy, Jr. Associate Professor of Physics
Diploma, Lajos Kossuth University (Hungary), 1993; Ph.D., Vanderbilt University, 1999

Bianca Jones Marlin
Herbert and Florence Irving Assistant Professor of Cell Research (in Psychology and Neuroscience) at the Mortimer B. Zuckerman Mind Brain Behavior Institute
B.S., St. John’s University, 2009; Ph.D., New York University, 2015

John Marshall
Assistant Professor of Political Science
B.A., University of Oxford, St. Anne’s College, 2008; M.Sc., University of Oxford, 2010; Ph.D., Harvard University, 2016

Paraskevi Martzavou
Lecturer in Classics
B.A., Aristotle University of Thessaloniki (Greece), 1992; M.A., École Pratique des Hautes Études (France), 1998; Ph.D., 2008

Caroline Marvin
Lecturer in Psychology
B.A., Yale University, 2001; M.A., Courtauld Institute of Art (United Kingdom), 2002; Ph.D., Columbia University, 2016

Miya J. Masaoka
Assistant Professor of Professional Practice in Visual Arts in the Faculty of the Arts
B.A., San Francisco State University, 1991; M.A., Mills College, 1994

Joseph A. Massad
Professor of Middle Eastern, South Asian, and African Studies
B.A., University of New Mexico, 1987; M.A., 1989; M.Phil., Columbia University, 1994; Ph.D., 1998

Eric Matheis
Lecturer in French
B.A., University of Kansas, 1989; M.A., Columbia University, 2001; Ph.D., 2014

Robert D. Mawhinney
Professor of Physics
B.S., University of South Florida, 1980; A.M., Harvard University, 1982; Ph.D., 1987

Mark A. Mazower
Ira D. Wallach Professor of History

Malgorzata Mazurek
Associate Professor of Polish Studies
M.A., University of Warsaw, 2004; Ph.D., 2008

Shane A. McCrae
Associate Professor of Writing in the Faculty of the Arts
B.A., Linfield College, 2002; M.F.A., University of Iowa, 2004; J.D., Harvard University, 2007; M.A., University of Iowa, 2012

Stephanie McCurry
R. Gordon Hoxie Professor of American History in Honor of Dwight D. Eisenhower
B.A., University of Western Ontario, 1981; M.A., University of Rochester, 1983; Ph.D., Binghamton University - SUNY, 1988

Ann E. McDermott
Esther and Ronald Breslow Professor of Biological Chemistry and Professor of Biological Sciences and of Chemical Engineering
B.S., Harvey Mudd College, 1981; M.A., 1985; Ph.D., University of California, Berkeley, 1987

Matthew P. McKelway
Takeo and Itsuko Atsumi Professor of Japanese Art History
B.A., Amherst College, 1989; M.A., Columbia University, 1991; M.Phil., 1997; Ph.D., 1999

Galen A. McKinley
Professor of Earth and Environmental Sciences
B.S., Rice University, 1995; Ph.D., Massachusetts Institute of Technology, 2002

Jerry F. McManus
Professor of Earth and Environmental Sciences
B.A., Columbia University, 1989; M.A., 1992; M.Phil., 1996; Ph.D., 1997

V. Faye McNeill
Professor of Chemical Engineering and of Earth and Environmental Sciences
B.S., California Institute of Technology, 1999; M.S., 2001; Massachusetts Institute of Technology; Ph.D., 2005

John H. McWhorter
Associate Professor of Slavic Languages
B.A., Rutgers University, 1985; M.A., New York University, 1987; Ph.D., Stanford University, 1993

Tey Meadow
Associate Professor of Sociology
B.A., Barnard College, 1999; J.D., Fordham University School of Law; Ph.D., New York University, 2011

Alberto Medina
Professor of Latin American and Iberian Cultures
B.A., University of Salamanca (Spain), 1991; M.A., University of Southern California, 1994; Ph.D., New York University, 2000

Eric R. Mendelsohn
Professor of Professional Practice in Film
B.F.A., Purchase College - SUNY, 1986

Susan E. Mendelsohn
Lecturer in English and Comparative Literature
B.A., American University, 1996; M.A., University of Texas at Austin, 1998; Ph.D., 2012

Edward Mendelson
Lionel Trilling Professor in the Humanities
B.A., University of Rochester, 1966; M.A., Johns Hopkins University, 1968; Ph.D., 1969

Yuan-Yuan Meng
Senior Lecturer in East Asian Languages and Cultures
B.A., National Taiwan Normal University (Taiwan), 1988; M.A., Columbia University, 1992; M.A., 2013; M.Ed., 2018

Duncan N. L. Menge
Associate Professor of Ecology, Evolution, and Environmental Biology
Ph.D., Princeton University, 2008

William H. Menke
Professor of Earth and Environmental Sciences
B.S., Massachusetts Institute of Technology, 1976; M.S., 1976; Ph.D., Columbia University, 1982

Maria Ignacia Mercadal Albornoz
Assistant Professor of International and Public Affairs
Ph.D., University of Chicago, 2016

Christia Mercer
Gustave M. Berne Professor of Philosophy
B.A., Brooklyn College - CUNY, 1974; M.A., Rutgers University, 1978; M.A., Princeton University, 1984; Ph.D., 1989

Jessica E. Merrill
Assistant Professor of Slavic Languages
B.A., Northwestern University, 2003; M.A., University of California, Berkeley, 2007; Ph.D., 2012

Brinkley M. Messick
Professor of Anthropology and of Middle Eastern, South Asian, and African Studies
B.A., University of Pennsylvania, 1969; M.A., Princeton University, 1974; Ph.D., 1978

Janet A. Metcalf
Professor of Psychology
B.Sc., University of Toronto, 1975; M.A., 1977; Ph.D., 1982

Brian D. Metzger
Professor of Physics
B.S., University of Iowa, 2003; M.A., University of California, Berkeley, 2005; Ph.D., 2009

Jeffery F. Milarsky
Senior Lecturer in Music

Elizabeth A. Miller
Associate Professor of Biological Sciences
Ronald I. Miller  
**Lecturer in Economics**  
B.S., University of Toronto (Canada), 1987; M.A., Princeton University, 1989; Ph.D., 1994

Andrew J. Millis  
**Professor of Physics**  
A.B., Harvard University, 1982; Ph.D., Massachusetts Institute of Technology, 1986

Denise Milstein  
**Senior Lecturer in Sociology**  
B.A., Brown University, 1997; M.A., Columbia University, 2002; M.Phil., 2003; Ph.D., 2007

Wei Min  
**Professor of Chemistry**  
B.S., Peking University (China), 2003; Ph.D., Harvard University, 2008

Vishal Misra  
**Professor of Computer Science**  
B.S., Indian Institute of Technology, Bombay, 1992; M.S., University of Massachusetts, 1996; Ph.D., 2000

Timothy P. Mitchell  
**William B. Ransford Professor of Middle Eastern, South Asian, and African Studies and Professor of International and Public Affairs**  
B.A., University of Cambridge, 1977; M.A., Princeton University, 1979; Ph.D., 1984

Henri C. Mitterand  
**Professor Emeritus of French and Romance Philology**  
Docteur ès Lettres, Ecole normale supérieure (France), 1969

Naeem Mohaiemen  
**Associate Professor of Visual Arts**  
B.A., Oberlin College, 1993; M.A., Columbia University, 2015; Ph.D., 2019

Graciela R. Montaldo  
**Professor of Latin American and Iberian Cultures**  
B.A., Universidad de Buenos Aires, 1984; Ph.D., 1990

Jose L. Montiel Olea  
**Assistant Professor of Economics**  
B.A., The Instituto Tecnológico Autónomo de México, 2006; M.A., 2008; Ph.D., Harvard University, 2013

Michele M. Moody-Adams  
**Joseph Straus Professor of Political Philosophy and Legal Theory**  

Rosalind C. Morris  
**Professor of Anthropology**  
B.A., University of British Columbia (Canada), 1986; M.A., York University (Canada), 1989; Ph.D., University of Chicago, 1994

Yves Mousallam  
**Assistant Professor of Earth and Environmental Sciences**  
B.Sc., University of Ottawa, 2008; M.Sc., 2010; Ph.D., University of Cambridge, 2013

Alfred H. Mueller  
**Enrico Fermi Professor of Physics**  
B.S., Iowa State University, 1961; Ph.D., Massachusetts Institute of Technology, 1965

Debashree Mukherjee  
**Associate Professor of Middle Eastern, South Asian and African Studies**  
Ph.D. New York University, 2015

Sumit Mukherjee  
**Associate Professor of Statistics**  
B.A., Indian Statistical Institute (India), 2007; M.A., 2009; Ph.D., Stanford University, 2014

Dipali Mukhopadhyay  
**Assistant Professor of International and Public Affairs**  
B.A., Yale University, 2002; M.A., Tufts University, 2005; Ph.D., 2010

Robert A. Mundell  
**University Professor Emeritus**  
Ph.D., Massachusetts Institute of Technology, 1956

Maria Victoria Murillo  
**Professor of Political Science and of International and Public Affairs**  

Mary Pollard Murray  
**Associate Professor of English and Comparative Literature**  
B.A., Columbia University, 1994; M.Phil., University of Cambridge, 1996; Ph.D., Yale University, 2004

Stephen D. Murray  
**Lisa and Bernard Selz Professor of Medieval Art History in the Department of Art History and Archaeology**  

John C. Mutter  
**Professor of Earth and Environmental Sciences and of International and Public Affairs**  
B.S., University of Melbourne (Australia), 1969; M.S., University of Sydney (Australia), 1978; Ph.D., Columbia University, 1982

Ioannis Mylonopoulos  
**Associate Professor of Art History and Archaeology**
B.A., National and Kapodistrian University of Athens, 1991; Ph.D., Heidelberg University (Germany), 2001

Shahid Naeem
Professor of Ecology, Evolution, and Environmental Biology
B.A., University of California, Berkeley, 1979; M.A., 1984; Ph.D., 1988

Suresh Naidu
Professor of International and Public Affairs and of Economics
M.A., University of Massachusetts Amherst, 2004; Ph.D., University of California, Berkeley, 2010

Abdul Nanji
Senior Lecturer in Middle Eastern, South Asian, and African Studies
A.A., Corning Community College, 1966; B.A., State University of New York, College at New Paltz, 1969; M.A., 1975

Abhay Pasupathy Narayan
Professor of Physics
Ph.D., Cornell University, 2004

Andrew J. Nathan
Class of 1919 Professor of Political Science
A.B., Harvard University, 1963; A.M., 1965; Ph.D., 1971

Gerald Navratil
Thomas Alva Edison Professor
B.S., California Institute of Technology, 1973; M.S., University of Wisconsin-Madison, 1974; Ph.D., 1976

Shree K. Nayar
T.C. Chang Professor of Computer Science
B.S., Birla Institute of Technology (India), 1984; M.S., North Carolina State University, 1986; Ph.D., Carnegie Mellon University, 1990

Fumiko Nazikian
Senior Lecturer in East Asian Languages and Cultures
B.A., Iwate University (Japan), 1979; M.A., Tokyo Gakugei (Japan), 1984; M.A., Australian National University, 1986; Ph.D., University of Sydney, 1994

Ronald Charles Neath
Lecturer in Statistics
B.S., University of California, Davis, 1991; M.S., 1992; Ph.D., University of Minnesota, 2006

Frances Negrón-Muntaner
Professor of English and Comparative Literature
B.S., University of Puerto Rico, 1986; M.A., Temple University, 1991; Ph.D., Rutgers University, 2000

Melissa Kay Ness
Assistant Professor of Astronomy
B.E., University of Queensland (Australia), 2000; Ph.D., Australian National University, Research School of Astronomy and Astrophysics, 2013

Joao Nemi Neto
Senior Lecturer in Latin American and Iberian Cultures
B.A., University of São Paulo (Brazil), 2000; M.A., 2007; M.Phil., The Graduate Center, City University of New York, 2012; Ph.D., 2015

Lara J. Nettelfield
Senior Lecturer in Political Science
B.A., University of California, 1995; M.A., Columbia University, 1999; M.Phil., 2001; Ph.D., 2006

Meredith K. Nettles
Professor of Earth and Environmental Sciences
A.B., Harvard University, 1995; M.S., University of Arizona, 2000; Ph.D., Harvard University, 2005

Fay W. Ng
Senior Lecturer in Chemistry
B.S., University of California, 1992; M.A., Yale University, 1993; Ph.D., Columbia University, 1997

Serena Ng
Edwin W. Rickert Professor of Economics
B.A., University of Western Ontario (Canada), 1980; M.A., 1982; M.A., Princeton University, 1992; Ph.D., 1993

Mae Ngai
Lung Family Professor of Asian American Studies and Professor of History

Lien-Hang Nguyen
Dorothy Borg Associate Professor of the History of American-East Asian Relations
B.A., University of Pennsylvania, 1996; Ph.D., Yale University, 2008

Phuong Chung Nguyen
Lecturer in Vietnamese
B.A., Hanoi University, 2000; M.A., Hanoi National University, 2007

Alberto Nicolis
Associate Professor of Physics
Laurea, Pisa University (Italy), 1999; Diploma, Scuola Normale Superiore, Pisa (Italy), 1999; Ph.D., 2003

Jason Nieh
Professor of Computer Science
B.S., Massachusetts Institute of Technology, 1989; M.S., Stanford University, 1990; Ph.D., 1999

Lars T. Nielsen
Senior Lecturer in Mathematics
M.A., University of Copenhagen (Denmark), 1980; Ph.D., Harvard University, 1985

Miharu Nittono
Senior Lecturer in East Asian Languages and Cultures

Jack R. Norton
Professor of Chemistry
A.B., Harvard University, 1967; Ph.D., Stanford University, 1972

Lynn I. Nottage
Associate Professor in Theatre Arts in the Faculty of the Arts
B.A., Brown University, 1986; M.F.A., Yale University, 1989

Youssef Nouhi
Senior Lecturer in Middle Eastern, South Asian, and African Studies
M.A., University of Ottawa (Canada), 1996; M.A., University of Southern California, 2003

Steven M. Nowick
Professor of Computer Science and of Electrical Engineering
B.A., Yale University, 1976; M.A., Columbia University, 1979; Ph.D., Stanford University, 1993

Colin P. Nuckolls
Sheldon and Dorothy Buckler Professor of Material Science in the Department of Chemistry
B.S., University of Texas at Austin, 1993; Ph.D., Columbia University, 1998

Michael Nutter
David N. Dinkins Professor of Professional Practice and Public Affairs
B.S. University of Pennsylvania, 1979

Marcel Nutz
Professor of Mathematics; Professor of Statistics
Diploma Mathematics, ETH Zurich (Switzerland), 2007; Ph.D., 2010

Jose A. Ocampo
Professor of Professional Practice in the Faculty of International and Public Affairs
B.A., University of Notre Dame, 1972; Ph.D., Yale University, 1976

Ana Maria Ochoa
Professor of Music
B.A., University of British Columbia (Canada), 1987; M.A., Indiana University, Bloomington, 1993; Ph.D., 1996

Kevin N. Ochsner
Professor of Psychology

Brendan Andrew O’Flaherty
Professor of Economics

Sharyn L. O’Halloran
George Blumenthal Professor of Political Economy and Professor of International and Public Affairs
B.A., University of California, San Diego, 1985; M.A., 1988; Ph.D., 1991

Keiko Okamoto
Lecturer in East Asian Languages and Cultures

Andrei Okounkov
Samuel Eilenberg Professor of Mathematics
B.S., Moscow State University (Russia), 1993; Ph.D., 1995

Paul E. Olsen
Arthur D. Storke Memorial Professor of Earth and Environmental Sciences
B.A., Yale University, 1978; Ph.D., 1983

Robert G. O’Meally
Zora Neale Hurston Professor of English and Comparative Literature
A.B., Stanford University, 1970; A.M., Harvard University, 1971; Ph.D., 1975

Benjamin S. Orlove
Professor of International and Public Affairs
Ph.D., University of California, Berkeley, 1975

Jonathan S. Owen
Associate Professor of Chemistry
B.S., University of Wisconsin-Madison, 2000; Ph.D., California Institute of Technology, 2005

Frederik B. Paerels
Professor of Astronomy
M.S., Utrecht University (Netherlands), 1984; Ph.D., 1987

Matthew I. Palmer
Senior Lecturer in the Discipline of Ecology, Evolution and Environmental Biology
B.S., Cornell University, 1996; Ph.D., Rutgers University, 2005

Patrizia Palumbo
Senior Lecturer in Italian
B.A., University of Turin (Italy), 1988; M.A., Columbia University, 1990; M.Phil., 1992; Ph.D., 1996

Orhan Pamuk
Robert Yik-Fong Tam Professor in the Humanities
B.A., University of Istanbul, 1976

**Arvind Panagariya**  
*Jagdish N. Bhagwati Professor of Indian Political Economy*  
Ph.D., Princeton University, 1978

**Liam Paninski**  
*Professor of Neuroscience and of Statistics*  
B.Sc., Brown University, 1999; Ph.D., New York University, 2003

**Christos H. Papadimitriou**  
*Donovan Family Professor of Computer Science*  
B.S. Athens Polytechnic, 1972; M.S., Princeton University, 1974; Ph.D., 1976

**Deborah A. Paredez**  
*Associate Professor of Professional Practice in Writing in the Faculty of the Arts*  
B.A., Trinity University, 1993; Ph.D., Northwestern University, 2002

**Ah-Hyung Park**  
*Lenfest Earth Institute Associate Professor of Climate Change*  
B.A.S., University of British Columbia (Canada), 1998; M.A.S., 2000; Ph.D., Ohio State University, 2005

**Jisuk Park**  
*Lecturer in East Asian Languages and Cultures*  
B.A., University of Aichi (Japan), 2000; M.A., University of Wisconsin-Madison, 2002

**Edward C. Parker**  
*Professor of Professional Practice in Theatre Arts in the Faculty of the Arts*  
M.F.A., Columbia University, 1998

**Gerard F. Parkin**  
*Professor of Chemistry*  
B.A., University of Oxford, 1981; Ph.D., 1985

**Michael D. Parrott**  
*Lecturer in Political Science*  
B.A., University of Texas; M.A., Fordham University; Ph.D., University of Maryland, College Park, 2016

**John A. Parsons**  
*Professor of Physics*  
B.S., McMaster University (Canada), 1985; M.S., University of Toronto, 1986; Ph.D., 1990

**Michael J. Passaro**  
*Associate Professor of Professional Practice in Theatre Arts in the Faculty of the Arts*  
B.A., New York University, 1984; M.A., 1988

**Esther Pasztory**  
*Lisa and Bernard Selz Professor Emerita of Pre-Columbian Art History and Archaeology*  
B.A., Barnard College, 1965; M.A., Columbia University, 1967; Ph.D., 1971

**Joseph Patterson**  
*Professor of Astronomy*  
A.B., Harvard University, 1969; Ph.D., University of Texas at Austin, 1979

**Christopher A.B. Peacocke**  
*Johnsonian Professor of Philosophy*  
B. Phil., University of Oxford, 1974; M.A., 1971; Ph.D., 1979

**Susan G. Pedersen**  
*Gouvernor Morris Professor of History*  
A.B., Harvard University, 1982; Ph.D., 1989

**Itshack G. Pe’er**  
*Associate Professor of Computer Science*  
B.S., Tel Aviv University, 1991; M.S., 1995; Ph.D., 2002

**John Pemberton, IV**  
*Associate Professor of Anthropology*  

**Richard Peña**  
*Professor of Professional Practice in the Faculty of the Arts*  
M.S., Massachusetts Institute of Technology, 1978

**Feniosky A. Pena-Mora**  
*Edwin Howard Armstrong Professor of Civil Engineering and Engineering Mechanics, Professor of Earth and Environmental Engineering, and of Computer Science*  
M.S., Massachusetts Institute of Technology, 1991; Med.Sc.D., 1994

**Gustavo F. Pérez-Firmat**  
*David Feinson Professor of Humanities*  
B.A., University of Miami, 1970; M.A., 1972; Ph.D., University of Michigan, 1979

**Julie S. Peters**  
*M. Gordon Garbedian Professor of English and Comparative Literature*  
A.B., Yale University, 1981; Ph.D., Princeton University, 1986

**Anne Pfeifer**  
*Assistant Professor of Germanic Languages*  
B.A., Columbia University, 2004; M.A., University of Toronto, 2008; Ph.D., Yale University, 2015

**Gregory M. Pflugfelder**  
*Associate Professor of East Asian Languages and Cultures*  
A.B., Harvard University, 1981; M.A., Waseda University (Japan), 1984; Ph.D., Stanford University, 1996

**John D. Phan**  
*Assistant Professor of East Asian Languages and Cultures*  
B.A., Saint Olaf College, 2002; M.A., Columbia University, 2005; Ph.D., Cornell University, 2012
Edmund S. Phelps  
*McVickar Professor of Political Economy*  
B.A., Amherst College, 1955; M.A., Yale University, 1956; Ph.D., 1959

Justin H. Phillips  
*Professor of Political Science*  
B.A., Lewis and Clark College, 1998; Ph.D., University of California, San Diego, 2005

Karen E.S. Phillips  
*Senior Lecturer in Chemistry*  
A.A., Miami-Dade Community College, 1990; B.S., Barry University, 1995; M.A., Columbia University, 1996; M.Phil., 2000; Ph.D., 2001

Duong Hong Phong  
*Professor of Mathematics*  
A.B., Princeton University, 1973; M.A., 1974; Ph.D., 1976

Pablo A. Piccato  
*Professor of History*  
B.A., Universidad Nacional Autónoma de México, 1990; Ph.D., University of Texas at Austin, 1997

Aron Pinczuk  
*Professor of Applied Physics and of Physics*  
Licenciado, University of Buenos Aires, 1962; Ph.D., University of Pennsylvania, 1969

Henry C. Pinkham  
*Professor of Mathematics*  
A.B., Harvard University, 1970; Ph.D., 1974

Eleonora Pistis  
*Assistant Professor of Art History and Archaeology*  
Ph.D., Università Iuav di Venezia (Italy), 2011

Caterina L. Pizzigoni  
*Associate Professor of History*  
Laurea, University of Milano (Italy), 1996; Ph.D., King’s College London, 2002

Terry A. Plank  
*Arthur D. Storke Memorial Professor of Earth and Environmental Sciences*  
A.B., Dartmouth College, 1985; M.A., Columbia University, 1987; M.Phil., 1991; Ph.D., 1993

Pawel Polack  
*Assistant Professor of Statistics*  
Ph.D. Swiss Finance Institute, 2014

Robert E. Pollack  
*Professor of Biological Sciences*  
B.A., Columbia University, 1961; Ph.D., Brandeis University, 1966

Lorenzo M. Polvani  
*Professor of Applied Physics and Applied Mathematics and of Earth and Environmental Sciences*  
B.Sc., McGill University (Canada), 1981; M.S., 1982; Ph.D., Massachusetts Institute of Technology, 1988

Cristian Pop-Eleches  
*Associate Professor of International and Public Affairs*  
A.B., Harvard University, 1998; A.M., 2000; Ph.D., 2003

Ross Posnock  
*Anna S. Garbedian Professor of the Humanities*  
B.A., Kenyon College, 1974; M.A., Johns Hopkins University, 1976; Ph.D., 1980

Elizabeth Povinelli  
*Franz Boas Professor of Anthropology*  
B.A., St. John’s College, 1984; M.Phil., Yale University, 1988; Ph.D., 1991

Andrea Prat  
*Richard Paul Richman Professor of Business and Professor of Economics*  
Ph.D., Stanford University, 1997

Carlo Prato  
*Assistant Professor of Political Science*  
B.A., Bocconi University, 2004; M.S., 2006; Ph.D., Northwestern University, 2012

Kenneth Prewitt  
*Carnegie Professor of Public Affairs*  
Ph.D., Yale University, 1968

Mary Ann Price  
*Lecturer in Biological Sciences*  
B.S., University of Montevallo, 1987; Ph.D., John Hopkins University, 1992

Frances Pritchett  
*Professor Emerita of Middle Eastern, South Asian, and African Studies*  

Carol L. Prives  
*Da Costa Professor of Biology*  
B.Sc., McGill University (Canada), 1962; Ph.D., 1968

Philip E. Protter  
*Professor of Statistics*  
B.A., Yale University, 1971; Ph.D., University of California, San Diego, 1975

Ron M. Prywes  
*Professor of Biological Sciences*  
B.A., University of Pennsylvania, 1979; Ph.D., Massachusetts Institute of Technology, 1984

Molly F. Przeworski  
*Professor of Biological Sciences and Systems Biology*  
A.B., Princeton University, 1994; Ph.D., University of Chicago, 2000
Valerie J. Purdie-Vaughns  
Associate Professor of Psychology  
B.A., Columbia University, 1993; Ph.D., Stanford University, 2005

G. Michael Purdy  
Professor of Earth and Environmental Sciences  
B.S., Imperial College London, 1969; M.S., 1970; Ph.D., University of Cambridge, 1974

Mary E. Putman  
Professor of Astronomy  
B.S., University of Wisconsin, 1996; Ph.D., 2001

Shaoyan Qi  
Lecturer in East Asian Languages and Cultures  
B.A., Huazhong University of Science and Technology (China), 1999; M.A., State University of New York, 2002; M.A., Villanova University, 2004

Ying Qian  
Assistant Professor of East Asian Languages and Cultures  
Ph.D. Harvard University, 2013

Raquel Queiroz  
Assistant Professor of Physics  
B.Sc., Universidade Técnica de Lisboa (Portugal), 2009; M.Sc., Imperial College London (United Kingdom), 2010; Ph.D., University of Stuttgart (Germany), 2015

Sophie C. Queuniet  
Senior Lecturer in French and Romance Philology  
M.A., Université Sorbonne Nouvelle (France), 1991; M.A., Yale University, 1993; M.Phil., 1993; Ph.D., 1999

Austin E. Quigley  
Brander Matthews Professor of Dramatic Literature  
B.A., University of Nottingham (U.K.), 1967; M.A., University of Birmingham (U.K.), 1969; Ph.D., University of California, Santa Cruz, 1971

Maureen Elizabeth Raymo  
G. Unger Vetlesen Professor of Earth and Climate Science  

Shana Redmond  
Professor of English and Comparative Literature  
B.A., Macalester College, 2002; M.A., M.Phil., Yale University, 2006; Ph.D., 2008

Adam D. Reich  
Associate Professor of Sociology  
B.A., Brown University, 2004; M.A., University of California, Berkeley, 2007; Ph.D., 2012

David R. Reichman  
Centennial Professor of Chemistry  
B.A., University of Chicago, 1992; Ph.D., Massachusetts Institute of Technology, 1997

Ricardo Reis  
Professor of Economics  
B.Sc., London School of Economics, 1999; Ph.D., Harvard University, 2004

Rodrigo Reis Soares  
Lemann Professor of Brazilian Public Policy and International and Public Affairs  
B.A., Federal University of Minas Gerais (Brazil), 1994; M.A., Pontifical Catholic University of Rio de Janeiro, 1997; Ph.D., University of Chicago, 2002

Irina Reyfman  
Professor of Slavic Languages  
Diploima, University of Tartu (Estonia), 1973; Ph.D., Stanford University, 1986

Aaron J. Ritzenberg  
Senior Lecturer in English and Comparative Literature  
B.A., Haverford College, 1998; M.A., Brandeis University, 2003; Ph.D., 2006

Richard G. Robb  
Professor of Professional Practice in the Faculty of International and Public Affairs  
Ph.D., University of Chicago, 1985

Bruce William Robbins  
Old Dominion Foundation Professor in the Humanities  
A.B., Harvard University, 1971; A.M., 1976; Ph.D., 1980

Joyce Trina Robbins  
Lecturer in Statistics  
B.S.E., Princeton University, 1989; M.A., Tel Aviv University (Israel), 1994; Ph.D., Columbia University, 2002

Camille Robcis  
Professor of French and Romance Philology and History  
B.A., Brown University, 1999; Ph.D., Cornell University, 2007

Samuel K. Roberts
Associate Professor of History and of Sociomedical Sciences
A.B., University of Virginia, 1995; M.A., Princeton University, 1997; Ph.D., 2001

Lauren Robertson
Assistant Professor of English and Comparative Literature
B.A., St. John's College, 2008; Ph.D., Washington University in St. Louis, 2016

Ailsa A. Roell
Professor of International and Public Affairs
Ph.D., Johns Hopkins University, 1983

Diana P. Romero
Lecturer in Latin American and Iberian Cultures
B.A., Universidad de Los Andes (Colombia), 1994; M.A., University of Maryland, 1998; Ph.D., 2009

Francisco Rosales-Varo
Senior Lecturer in Latin American and Iberian Cultures
M.A., University of Granada (Spain), 1991; Ph.D., 1998

Rachel A. Rosen
Associate Professor of Physics
B.S., Brown University, 2003; Ph.D., New York University, 2009

David K. Rosner
Ronald H. Lauterstein Professor of Sociomedical Sciences and Professor of History
B.A., City College of New York - CUNY, 1968; M.A., University of Massachusetts Boston, 1972; Ph.D., Harvard University, 1978

Alan Ross
Assistant Attending of Classics
B.A., University College London, 2005; M.St., University of Oxford, 2006; Ph.D., 2011

Carol Howe Rounds
Senior Lecturer in Italian
B.A., Columbia University, 1984; M.A., 1986; Ph.D., 1992

Kenneth A. Ross
Professor of Computer Science
B.S., University of Melbourne (Australia), 1986; Ph.D., Stanford University, 1991

David J. Rothman
Bernard Schoenberg Professor of Social Medicine and Professor of History
B.A., Columbia University, 1958; A.M., Harvard University, 1959; Ph.D., 1964

Carol Rovane
Violin Family Professor of Philosophy; Carnoy Family Program Chair for Contemporary Civilization
Ph.D., University of Chicago, 1983

Tomislav Rovis
Samuel Latham Mitchell Professor of Chemistry
B.Sc., University of Toronto, 1990; Ph.D., 1998

Xavier S. Roy
Associate Professor of Chemistry
Ph.D., University of British Columbia (Canada), 2011

Daniel S. Rubenstein
Associate Professor of Computer Science
Ph.D., University of Massachusetts Amherst, 2000

Dustin R. Rubenstein
Professor of Ecology, Evolution, and Environmental Biology
B.A., Dartmouth College, 1999; Ph.D., Cornell University, 2006

Jose P. Ruiz Campillo
Senior Lecturer in Latin American and Iberian Cultures
B.A., University of Granada (Spain), 1987; M.A., 1993; Ph.D., 1999

Guadalupe Ruiz-Fajardo
Senior Lecturer in Latin American and Iberian Cultures
B.A., University of Granada (Spain), 1984; M.A., 1986; Ph.D., 1992

Cynthia G. Rush
Assistant Professor of Statistics
B.S., University of North Carolina at Chapel Hill, 2010; M.A., Yale University, 2011; Ph.D., 2016

Alessandra Russo
Professor of Latin American and Iberian Cultures
Laurea, University of Bologna (Italy), 1996; M.A., École des Hautes Études en Sciences Sociales (France), 1997; Ph.D., 2006

Maureen Ryan
Professor of Professional Practice of Film in the Faculty of the Arts
M.F.A., Columbia University, 1992

S

Emmanuelle M. Saada
Professor of French and Romance Philology
Ph.D., École des Hautes Études en Sciences Sociales (France), 2001

Giulia Sacca
Assistant Professor of Mathematics
B.S., Sapienza Università di Roma (Italy), 2006; M.S., 2008; Ph.D., Princeton University, 2013

Jeffrey D. Sachs
University Professor

Evan D. Sadler
Assistant Professor of Economics
B.A., Princeton University, 2009; Ph.D., New York University, 2015

Abolfazl Safikhani
Assistant Professor of Statistics
Ph.D., Michigan State University, 2015

Alessandra Saggin
Senior Lecturer in Italian
M.A., University of Pisa (Italy), 1990

Ozgur Sahin
Associate Professor of Biological Sciences and of Physics
B.S., Bilkent University (Turkey), 2001; M.S., Stanford University, 2003; Ph.D., 2005

Xavier Sala-i-Martin
Jerome H. and Matthew S. Grossman Professor of Development Economics
Licenciao Ciencias Economicas, Universitat Autonoma de Barcelona (Spain), 1985; A.M., Harvard University, 1987; Ph.D., 1990

Bernard Salanié
Professor of Economics
B.A., École Polytechnique (France), 1984; M.A., École Nationale de la Statistique et de l'Administration Economique (France), 1986; Ph.D., École des Hautes Études en Sciences Sociales (France), 1992

Dalibor Sames
Associate Professor of Chemistry
B.S., Charles University (Czech Republic), 1990; Ph.D., University of Arizona, 1996

Saskia Sassen
Robert S. Lynd Professor of Sociology
M.A., Notre Dame University, 1971; Ph.D., 1974

Vasile Ovidiu Savin
Professor of Mathematics
M.S., University of Pittsburgh, 1999; Ph.D., University of Texas at Austin, 2003

Will Sawin
Assistant Professor of Mathematics
B.S., Yale University, 2011; Ph.D., Princeton University, 2016

Simon M. Schama
University Professor
M.A., University of Cambridge, 1969

James A. Schamus
Professor of Professional Practice in Film in the Faculty of the Arts
A.B., University of California, Berkeley, 1982; M.F.A., 1987; Ph.D., 2003

Jose A. Scheinkman
Charles and Lynn Zhang Professor of Economics
B.A., Universidade Federal do Rio de Janeiro (Brazil), 1969; M.S., Instituto de Matemática Pura e Aplicada (Brazil), 1970; M.A., Rochester University, 1973; Ph.D., 1974

David Schiminovich
Professor of Astronomy
B.Sc., Yale University, 1989; Ph.D., Columbia University, 1998

Wolfram Schlenker
Associate Professor of International and Public Affairs and Economics
Ph.D., University of California, Berkeley, 2003

Jutta Schmiers-Heller
Senior Lecturer in Germanic Languages
B.A., Westfälische Wilhelms-Universität Münster (Germany), 1996; M.A., 1996; M.A., Montclair State University, 2009

Stephanie Schmitt-Grohé
Professor of Economics
Vordiplom, Westfälische Wilhelms-Universität Münster (Germany), 1987; M.B.A., Baruch College - CUNY, 1989; Ph.D., University of Chicago, 1994

Christopher H. Scholz
Professor of Applied Physics and Applied Mathematics and of Earth and Environmental Sciences
B.S., University of Nevada, 1964; Ph.D., Massachusetts Institute of Technology, 1967

Henning G. Schulzrinne
Julian Clarence Levi Professor of Mathematical Methods and Computer Science and Professor of Electrical Engineering
B.S., Technische Universität Darmstadt (Germany), 1984; M.S., University of Cincinnati, 1987; Ph.D., University of Massachusetts Amherst, 1992

Seth R. Schwartz
Lucius N. Littauer Professor of Classical Jewish Civilization
B.A., Yeshiva University, 1979; M.A., Columbia University, 1981; M.Phil., 1982; Ph.D., 1985

David A. Scott
Ruth and William Lubic Professor of Anthropology
B.S., University of West Indies (Jamaica), 1980; M.A., New School for Social Research, 1983; Ph.D., 1989

Guy Sella
Associate Professor of Biological Sciences
B.S., Tel Aviv University, 1993; M.S., Hebrew University, 1997; Ph.D., Tel Aviv University, 2001

Ahmet Tunç #en
Assistant Professor of History
B.A., Sabanc# University (Turkey), 2006; M.A., 2008; M.A., University of Chicago, 2010; Ph.D., 2016

Bodhisattva Sen
Professor of Statistics
B.Stat., Indian Statistical Institute (India), 2002; M.Stat., 2004; M.S., University of Michigan, 2007; Ph.D., 2008

Neslihan Senocak
Associate Professor of History

39
The Administration and Faculty of Columbia College

Rocco A. Servedio  
*Professor of Computer Science*  
A.B., Harvard University, 1993; S.M., 1997; Ph.D., 2001

Stephen R. Sestanovich  
*Kathryn and Shelby Cullom Davis Professor for the Practice of International Diplomacy*  
Ph.D., Harvard University, 1978

Lakshminarasimhan Khalil Sethumadhavan  
*Associate Professor of Computer Science*  
Ph.D., University of Texas at Austin, 2007

Michael H. Shaevitz  
*Professor of Physics*  
B.S., Ohio State University, 1969; M.S., 1971; Ph.D., 1975

Neel Shah  
*Assistant Professor of Chemistry*  
B.S., New York University, 2008; Ph.D., Rockefeller University, 2013

Avinoam Shalem  
*Riggio Professor of Art History*  
Ph.D., University of Edinburgh, 1995

Aziza Shanazerova  
*Assistant Professor of Religion*  
B.A., Tashkent State University of Oriental Studies (Tashkent-Poland), 2007; M.A., 2008; Indiana University, 2013; Ph.D., 2019

Wei Shang  
*Wm. Theodore and Fanny Brett de Bary and Class of 1941 Collegiate Professor of Asian Humanities, and Du Family Professor of Chinese Culture*  
B.A., Peking University (China), 1982; M.A., 1984; Ph.D., Harvard University, 1994

James Shapiro  
*Larry Miller Professor of English and Comparative Literature*  
B.A., Columbia University, 1977; M.A., University of Chicago, 1978; Ph.D., 1982

Jill S. Shapiro  
*Senior Lecturer in the Discipline of Ecology, Evolution and Environmental Biology*  
B.A., Barnard College, 1980; M.A., Columbia University, 1982; Ph.D., 1995

Robert Y. Shapiro  
*Wallace S. Sayre Professor of Government and Professor of International and Public Affairs*  
B.S., Massachusetts Institute of Technology, 1974; M.A., University of Chicago, 1977; Ph.D., 1982

Teresa Christine Sharpe  
*Senior Lecturer in Sociology*
Associate in Music Performance
B.A. Columbia University, 1997

Samuel Skippon
Lecturer in French and Romance Philology
M.Phil., Sorbonne University (France), 1994; M.A., New York University, 2002

Joseph R. Slaughter
Associate Professor of English and Comparative Literature
B.A., University of Florida, 1989; M.A., University of Texas at Austin, 1994; Ph.D., 1998

Mikhail Smirnov
Senior Lecturer in Mathematics
B.S., M.S., Moscow University (Russia), 1989; M.A., Princeton University, 1992; Ph.D., 1995

Pamela H. Smith
Seth Low Professor of History
B.A., University of Wollongong (Australia), 1979; Ph.D., Johns Hopkins University, 1991

Sable Smith
Assistant Professor of Visual Arts

Alla A. Smyslova
Senior Lecturer in Slavic Languages
B.A., Moscow State Pedagogical Institute of Foreign Languages (Russia); M.A., Indiana University at Bloomington; Ph.D., Bryn Mawr College

Jack L. Snyder
Robert and Renee Belfer Professor of International Relations
A.B., Harvard University, 1973; Ph.D., Columbia University, 1981

Adam H. Sobel
Professor of Applied Physics and Applied Mathematics and of Earth and Environmental Sciences
B.A., Wesleyan University, 1989; M.A., Massachusetts Institute of Technology, 1997; Ph.D., 1998

Michael E. Sobel
Professor of Statistics
B.A., Florida State University, 1972; M.S., University of Wisconsin-Madison, 1975; M.A., 1978; Ph.D., 1980

Sean C. Solomon
William B. Ransford Professor of Earth and Planetary Science
B.S., California Institute of Technology, 1966; Ph.D., Massachusetts Institute of Technology, 1971

Josef Sorett
Professor of Religion and of African American and African Diaspora Studies
B.S., Oral Roberts University, 1996; M.Div., Boston University, 2000; Ph.D., Harvard University, 2008

Naoko Sourial
Assistant Professor, Department of Political Science
B.A., University of Tokyo (Japan), 2015; Ph.D. Princeton University, 2020

Alfredo Spanga
Lecturer in the Discipline of Psychology
B.A., Sapienza, University of Rome (Italy), 2006; M.A., 2010; Ph.D., 2013

Edward A. Spiegel
Rutherfurd Professor of Astronomy
B.A., University of California, Los Angeles, 1952; M.S., University of Michigan, 1954; Ph.D., 1958

Maura Spiegel
Senior Lecturer in English and Comparative Literature
B.A., Bennington College, 1976; Ph.D., Columbia University, 1993

Marc W. Spiegelman
Arthur D. Storke Memorial Professor of Earth and Environmental Sciences and Professor of Applied Physics and Applied Mathematics
A.B., Harvard University, 1985; Ph.D., University of Cambridge, 1989

Barbara Spinelli
Senior Lecturer in Italian
B.A., University of Perugia (Italy), 1989; M.A., University of Venice (Italy), 2001

Gayatri Chakravorty Spivak
University Professor
B.A., University of Calcutta (India), 1959; M.A., Cornell University, 1962; Ph.D., 1967

James Stafford
Assistant Professor of History

Joanna R. Stalnaker
Professor of French and Romance Philology
Ph.D., New York University, 2002

Michael F. Stanislawski
Nathan J. Miller Professor of Jewish History
A.B., Harvard University, 1973; A.M., 1975; Ph.D., 1979

Amy A. Starecheski
Lecturer in Sociology
B.A. Columbia University, 1999; M.A., 2005; Ph.D., City University of New York, 2014

David C. Stark
Arthur Lehman Professor of Sociology and International Affairs
A.B., Princeton University, 1972; A.M., Harvard University, 1977; Ph.D., 1982

Ursula M. Staudinger
Robert N. Butler Professor
M.A., Friedrich-Alexander University of Erlangen-Nürnberg (Germany), 1984; Ph.D., Freie Universität Berlin, 1988

Benjamin A. Steege
Associate Professor of Music
B.A., Columbia University, 2000; Ph.D., Harvard University, 2007

Clifford S. Stein
Professor of Industrial Engineering and Operations Research and of Computer Science
Ph.D., Massachusetts Institute of Technology, 1992

Deborah T. Steiner
Jay Professor of Greek and Latin Languages
A.B., Harvard University, 1982; M.Litt., University of Oxford, 1984; Ph.D., University of California, Berkeley, 1991

Alma Steingart
Assistant Professor of History
B.A., Columbia University, 2006; Ph.D., Massachusetts Institute of Technology, 2013

Alfred Stepan
Wallace S. Sayre Professor Emeritus of Government, Professor Emeritus of Political Science, and Dean Emeritus of the Faculty of International and Public Affairs
B.A., Notre Dame University, 1958; B.A., Balliol College (U.K.), 1960; M.A., 1960; Ph.D., Columbia University, 1969

Nancy Leys Stepan
Professor Emeritus of History
Ph.D., University of California, Los Angeles, 1971

Anders G. Stephanson
Andrew and Virginia Rudd Family Foundation Professor of History
B.A., University of Gothenburg (Sweden), 1975; B.Phil., University of Oxford, 1977; Ph.D., Columbia University, 1986

Rhiannon Stephens
Associate Professor of History
B.A., University of London, 2000; M.A., Northwestern University, 2002; Ph.D., 2007

Magdalena A. Stern Baczewska
Lecturer in Music

Alan G. Stewart
Professor of English and Comparative Literature
B.A., University of Cambridge, 1988; Ph.D., 1993

Dustin D. Stewart
Assistant Professor of English and Comparative Literature
B.A., Baylor University, 2001; M.A., 2004; Ph.D., University of Texas, 2013

Joseph E. Stiglitz
University Professor
B.A., Amherst College, 1964; Ph.D., Massachusetts Institute of Technology, 1967

Brent R. Stockwell
Professor of Biological Sciences and of Chemistry
B.A., Cornell University, 1994; Ph.D., Harvard University, 1999

Salvatore J. Stolfo
Professor of Computer Science
B.S., Brooklyn College - CUNY, 1974; M.S., New York University, 1976; Ph.D., 1979

Paul Strohm
Anna S. Garbedian Professor Emeritus of the Humanities
B.A., Amherst College, 1960; M.A., University of California, Berkeley, 1962; Ph.D., 1966

Zoi S. Strother
Riggio Professor of African Art; Jonathan Sobel and Marcia Dunn Program Chair for Art Humanities
B.A., Bryn Mawr College, 1982; M.A., Yale University, 1984; M.A., 1987; Ph.D., 1992

Joowon Suh
Senior Lecturer in East Asian Languages and Cultures

Chiara Superti
Lecturer in Political Science
B.A., University of Bologna (Italy), 2006; M.P.I.A., University of California, 2009; Ph.D., Harvard University, 2015

Peter M. Susser
Senior Lecturer in Music
B.A., Bennington College, 1981; M.M., Manhattan School of Music, 1984; DMA, Columbia University, 1994

Tomi Suzuki
Professor of East Asian Languages and Cultures
B.A., University of Tokyo, 1974; M.A., 1977; Ph.D., Yale University, 1988

Jan Svejnar
James T. Shotwell Professor of Global Political Economy
B.S., Cornell University, 1974; M.A., Princeton University, 1976; Ph.D., 1979

Mariame I. Sy
Lecturer in Middle Eastern, South Asian, and African Studies
M.A., East Stroudsburg University, 1996; M.A., University of California, Los Angeles, 2003; Ph.D., 2007

Sarah M. Sze
Professor of Visual Arts in the Faculty of the Arts
B.A., Yale University, 1991; M.F.A., School of Visual Arts, 1997

T
Simon Tavare
Professor of Statistics and of Biological Sciences
B.Sc., University of Sheffield (U.K.), 1974; M.S., 1975; Ph.D., 1979

Mark C. Taylor
Professor of Religion
B.A., Wesleyan University, 1968; Ph.D., Harvard University, 1973; Doktorgrad, University of Copenhagen, 1981

Pietro Tebaldi
Assistant Professor of Economics
B.A., Bocconi University (Italy), 2009; M.Sc., 2011; Ph.D., Stanford University, 2016

Dennis Tenen
Associate Professor of English and Comparative Literature
B.A., University of Michigan, 2001; Ph.D., Harvard University, 2011

Herbert S. Terrace
Professor of Psychology
B.A., Cornell University, 1957; M.A., 1958; Ph.D., Harvard University, 1961

Michael Thaddeus
Professor of Mathematics
A.B., Harvard University, 1988; D.Phil., University of Oxford, 1992

Yannik Thiem
Associate Professor of Religion
B.A., University of Tuebingen (Germany), 1998; M.A., 2002; Th.D., 2004; M.A., University of California, Berkeley, 2004; Ph.D., 2009

Jiang Tianqi
Lecturer in East Asian Languages and Cultures
B.A., Northwestern University, 2010; M.A., Beijing Language and Culture University (China), 2013; Ph.D., 2019

Michael M. Ting
Professor of International and Public Affairs and of Political Science
S.B., Massachusetts Institute of Technology, 1992; A.M., Harvard University, 1995; Ph.D., Stanford University, 1999

Rirkrit Tiravanija
Professor of Professional Practice in Visual Arts in the Faculty of the Arts
B.A., Ontario College of Art (Canada), 1984; M.A., School of the Art Institute of Chicago, 1986

T. Colm Toibin
Irene and Sidney B. Silverman Professor of the Humanities
B.A., University College Dublin, 1975

Maya Tolstoy
Professor of Earth and Environmental Sciences
B.Sc., University of Edinburgh, 1988; Ph.D., University of California, San Diego, 1994

Raju Tomer
Assistant Professor of Biological Sciences
B. Tech - M. Tech Dual Degree, Indian Institute of Technology, Delhi, 2004; Ph.D., European Molecular Biology Laboratory, 2010

Pier Mattia Tommasino
Associate Professor of Italian
B.A., Università degli Studi, Pisa (Italy), 2002; M.A., Università degli Studi, Urbino (Italy), 2003; Ph.D., Scuole Normale Superiore, Pisa (Italy), 2009

Liang Tong
William R. Kenan, Jr. Professor of Biological Sciences
B.S., Peking University (China), 1983; Ph.D., University of California, Berkeley, 1989

Adam Tooze
Kathryn and Shelby Cullom Davis Professor of History; Director of the European Institute
Ph.D., London School of Economics, 1996

Gerard Torrats-Espinosa
Assistant Professor of Sociology
B.S., Polytechnic University of Catalonia (Spain), 2004; MPP, Harvard University, 2014; Ph.D., New York University, 2019

Maria Tosches
Assistant Professor Biological Sciences
Ph.D., Scuola Normale Superiore (Italy), 2012

Nim Tottenham
Professor of Psychology
B.A., Barnard College, 1996; Ph.D., University of Minnesota, 2005

Lisa Trever
Lisa and Bernard Selz Associate Professor of Pre-Columbian Art History and Archaeology
B.A., Yale University, 2000; M.A., University of Maryland, 2005; A.M., Harvard University, 2007; Ph.D., 2013

Sonam Tsering
Lecturer in East Asian Languages and Cultures
B.A., University of London (United Kingdom), 2005

Takuya Tsunoda
Assistant Professor of Japanese Visual Culture
B.A., Waseda University, 2002; M.A., Columbia University, 2005; M.A., 2008; Ph.D., Yale University, 2015

Philip Michael Tuts
Professor of Physics
B.S., Massachusetts Institute of Technology, 1974; Ph.D., Stony Brook University - SUNY, 1979

Gray Tuttle
Leila Hadley Luce Associate Professor of Modern Tibetan Studies
Ph.D., Harvard University, 2002
U

Elsa Ubeda  
*Lecturer in Latin American and Iberian Cultures*  
B.A., University of Barcelona (Spain), 2002; M.A. Menéndez Pelayo International University (Spain), 2009

Yasutomo Uemura  
*Professor of Physics*  
B.S., University of Tokyo, 1977; M.S., 1979; D.Sc., 1982

Joseph C. Ulichny  
*Associate in Chemistry*  
B.S., University of Scranton, 2006; M.A., Columbia University, 2008

Eric Jean-Paul Urban  
*Professor of Mathematics*  
Ph.D., University of Paris-Sud, 1994

Nadia Urbinati  
*Kyriakos Tsakopoulos Professor of Political Theory and Hellenic Studies*  
Laurea, University of Bologna (Italy), 1977; Master, University of Parma (Italy), 1980; Ph.D., European University Institute of Florence (Italy), 1989

Maria Uriarte  
*Professor of Ecology, Evolution, and Environmental Biology*  
B.A., University at Albany - SUNY, 1986; M.A., Yale University, 1995; Ph.D., Cornell University, 2002

Martin Uribe  
*Professor of Economics*  
B.A., Universidad Nacional de Córdoba (Argentina), 1987; M.A., University of Centro de Estudios Macroeconómicos de Argentina, 1989; Ph.D., University of Chicago, 1994

Miguel S. Urquiola  
*Professor of Economics and of International and Public Affairs*  
B.A., Swarthmore College, 1992; Ph.D., University of California, Berkeley, 2000

V

James J. Valentini  
*Henry L. and Lucy G. Moses Professor*  
B.S., University of Pittsburgh, 1972; M.S., University of Chicago, 1973; Ph.D., University of California, Berkeley, 1976

Paolo Valesio  
*Giuseppe Ungaretti Professor Emeritus of Italian Literature*  
Ph.D., University of Bologna (Italy), 1969

Marc Van De Mieroop  
*Professor of History*  
B.A., Katholieke Universiteit Leuven (Belgium), 1978; M.A., Yale University, 1980; Ph.D., 1983

Anne Margrete Nicolien van Delft  
*Assistant Professor of Statistics*  
B.Sc., Maastricht University (Netherlands), 2011; M.Sc., 2012; Ph.D., 2016

Karen R. Van Dyck  
*Kimon A. Doukas Professor of Hellenic Studies*  

Vladimir Vapnik  
*Professor of Computer Science*  
Ph.D., Institute of Control Sciences (Russia), 1964

Achille C. Varzi  
*John Dewey Professor of Philosophy*  
Laurea Hons., University of Trento (Italy), 1982; M.A., University of Toronto, 1983; Ph.D., 1994

Thibault Vatter  
*Assistant Professor of Statistics*  
B.Sc., Swiss Federal Institute of Technology, 2010; M.Sc., 2012; Ph.D., HEC Lausanne, 2016

Diane Vaughan  
*Professor of Sociology and of International and Public Affairs*  
B.A., Ohio State University, 1973; M.A., 1974; Ph.D., 1979

Yamil Velez  
*Assistant Professor of Political Science*  
B.A., Florida State University, 2010; M.A., Stony Brook University, 2012; Ph.D., 2015

Latha Venkataraman  
*Professor of Applied Physics and Chemistry*  
B.S., Massachusetts Institute of Technology, 1993; M.S., Harvard University, 1997; Ph.D., 1999

Venkat Venkatasubramanian  
*Samuel Ruben-Peter G. Viele Professor of Engineering*  
Ph.D., Cornell University, 1984

Sudhir A. Venkatesh  
*William B. Ransford Professor of Sociology*  
B.A., University of California, San Diego, 1988; M.A., University of Chicago, 1992; Ph.D., 1997

Wouter Vergote  
*Lecturer in Economics*  
M.A., Ku Leuven (Belgium), 1999; M. Phil., Columbia University, 2003; Ph.D., 2005

Eric A. Verhoogen  
*Professor of International and Public Affairs and of Economics*  
A.B., Harvard University, 1991; M.A., University of Massachusetts Amherst, 1998; Ph.D., University of California, Berkeley, 2004

Gauri Viswanathan  
*Class of 1933 Professor of English and Comparative Literature*  
B.A., University of Delhi (India), 1971; M.Ed., Columbia University, 1984; Ph.D., 1985
Katja Vogt  
**Professor of Philosophy**  
B.A., University of Munich (Germany), 1990; M.A., 1992; Ph.D., 1996

Katharina Volk  
**Professor of Classics**  
M.A., University of Munich (Germany), 1994; M.A., Princeton University, 1996; Ph.D., 1999

Dorothea von Mücke  
**Gebhard Professor of German Language and Literature**  
Staatsexamen Germanistik, University of Mannheim (Germany), 1981; M.A., Stanford University, 1983; Ph.D., 1988

Tomas Vu-Daniel  
**LeRoy Neiman Professor of Professional Practice in Visual Arts in the Faculty of the Arts**  
B.F.A., University of Texas at El Paso, 1988; M.F.A., Yale University, 1990

Gordana Vunjak-Novakovic  
**University Professor**  
Ph.D., University of Belgrade, 1980

W

David Walker  
**Higgins Professor of Earth and Environmental Sciences**  
B.A., Oberlin College, 1968; A.M., Harvard University, 1970; Ph.D., 1972

Nicole B. Wallack  
**Senior Lecturer in English and Comparative Literature**  
B.A., McGill University (Canada), 1988; M.A., University of Edinburgh (United Kingdom), 1989; Ph.D., New York University, 2004

Wendy S. Walters  
**Associate Professor of Writing**  
B.A., University of Michigan, 1992; M.F.A., Cornell University, 1995; M.A., 1997; Ph.D., 2000

Hailong Wang  
**Lecturer in East Asian Languages and Cultures**  
B.A., Jiangsu Normal University (China); M.A., Shanghai Normal University (China); M.A., Columbia University, 1993

Mu-Tao Wang  
**Professor of Mathematics**  
M.S., National Taiwan University, 1992; Ph.D., Harvard University, 1998

Zhirong Wang  
**Senior Lecturer in East Asian Languages and Cultures**  
B.A., Peking University (China), 1987; Ph.D., University of Wisconsin-Madison, 2003

Christopher J. Washburne  
**Professor of Music**  
B.A., University of Wisconsin, 1986; M.A., Columbia University, 1992; Ph.D., 1999

Michael J. Waters  
**Assistant Professor of Art History and Archaeology**  
B.F.A., University of Illinois at Urbana-Champaign, 2005; M.Arch. History, University of Virginia, 2007; Ph.D., Institute of Fine Arts, New York University, 2015

Gregory J. Wawro  
**Professor of Political Science**  
B.A., Pennsylvania State, 1990; Ph.D., Cornell University, 1997

Elke U. Weber  
**Jerome A. Chazen Professor of International Business and Professor of Psychology**  
B.A., York University (Canada), 1980; Ph.D., Harvard University, 1984

Silja Weber  
**Lecturer in German**  
B.A., Rheinische Friedrich-Wilhelms-Universität (Germany), 1999; M.Sc., 1999; M.A., Indiana University, 2012; Ph.D., 2018

Hannah Weaver  
**Associate Research Scholar in the Department of English and Comparative Literature**  
B.A., Boston University, 2009; M.A., University of Toronto (Canada), 2014; A.M., Harvard University, 2015; Ph.D., 2019

Lance D. Weiler  
**Associate Professor of Professional Practice in Film in the Faculty of Arts**  

Erick J. Weinberg  
**Professor of Physics**  
B.S., Manhattan College, 1968; A.M., Harvard University, 1969; Ph.D., 1973

David E. Weinstein  
**Carl Sumner Shoup Professor of Japanese Economics**  
B.A., Yale University, 1985; M.A., University of Michigan, 1988; Ph.D., 1991

Michael I. Weinstein  
**Professor of Applied Mathematics and of Mathematics**  
Ph.D., New York University, 1982

Omri Weinstein  
**Assistant Professor of Computer Science**  
B.Sc., Tel Aviv University, 2010; Ph.D., Princeton University, 2015

Renata Maria Wentzcovitch  
**Professor of Material Science and Applied Physics, and Earth and Environmental Science**  
B.S., University of São Paulo, 1980; M.S., 1982; Ph.D., University of California, Berkeley, 1988

Jennifer Ann Wenzel
Associate Professor of English and Comparative Literature and of Middle Eastern, South Asian, and African Studies
B.A., University of Texas at Austin, 1990; M.A., Indiana University, 1992; Ph.D., University of Texas, Austin, 1998

Bruce Western
Bryce Professor of Sociology and Social Justice
B.A., University of Queensland (Australia), 1987; M.A., University of California, Los Angeles, 1990; Ph.D., 1993

Harrison C. White
Giddings Professor Emeritus of Sociology
B.Sc., Massachusetts Institute of Technology, 1950; Ph.D., 1955; Ph.D., Princeton University, 1960

Joshua D. Whitford
Associate Professor of Sociology
B.A., University of Wisconsin-Madison, 1993; M.S., 1997; Ph.D., 2003

Sebastian Will
Assistant Professor of Physics
Diplom., Johannes Gutenberg University Mainz 2006; Ph.D., 2011

Gareth D. Williams
Anthon Professor of Latin Language and Literature
B.A., University of Cambridge, 1986; Ph.D., 1990

Jack J. Willis
Assistant Professor of Economics
B.A., University of Cambridge, 2006; M.A., Paris School of Economics, Université Paris I, 2009; Ph.D., Harvard University, 2017

Mabel O. Wilson
Nancy and George Rupp Professor of Architecture, Planning and Preservation; Professor of African American and African Diaspora Studies
B.S., University of Virginia, 1985; M.Arch, Columbia University, 1991; Ph.D., New York University, 2007

Andreas Wimmer
Lieber Professor of Political Philosophy
M.A., University of Zurich, 1989; D.Phil., 1992

Jason M. Wingard
Professor of Professional Studies
B.A., Stanford University, 1995; M.A., Emory University, 1996; Ed.M., Harvard University, 1997; Ph.D., University of Pennsylvania, 2000

Michael Witgen
Professor of History
B.A., Texas Christian University, 1988; M.A., University of Washington, 1998; Ph.D., 2004

Peter G. Woit
Senior Lecturer in Mathematics
A.B., M.A., Harvard University, 1979; Ph.D., Princeton University, 1985

Michael Woodford
John Bates Clark Professor of Political Economy
A.B., University of Chicago, 1977; J.D., Yale University, 1980; Ph.D., Massachusetts Institute of Technology, 1983

Sarah Woolley
Professor of Psychology
B.A., University of Colorado, 1991; Ph.D., University of Washington, 1999

Henryk Wozniakowski
Professor Emeritus of Computer Science
M.S., University of Warsaw, 1969; Ph.D., 1972

Chen Wu
Lecturer in East Asian Languages and Cultures
B.A., Fudan University (China), 2006; M.A., 2009; M.A., University of Wisconsin-Madison, 2011; Ph.D., 2016

Eugene Wu
Assistant Professor of Computer Science
Ph.D., Massachusetts Institute of Technology, 2014

X

Jia Xu
Lecturer in East Asian Languages and Cultures
B.A., Beijing Language and Culture University, 2005; M.Ed., 2009

Y

Lili Yamasaki
Lecturer in Biological Sciences
B.S., University of Michigan, 1982; Ph.D., University of Texas at San Antonio, 1991

Ling Yan
Senior Lecturer in East Asian Languages and Cultures
B.A., Northwestern University, 1986; M.A., Northwestern Polytechnical University (China), 1996; Ph.D., University of Kansas, 2005

Jian Yang
Professor of Biological Sciences
M.S., Academia Sinica (Taiwan), 1985; Ph.D., University of Washington, 1991

Junfeng Yang
Associate Professor of Computer Science
B.S., Tsinghua University (China), 2000; M.S., Stanford University, 2002; Ph.D., 2008

Zhaohua Yang
Sheng Yen Assistant Professor of Chinese Buddhism
Ph.D., Stanford University, 2013

Mihalis Yannakakis
Percy K. and Vida L.W. Hudson Professor of Computer Science
Dipl., National Technical University of Athens, 1975; M.S., Ph.D., Princeton University, 1979

Keren Yarhi-Milo
Arnold A. Saltzman Professor of War and Peace Studies; Professor of Political Science and of International and Public Affairs
B.A., Columbia University, 2003; Ph.D., University of Pennsylvania, 2010

Tuncel M. Yegulalp
Professor Emeritus of Mining in the Department of Earth and Environmental Engineering

David M. Yerkes
Professor of English and Comparative Literature

Hyunkyu Yi
Lecturer in East Asian Languages and Cultures
B.A., Yonsei University (Korea), 1982; M.A., 1987

Zhiliang Ying
Professor of Statistics
B.S., Fudan University (China), 1982; M.A., Columbia University, 1984; Ph.D., 1987

Gabriel J. Young
Lecturer in Statistics
B.S., Metropolitan State University of Denver, 2009; M.S., Colorado State University, 2012; Ph.D., 2016

Chun-Fang Yu
Sheng Yen Professor Emerita of Chinese Buddhism and Professor Emerita of East Asian Languages and Cultures
Ph.D., Columbia University, 1973

Ming Yuan
Professor of Statistics
B.S., University of Science and Technology of China, 1997; M.S., 2000; M.S., University of Wisconsin-Madison, 2003; Ph.D., 2004

Rafael Yuste
Professor of Biological Sciences and of Neuroscience
M.D., Autónoma de Madrid, 1987; Ph.D., Rockefeller University, 1992

Z

William A. Zajc
I.I. Rabi Professor of Physics
B.S., California Institute of Technology, 1975; Ph.D., University of California, Berkeley, 1982

Konstantina Zanou
Assistant Professor of Italian

B.A., National School of Dramatic Art, Greece, 1997; B.A., National and Kapodistrian University of Athens, 2000; M.A., Birkbeck College, University of London, 2002; Ph.D., University of Pisa (Italy), 2007; European Doctorate, École Normale Superieure (France), 2008

Elleni Zeleke
Assistant Professor of Middle Eastern, South Asian, and African Studies
Ph.D., York University (Canada), 2016

Tanya Zelevinsky
Professor of Physics
S.B., Massachusetts Institute of Technology, 1999; A.M., Harvard University, 2001; Ph.D., 2004

Madeleine H. Zelin
Dean Lung Professor of Chinese Studies
B.A., Cornell University, 1970; Ph.D., University of California, Berkeley, 1979

James E.G. Zetzel
Anthon Professor Emeritus of the Latin Language and Literature
A.B., Harvard University, 1968; A.M., 1970; Ph.D., 1973

Changxi Zheng
Assistant Professor of Computer Science
M.S., Cornell University, 2010; Ph.D., 2012

Tian Zheng
Professor of Statistics
B.S., Tsinghua University (China), 1998; M.A., Columbia University, 2000; Ph.D., 2002

Xiaoyang Zhu
Howard Family Professor of Nanoscience in the Department of Chemistry
B.S., Fudan University (China), 1984; Ph.D., University of Texas at Austin, 1989

Alan Ziegler
Professor of Professional Practice
B.A., Union College, 1970; M.A., City College of New York - CUNY, 1974

Eliza Zingesser
Associate Professor of French and Romance Philology
B.A., Smith College, 2005; M.A., Princeton University, 2008; Ph.D., 2012

BOARD OF VISITORS 2021–22

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William A. von Mueffling ’90, BUS’95

OFFICERS OF COLUMBIA COLLEGE
2021–2022

James J. Valentini
Dean of Columbia College and Vice President for Undergraduate Education
B.S., University of Pittsburgh, 1972; M.S., University of Chicago, 1973; Ph.D., University of California, Berkeley, 1976

Corey S. Aronstam
Senior Associate Dean for Columbia College Development and Deputy Vice President for Development, Columbia College and Arts and Sciences

Susan Chang-Kim
Vice Dean and Chief Administrative Officer of Columbia College
B.A., University of Maryland, 1993; M.A., Teachers College, Columbia University, 2005

Lisa Hollibaugh
Dean of Academic Affairs
B.A., Rice University, 1990; M.A., Columbia University, 1996; Ph.D., 2005

Jessica Marinaccio
Dean of Undergraduate Admissions and Financial Aid
A.B., Harvard University, 1991; M.Ed., 1994

Shannon P. Marquez
Dean of Undergraduate Global Engagement
B.S., Prairie View A&M University, 1992; M.Eng., Texas A&M University, 1993; Ph.D., University of North Carolina at Chapel Hill, 1998

James T. McMenamin, Jr.
Senior Associate Dean for Columbia College Development and Senior Director of Principal Gifts, Office of Alumni and Development
B.A., Johns Hopkins University, 1971

Andrew Plaa
Dean of Advising, James H. and Christine Turk Berick Center for Student Advising
B.A., McGill University (Canada), 1983; M.A., Columbia University, 1986; M.Phil., 1987; Ph.D., 1994

Cristen Scully Kromm
Dean of Undergraduate Student Life
B.A., Wheaton College, 1995; M.S.W., New York University, 1998

Kavita Sharma
Dean of Career Education
B.Sc., University of Southampton, 1989; M.Sc., London School of Economics, 1991; M.A., Teachers College, Columbia University, 2012

Bernice Tsai
Chief of Communications and Marketing Officer
B.A., Columbia University, 1996; M.B.A., Northwestern University, 2001

Melinda Aquino
Associate Dean of Multicultural Affairs, Undergraduate Student Life

Chanda Bennett
Advising Dean, James H. and Christine Turk Berick Center for Student Advising
B.S., Cornell University, 1996; M.A., Columbia University, 2001; M.Phil., 2004; Ph.D., 2007

Jillian Burdziak
Advising Dean, James H. and Christine Turk Berick Center for Student Advising
B.A., Boston College, 2010; M.A., Teachers College, Columbia University, 2013
Marcela D. Calidonio
Advising Dean, James H. and Christine Turk Berick Center for Student Advising
B.A., Columbia University, 2006

Scott W. Carpenter
Associate Dean of Global Education and Fellowships
B.A., Dickinson College, 1995; M.A., New York University, 1996; M.Phil., 1999

Angie Carrillo
Associate Dean, James H. and Christine Turk Berick Center for Student Advising

Cindy Cogdill
Advising Dean, James H. and Christine Turk Berick Center for Student Advising
B.S., Southeast Missouri State University, 1983; M.S.Ed., Southern Illinois University, 1988

Jason Collado
Assistant Dean, James H. and Christine Turk Berick Center for Student Advising
B.A., University at Albany, SUNY, 1997; M.S., 2000

Daveena Colwell
Advising Dean, James H. and Christine Turk Berick Center for Student Advising
B.A., Rutgers University, 2009; Ed.M., 2013

Manoushka Constant
Senior Advising Dean, James H. and Christine Turk Berick Center for Student Advising
B.A., St. John's University, 2000; M.S., 2003

Niki Cunningham
Senior Advising Dean, James H. and Christine Turk Berick Center for Student Advising
B.A., Brown University, 1990; M.A., University of Wisconsin, 1994; M.P.H., Columbia University, 2017

Amanda Daugherty
Advising Dean, James H. and Christine Turk Berick Center for Student Advising
B.S., Indiana State University, 2006; M.P.H. Indiana University Bloomington, 2008

Jessica Dzaman
Advising Dean, James H. and Christine Turk Berick Center for Student Advising
B.A., Brown University, 2006; M.A., Columbia University, 2008; Ph.D., 2015

Darius V. Echeverría
Advising Dean, James H. and Christine Turk Berick Center for Student Advising
B.A., Rutgers University, 1999; M.A., Temple University, 2003; Ph.D., 2006

A. Alexander España
Associate Dean, James H. and Christine Turk Berick Center for Student Advising
B.S., Southwestern Adventist University, 1994; M.A., Andrews University, 1997

Aileen Forbes
Senior Advising Dean, James H. and Christine Turk Berick Center for Student Advising
B.A., Columbia University, 1993; M.A., Princeton University, 1999; Ph.D., 2004

Joshua Gaynor
Advising Dean, James H. and Christine Turk Berick Center for Student Advising
B.A., Marist College, 1996; M.A., New York University, 1999

Chad Gifford
Assistant Dean, James H. and Christine Turk Berick Center for Student Advising

Aaron Gomes
Executive Director of Student Engagement, Undergraduate Student Life

Michael Hall
Executive Director of Financial Aid

Tara Hanna
Executive Director of Residential Life, and Associate Dean of Undergraduate Student Life

Dawn Hemphill
Advising Dean, James H. and Christine Turk Berick Center for Student Advising
B.A., Hiram College, 1995; M.Ed., Kent State University, 1999

Kay Hershberger
Advising Dean, James H. and Christine Turk Berick Center for Student Advising
B.A., Goshen College, 1988; M.S., Indiana University, 1994

Larry Jackson
Associate Dean of Academic Affairs, Core Curriculum and Undergraduate Programs

Susan Jordan
Director of Family Outreach and Support
B.A., Hobart and William Smith Colleges, 2006; M.A., Teachers College, Columbia University, 2019

Fay Ju
Associate Dean of Columbia Global Programs
B.S., Bucknell University, 1989; M.A., Teachers College, Columbia University, 2001

Stephanie King
Director of Student Wellness, Student and Family Support
B.A., Cornell University, 2007; M.S.W., University of Pennsylvania, 2009

Ariella Lang
Associate Dean of Academic Affairs, Director of Undergraduate Research and Fellowships
B.A., University of Chicago, 1995; M.A., Columbia University, 1996; Ph.D., 2003

Lavinia Lorch
Senior Assistant Dean, James H. and Christine Turk Berick Center for Student Advising

Victoria Malaney Brown
Director of Academic Integrity
B.A., Skidmore College, 2010; M.Ed., University of Massachusetts, 2015; Ph.D., 2020

A. Nicole Mihnovets
Advising Dean, James H. and Christine Turk Berick Center for Student Advising

Niamh O’Brien
Senior Associate Dean of Alumni and Undergraduate Career Development, Center for Career Education
B.A., Trinity College Dublin, 1990; M.S., New York University, 2003; M.A., Teachers College, Columbia University, 2021

Sarah Oldham
Advising Dean, James H. and Christine Turk Berick Center for Student Advising
B.A., Elon University, 2012; M.A., Teachers College, Columbia University, 2016

Matthew Patashnick
Associate Dean of Student and Family Support

Jennifer Preis
Associate Dean of Experiential Education, Center for Career Education

B.S., Fairfield University, 2004; M.A., Teachers College, Columbia University, 2021

Megan Rigney
Associate Dean, James H. and Christine Turk Berick Center for Student Advising
B.A., Miami University, Ohio, 1993; M.A., New York University, 1996

Erica Siegel
Assistant Dean, James H. and Christine Turk Berick Center for Student Advising
B.A., Columbia University, 1998; M.A., 2005; Ph.D., 2010

Justin Snider
Assistant Dean, James H. and Christine Turk Berick Center for Student Advising

Jamie Yen Tan
Advising Dean, James H. and Christine Turk Berick Center for Student Advising
B.A., University of California, Berkeley, 2010; M.Div., Princeton Theological Seminary, 2015

Stephanie Wolfe
Advising Dean, James H. and Christine Turk Berick Center for Student Advising
B.A., Columbia University, 2005; M.A., Northwestern University, 2011; Ph.D., 2016

Danielle Wong
Senior Advising Dean, James H. and Christine Turk Berick Center for Student Advising
B.A., Stony Brook University-SUNY, 1996; M.A., Teachers College, Columbia University, 1999; M.Ed., 1999

Nancy Workman
Advising Dean, James H. and Christine Turk Berick Center for Student Advising
A.B., Occidental College, 1984; Ph.D., Columbia University, 1998

Jodi Zaffino
Assistant Dean of Academic Affairs, Fellowship Programs
B.A., Willamette University, 2005; M.A., University of York (UK), 2007; Ph.D., University College Dublin, 2015
ADMISSION

Mailing address
Undergraduate Admissions
1130 Amsterdam Avenue
212 Hamilton Hall, Mail Code 2807
New York, NY 10027

Office hours: Monday–Friday, 9 a.m.–5 p.m.
Telephone: 212-854-2522
Email: ugrad-ask@columbia.edu
Website: http://undergrad.admissions.columbia.edu

For information about undergraduate admissions, please visit the Undergraduate Admissions website or contact the office by phone or email.
FEES, EXPENSES, AND FINANCIAL AID

ESTIMATED EXPENSES FOR THE ACADEMIC YEAR

An itemized estimate of the cost of attending Columbia College for the 2021–2022 academic year of nine months is as follows:

<table>
<thead>
<tr>
<th>Expense</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition</td>
<td>$60,514</td>
</tr>
<tr>
<td>Mandatory Fees</td>
<td>$3,016</td>
</tr>
<tr>
<td>Average Room and Board Cost</td>
<td>$15,450</td>
</tr>
<tr>
<td>Books and Personal Expenses</td>
<td>$3,604</td>
</tr>
<tr>
<td>Travel</td>
<td>varies</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$82,584 + Travel</strong></td>
</tr>
</tbody>
</table>

There is an additional charge of $485 for new students who are required to attend Orientation.

Information on planning and managing educational expenses is contained at [https://sfs.columbia.edu/](https://sfs.columbia.edu/)

FEES

The following fees, prescribed by statute for each Fall or Spring term, are subject to change at any time at the discretion of the Trustees. The fees shown are those in effect during the 2021–2022 academic year.

University charges, such as tuition and fees, residence halls, and dining plans, are due and payable in full by the date announced before the beginning of each term. To check on an account balance, log in to Student Services Online (SSOL) or call 212-854-4400. A late payment penalty is assessed on payments received after the due date.

It is the policy of the University to withhold all University services, including registration, diplomas, and official transcripts, until all financial obligations have been met.

Tuition 2021–2022

There is a flat tuition charge for all Columbia College students, including visitors, regardless of the number of credits a student is taking. Students who are enrolled for eight terms must pay the flat tuition, regardless of the number of credits they are taking. The charge for 2021–2022 is $30,257 a term.

Postgraduate special students and degree candidates enrolled for a ninth term are billed according to the per-point system; the per-point cost is $2,022.

Late Registration Fee

Students who register after the scheduled period (see Academic Calendar) are charged a late registration fee of $100.

Mandatory Fees*

<table>
<thead>
<tr>
<th>Fee</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Life Fee*</td>
<td>$1,770</td>
</tr>
<tr>
<td>Columbia Health and Related Services Fee</td>
<td>$1,246</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$3,016</strong></td>
</tr>
</tbody>
</table>

*Students registered in Columbia College (Fall Term): $843; Students registered in Columbia College (Spring Term): $927

Document Fee

All first-time registrants at Columbia University are charged a one-time document fee of $105, which thereafter allows them to order transcripts and enrollment and degree certifications, and to receive the mailing of the original diploma at no additional charge. This fee appears on the first Student Account Statement of the Fall term.

International Services Charge

All students holding a non-resident visa are charged an international services charge of $120 each term, totaling $240 for academic year 2021-2022. This fee supports the University's services to international students.

Columbia Health and Related Services Fee and Student Health Insurance Premiums

Columbia Health and Related Services Fee

Columbia Health programs and services are supported by the Columbia Health and Related Services Fee. Students can access the on-campus services provided by the units of Columbia Health and pay no additional charges for most on-campus services:

- Alice! Health Promotion, including the Gay Health Advocacy Project (GHAP)
- Counseling and Psychological Services
- Disability Services
- Medical Services
- Sexual Violence Response

All full-time students, international students, and and part-time students who are on the Columbia Student Health Insurance Plan are required to pay the Columbia Health and Related Services Fee. Half-time or part-time students pay a reduced fee and have access to some, but not all, of the services. Half or part-time students may elect to upgrade to the full-time fee to have access to the full range of on-campus programs and services. For details on the fee levels please visit the Columbia Health website.
The Columbia Heath and Related Services Fee is billed separately for each term. The periods of coverage and fees for 2021–2022 are as follows:

<table>
<thead>
<tr>
<th>Term</th>
<th>Dates</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall Term</td>
<td>August 15, 2021–December 31, 2021</td>
<td>$623</td>
</tr>
<tr>
<td>Spring Term</td>
<td>January 1, 2022–August 14, 2022</td>
<td>$623</td>
</tr>
</tbody>
</table>

**Student Health Insurance Premiums**

To ensure students have access to high-quality healthcare while at Columbia, University policy requires all full-time students and all international students to have health insurance coverage that meets University requirements, in addition to the on-campus programs and services provided by Columbia Health. Columbia University offers the Columbia Student Health Insurance Plan (Columbia Plan), administered and underwritten by Aetna Student Health. Please visit the Columbia Health Insurance website for plan benefits and cost.

**International students**

Navigating the U.S. healthcare system can be complex. To help ensure that international students have access to the highest quality of care on- and off-campus, Columbia University requires all international students to enroll in the Columbia Student Health Insurance Plan. On a limited case-by-case basis, international students may qualify for an exception.

**Waivers and exceptions**

Domestic students who have an alternate insurance plan that meets established criteria set by the University may submit a request for a waiver and on a limited, case-by-case basis, some international students may submit a request for an exception. Visit the Columbia Health website for more information about waiver and exception criteria.

Waiver and exception requests are due at least two weeks before the enrollment deadline (September 30 for Fall enrollment; February 15 for new Spring enrollment; or June 15 for new Summer enrollment). All requests are considered, but approval is not guaranteed. Students who do not submit a request for a waiver or exception in a timely manner will be charged the insurance premium on their term bill and are responsible for these charges.

Students must confirm their enrollment on SSOL or submit a request for a waiver (domestic students) or exception (international students) on the Columbia Health Patient Portal every year. Students will receive reminders through their Columbia email.

Please contact the Student Health Insurance Team with any questions. They can be reached via studentinsurance@columbia.edu, or by visiting the office on the 3rd Floor of John Jay Hall.

**Withdrawal and Adjustment of Fees**

Withdrawal is defined as the dropping of one’s entire program in a given term as opposed to dropping a portion of one’s program (see Academic Regulations). Any student withdrawing from the College must notify the Center for Student Advising in writing: notification to instructors or failure to attend classes does not constitute an official withdrawal from the College and will result in failing grades in all courses.

A student who withdraws is charged a withdrawal fee of $75. In addition, students will be charged a housing fee once they leave a university residence. All application fees, late fees, and other special fees are not refundable if the student withdraws after the first 30 days of classes, and any coverage remains in effect until the end of the term. Students who withdraw or are dismissed from the University and are on the Columbia Student Health Insurance Plan will be terminated from the insurance plan and receive a pro-rated refund of any remaining premium as a credit to their student account. As with other University fees, the Columbia Health and Related Services Fee is non-refundable and not pro-rated.

**Medical Leave**

Students who are on an approved medical leave of absence are eligible to remain on the Columbia Student Health Insurance Plan for a cumulative maximum of two semesters during the course of the student’s entire enrollment within a particular school at Columbia, regardless of the length of program.

Medical leaves must be approved by the student’s academic unit and reflected in the Student Information System. Upon written notification from the academic unit granting medical leave, the Student Health Insurance Office will contact the student via their Columbia email address to determine whether the student wishes to remain enrolled in the Columbia Student Health Insurance Plan.

Students who do not reply within 14 days will be automatically terminated from the plan, effective at the end of the month in which the Student Health Insurance Office is notified or at the conclusion of the semester, whichever comes first.

Any adjustment to the tuition that the student has paid is determined by the date of withdrawal. Students receiving financial aid are not entitled to any portion of a refund until all Title IV financial aid programs are credited and all outstanding charges have been paid.

Each term, students are required to register for a full program of courses (minimum of 12 points), by the end of the Change of Program period, i.e., by the end of the second week of classes. Students who are not registered for at least 12 points by the end of the Change of Program period will be withdrawn from Columbia College.
Fall and Spring Term Tuition Refund Schedule

For the purposes of tuition proration, a week is defined as beginning on Monday and ending on Sunday. Also note that the official Change of Program period normally ends on a Friday.

<table>
<thead>
<tr>
<th>Description</th>
<th>Charge Assessed</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Registration</td>
<td>$0</td>
</tr>
<tr>
<td>1st and 2nd week</td>
<td>Document fee for new students only, plus $75 Withdrawal fee</td>
</tr>
<tr>
<td>3rd week</td>
<td>10% tuition, fees, plus $75 Withdrawal fee</td>
</tr>
<tr>
<td>4th week</td>
<td>20% tuition, fees, plus $75 Withdrawal fee</td>
</tr>
<tr>
<td>5th week</td>
<td>30% tuition, fees, plus $75 Withdrawal fee</td>
</tr>
<tr>
<td>6th week</td>
<td>40% tuition, fees, plus $75 Withdrawal fee</td>
</tr>
<tr>
<td>7th week</td>
<td>50% tuition, fees, plus $75 Withdrawal fee</td>
</tr>
<tr>
<td>8th week</td>
<td>60% tuition, fees, plus $75 Withdrawal fee</td>
</tr>
<tr>
<td>9th week and after</td>
<td>100% tuition, fees, plus $75 Withdrawal fee</td>
</tr>
</tbody>
</table>

There is no difference in the proration schedule of a school or program charging per-point or flat rate tuition.

Mailing Address

Financial Aid and Educational Financing, Columbia College
1130 Amsterdam Avenue
100 Hamilton Hall, Mail Code 2802
New York, NY 10027

Office Location

618 Alfred Lerner Hall
2920 Broadway
New York, NY 10027

Office Hours: Monday–Friday, 9 a.m.–5 p.m.
Telephone: 212-854-3711
Fax: 212-854-5353
Email: ugrad-finaid@columbia.edu
Website: http://cc-seas.financialaid.columbia.edu

Columbia is committed to meeting the full demonstrated financial need for all applicants admitted as first-year students or transfer students pursuing their first degree. Financial aid is available for all four undergraduate years, provided that students continue to demonstrate financial need.

All applicants who are citizens or permanent residents of the United States, who are students granted refugee visas by the United States, or who are undocumented students in the United States, are considered for admission in a need-blind manner.

International students who did not apply for financial aid in their first year are not eligible to apply for financial aid in any subsequent years. Foreign transfer candidates applying for aid must understand that such aid is awarded on an extremely limited basis. Columbia does not give any scholarships for academic, athletic, or artistic merit.

The following listing of named scholarship funds have been generously donated by alumni, parents, and friends of Columbia College and are the cornerstone of the College’s need-based and full need financial aid program. More than fifty percent of Columbia College students receive a Columbia Grant toward their demonstrated need and are eligible to receive named scholarship. The commitment of the Columbia College community enables the College to maintain an economically, ethnically, and racially diverse student body.

For more information on how to support the named scholarship program at Columbia College, please contact:

Columbia College Donor Relations
Columbia Alumni Center
622 West 113th Street, MC 4530
New York, NY 10025
212-851-7488

Scholarship A-Z Listing

A

FREDERICK F. AND HELEN M. ABDOO SCHOLARSHIP FUND

SAM ACKERMAN SCHOLARSHIP FUND

CARROLL ADAMS SCHOLARSHIP FUND

MICHAEL ADDISON SCHOLARSHIP FUND
(1955) Gift of Viola G. Addison in memory of her husband, Michael Addison.

EDWARD C. ADKINS MEMORIAL SCHOLARSHIP FUND

ALBOOLUTE FAMILY SCHOLARSHIP

JAMES HERMAN ALDRICH AND HERMAN ALDRICH EDSON SCHOLARSHIP FUND
(1913) Gift of James Herman Aldrich CC 1863, in honor of the fiftieth anniversary of his graduation, and bequest of James Herman Aldrich CC 1863 and Mary Gertrude Edson Aldrich.
PATRICIA AND SHEPARD ALEXANDER SCHOLARSHIP FUND  

SHEPARD L. ALEXANDER SCHOLARSHIP FUND  

WILLIAM ALPERN SCHOLARSHIP FUND  

CECILE AND SEYMOUR ALPERT, M.D. SCHOLARSHIP FUND  

ALAN J. ALTHEIMER SCHOLARSHIP FUND  

ALUMNI SCHOLARSHIP FUND  

GEORGE J. AMES/LAZARD FRERES SCHOLARSHIP FUND  

ERIC L. AMSTED AMSTERDAM FAMILY SCHOLARSHIP FUND FOR COLUMBIA COLLEGE  

CATHERINE AND DENIS ANDREUZZI SCHOLARSHIP FUND  

JULIO LOUIS ANON AND ROBERT A. KAMINSKI SCHOLARSHIP FUND  

ANONYMOUS SCHOLARSHIP FUND  

ANONYMOUS SCHOLARSHIP FUND  

ANONYMOUS SCHOLARSHIP FUND  

ANONYMOUS FUND FOR STUDENT AID #2  
(1954) Gift of an anonymous donor.

ANONYMOUS SCHOLARSHIP FUND III IN COLUMBIA COLLEGE  

ANONYMOUS #241 COLUMBIA COLLEGE SCHOLARSHIP FUND  

ANONYMOUS 22076 SCHOLARSHIP FUND  

ANONYMOUS 32476 SCHOLARSHIP FUND  

ANONYMOUS 351942 SCHOLARSHIP FUND  

ANONYMOUS 32994 SCHOLARSHIP FUND  

ANONYMOUS 456135  

ANONYMOUS 924518 SCHOLARSHIP  

RAYMOND F. ANTIGNAT SCHOLARSHIP FUND  
(1991) Bequest of Raymond F. Antignat CC’37, GSAS’40.

VIMLA AND DEVENDRA NATH AVASTHI GOLDMAN SACHS SCHOLARSHIP  

AQUILA FAMILY SCHOLARSHIP FUND  

ROONE P. ARLEDGE SCHOLARSHIP FUND  

NICHOLAS F. AND FRANCES N. ARTUSO SCHOLARSHIP FUND  

ESTATE OF SYLVIA ASHLEY BEQUEST FOR GENERAL UNIVERSITY FINANCIAL AID  

LOUIS AND THEONIE ASLANIDES SCHOLARSHIP FUND  

CHARLES B. ASSIFF SCHOLARSHIP FUND  

ASTOR PRESIDENTIAL SCHOLARSHIP FUND  

THE BILL AND INGRID ATKINSON MEMORIAL SCHOLARSHIP FUND  

MILA ATMOS SCHOLARSHIP FOR EUROPEAN HISTORY  
(2017) Gift of Sharmila H. Tuttle CC’96, SIPA’05

VICTOR AUERBACH ESTATE SCHOLARSHIP GIFT  

BERTHA AND WILLIAM AUGENBRAUN ENDOWED SCHOLARSHIP FUND AT COLUMBIA COLLEGE
Fees, Expenses, and Financial Aid

(2011) Bequest of Barry S. Augenbraun CC’60.

FRANK AND HARRIET AYER SCHOLARSHIP FUND
(1977) Bequest of Frank A. Ayer SEAS 1911.

BABAR FAMILY UNDERGRADUATE SCHOLARSHIP FUND

A. JAMES AND VONA HOPKINS BACH SCHOLARSHIP FUND

FREDERICK AND ELEANORE BACKER SCHOLARSHIP FUND

KAMEL S. BAHARY SCHOLARSHIP FUND

BAKER FAMILY SCHOLARSHIP FUND

GARY THOMAS BAKER SCHOLARSHIP FUND

ADELLE PHYLLIS BALFUS SCHOLARSHIP FUND

ALFRED M. BARABAS MEMORIAL FUND

THE MICHAEL L. BARNETT SCHOLARSHIP FUND
(2014) Bequest of Michael Barnett CC’64, DM’67.

KYRA TIRANA BARRY AND DAVID BARRY SCHOLARSHIP FUND

MICHAEL BARRY ’89 SCHOLARSHIP FUND

FREDERIC D. BARSTOW SCHOLARSHIP FUND
(1943) Bequest of William S. Barstow.

ANDREW AND AVERY BARTH SCHOLARSHIP FUND

MILTON B. AND EDITH C. BASSON ENDOWMENT FUND

CLEMENT AND ELIZABETH PROBASCO BEACHEY SCHOLARSHIP FUND
(1965) Bequest of Margaret Probasco Beachey in memory of her parents, Clement Beachey and Elizabeth Probasco Beachey.

ROBERT L. BELKNAP SCHOLARSHIP FUND

WILLIAM C. AND ESTHER HOFFMAN BELLER SCHOLARSHIP FUND

WILLIAM AITKEN BENSEL MEMORIAL ENDOWMENT

HERBERT R. BERK SCHOLARSHIP FUND

PINCUS BERNER MEMORIAL SCHOLARSHIP FUND

ROBERT BERNOT ’55 AND MORRIS LAMER SCHOLARSHIP FUND IN HONOR OF SAMARA BERNOT MESHEL’92

YOGI BERRA SCHOLARSHIP FUND
(1959) Gift of various donors in honor of Yogi Berra ^.

THE BETHILL FAMILY SCHOLARSHIP FUND

BIKHCHANDANI SCHOLARSHIP FUND

BLACK ALUMNI COUNCIL ENDOWED SCHOLARSHIP FUND

CHARLES P. BLACKMORE ATHLETIC SCHOLARSHIP FUND

LEO BLITZ MEMORIAL SCHOLARSHIP FUND

THE BENJAMIN F. & BERNICE BLOCK FAMILY SCHOLARSHIP FUND

THE WILLARD AND ROBERTA BLOCK FAMILY SCHOLARSHIP FUND

MAXWELL A. BLOOMFIELD SCHOLARSHIP FUND

BOCKLAGE FAMILY SCHOLARSHIP FUND
ALEXANDER BODINI ENDOWED FINANCIAL AID FUND

PHILIP BONANNO SCHOLARSHIP FUND

HOWARD H. BORN SCHOLARSHIP FUND

H. HUBER BOSCOWITZ SCHOLARSHIP FUND

DR. LEONARD B. BRAM SCHOLARSHIP FUND

EDWARD M. BRATTER SCHOLARSHIP FUND

THE MICHAEL O. BRAUN SCHOLARSHIP FUND

BREAD OF LIFE FOUNDATION SCHOLARSHIP FUND

JESSICA LEE BRETT SCHOLARSHIP FUND

LAURENCE AND MARION BREWER ’38 CC SCHOLARSHIP FUND

BRIGHT SCHOLAR - COLUMBIA SCHOLARSHIP FUND

BRILLO-SONNINO FAMILY SCHOLARSHIP FUND

THE CRAIG B. BROD SCHOLARSHIP
(2011) Gift of Craig B. Brod CC’77.

HAROLD BROD MEMORIAL ROOM SCHOLARSHIP FUND
(1958) Gift of Beth Brod W: CC’47 in memory of her husband, Harold Brod CC’47.

DOROTHY R. BRODIN SCHOLARSHIP FUND FOR THE HUMANITIES

BRONIN FAMILY SCHOLARSHIP FUND

ROBERT R. BROOKHART MEMORIAL SCHOLARSHIP FUND

RICHARD A. BROOKS AND EVA MARIA STADLER SCHOLARSHIP FUND

FRANK AND DEENIE BROSENS SCHOLARSHIP FUND

HAROLD BROWN SCHOLARSHIP FUND

SAMUEL POTTER BROWN SCHOLARSHIP FUND

CARL M. BRUKENFELD CLASS OF 1927 MEMORIAL SCHOLARSHIP FUND

CLARENCE BRUNER-SMITH SCHOLARSHIP FUND - COLUMBIA COLLEGE

LOUISE AND ROBERT BRUNNER FAMILY SCHOLARSHIP FUND

MICHAEL S. BRUNO, M.D. SCHOLARSHIP FUND

DR. ELI BRYK SCHOLARSHIP FUND
(1999) Gift of Eli Bryk CC’78, PS’82, P: CC’07, CC’08, CC’10, CC’13, BC’03, BUS’11, GSAS’10, JRN’14, LAW’11, PS’15.

BRYNJOLFSSON FAMILY UNDERGRADUATE SCHOLARSHIP FUND
(2008) Gift of Margaret and John Brynjolfur Brynjolfsson CC’86.

BUCHMAN FAMILY SCHOLARSHIP FUND

ANNIE P. BURGESS SCHOLARSHIP FUND
(1913) Bequest of Annie P. Burgess.

DANIEL BURGESS SCHOLARSHIP FUND
(1913) Bequest of Annie P. Burgess.

ARNOLD D. BURK MEMORIAL SCHOLARSHIP FUND
(1918) Bequest of Arnold D. Burk CC’53, LAW’55.

J. GARY BURKHEAD SCHOLARSHIP FUND

DR. IRVIN J. BUSSING SCHOLARSHIP FUND

RICHARD BUTLER SCHOLARSHIP FUND
(1903) Gift of Mrs. Richard Butler in memory of her husband, Richard Butler.
BENJAMIN J. BUTTENWIESER PRESIDENTIAL SCHOLARSHIP FUND
(1992) Gift of Lionel I. Pincus BUS’56, P: CC’92, CC’95, BUS’02, the Charles H. Revson Foundation, and various donors in memory of Benjamin J. Buttenwieser CC 1919.

MICHAEL BYOWITZ / RUTH HOLZER / SUZANNE BYOWITZ SCHOLARSHIP FUND

JOHN T. CAHILL MEMORIAL SCHOLARSHIP FUND

EDWARD F. CALESA SCHOLARSHIP FUND

STEVEN C. CALICCHIO FUND
(2013) Gift of Steven C. Calicchio Foundation.

JOHN AND BETTY CARROLL MEMORIAL SCHOLARSHIP FUND

PROFESSOR JOHN P. CARTER SCHOLARSHIP FUND

EDWIN H. CASE MEMORIAL SCHOLARSHIP FUND

CAMPBELL FAMILY SCHOLARSHIP FUND

WILLIAM CAMPBELL FELLOWSHIP FUND
(1938) Gift of William Campbell.

CENTRAL DELICATESSEN FUND

CESTAR FAMILY FUND

DOUGLAS A. CHADWICK, JR. SCHOLARSHIP FUND

FRANK W. CHAMBERS SCHOLARSHIP FUND
(1950) Gift of various donors in memory of Frank W. Chambers CC 1906.

SOU CHAN SCHOLARSHIP FUND
(1949) Gift of Sou Chan.

RYAN CHANG SCHOLARSHIP FUND

SO YOUNG CHANG FAMILY SCHOLARSHIP FUND
(2015) Gift of So Young Chang BUS’02.

JOYCE CHANG SCHOLARSHIP FUND

CHANG CHAN YUK PING SCHOLARSHIP FUND

CHAPMAN FAMILY SCHOLARSHIP FUND

SIMEON B. JR. CHAPIN SCHOLARSHIP FUND
(1992) Gift of Mary B. Chapin.

JOHN CHEE SCHOLARSHIP FUND

CHARLIE CHO SCHOLARSHIP FUND

THE CHODASH FAMILY SCHOLARSHIP FUND

GERMAINE AND MICHAEL CHLOE SCHOLARSHIP FUND
(2020) Gift of Michael and Germaine Choe CC’95.

CHOU SCHOLARSHIP FUND

SILAS CHOU SCHOLARSHIP FUND

DANIEL S.J. CHOY COLUMBIA COLLEGE SCHOLARSHIP FUND

PHILLIP AND THEODORA CHRISTIE ENDOWED SCHOLARSHIP
(2016) Bequest of Theodora and Phillip Christie.

JEREMIAH AND YOLANDA CIANCIA FAMILY SCHOLARSHIP FUND

RICHARD H. CIPOLLA MEMORIAL SCHOLARSHIP FUND

ROBERT CIRICILLO SCHOLARSHIP FUND

JOHN J. CIRIGLIANO SCHOLARSHIP FUND

TATJANA CIZEVSKA SCHOLARSHIP FUND
CLASS OF 1892 ARTS AND MINES SCHOLARSHIP
(1917) Gift of various donors in the Class of 1892 Arts and Mines.

CLASS OF 1896 ARTS AND MINES SCHOLARSHIP
(1921) Gift of various donors in the Class of 1896 Arts and Mines.

CLASS OF 1899 COLLEGE AND MINES NATIONAL SCHOLARSHIP FUND
(1949) Gift of various donors in the Class of 1899 Arts and Mines.

CLASS OF 1900 FUND
(1950) Gift of various donors in the Class of 1900 College, Engineering and Architecture.

CLASS OF 1902 COLLEGE AND ENGINEERING SCHOLARSHIP FUND
(1952) Gift of various donors in the Class of 1902.

CLASS OF 1905 SCHOLARSHIP FUND
(1955) Gift of various donors in the Class of 1905.

CLASS OF 1906 FRANK D. FACKENTHAL SCHOLARSHIP FUND
(1948) Gift of various donors in the Class of 1906.

CLASS OF 1907 ENGINEERING FUND
(1937) Gift of various donors in the Class of 1907.

CLASS OF 1908 COLLEGE FUND FOR A ROOM IN RESIDENCE HALLS FUND
(1948) Gift of various donors in the Class of 1908.

CLASS OF 1909 SCHOLARSHIP FUND
(1947) Gift of various donors in the Class of 1909.

CLASS OF 1911 FUND
(1936) Gift of various donors in the Class of 1911.

CLASS OF 1912 COLLEGE AND ENGINEERING 35TH ANNIVERSARY FUND
(1969) Gift of various donors in the Class of 1912 in honor of the thirty-fifth anniversary of their graduation.

CLASS OF 1914 COLLEGE AND ENGINEERING FUND
(1969) Gift of various donors in the Class of 1914.

CLASS OF 1915 SCHOLARSHIP FUND
(1950) Gift of various donors in the Class of 1915.

CLASS OF 1916 COLLEGE AND ENGINEERING FUND
(1947) Gift of various donors in the Class of 1916.

CLASS OF 1916 SCHOLARSHIP FUND
(1951) Gift of various donors in the Class of 1916.

CLASS OF 1917 COLLEGE, ENGINEERING, JOURNALISM FUND
(1939) Gift of various donors in the Class of 1917.

CLASS OF 1918 SCHOLARSHIP FUND
(1948) Gift of various donors in the Class of 1918.

CLASS OF 1918 50TH ANNIVERSARY SCHOLARSHIP FUND
(1968) Gift of various donors in the Class of 1918.

CLASS OF 1920 SCHOLARSHIP FUND

CLASS OF 1921 SCHOLARSHIP FUND
(1936) Gift of various donors in the Class of 1921.

CLASS OF 1922 NATIONAL SCHOLARSHIP ENDOWMENT FUND
(1950) Gift of various donors in the Class of 1922.

CLASS OF 1924 SCHOLARSHIP FUND
(1949) Gift of various donors in the Class of 1924.

CLASS OF 1924 SCHOLARSHIP ROOM ENDOWMENT FUND
(1949) Gift of various donors in the Class of 1924.

CLASS OF 1925 HERBERT E. HAWKES SCHOLARSHIP FUND

CLASS OF 1926 DWIGHT C. MINER SCHOLARSHIP FUND
(1973) Gift of various donors including faculty, students, and alumni.

CLASS OF 1927 SCHOLARSHIP FUND
(1947) Gift of various donors in the Class of 1927.

CLASS OF 1928 COLLEGE PERMANENT FUND
(1956) Gift of various donors in the Class of 1928.

CLASS OF 1929 TENTH ANNIVERSARY FUND
(1939) Gift of various donors in the Class of 1929.

CLASS OF 1932 SCHOLARSHIP FUND

THE CLASS OF 1933 SCHOLARSHIP FUND

CLASS OF 1933 SCHOLARSHIP FUND
(1988) Gift of various donors in the Class of 1933.

CLASS OF 1934 SCHOLARSHIP FUND
(1986) Gift of various donors in the Class of 1934.

CLASS OF 1936 SCHOLARSHIP FUND
(1965) Gift of various donors in the Class of 1936.

CLASS OF 1938 SCHOLARSHIP FUND
(1967) Gift of various donors in the Class of 1938.

CLASS OF 1942 GEORGE A. HYMAN, M.D. SCHOLARSHIP FUND

(1986) Gift of Tatjana Cizevska GSAS'49 ^.
Fees, Expenses, and Financial Aid


CLASS OF 1942 SCHOLARSHIP FUND
(1967) Gift of various donors in the Class of 1942.

CLASS OF 1943 SCHOLARSHIP FUND
(1976) Gift of various donors in the Class of 1943.

CLASS OF 1951 SCHOLARSHIP FUND

CLASS OF 1952 ENDOWMENT FUND
(1988) Gift of various donors in the Class of 1952 in honor of the thirty-fifth anniversary of their graduation.

COLUMBIA COLLEGE CLASS OF 1952 SCHOLARSHIP FUND

CLASS OF 1953/ MICHAEL I. SOVERN SCHOLARSHIP FUND

CLASS OF 1955 SCHOLARSHIP FUND

CLASS OF 1956 ALAN N. MILLER SCHOLARSHIP FUND

CLASS OF 1956 SCHOLARSHIP FUND

THE CLASS OF 1958 PETER STUYVESANT SCHOLARSHIP

CLASS OF 1959 SCHOLARSHIP FUND

CLASS OF 1966 SCHOLARSHIP FUND

CLASS OF 1968 SCHOLARSHIP FUND

CLASS OF 1969 SCHOLARSHIP FUND
(1991) Gift of various donors in the Class of 1969 in honor of the twentieth anniversary of their graduation.

CLASS OF 1975 NEIL SELINGER MEMORIAL SCHOLARSHIP FUND

THE CLASS OF 1979 DEAN AUSTIN E. QUIGLEY SCHOLARSHIP FUND

THE CLASS OF 1984 SCHOLARSHIP FUND

THE CLASS OF 1985 SCHOLARSHIP FUND

THE CLASS OF 1989 SCHOLARSHIP FUND

THE COLUMBIA COLLEGE CLASS OF 1994 SCHOLARSHIP FUND

THE COLUMBIA COLLEGE CLASS OF 2005 SCHOLARSHIP FUND

MICHAEL J. CLEMENS SCHOLARSHIP FUND
(1990) Bequest of Michael J. Clemens CC’61, GSAS’64.

ETHEL CLYDE SCHOLARSHIP FUND

DONN COFFEE MEMORIAL SCHOLARSHIP FUND

JOAN M. COHEN SCHOLARSHIP FUND

SANFORD M. COHEN SCHOLARSHIP FUND

PETER AND JOAN COHN SCHOLARSHIP FUND

COLE FUND
(1943) Bequest of Edward F. Cole.

MAE AND HARRY COLE MEMORIAL FUND
(1965) Bequest of Harry Dix Cole CC 1913.

HENRY S. COLEMAN SCHOLARSHIP FUND

HENRY S. COLEMAN LEADERSHIP SCHOLARSHIP FUND

THE SARAH R. COLEMAN SCHOLARSHIP FUND

MADELEINE L. COLEMAN SCHOLARSHIP FUND

PERRY MCDONOUGH COLLINS SCHOLARSHIP FUND (1917) Bequest of Kate Collins Brown in memory of her uncle, Perry McDonough Collins.


COLUMBIA COLLEGE SCHOLARSHIP FUND (2011) Gift of various donors.


COLUMBIA UNIVERSITY ALUMNI CLUB OF NASSAU COUNTY SCHOLARSHIP FUND (1986) Gift of the Columbia University Alumni Club of Nassau County.


COLUMBIA UNIVERSITY FUND FOR STUDENTS (2005) Bequest of Al Jolson.


PAUL AND LILLIAN COSTALLAT SCHOLARSHIP FUND (1972) Bequest of Lillian and Paul Costallat.


LOUISE CRAIGMYLE SCHOLARSHIP FUND (1960) Gift of Louise Craigmyle.

CHESTER W. CUTHELL CLASS OF 1905 SCHOLARSHIP FUND (1945) Gift of various donors in the Class of 1905 in honor of the fortieth anniversary of their graduation.


VERA B. DAVID SCHOLARSHIP FUND (1963) Bequest of Vera B. David.

A.M. DAVIS SCHOLARSHIP FUND (1944) Gift of A.M. Davis.


EDWIN F. DAVIS SCHOLARSHIP FUND (1939) Bequest of Edwin F. Davis.


JUDGE ARCHIE DAWSON MEMORIAL SCHOLARSHIP FUND (1964) Gift of various donors in memory of Archie Dawson CC 1921.

THE RAUL J. DE LOS REYES MEMORIAL SCHOLARSHIP FUND
Fees, Expenses, and Financial Aid

RICHARD AND DANIELA DE LOS REYES SCHOLARSHIP FUND

HERBERT A. DEANE SCHOLARSHIP FUND

THE DEBART SCHOLARSHIP FUND - COLUMBIA COLLEGE

DELOITTE AND TouCHE SCHOLARSHIP GIFT

LEONARDO C. AND MARY M. DE MORELOS SCHOLARSHIP FUND

DEMA SCHOLARSHIP FUND

FRANK W. DEMUTH SCHOLARSHIP FUND
(1965) Bequest of Frank W. Demuth CC 1914, LAW 1916.

LELAND S. DENNING SCHOLARSHIP FUND

ROBERT STEVEN DENNING SCHOLARSHIP FUND

ROBERT STEVEN DENNING SCHOLARSHIP FUND
(2014) Gift of Roberta B. and Steven A. Denning P: CC’06 in honor of the 30th birthday of their son, Robert Steven Denning CC’06.

CARL W. DESCH SCHOLARSHIP FUND IN MEMORY OF KATHARINE W. DESCH

WILLIAM B. AND ALAN TAYLOR DEVOE SCHOLARSHIP FUND

WILLIAM AND IDA H. DEWAR FINANCIAL ASSISTANCE AND SCHOLARSHIP FUND

EDWARD WILSON DEWILTON SCHOLARSHIP FUND

SIDNEY R. AND ARTHUR W. DIAMOND SCHOLARSHIP FUND

LEONARD DICKSON SCHOLARSHIP FUND

GRACE AND JAMES DIGNAN FAMILY SCHOLARSHIP FUND

WILLIAM A.S. DOLLARD AND BERNARD F. KELLEY SCHOLARSHIP

MARTIN DORSCH STUDENT ASSISTANCE FUND
(1978) Bequest of Martin Dorsch.

ROGER E. DOUNCE SCHOLARSHIP FUND
(2014) Bequest of Shirley A. Ingalls.

PAUL SEYMOUR DREUX SCHOLARSHIP FUND

DRL FUND

AVRAM DRORI SCHOLARSHIP FUND

ELIZABETH AND DANIEL DWYER SCHOLARSHIP FUND

THE DYCKMAN INSTITUTE SCHOLARSHIP FUND
(1943) Gift of the Dyckman Institute.

EDWARD MEAD EARLE SCHOLARSHIP FUND

DANIEL EASTMAN SCHOLARSHIP FUND

BERIL EDELMAN MEMORIAL SCHOLARSHIP FUND

STANLEY EDELMAN SCHOLARSHIP FUND

DR. JAMES C. EGBERT MEMORIAL SCHOLARSHIP FUND

JOHN S. AND SARAH STONE EHLINGER SCHOLARSHIP FUND

ADOLPHUS EHRlich SCHOLARSHIP FUND

BURTT R. EHRlich MEMORIAL FUND

THE ERIC EISNER SCHOLARSHIP FUND

ABIGAIL ELBAUM SCHOLARSHIP FUND

DANIEL GIRAUD ELLIOT FUND
(1949) Bequest of Margaret Henderson Elliot.

THE DAVID AND ALICE ENG FAMILY SCHOLARSHIP FUND

SOLTON ENGEL NATIONAL SCHOLARSHIP FUND

JEREMY G. EPSTEIN ’67 SCHOLARSHIP FUND

ESPOSITO-CRANDALL FAMILY SCHOLARSHIP FUND

J. HENRY ESSER SCHOLARSHIP FUND

EXTER FAMILY SCHOLARSHIP FUND

F

MICHAEL AND JANE DIEHL FACKENTHAL SCHOLARSHIP AND FELLOWSHIP FUND

FALK WALLACE FAMILY SCHOLARSHIP FUND

HAMEN AND PHYLLIS FAN FAMILY SCHOLARSHIP FUND

FANG FAMILY SCHOLARSHIP FUND

THOMAS AND FLORENCE FARKAS SCHOLARSHIP FUND

GERALD FEINBERG MEMORIAL SCHOLARSHIP FUND

PHILIP FELDMAN SCHOLARSHIP FUND

SYLVIA FELLER AND LUCILLE KNIPE SCHOLARSHIP FUND

FERGANG FAMILY SCHOLARSHIP FUND

E. ALVIN AND ELAINE M. FIDANQUE FUND

FINK FAMILY SCHOLARSHIP FUND

CAROL AND JOHN FINLEY SCHOLARSHIP FUND

PETE AND SUSAN FISCHBEIN FAMILY SCHOLARSHIP FUND

ANDREW L. FISHER ’66 CC SCHOLARSHIP FUND

ELIZA AND CANNING FOK ENDOWED FUND FOR INTERNATIONAL STUDENT FINANCIAL AID

FORD/EEOC ENDOWMENT SCHOLARSHIP FUND - COLUMBIA COLLEGE

SIDNEY FORSCH SCHOLARSHIP FUND
(1967) Gift of Josephine E. Forsch in memory of her husband, Sidney Forsch CC 1906.

STEVEN P. AND MARGARET E. FORSTER SCHOLARSHIP FUND

MABEL V.P. SMITH FORSYTH SCHOLARSHIP FUND
(1977) Bequest of Mabel V.P. Smith Forsyth.

GARY S. FRAGIN SCHOLARSHIP FUND
(1990) Gift of Gary S. Fragin SIPA’69, BUS’70, P: BUS’01, BUS’03, LAW’03.

JOHN AND MAY FRASER SCHOLARSHIP FUND
(1971) Bequest of Ian F. Fraser CC’29, GSAS’39.

JUDGE JOHN JOSEPH FREEDMAN SCHOLARSHIP FUND

DORIS AND JESSE FREIDIN SCHOLARSHIP FUND

A. ALAN FRIEDBERG SCHOLARSHIP FUND

LAWRENCE N. FRIEDLAND SCHOLARSHIP FUND

JACOB W. FRIEDMAN SCHOLARSHIP FUND

ROBERT AND BARBARA FRIEDMAN SCHOLARSHIP FUND

GORDON BROOKS FULCHER, JR. SCHOLARSHIP FUND

FUND DEVELOPMENT CONCIL DC SCHOLARSHIP FUND

PHILIP FUSCO MEMORIAL SCHOLARSHIP FUND

G

GAGUINE SCHOLARSHIP FUND

STUART GARCIA MEMORIAL SCHOLARSHIP FUND
(1987) Gift of various donors in memory of Stuart L. Garcia CC’84.

DOUGLAS B. GARDNER SCHOLARSHIP FUND

GEHRIG SCHOLARSHIP FUND
(1958) Gift of Mel Allen and various donors in honor of Lou Gehrig CC 1925.

GEORGE AUGUSTUS GEIGER SCHOLARSHIP FUND

GERMAN SOCIETY OF THE CITY OF NEW YORK SCHOLARSHIP FUND

WILLIAM HENRY GIBSON SCHOLARSHIP FUND
(1927) Gift of Honoro Gibson Pelton in memory of her father, William Henry Gibson CC 1875.

ARTHUR A. GLADSTONE ENDOWED SCHOLARSHIP FUND

JOSEPH E. GLASS, JR. SCHOLARSHIP FUND

THOMAS GLOCER SCHOLARSHIP FUND

GM/EEOC ENDOWMENT SCHOLARSHIP FUND - COLUMBIA COLLEGE
(1984) Gift of General Motors/EEOC Endowed Scholarship Program

ABRAHAM AND LEE GOLDEN SCHOLARSHIP FUND
(2011) Gift of Michelle Mercer and Bruce Golden CC’81.

GOLDEN FUTURE SCHOLARSHIP FUND

CHARLES AND JANE GOLDMAN SCHOLARSHIP FUND

GOLDSCHMIDT FAMILY SCHOLARSHIP FUND

ERIC AND TAMAR GOLSTEIN SCHOLARSHIP FUND

THE CARTER GOLEMBE SCHOLARSHIP FUND

JOHN P. GOMMES SCHOLARSHIP FUND

ARAGON/GONZALEZ-GUISTI ENDOWED SCHOLARSHIP FUND

EMANUEL GOODMAN SCHOLARSHIP FUND

ALAN GORNICK SCHOLARSHIP FUND

EUGENE AND PHYLLIS GOTTFRIED SCHOLARSHIP FUND

FRANKLIN AND IRENE GOULD SCHOLARSHIP FUND

THE SARAH E. GRANT SCHOLARSHIP FUND AT COLUMBIA COLLEGE

GREATER NEW YORK MUTUAL INSURANCE COMPANY FUND

DONALD P. GREET FUND
THE GEOFFREY E. GROSSMAN SCHOLARSHIP FUND

THE MATTHEW C. GROSSMAN SCHOLARSHIP FUND

THE SHARON AND PETER GROSSMAN FAMILY SCHOLARSHIP
(2005) Gift of Sharon and Peter A. Grossman CC’79, P: CC’05,
CC’08, GSAS’07, GSAS’11.

PETER GRUENBERGER FAMILY SCHOLARSHIP FUND

GRUENSTEIN FAMILY SCHOLARSHIP FUND

WALTER GUESCH SCHOLARSHIP FUND

LEE AND ELIZABETH GUITTAR SCHOLARSHIP FUND

SUNIL K. GULATI SCHOLARSHIP FUND
(2012) Gift of an anonymous donor in honor of Sunil Gulati
GSAS’83, GSAS’86, P: CC’20.

H. HAROLD GUMM AND ALBERT VON TILZER SCHOLARSHIP FUND

GURIAN FAMILY SCHOLARSHIP FUND
(2008) Gift of Lori Bikson-Gurian and Craig R. Gurian CC’79,
LAW’83, GSAS’03, P: CC’13, LAW’17.

LAWRENCE GUSSMAN COLUMBIA COLLEGE SCHOLARSHIP FUND
(1987) Gift of Lawrence A. Guissman CC’37, SEAS’38,
SEAS’39, P: CC’64, BUS’68 in honor of the fiftieth
anniversary of his graduation.

H

G. HENRY HALL FUND
(1915) Bequest of George Henry Hall.

SEWARD HENRY HALL SCHOLARSHIP FUND

DAVID HALPERIN ATHLETIC SCHOLARSHIP FUND

ALBERT J. HAMBRET FUND

ALEXANDER HAMILTON SCHOLARSHIP FUND
(2011) Gift of Jinduk Han CC’85, P: CC’17, CC’19.

ELLEN KING HAND MEMORIAL FUND
(1941) Bequest of Oliver Kane Hand in memory of his mother,
Ellen K. Hand.

HAO FAMILY SCHOLARSHIP FUND

JAMES RENWICK HARRISON SCHOLARSHIP FUND
(1936) Bequest of James R. Harrison CC 1917.

PROFESSOR C. LOWELL HARRISS SCHOLARSHIP FUND
honor of his father, C. Lowell Harriss GSAS’40, P: CC’68,
LAW’71, BUS’72, LAW’74, BUS’75, LAW’79.

VIRGINIA HARROLD SCHOLARSHIP

LAWRENCE S. HARTE SCHOLARSHIP FUND
(1991) Gift of Lawrence S. Harte CC’53, P: CC’88, BC’92,
BUS’92.

THE PETER AND HILARY HATCH SCHOLARSHIP FUND
CC’92.

PERCY D. HAUGHTON MEMORIAL FUND
(1926) Gift of Haughton Memorial Committee in memory of
Percy D. Haughton.

HENRY FIELD HAVILAND SCHOLARSHIP FUND

DEAN HERBERT E. HAWKES MEMORIAL FUND
(1943) Gifts of various donors in memory of Herbert E. Hawkes.

DEAN HERBERT E. HAWKES MEMORIAL SCHOLARSHIP FUND

CHARLES HAYDEN MEMORIAL SCHOLARSHIP FUND
(1945) Gift of the Charles Hayden Foundation.

WILLIAM RANDOLPH HEARST FOUNDATION SCHOLARSHIP FUND

THE ROBERT M. HECKER SCHOLARSHIP FUND

JOSEPH AND MARION HEFFERNAN SCHOLARSHIP FUND

HELENIC STUDENT FUND

M. AND M. HERMAN SCHOLARSHIP FUND
Fees, Expenses, and Financial Aid


STEPHEN A. HERMIDES SCHOLARSHIP FUND

RICHARD HERPERS MEMORIAL SCHOLARSHIP FUND

DAVID B. HERTZ COLLEGE/ENGINEERING INTERSCHOOL SCHOLARSHIP FUND

OREN C. HERWITZ 1930 MEMORIAL ENDOWED SCHOLARSHIP FUND
(2009) Bequest of Mary E. Herwitz in memory of her husband, Oren C. Herwitz LAW’30.

ANDREW L. HERZ SCHOLARSHIP FUND

ROBERT IRWIN HERZ MEMORIAL FUND

ABRAM S. HEWITT MEMORIAL

ABRAM S. HEWITT SCHOLARSHIP FUND

PROFESSOR GEORGE W. HIBBITT MEMORIAL SCHOLARSHIP FUND
(1966) Gift of Thomas E. Bratter CC’61, P; CC’87, CC’90 and other donors in memory of George Whiting Hibbitt.

RICHARD AND CHRISTIANE HIEGEL SCHOLARSHIP FUND

NORMAN HILDES-HEIM FUND

DAVID AND NANCY HILLIS SCHOLARSHIP FUND

FERNAND AND REBECCA HIRSCH SCHOLARSHIP FUND

PATRICIA ELLEN HIRSCH SCHOLARSHIP FUND
(1977) Gift of various donors in memory of Patricia E. Hirsch.

CHARLES F. HOELZER JR., MEMORIAL SCHOLARSHIP FUND

HOFFEN FAMILY SCHOLARSHIP FUND

ROBERTA L. AND JOEL S. HOFFMAN SCHOLARSHIP FUND

FRANK AND MARY HOGAN SCHOLARSHIP FUND
(1975) Gift of Mary R. Hogan in memory of her husband, Frank Smithwick Hogan CC 1924, LAW 1928.

HONG KONG ALUMNI ASSOCIATION SCHOLARSHIP FUND

JAMES T. HORN SCHOLARSHIP FUND
(1938) Gift of Sarah L. Horn and Mary T. Horn in memory of their brother, James T. Horn.

DAVID H. HOROWITZ SCHOLARSHIP FUND

ELISSA HOROWITZ SCHOLARSHIP FUND

FELICIA AND BEN HOROWITZ SCHOLARSHIP FUND

GEDALE B. AND BARBARA S. HOROWITZ SCHOLARSHIP FUND

LIBBY HOROWITZ SCHOLARSHIP FUND

RUSSELL C. AND MELODIE A.R. HOROWITZ SCHOLARSHIP FUND

CHARLES EUGENE HUBER, JR. M.D. SCHOLARSHIP FUND

FREDERICK W. HUBER SCHOLARSHIP FUND
(1924) Gift of Frederick W. Huber.

JOHN L. HUEMER SCHOLARSHIP FUND

THE MICHAEL AND BETH HUGHES FAMILY ENDOWED SCHOLARSHIP FUND

HUMANITIES SCHOLARSHIP FUND IN HONOR OF JACQUES BARZUN

THE CRONIN HURST FAMILY SCHOLARSHIP

HAROLD M. STEWART AND MARY STEWART HUTCHENS ENDOWMENT FUND
(2013) Bequest of Mary Stewart Hutchens.

ALLEN HYMAN SCHOLARSHIP FUND

ANDREW HYMAN AND MOLLY CHREIN SCHOLARSHIP FUND

THE CASEY ICHNIOWSKI MEMORIAL FUND

HELEN K. IKELER SCHOLARSHIP FUND

ANTHONY M. IMPARATO, M.D. SCHOLARSHIP FUND

MARGARET MILAM INSERNI SCHOLARSHIP FUND

INTERNATIONAL STUDENTS SCHOLARSHIP FUND

ORRIN C. ISBELL FUND
(1989) Bequest of Emily D. Isbell in memory of her husband, Orrin C. Isbell CC 1912, LAW 1914.

THEODORE KAHAN SCHOLARSHIP FUND

ALAN R. KAHN FAMILY SCHOLARSHIP FUND

PROCTOR WILLIAM E. KAHN SCHOLARSHIP FUND
THE KAISER FAMILY SCHOLARSHIP

EDWARD C. & ELIZABETH B. KALAIJIAN SCHOLARSHIP

KAMATH FAMILY SCHOLARSHIP FUND

SANDRA AND MICHAEL KAMEN SCHOLARSHIP FUND

VICTOR V. KAMINSKI III MEMORIAL SCHOLARSHIP FUND

LAMONT AND LEAH KAPLAN SCHOLARSHIP FUND

THE ROBERT AND SHIRLEY KAPLAN AND JOSEPH AND HELEN KOHN SCHOLARSHIP FUND

RAVI KAPUR SCHOLARSHIP FUND

JUDY AND JEANETTE KATEMAN MEMORIAL SCHOLARSHIP FUND

SAMUEL AND VICKI KATZ SCHOLARSHIP FUND

ALI KAY/DILLER-VON FURSTENBERG FOUNDATION GIFT
(2016) Gift of Alison P. Kay CC’06.

RALPH KEEN SCHOLARSHIP FUND

ELLWOOD WADSWORTH KEMP, JR., COLUMBIA COLLEGE CLASS OF 1919 MEMORIAL SCHOLARSHIP FUND

THE ROBERT F. KEMP CC’82 MEMORIAL SCHOLARSHIP FUND

GRACE BEACHEY KEMPER FUND

SIGMUND MARSHALL KEMPNER SCHOLARSHIP FUND

MARGARETE E. KENNEDY ESTATE SCHOLARSHIP FUND

KERZNER SCHOLARSHIP FUND

MOSSETTE AND HENRI KEYZER-ANDRE SCHOLARSHIP FUND

SEILAI KHOO MEMORIAL SCHOLARSHIP FUND

KHOSROWSHAHI FAMILY SCHOLARSHIP FUND

KIERANTIMBERLAKE SCHOLARSHIP FUND ON BEHALF OF RICHARD MAIMON’85

KILLAM CANADIAN FUND

KILLOUGH (WALTER H.D.) FUND FOR ERASMUS HALL SCHOLARSHIPS

AHNA KIM SCHOLARSHIP FUND

KIM FAMILY FUND

SANG AND BORAH KIM FAMILY SCHOLARSHIP FUND

THE MARK AND ANLA CHENG KINGDON FUND

GRAYSON KIRK SCHOLARSHIP FUND
(1982) Gift of various donors in honor of Grayson Kirk ’53 HON.

KLINGENSMITH FAMILY SCHOLARSHIP FUND

KN SCHOLARSHIP FUND GIFT

JEFFREY D. KNOWLES SCHOLARSHIP

LAWRENCE AND RUTH KOBRIN SCHOLARSHIP FUND

DR. RUTH M. KOCH SCHOLARSHIP FUND

HAROLD KORZENIK SCHOLARSHIP FUND

THE HAROLD AND ROSE KOVNER SCHOLARSHIP FUND

DAVID H. KRAFT SCHOLARSHIP FUND

ROBERT KRAFT FAMILY SCHOLARSHIP FUND

FREDERICK AND RICHARD KRAMER FAMILY SCHOLARSHIP FUND

KRAMER ENDOWED SCHOLARSHIP FUND
(1965) Gift of the Kramer Foundation.

ROBERT J. KRANE AND JULIUS Y. GRAFF SCHOLARSHIP FUND

MARCY AND JOSH KREVITT SCHOLARSHIP FUND
(1913) Gift of Josh A. Krevitt CC’89 and Marcy Nislow Krevitt BC’90.

THE KRISBERG FAMILY SCHOLARSHIP

JOSEPH WOOD KRUTCH SCHOLARSHIP FUND #2
(1973) Gift of Marcelle L. Krutch ^ in memory of her husband, Joseph W. Krutch GSAS’24, ’54 HON.

RICK KURNIT AND DIANE KATZIN SCHOLARSHIP FUND

THE KUNG AND YEUNG SCHOLARSHIP FUND

PAUL SAMUEL KURZWEIL SCHOLARSHIP FUND

KUMA/KUZNETSOV SCHOLARSHIP FUND

LAACU ENDOWED SCHOLARSHIP FUND

PREM LACHMAN SCHOLARSHIP FUND

AMNON AND YAEL LANDAN SCHOLARSHIP FUND

NORMAN JOSEPH LANDAU SCHOLARSHIP FUND

JERRY G. LANDAUER SCHOLARSHIP FUND

PATRICIA LANDMAN AND DANIELLE LANDMAN MEMORIAL FUND

DENNIS ’71, SUSAN, WILLIAM ’04 AND THOMAS ’08 LANGER SCHOLARSHIP FUND

GEORGE R. LANYI MEMORIAL FOUNDATION SCHOLARSHIP FUND

PETER I. B. LAVAN SCHOLARSHIP FUND

JONATHAN AND JEANNE LAVINE SCHOLARSHIP FUND

THE GEORGE AND EVA KOONS LAVOLIS SCHOLARSHIP FUND IN MEMORY OF EVE’S PARENTS BY DR. MARTIN RAYMOND AND EVE LEWELLIS LEBOWITZ

PAUL LAZARE SCHOLARSHIP FUND

HARRY R. LEA SCHOLARSHIP FUND

ESTELLE LEAVY SCHOLARSHIP FUND
THE LEE FAMILY SCHOLARSHIP FUND  

DANNY L. LEE SCHOLARSHIP FUND  

FRANK LAMPSON LEE SCHOLARSHIP FUND  

GRANVILLE WHEELER LEE, SR., CLASS OF 1931, MEMORIAL SCHOLARSHIP FUND  

KAI-FU AND SHEN-LING LEE SCHOLARSHIP FUND  

ROBERT AND ALISON LEE FAMILY SCHOLARSHIP FUND  

ERWIN H. LEIWANT SCHOLARSHIP FUND  

NICHOLAS LEONE FAMILY SCHOLARSHIP FUND  

HAROLD LEVENTHAL SCHOLARSHIP FUND  
(2010) Gift of Judith A. Miller and Peter Buscemi CC’69, LAW’76.

THE LEVINE FAMILY SCHOLARSHIP FUND  

LEONARD LEVINE SCHOLARSHIP FUND  

JOHN TAYLOR LEWIS SCHOLARSHIP FUND  
(1979) Gift of various donors in memory of John T. Lewis CC’74.

THE KUO-LIANG LIN SCHOLARSHIP  

SALLY LIPPER MEMORIAL SCHOLARSHIP  

LOU LITTLE SCHOLARSHIP FUND  
(1979) Gift of various donors in honor of Lou Little.

CATHERINE LIVINGSTON AND FRANK GORDON SCHOLARSHIP FUND  

FRANK A. LLOYD, JR. SCHOLARSHIP FUND  

HARRY LEON LOBSENZ SCHOLARSHIP FUND  

DANIEL S. LOEB SCHOLARSHIP FUND  

JAMES J. AND JOVIN C. LOMBARDO SCHOLARSHIP FUND  

THE BENJAMIN B. AND BETSY A. LOPATA SCHOLARSHIP FUND  

FRANK AND VICTOR LOPEZ-BALBOA SCHOLARSHIP FUND  

LORENZO FAMILY SCHOLARSHIP FUND  

OLEGARIO LORENZO MEMORIAL SCHOLARSHIP FUND  

IRWIN AND MARIANETTE L. LOWELL SCHOLARSHIP FUND  

LI LU ’96 SCHOLARSHIP FUND  

STANLEY B. AND JUDITH M. LUBMAN SCHOLARSHIP FUND  

A. LEONARD LUBBY CLASS OF 1938 SCHOLARSHIP FUND  

LUI FAMILY SCHOLARSHIP  

LYON STUDENT SCHOLARSHIP FUND FOR COLUMBIA COLLEGE

M

M&BG SCHOLARSHIP FUND

RICHARD C. AND LINAN MA SCHOLARSHIP FUND

THOMAS MACIOCE SCHOLARSHIP FUND
(1986) Gift of Edwin W. Rickert CC’36 ^ and various donors in honor of Thomas M. Macioce CC’39, LAW’42 ^.

THE MADDON FAMILY SCIENCE SCHOLARSHIP FUND
(2011) Gift of Paul J. Maddon CC’81, GSAS’85, GSAS’88, PS’89.

DR. LEO C. MAITLAND SCHOLARSHIP FUND
(2012) Gift of Tracy V. Maitland CC’82.

MALIN-SERLE FAMILY SCHOLARSHIP FUND

DONALD LEE MARGOLIS SCHOLARSHIP FUND

JAMES, DONALD, AND EMILY MARGOLIS SCHOLARSHIP FUND

ALFRED E. MARLING SCHOLARSHIP FUND
(1938) Bequest of Alfred E. Marling.

HERBERT MARK ’42 MEMORIAL SCHOLARSHIP FUND

MARSHALL D. AND KATHERINE S. MASCOTT ENDOWED SCHOLARSHIP

DR. JEROME & CORA MARKS SCHOLARSHIP FUND

MAROULIS FAMILY SCHOLARSHIP FUND

MICHAEL D. MARTOCCI SCHOLARSHIP FUND

THE AARON LEO MAYER SCHOLARSHIP FUND

R. EDWARD MAYER FUND
(1934) Gift of Ralph Mayer ^ in memory of his father, Ralph E. Mayer CC’27.

BARBARA MAZUR SCHOLARSHIP FUND
(1999) Gift of Ilana B. Mazur SW’86 and Marc B. Mazur CC’81 P: CC’12, CC’15 in memory of their mother, Barbara Mazur P: CC’81, SW’86.

LOUIS K. MCCLYMONDS SCHOLARSHIP FUND
(1926) Bequest of Annie M. McClymonds in memory of her husband, Louis K. McClymonds.

DOUGLAS H. MCCORKINDALE SCHOLARSHIP FUND

PAUL C. MCCORMICK SCHOLARSHIP FUND

WILLIAM MCDAVID SCHOLARSHIP FUND

MCFARLAND SCHOLARSHIP FUND

PATRICK AND YVETTE MCGARRIGLE COLLEGE SCHOLARSHIP
(2011) Gift of Patrick C. McGarrigle CC’86.

NICHOLAS MCDOWELL MCKNIGHT SCHOLARSHIP FUND
(1962) Bequest of Carl J. McKnight.

SPENCER J. MCGRADY SCHOLARSHIP FUND

MABEL C. MEAD FUND
(1958) Bequest of Mabel C. Mead.

ROI COOPER MEGRUE FUND
(1928) Bequest of Stella Cooper Megrue in memory of her son Roi Cooper Megrue CC 1903.

LILAVATI H. MEHTA SCHOLARSHIP FUND

RAPHAEL MEISELS SCHOLARSHIP FUND

MELCHER FAMILY FUND

JAMES L. MELCHER AND DR. APRIL ANN BENASICH SCHOLARSHIP FUND

EDWARD G. MENAKER SCHOLARSHIP FUND

SAMUEL AND BLANCHE MENDELSON MEMORIAL SCHOLARSHIP FUND
(1983) Gift of Laurans A. Mendelson CC’60, BUS’61, P: CC’87, CC’89, BUS’89.

MESHEL FAMILY SCHOLARSHIP FUND

71
FREDERICK B. MONELL, JR. AND HELEN P. MONELL SCHOLARSHIP FUND  

ELIZABETH WILMA MONTGOMERY SCHOLARSHIP FUND  

DR. ROYAL M. MONTGOMERY SCHOLARSHIP FUND  

SIDNEY MORGENBESSER MEMORIAL FUND  

JAMES P. MORRISON SCHOLARSHIP FUND  
(1973) Gift of James P. Morrison CC’30 in memory of his son, Peter N. Morrison CC’63.

DAISY IRENE LUTZ MORSE MEMORIAL FUND  
(2005) Bequest of Elizabeth B. Morse GSAS’34 and Herbert C. Morse GSAS’41, GSAS’73.

CLARA W. MOSSLER SCHOLARSHIP FUND  

THOMAS L. MOUNT SCHOLARSHIP FUND  

MOXIE’S CREATIVE INTELLECT SCHOLARSHIP FUND  
(2014) Gift of Marian F.H. Wright CC’90 in memory of her mother, Nonya Rhoads Stevens Wright P: CC’90.

MUKHERJEE-RUSSELL MEMORIAL FUND  

GLADYS H. MUÑOZ SCHOLARSHIP FUND  

STAN MUSIAL SCHOLARSHIP FUND  
(1962) Gift of various donors in honor of Stan Musial.

THOMAS A. NACLERIO SCHOLARSHIP FUND  

JOHN NALEY MEMORIAL SCHOLARSHIP  

ALI NAMVAR SCHOLARSHIP FUND  

JON NARCUS SCHOLARSHIP FUND  

AMERICO C. NARDIS SCHOLARSHIP FUND

MURRAY AND BELLE NATHAN SCHOLARSHIP ENDOWMENT

NAWN FAMILY SCHOLARSHIP FUND

THE NAYYAR FAMILY SCHOLARSHIP FUND

THOMAS B. NEFF SCHOLARSHIP FUND

THE CHARLES E. AND DOROTHY C. NEWLON SCHOLARSHIP FUND

THE JEFFREY NEWMAN SCHOLARSHIP FUND

JEROME A. NEWMAN SCHOLARSHIP FUND

NG TENG FONG SCHOLARSHIP FUND

NG TENG FONG SCHOLARSHIP FUND
(2005) Gift of Robert Chee-Siong Ng P: CC’01, CC’03, CC’12, CC’14, GSAPP’10.

LOUIS AND MARINA NICHOLAS SCHOLARSHIP FUND

9/11 MEMORIAL FUND SCHOLARSHIP

ADRIANE NOCCO SCHOLARSHIP FUND

DAVID NORR, CLASS OF 1943 SCHOLARSHIP FUND

NORRY FAMILY SCHOLARSHIP FUND FOR THE COLLEGE

EUGENE V. OEHLLERS SCHOLARSHIP FUND

ALFRED OGDEN FUND

SANDRA A. AND LEWIS P. (CC’36) OGLE SCHOLARSHIP FUND

OMAR FAMILY SCHOLARSHIP FUND

GIDEON H. OPPENHEIMER SCHOLARSHIP FUND

GEORGE M. ORPHANOS SCHOLARSHIP FUND

BLANCHE WITTES OSHEROV SCHOLARSHIP FUND

JENNIFER MAXFIELD OSTFELD AND SCOTT D. OSTFELD FAMILY SCHOLARSHIP FUND

OUZOUNIAN FAMILY SCHOLARSHIP FUND

OZ FAMILY SCHOLARSHIP FUND

OZALTIN FAMILY SCHOLARSHIP FUND

PACKER-BAYLISS SCHOLARS

STELIOS AND ESPERANZA PAPADOPOULOS SCHOLARSHIP FUND

EMANUEL M. PAPPER AND PATRICIA M. SCHOLARSHIP FUND
(2002) Bequest of Emanuel M. Papper CC’35, ’88 HON.

MAX PAPPER SCHOLARSHIP FUND
(1961) Gift of Lillian M. Jaffe; Emanuel M. Papper CC’35, ’88 HON ^; and Solomon Papper CC’42 ^.

MONTONE PARDI FAMILY SCHOLARSHIP FUND

JOHN AND MINNIE PARKER NATIONAL SCHOLARSHIP FUND GIFT
HERBERT AND JEANETTE PEARL SCHOLARSHIP FUND

ROBERT I. PEARLMAN SCHOLARSHIP FUND - CC

B. DAVID AND ROSANN PECK SCHOLARSHIP FUND

ROBERT L. PELZ SCHOLARSHIP FUND

ANTHONY PENALE SCHOLARSHIP FUND

HERBERT C. PENTZ SCHOLARSHIP FUND

DR. M. MURRAY AND LILLIAN PESHKIN SCHOLARSHIP FUND

DR. NIS A. PETERSEN SCHOLARSHIP FUND

WILLIAM E. PETERSEN SCHOLARSHIP FUND

THE PETITO FAMILY SCHOLARSHIP FUND

MARY ELLEN AND BRUCE EBEN PINDYCK SCHOLARSHIP FUND
(1981) Gift of Bruce E. Pindyck CC’67, LAW’70, BUS’71, P: CC’03, JRN’15 and Mary Ellen Pindyck LAW’73, GSAPP’75, P: CC’03, JRN’15.

FRANK R. PITT SCHOLARSHIP FUND

FRANK R. PITT SCHOLARSHIP FUND

PLANALP TREVOR FAMILY SCHOLARSHIP FUND

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JOSEPH PULITZER SCHOLARSHIP FUND B
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(1996) Gift of James E. Satloff CC’84, BUS’86 in honor of his father, Aaron Satloff CC’56, P: CC’84, BUS’86.

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WILLIAM P. SCHWEITZER SCHOLARSHIP FUND
(1973) Gift of Gertrude Schweitzer ^ P: CC’60, in memory of her husband, William P. Schweitzer CC’21, GSAS’22, P: CC’60.

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(1952) Bequest of Dora Monness Shapiro.

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(2005) Gift of Patricia Tarallo W: CC’61, LAW’64.

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(1976) Bequest of William T. Taylor CC 1921, LAW 1923 and gift of various donors in his memory.

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BRIAN AND SABINE THOMSON FAMILY SCHOLARSHIP FUND

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(1973) Bequest of Grace Brinkerhoff Thomassen in memory of her husband, Edgar G. Thomssen CC 1907.

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(1972) Bequest of Blanche S. Thorman.

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(2009) Gift of Shujun Li.

Kyriakos Tsakopoulos Scholarship Fund in Honor of Eugene Rossides
(2005) Gift of Kyriakos Tsakopoulos CC’93 in honor of his grandfather, Kyriakos Tsakopoulos.

Maria Tsakos Scholarship Fund

The Tukman Family Scholarship Fund

Anthony and Amy Tutrone Scholarship Fund

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(2017) Gift of various donors in honor of the twenty-fifth anniversary of their graduation.

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(2002) Gift of USX.

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(1957) Bequest of Emily Buch.

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(2019) Gift of Mary Vig CC’91.

Sigmund and Mary Violin Scholarship Fund

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(1994) Proceeds from Visa credit card receipts.

William F. Voelker Memorial Scholarship Fund
(1976) Bequest of William F. Voelker CC’42, LAW’48 and gift of various donors in his memory.

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ROBERT WATT SCHOLARSHIP FUND

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XU FAMILY SCHOLARSHIP FUND

LIU XU SCHOLARSHIP FUND

Y

PHILIP C. YACOS MEMORIAL SCHOLARSHIP FUND

YAGODA FAMILY SCHOLARSHIP FUND

YANCEPOULOS FAMILY SCHOLARSHIP

FREDERIC AND ANNA YANG SCHOLARSHIP FUND

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THE YU FAMILY FUND

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(1967) Gifts of various donors in memory of Tung Li Yuan CC 1922 and later renamed in memory of Hui Hsi and Tung Li Yuan CC 1922.

Z

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(1991) Gift of L. Steven Zwerling CC’60, GSAS’61 and Leonard J. Zwerling CC’65 in honor of their parents, Ray M. and David Zwerling P: CC’60, CC’65, GSAS’61, on their anniversary.

^ Deceased; P: Parent; W: Widow
ACADEMIC REQUIREMENTS

In order to graduate from Columbia College with a Bachelor of Arts (B.A.) degree, all students must successfully complete a minimum of 124 points of academic credit, which must include the full Core Curriculum, requirements for one major or concentration, and courses taken for elective credit. Students must also complete all coursework with an overall GPA of 2.0 or higher.

Students are expected to complete the B.A. degree in eight full-time semesters. The last two semesters must be taken while enrolled in the College for study on this campus or on one of the Columbia-sponsored international programs.

REQUIREMENTS FOR TRANSFER STUDENTS

Columbia College offers transfer students the opportunity to experience a wide-ranging liberal arts education that includes its Core Curriculum and a broad range of majors and concentrations. In order to graduate from Columbia College with a Bachelor of Arts (B.A.) degree, all transfer students must successfully complete a minimum of 124 points of academic credit, which must include the full Core Curriculum, the requirements for one major or concentration, and courses taken for elective credit. Students must also complete all coursework with an overall GPA of 2.0 or higher.

Transfer students are expected to complete the B.A. degree in six full-time semesters (for students entering Columbia College in the sophomore year) or four full-time semesters (for students entering Columbia College in the junior year). The last two semesters must be taken while enrolled in the College for study on this campus or on one of the Columbia-sponsored international programs.

Upon admission to Columbia College, transfer students should familiarize themselves with the regulations pertaining to their special status (see Academic Regulations—Regulations for Transfer Students).

ACADEMIC CREDIT

A point of academic credit is awarded to a student based on the successful completion of a certain number of contact hours with an instructor and a certain number of hours of coursework outside of class. Generally speaking, one point of academic credit denotes 14 hours of in-class work and 28 hours of out-of-class work. Most undergraduate courses carry 3 to 5 points of academic credit.

Every Columbia College student must complete 124 points of academic credit to earn the B.A. degree from Columbia College. To complete this number of credits over 8 semesters, students will need to complete an average of 15.5 credits per semester, which typically represents 4 to 5 academic courses per term. According to the expectations of workload per credit hour noted above, a 15.5-credit academic course load will require a minimum of 46.5 hours of work per week, spent attending class and doing homework.

All courses listed in this Bulletin are open to Columbia College students and carry credit that can be earned toward the B.A. degree. If students are interested in courses that are not listed in this Bulletin, it is important that they consult their advising dean in the Berick Center for Student Advising to confirm that the course will carry credit toward the B.A. degree.

Students may not earn credit for a course more than once, and may not earn credit multiple times for course content that is essentially duplicative:

• If students have been granted academic credit through advanced standing credit (AP, IB, GCE, etc.), they may not take the equivalent course(s) at Columbia for credit. If students take the equivalent course(s) at Columbia, they will need to forfeit the advanced standing credit previously granted. For more information, see Academic Regulations—Placement and Advanced Standing.

• If students have been granted academic credit through transfer credit for coursework at another college or university, they may not take the equivalent course(s) at Columbia for credit. If students take the equivalent course(s) at Columbia, they will need to forfeit the transfer credit previously granted.

• For example, credit cannot be earned for two first-term calculus courses, even if one is more theoretical in approach than the other. Similarly, credit cannot be earned for two comparable terms of a science or foreign language even if one has a Barnard course number and the other a Columbia course number.

• In some courses, only partial credit may be counted toward the degree.

• In rare instances in which a student has earned a passing grade and credit for a course and yet feels it necessary to repeat the course, both attempts will be reflected on the student’s transcript, but only the final grade for the first attempt will be awarded credit and factored into the overall GPA. (If the first attempt resulted in a failing grade, the student may take the class again and earn credit for the second attempt with a passing grade.)

THE CORE CURRICULUM

The Core Curriculum (p. 87) represents the College’s approach to general education requirements:
Students who do not complete the first-year requirements (Frontiers of Science, Literature Humanities, and University Writing) by the end of the first year, or the sophomore requirement (Contemporary Civilization) by the end of the second year, will be placed on academic probation.

Courses taken to fulfill the Core Curriculum must be taken in Columbia College, with the exception of the Foreign Language Requirement, which, in some instances and as determined by the relevant academic department at Columbia, may be satisfied at Barnard College. In general, students must fulfill the Global Core and Science Requirements with courses already on the lists of approved courses and may not petition for other courses taught at Columbia or Barnard to fulfill either requirement. Students may be able to petition the Committee on the Global Core for courses taken at a study abroad program to count toward the Global Core Requirement, and/or to petition the Committee on Science Instruction for courses taken at a study abroad program to count toward the Science Requirement, after first meeting with their advising dean in the Berick Center for Student Advising.

The Departmental Concentration or Major

All Columbia College students must complete either a concentration or a major in order to experience sustained and advanced work in a field of special interest, often entailing individual research. Individual concentrations and majors are described in the departmental sections of this Bulletin (see Departments, Programs, and Courses). A concentration consists of intensive study in one academic program achieved by fulfilling a series of requirements; a major provides even more depth through additional coursework and possibly a senior capstone experience such as a thesis.

The choice of a concentration versus a major depends on the particular aims and needs of a student, as well as on the offerings of the particular department in which a student wishes to study. The concentration and the major are not designed to produce professionally trained specialists for one profession or another. In fact, students often pursue careers that are not dependent on the specific content of their concentrations or majors. A concentration or a major will provide students with the knowledge and skills that will serve them well throughout their professional and personal lives.

The faculty members in each department/program determine the requirements for a concentration or major, and each department/program has one or more faculty members designated as a director of undergraduate studies who provide(s) advising for both prospective and declared concentrators/majors. It is the responsibility of students to ensure that they complete the concentration or major requirements that are in effect as of the time they declare the concentration or major in their sophomore year and that they seek out advising regularly from the relevant director of undergraduate studies.
All courses taken to complete a concentration or major, (whether they are designated as required or elective within the concentration or major) must be taken for a letter grade and must be passed with a grade of C- or higher. Some academic departments permit an exception to this policy, allowing the first one-term course taken by the student in his or her eventual major to be taken for a mark of "Pass." Students should consult the director of undergraduate studies (DUS) for any permissions or restrictions on grading options for the concentration or major.

Students should carefully read the requirements for their proposed concentration or major and direct questions to the relevant director of undergraduate studies (DUS). For example:

- Some concentrations and majors require that certain introductory courses be completed before the start of the junior year.
- Some concentrations and majors have different minimum and maximum points allowed for a concentration or a major.
- Concentrations and majors have different policies on whether students can fulfill requirements with a grade of D or a mark of "Pass."

In the first and sophomore years, students should confer with faculty members in the department, advising deans in the Berick Center for Student Advising, and advisers in the Center for Career Education while considering their choice of concentration or major. All students declare a concentration or major in their fourth term. Information about the process for declaring a concentration or major is sent to students in the spring of the sophomore year by the Berick Center for Student Advising.

Interdisciplinary and Interdepartmental Majors and Concentrations

Interdisciplinary and interdepartmental concentrations and majors combine coursework in two or more areas of study. Interdisciplinary concentrations and majors are linked to the interdisciplinary programs (see Departments of Instruction).

Independent majors or concentrations are not permitted for Columbia College students.

Special Concentrations

In certain cases, a program of study has been designated a "special concentration." While a special concentration may require a similar number of courses or points of credit as a departmental concentration does, a "special concentration" does not fulfill a degree requirement. Therefore, a special concentration can only be pursued as a second program of study, in addition to a concentration or major.

Double Concentrations/Majors

Most Columbia College students graduate with a single program of study — i.e., one concentration or major. It is possible to declare a maximum of two programs of study — e.g., two concentrations, two majors, a concentration and a major, a concentration and a special concentration, or a major and a special concentration.

Students must complete their degree requirements within eight semesters (including the terms that transfer students spent at other institutions), and students will not be awarded additional semesters for the purposes of completing an additional concentration or major.

If a student decides to pursue two programs of study, they may not both be owned by the same offering unit (department, institute, or center). For example, a student may not declare programs in Russian Language and Culture and in Slavic Studies, both of which are owned by the Department of Slavic Languages; similarly, a student may not declare programs in Mathematics and in Applied Mathematics, both of which are owned by the Department of Mathematics. All joint majors (e.g., Economics-Political Science) will be considered as owned by both offering units, so that a student may not, for example, major in both Political Science and Economics-Political Science.

If a student chooses to declare two programs of study, the student can, in certain situations, apply a course to both programs ("double-counting"). There are three conditions under which students may apply a course to two programs, and depending on the two programs declared, some or all of these conditions may apply:

1. If two programs both require the same coursework to teach fundamental skills needed for the field, those courses may be applied to both programs. The Committee on Instruction has defined that coursework as the following:
   (1) elementary and intermediate foreign language courses;
   (2) the calculus sequence (I through IV, or Honors A and B);
   (3) introductory courses in Statistics (STAT UN1101 or 1201);
   (4) the introductory course in computer programming (COMS W1004).

   If faculty members feel that other courses should be included in this category, those courses would need to be approved for such purpose by the Committee on Instruction.

2. In addition to double-counting any fundamental courses enumerated above, a student pursuing two programs of study may apply a maximum of two classes to both programs, if applicable. Offering departments, institutes, or centers may choose to restrict the double-counting of particular courses, and such restrictions cannot be appealed.

3. In addition to those courses that can be double-counted as noted above, a maximum of two courses taken to fulfill the Global Core, Science or Foreign Language Requirements can also be counted toward the requirements of a program of study (major, concentration, special concentration), if applicable. Literature Humanities, Contemporary Civilization, Frontiers of Science, Art Humanities, Music Humanities, and University
Writing may not be double-counted for any major, concentration or special concentration.

**SUPERVISED INDEPENDENT STUDY**

Supervised individual work on a special topic is available to qualified students as an alternative or as a supplement to courses and seminars in the field of specialization. Students must develop a plan of study with a faculty adviser and then obtain the approval of the department. Progress reports are submitted as required. From one to six points of credit may be awarded for this work; the exact number of points is to be determined in consultation with the department.

Approval depends on the quality of the proposal, the student’s qualifications, and the availability of an appropriate faculty adviser.

**PLANNING AN ACADEMIC PROGRAM**

When planning their academic program, students are expected to consult with their advising deans in the Berick Center for Student Advising and with the faculty advisers in the relevant academic departments. Advising deans in the Berick Center for Student Advising advise students on general graduation requirements and monitor students’ progress toward completing the Core Curriculum. Directors of Undergraduate Studies (DUS), and other faculty in academic departments, advise students on the requirements majors, concentrations, and/or special concentrations.

Advising deans in the James H. and Christine Turk Berick Center for Student Advising (CSA), located in 403 Lerner, guide and support undergraduates at Columbia College and Columbia Engineering as they navigate their academic and co-curricular lives at Columbia University. Students are assigned an advising dean in the summer before matriculation. Productive advising is built on a partnership in which the student and the adviser work together: the spirit of an ideal advising partnership is one of mutual engagement, responsiveness, and dedication. Regular advising conversations - the fundamental building blocks of the partnership - enable an adviser to serve as a knowledgeable resource, reliable guide, and a source for referrals, so that students may make the most of all the opportunities available to them inside and outside the classroom during their time at the College. Students can make appointments with their advising deans using the online appointment system.

While students have assigned advising deans, students may make appointments with any of the advisers in the Berick Center for Student Advising. Students who wish to change assigned advising deans are encouraged to make an appointment with Andrew Plaa, Dean of Advising, who can make new adviser assignments.

To ensure successful planning, students should familiarize themselves with the requirements of any academic programs in which they may be interested. In particular, students should note that some concentrations and majors require that certain introductory courses be completed before the start of the junior year. Similarly, study abroad, professional programs, and graduate schools have a range of requirements that must be successfully completed at prescribed times during the undergraduate career.

In particular, students considering a concentration or major in the sciences should focus on required introductory science courses in their first two years, in addition to Core requirements. Students considering a concentration or major in the humanities and social sciences should try to take, in their first two years, a combination of Core requirements and introductory level courses in the department(s) in which they are interested in majoring.

Under no circumstances will students be granted more than 8 semesters to complete an additional concentration or major.

In addition, all students should do the following:

1. become thoroughly familiar with the requirements for the degree and with the College regulations, including deadlines;
2. plan to complete University Writing (ENGL CC1010), Frontiers of Science (SCNC CC1000), Masterpieces of Western Literature and Philosophy I & II (HUMA CC1001-HUMA CC1002) during the first year, as well as Introduction to Contemporary Civilization in the West (COCI CC1101 - COCI CC1102) by the end of the sophomore year; and
3. choose a major or concentration in their fourth term.

Students will declare a concentration or major either through an online declaration process or by the submission of a paper declaration form to the Berick Center for Student Advising, 403 Lerner. Some concentrations and majors require departmental review, and students can only declare these concentrations or majors after receiving approval by the department. A concentration or major may be changed at any time as long as the requisite departmental approval is received, the requirements have been or can be fulfilled, and students can still graduate by the end of their eighth semester. If a change of concentration or major is decided upon, a new declaration form must be filed online or in hard copy with the advising dean in the Berick Center for Student Advising.

**ADVISING FOR FIRST-YEAR STUDENTS**

In the summer, each incoming student receives the Academic Planning Guide for New Students, which is designed to assist incoming students in planning and creating their academic programs. Incoming students should read the Academic Planning Guide for New Students prior to their first advising appointment. Students will receive information by email about opportunities to connect with their advising deans in the summer.
Each first-year student is preregistered for Literature Humanities as well as for Frontiers of Science or University Writing. (First-year students are pre-registered for either Frontiers of Science or University Writing in the Fall term and take the other course in the Spring term.)

All incoming students are expected to meet with their advising deans in the Berick Center for Student Advising during the summer (in person or by phone/internet), during the New Student Orientation Program (NSOP), and/or in the first two weeks of the term (Change-of-Program period) in order to discuss their fall course selections, their transition to college, their short- and long-term goals, and to learn about other advising resources and offices available to them at Columbia.

Students are expected to stay in touch regularly with their advising deans in the Berick Center for Student Advising throughout their time at Columbia.

Approval depends on the quality of the proposal, the student’s qualifications, and the availability of an appropriate faculty adviser.
CORE CURRICULUM

The Center for the Core Curriculum
202 Hamilton
212-854-2453
core-curriculum@columbia.edu

The Core Curriculum is the cornerstone of the Columbia College education. The central intellectual mission of the Core is to provide all students with wide-ranging perspectives on significant ideas and achievements in literature, philosophy, history, music, art, and science.

Contemporary Civilization began in 1919 as a course on war and peace issues, and the creation of Literature Humanities followed in 1937. By 1947, Art Humanities and Music Humanities had been added, and a new course in Asian Humanities was introduced. The Global Core requirement, formerly Major Cultures, joined the Core in 1990, and Frontiers of Science in 2004. Though celebrated for their content, Core Curriculum courses are equally important for their small class format. Taught in seminars of approximately twenty-two students, these courses ensure that education at Columbia begins with an emphasis on active intellectual engagement. The small class sizes provide students with opportunities to develop intellectual relationships with faculty early on in their College career and to participate in a shared process of intellectual inquiry. In the Core Curriculum, the pursuit of better questions is every bit as important as the pursuit of better answers. The skills and habits honed by the Core—careful observation, close analysis, effective argument, imaginative comparison, and respect for a variety of ideas—provide a rigorous preparation for life as an engaged citizen in today’s complex and changing world.

Committee on the Core Curriculum

Kathy Eden
Chavkin Family Professor of English Literature and Professor of Classics
Paul Brooke Program Chair for Literature Humanities
401A Philosophy; 212-854-6432
khe1@columbia.edu

Elaine Sisman
Anne Parsons Bender Professor of Music
Chair of Music Humanities
604 Dodge; 212-854-7728
es53@columbia.edu

Patricia Grieve
Nancy and Jeffrey Marcus Professor of the Humanities
Chair of the Committee on Global Core
305 Casa Hispánica; 212-854-4338
peg1@columbia.edu

David J. Helfand
Professor of Astronomy
Chair of Frontiers of Science
1020 Pupin Hall; 212-854-6876
djh@astro.columbia.edu

Lisa Hollibaugh
Dean of Academic Affairs
202 Hamilton Hall; 212-851-9814
lkh5@columbia.edu

Ivana Nikolic Hughes
Director of Frontiers of Science
Senior Lecturer in the Discipline of Chemistry
625 Pupin; 212-854-2202
ih2194@columbia.edu

Carol Rovane
Violin Family Professor of Philosophy
Carnoy Family Program Chair for Contemporary Civilization
711 Philosophy; 212-854-8618
cr260@columbia.edu

Zoë Strother
Riggio Professor of African Art
Chair of Art Humanities
811 Schermerhorn; 212-854-8529
zss1@columbia.edu

Larry Jackson
Associate Dean of Academic Affairs, Core Curriculum and Undergraduate Programs
202 Hamilton; 212-854-9625
lj2504@columbia.edu

James Valentini
Dean of Columbia College
208 Hamilton; 212-854-2443
jjv1@columbia.edu

Nicole B. Wallack
Senior Lecturer in the Discipline of English and Comparative Literature
Director of Undergraduate Writing Program
310 Philosophy; 212-854-3886
nw2108@columbia.edu
LITERATURE HUMANITIES

Chair for Literature Humanities
Prof. Kathy Eden
Chavkin Family Professor of English Literature and Professor of Classics
401A Philosophy
212-854-6432
khe1@columbia.edu

Literature Humanities Website

HUMA CC1001/HUMA CC1002 Masterpieces of Western Literature and Philosophy II, popularly known as “Literature Humanities’” or “Lit Hum,” is a year-long course that offers Columbia College students the opportunity to engage in intensive study and discussion of some of the most significant texts of Western culture. The course is not a survey, but a series of careful readings of literary works that reward both first encounters and long study. Whether classwork focuses on the importance of the text to literary history or on its significance to our contemporary culture, the goal is to consider particular conceptions of what it means to be human as well as the place of such conceptions in the development of critical thought.

The principal objectives of Literature Humanities are to teach students to analyze literary texts and to construct well-reasoned arguments. An interdepartmental staff of professorial and preceptorial faculty meets with groups of approximately twenty-two students for four hours a week in order to discuss texts by Homer, Enheduanna, Sappho, Aeschylus, Suzan-Lori Parks, Plato, Virgil, Apuleius, Augustine, Ibn 'Arabi, Marie de France, Dante, Montaigne, Shakespeare, Cervantes, Austen, Machado de Assis, Dostoevsky, Kafka, Woolf, Césaire, Morrison, Rankine, and Kim, as well as Hebrew Scriptures and New Testament writings.

REGISTRATION PROCEDURE

All information concerning registration in HUMA CC1001/HUMA CC1002 Masterpieces of Western Literature and Philosophy II is included in the registration materials sent to students. All first-year students are preregistered in Literature Humanities.

All Core Curriculum courses, including Literature Humanities, must be taken for a letter grade. Students may not drop or withdraw from Literature Humanities after the Core drop deadline, which is also the end of the Change-of-Program period (p. 4). For more information, see Registration—Dropping Core Courses.

COURSES OF INSTRUCTION

HUMA CC1001 Masterpieces of Western Literature and Philosophy I. 4 points.

Taught by members of the Departments of Classics; English and Comparative Literature; French; German; Italian; Middle Eastern, South Asian, and African Studies; Philosophy; Religion; Slavic Languages; and Latin American and Iberian Cultures; as well as members of the Society of Fellows. Major works by over twenty authors, ranging in time, theme, and genre, from Homer to Virginia Woolf. Students are expected to write at least two papers, to complete two examinations each semester, and to participate actively in class discussions.

Fall 2021: HUMA CC1001

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actively in class discussions. Students are expected to write at least two papers, to complete two examinations each semester, and to participate in class discussions.

**HUMA CC1002 Masterpieces of Western Literature and Philosophy II. 4 points.**

Taught by members of the Departments of Classics; English and Comparative Literature; French, German, Italian; Middle Eastern, South Asian, and African Studies; Philosophy; Religion; Slavic Languages; and Spanish; as well as members of the Society of Fellows. Major works by over twenty authors, ranging in time, theme, and genre, from Homer to Virginia Woolf. Students are expected to write at least two papers, to complete two examinations each semester, and to participate actively in class discussions.

**Spring 2022: HUMA CC1002**

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477 Alfred Lerner Hall

Sarah 4 21/22

Jude Webre 4 17/22

Ariella Lang 4 15/22

Rachel Zhang 4 22/22

Taarini Mookherjee 4 21/22

Steven Baker 4 20/22

Taarini Mookherjee 4 22/22

Steven Baker 4 20/22

HUMA 1002
Contemporary Civilization

Chair for Contemporary Civilization
Prof. Carol Rovane
Violin Family Professor of Philosophy
711 Philosophy
212-854-8618
cr260@columbia.edu

Contemporary Civilization Website
The central purpose of COCI CC1101-COCI CC1102 CONTEMP WESTRN CIVILIZATION II, also known as “Contemporary Civilization” or “CC”, is to introduce students to a range of issues concerning the kinds of communities—political, social, moral, and religious—that human beings construct for themselves and the values that inform and define such communities, in order to prepare students to become active and informed citizens. Founded in 1919 as a course on war and peace issues, Contemporary Civilization has evolved continuously while remaining a constant and essential element of the Columbia College curriculum. The course asks students to read closely texts in various traditions of argument and to construct arguments of their own, both in speech and in writing, about some of the explicit and implicit issues that these texts raise.

Both the form and the content of the course contribute to the achievement of its aims. The discussion format is intended to respond in a palpable way to the existence, in these traditions, of different and often conflicting points of view; to embody the possibility of reasoned discourse among people who hold disparate convictions; and to help students sharpen their own skills of thought and argument about matters of current personal and civic concern through participating in and extending the debates of the past. The Contemporary Civilization syllabus introduces students to a set of ideas and arguments that has played a formative role in the political and cultural history of our time, alerts them to ideas that have not held an influential role in that history, and acquaints them with some exemplars of critical thinking about alternative cultures, institutions, and practices.

Because Contemporary Civilization is a year-long course, readings are necessarily selective. While these readings change from time to time, the factors that lead to adoption of a text always include historical influence, the presentation of ideas of enduring importance, and the demonstrated ability of a text to provoke productive discussion. Among the readings currently required in the course are the Bible, The Qur’an, Plato, Aristotle, Augustine, Machiavelli, Aquinas, Christine de Pizan, Descartes, Hobbes, Locke, Rousseau, Smith, Kant, Wollstonecraft, Tocqueville, Mill, Marx, Darwin, Nietzsche, Ambedkar, Du Bois, Gandhi, Arendt, Fanon, and Foucault.

REGISTRATION PROCEDURE

All information concerning registration in COCI CC1101-COCI CC1102 CONTEMP WESTRN CIVILIZATION II is included in the registration materials sent to students. Students normally take Contemporary Civilization in their second year at Columbia.

All Core Curriculum courses, including Contemporary Civilization, must be taken for a letter grade. Students may not drop or withdraw from Contemporary Civilization after the Core drop deadline (which is also the end of the Change-of-Program period (p. 4)). For more information, see Registration—Dropping Core Courses.

Courses of Instruction

COCI CC1101 Introduction To Contemporary Civilization in the West I. 4 points.

Taught by members of the Departments of Anthropology, Classics, English and Comparative Literature, French, German, History, Middle Eastern, South Asian, and African Studies, Philosophy, Political Science, Religion, Slavic Languages, and Sociology; and members of the Society of Fellows. A study in their historical context of major contributions to the intellectual traditions that underpin contemporary civilization. Emphasis is on the history of political, social, and philosophical thought. Students are expected to write at least three papers to complete two examinations, and to participate actively in class discussions.
<table>
<thead>
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<th>Course Code</th>
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<td>016/11476</td>
<td>M W</td>
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<td>C01 80 Claremont</td>
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<td>Dennis Tenen</td>
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<td>201a Philosophy Hall</td>
<td>Mariana Noe</td>
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</table>
Students are expected to write at least three papers to complete COCI 1102 Contemporary Civilization II. Taught by members of the Departments of Anthropology, Classics, English and Comparative Literature, French, German, History, Middle East and Asian Languages and Cultures, Philosophy, Political Science, Religion, Slavic Languages, and Sociology; and members of the Society of Fellows. A study in their historical context of major contributions to the intellectual traditions that underpin contemporary civilization. Emphasis is on the history of political, social, and philosophical thought. Students are expected to write at least three papers to complete two examinations, and to participate actively in class discussions.

### Course Information

**Course Number** | **Section/Call Number** | **Times/Location** | **Instructor** | **Points** | **Enrollment** | **Notes**
--- | --- | --- | --- | --- | --- | ---
COCI 1102 | 001/12951 | M W 8:10am - 10:00am 109 Hartley Hall | James Stafford | 4.00 | 22/22 |  
COCI 1102 | 002/12955 | M W 8:10am - 10:00am 111 Carman Hall | Manan Ahmed | 4.00 | 22/22 |  
COCI 1102 | 003/12957 | M W 8:10am - 10:00am 302 Hamilton Hall | David Ragazzoni | 4.00 | 23/22 |  
COCI 1102 | 004/12959 | M W 8:10am - 10:00am 206 Broadway Residence Hall | Claudia Sbuttoni | 4.00 | 20/22 |  
COCI 1102 | 005/12965 | M W 10:10am - 12:00pm 109 Hartley Hall | Hannah Farber | 4.00 | 22/22 |  
COCI 1102 | 006/12971 | M W 10:10am - 12:00pm Schiff Earl Hall | Michael Stanislawski | 4.00 | 22/22 |  
COCI 1102 | 007/12973 | M W 10:10am - 12:00pm 206 Broadway Residence Hall | Alma Steingart | 4.00 | 21/22 |  
COCI 1102 | 008/12974 | M W 10:10am - 12:00pm 607 Hamilton Hall | Matthew Heaney | 4.00 | 22/22 |  
COCI 1102 | 009/12976 | M W 10:10am - 12:00pm 316 Hamilton Hall | Aubrey Gabel | 4.00 | 14/22 |  
COCI 1102 | 010/12979 | M W 10:10am - 12:00pm 616 Hamilton Hall | Courtney Bender | 4.00 | 22/22 |  
COCI 1102 | 011/12987 | W 12:10pm - 2:00pm 516 Hamilton Hall | Michael Gottsegen | 4.00 | 17/22 |  
COCI 1102 | 011/12987 | W 12:10pm - 2:00pm 307 Uris Hall | Michael Gottsegen | 4.00 | 17/22 |  
COCI 1102 | 012/12988 | M W 12:10pm - 2:00pm 109 Hartley Hall | Shauna Rodrigues | 4.00 | 23/22 |  
COCI 1102 | 013/12989 | M W 12:10pm - 2:00pm Schiff Earl Hall | Divya Subramanian | 4.00 | 23/22 |  
COCI 1102 | 014/12990 | M W 12:10pm - 2:00pm 306 Hamilton Hall | Jason Resnikoff | 4.00 | 22/22 |  
COCI 1102 | 015/12991 | M W 12:10pm - 2:00pm 111 Carman Hall | Aziza Shanazareva | 4.00 | 22/22 |  
COCI 1102 | 016/12992 | M W 12:10pm - 2:00pm Sat Alfred Lerner Hall | Alexander de la Paz | 4.00 | 22/22 |  
COCI 1102 | 017/12994 | M W 2:10pm - 4:00pm 301 Hamilton Hall | Dennis Tenen | 4.00 | 22/22 |  
COCI 1102 | 018/12995 | M W 2:10pm - 4:00pm 306 Hamilton Hall | Josef Sorett | 4.00 | 22/22 |  
COCI 1102 | 019/12996 | M W 2:10pm - 4:00pm 407 Mathematics Building | Samuel Abrams | 4.00 | 22/22 |  
COCI 1102 | 020/12997 | M W 2:10pm - 4:00pm 402 Hamilton Hall | Aled Roberts | 4.00 | 22/22 |  
COCI 1102 | 021/12998 | M W 2:10pm - 4:00pm 206 Broadway Residence Hall | Rebecca Pawel | 4.00 | 22/22 |  
COCI 1102 | 022/13000 | M W 2:10pm - 4:00pm 109 Hartley Hall | Allison Aitken | 4.00 | 22/22 |  

_Spring 2022: COCI CC1102_
COCI 1102 023/13001  M W 2:10pm - 4:00pm  Schiff Earl Hall  Dorothea von Muecke  4.00  16/22
COCI 1102 024/13010  M W 4:10pm - 6:00pm 111 Carman Hall  Richard John  4.00  21/22
COCI 1102 025/13011  M W 4:10pm - 6:00pm  Schiff Earl Hall  Malgorzata Mazurek  4.00  21/22
COCI 1102 026/13012  M W 4:10pm - 6:00pm 206 Broadway Residence Hall  Annie Pfeifer  4.00  22/22
COCI 1102 027/13013  M W 4:10pm - 6:00pm 315 Hamilton Hall  Branka Arsic  4.00  23/22
COCI 1102 028/13015  M W 4:10pm - 6:00pm 402 Hamilton Hall  Aled Roberts  4.00  22/22
COCI 1102 029/13016  M W 4:10pm - 6:00pm 306 Hamilton Hall  Jenna Schoen  4.00  22/22
COCI 1102 030/13017  M W 4:10pm - 6:00pm 316 Hamilton Hall  Matthew Heeney  4.00  22/22
COCI 1102 031/13018  M W 4:10pm - 6:00pm 302 Hamilton Hall  Brittany Koffer  4.00  20/22
COCI 1102 032/13019  M W 6:10pm - 8:00pm 306 Hamilton Hall  Jenna Schoen  4.00  20/22
COCI 1102 033/13021  M W 6:10pm - 8:00pm 302 Hamilton Hall  Brittany Koffer  4.00  22/22
COCI 1102 034/13022  M W 6:10pm - 8:00pm 326 Urs Hall  Mariana Noe  4.00  21/22
COCI 1102 035/13023  M W 6:10pm - 8:00pm 224 Pupin Laboratories  Chloe Vaught  4.00  23/22
COCI 1102 036/13076  T Th 8:10am - 10:00am 111 Carman Hall  Nadia Saraihmed  4.00  22/22
COCI 1102 037/13079  T Th 8:10am - 10:00am 206 Broadway Residence Hall  Sean Colonna  4.00  22/22
COCI 1102 038/13080  T Th 8:10am - 10:00am 607 Hamilton Hall  Margaret Scarborough  4.00  22/22
COCI 1102 039/13081  T Th 8:10am - 10:00am 413 Hamilton Hall  Nada Khalifa  4.00  22/22
COCI 1102 040/13086  T Th 10:10am - 12:00pm 707 Hamilton Hall  Oliver Simons  4.00  22/22
COCI 1102 041/13090  T Th 10:10am - 12:00pm 316 Hamilton Hall  Clara Maier  4.00  22/22
COCI 1102 042/13091  T Th 10:10am - 12:00pm 402 Hamilton Hall  Charly Coleman  4.00  22/22
COCI 1102 043/13092  T Th 10:10am - 12:00pm Schiff Earl Hall  Matthew Engelke  4.00  22/22
COCI 1102 044/13093  T Th 10:10am - 12:00pm C01 80 Claremont  Mana Kia  4.00  19/22
COCI 1102 045/13094  T Th 10:10am - 12:00pm 304 Hamilton Hall  Marcus Folch  4.00  22/22
COCI 1102 046/13095  T Th 10:10am - 12:00pm 602 Northwest Corner  Phillip Polefnone  4.00  22/22
COCI 1102 047/13124  T Th 2:10pm - 4:00pm B60 Alfred Lerner Hall  Jeremy Dauber  4.00  22/22
COCI 1102 048/13139  T Th 2:10pm - 4:00pm 507 Philosophy Hall  Luke MacInnis  4.00  22/22
COCI 1102 049/13140  T Th 2:10pm - 4:00pm Schiff Earl Hall  Isabel Huacaja  4.00  22/22
COCI 1102 050/13142  T Th 2:10pm - 4:00pm 477 Alfred Lerner Hall  Adam Leeds  4.00  22/22
COCI 1102 051/13143  T Th 2:10pm - 4:00pm 613 Hamilton Hall  Richard Billows  4.00  22/22
COCI 1102 052/13148  T Th 2:10pm - 4:00pm 224 Pupin Laboratories  Marwa Elshakry  4.00  22/22
COCI 1102 053/13152  T Th 2:10pm - 4:00pm 318 Hamilton Hall  Michael Gottsegen  4.00  9/22
COCI 1102 054/13153  T Th 2:10pm - 4:00pm 309 Hamilton Hall  Caroline Marris  4.00  22/22
COCI 1102 055/13171  T Th 4:10pm - 6:00pm 301 Hamilton Hall  Zachary Levine  4.00  23/22
COCI 1102 056/13172  T Th 4:10pm - 6:00pm 309 Hamilton Hall  Caroline Marris  4.00  23/22
COCI 1102 057/13174  T Th 4:10pm - 6:00pm Schiff Earl Hall  David Lerer  4.00  22/22
COCI 1102 060/13175  T Th 4:10pm - 6:00pm 201 Philosophy Hall  Nader Atassi  4.00  22/22
COCI 1102 063/13176  T Th 4:10pm - 6:00pm C01 80 Claremont  Thomas Dodman  4.00  22/22
COCI 1102 064/13177  T Th 4:10pm - 6:00pm HI-1 Heyman Center For Humanities  Youssef Ben Ismail  4.00  22/22
COCI 1102 065/13186  T Th 6:10pm - 8:00pm 424 Kent Hall  Sharon Marcus  4.00  11/22
COCI 1102 066/13191  T Th 6:10pm - 8:00pm 301 Hamilton Hall  Zachary Levine  4.00  23/22
COCI 1102 067/13195  T Th 6:10pm - 8:00pm 302 Hamilton Hall  Natalia Alexander  4.00  22/22
ART HUMANITIES

Chair of Art Humanities
Prof. Zoë Strother
Riggio Professor of African Art
811 Schermerhorn
212-854-8529
zss1@columbia.edu

Art Humanities Website

HUMA UN1121 MASTERPIECES OF WESTERN ART, or “Art Humanities”, has been a degree requirement for all College students and an integral part of the Core Curriculum since 1947. It teaches students how to look at, think about, and engage in critical discussion of the visual arts. It is not a historical survey, but an analytical study of a limited number of monuments and artists. The course focuses on the formal structure of works of architecture, sculpture, painting, and other media, as well as the historical contexts in which these works were made and understood. Among the topics on the syllabus are the Parthenon, Amiens Cathedral, and works by Raphael, Sophonisba, Michelangelo, Bernini, Luisa Roldán, Rembrandt, Clara Peeters, David, Angelika Kauffman, Goya, Monet, Manet, Cassatt, Morisot, Picasso, Bearden, Wright, Le Corbusier, Warhol, Basquiat, and Cindy Sherman. In addition to discussion-based class meetings, all sections of Art Humanities make extensive use of the vast resources of New York City through field trips to museums, buildings, and monuments.

REGISTRATION PROCEDURE

All information concerning registration in HUMA UN1121 MASTERPIECES OF WESTERN ART is included in the registration materials sent to students. It is the expectation of the College that all students complete Art Humanities by the end of their third year.

All Core Curriculum courses, including Art Humanities, must be taken for a letter grade. Students may not drop or withdraw from Art Humanities after the Core drop deadline (which is also the end of the Change-of-Program period (p. 4)). For more information, see Registration—Dropping Core Courses.

COURSES OF INSTRUCTION

HUMA UN1121 MASTERPIECES OF WESTERN ART. 3.00 points.

Discussion and analysis of the artistic qualities and significance of selected works of painting, sculpture, and architecture from the Parthenon in Athens to works of the 20th century
HUMA 1121 017/13135  M W 5:40pm - 6:55pm 607 Schermerhorn Hall  Corey Ratch  3.00  19/22
HUMA 1121 018/13138  M W 5:40pm - 6:55pm 608 Schermerhorn Hall  Alyse Muller  3.00  22/22
HUMA 1121 019/13141  T Th 8:40am - 9:55am 604 Schermerhorn Hall  Sehyun Oh  3.00  20/22
HUMA 1121 020/13145  T Th 8:40am - 9:55am 607 Schermerhorn Hall  Aleksa Zivkovic  3.00  22/22
HUMA 1121 021/13147  T Th 8:40am - 9:55am 608 Schermerhorn Hall  Sarah Bevin  3.00  19/22
HUMA 1121 022/13148  T Th 10:10am - 11:25am 604 Schermerhorn Hall  Leah Weener  3.00  18/22
HUMA 1121 023/13149  T Th 10:10am - 11:25am 607 Schermerhorn Hall  Steven Niedbala  3.00  22/22
HUMA 1121 024/13150  T Th 10:10am - 11:25am 608 Schermerhorn Hall  Benjamin Young  3.00  21/22
HUMA 1121 025/13151  T Th 11:40am - 12:55pm 604 Schermerhorn Hall  Lucas Cohen  3.00  18/22
HUMA 1121 026/13152  T Th 11:40am - 12:55pm 607 Schermerhorn Hall  Kent Minturn  3.00  22/22
HUMA 1121 027/13153  T Th 11:40am - 12:55pm 608 Schermerhorn Hall  Catherine Danman  3.00  21/22
HUMA 1121 028/13154  T Th 11:40am - 12:55pm 604 Schermerhorn Hall  Sandrine Larrive-Bass  3.00  19/22
HUMA 1121 029/13156  T Th 11:40am - 12:55pm 607 Schermerhorn Hall  Steven Niedbala  3.00  22/22
HUMA 1121 030/13158  T Th 11:40am - 12:55pm 608 Schermerhorn Hall  Catherine Danman  3.00  22/22
HUMA 1121 031/13157  T Th 2:40pm - 3:55pm 604 Schermerhorn Hall  Leah Werier  3.00  22/22
HUMA 1121 032/13159  T Th 2:40pm - 3:55pm 607 Schermerhorn Hall  Sophia D’Addio  3.00  22/22
HUMA 1121 033/13160  T Th 2:40pm - 3:55pm 608 Schermerhorn Hall  Susan Sivard  3.00  21/22
HUMA 1121 034/13161  T Th 8:40am - 9:55am 807 Schermerhorn Hall  Page Knox  3.00  15/22
HUMA 1121 035/13162  T Th 4:10pm - 5:25pm 607 Schermerhorn Hall  Sophia D’Addio  3.00  21/22
HUMA 1121 036/13163  T Th 4:10pm - 5:25pm 608 Schermerhorn Hall  Margot Bernstein  3.00  22/22
HUMA 1121 037/13164  T Th 5:40pm - 6:55pm 604 Schermerhorn Hall  John Beeson  3.00  21/22
HUMA 1121 038/13165  T Th 5:40pm - 6:55pm 607 Schermerhorn Hall  Giovanni Lovisette  3.00  19/22
HUMA 1121 039/13166  T Th 5:40pm - 6:55pm 608 Schermerhorn Hall  Margot Bernstein  3.00  19/22
HUMA 1121 040/13361  T Th 6:10pm - 7:25pm 807 Schermerhorn Hall  James Chamberlain  3.00  16/22
HUMA 1121 041/18785  M W 9:55am - 11:10am Online Only  Caroline Wamsler  3.00  15/22

Spring 2022: HUMA UN1121

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<td>David Schneller 3.00</td>
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<td>HUMA 1121 002/11560</td>
<td>M W 8:40am - 9:55am 607 Schermerhorn Hall</td>
<td>Megan Boomer 3.00</td>
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<td>HUMA 1121 003/11561</td>
<td>M W 8:40am - 9:55am 608 Schermerhorn Hall</td>
<td>Matthew Teti 3.00</td>
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<td>HUMA 1121 004/11562</td>
<td>M W 10:10am - 11:15am 604 Schermerhorn Hall</td>
<td>Virginia Girard 3.00</td>
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<td>M W 10:10am - 11:15am 607 Schermerhorn Hall</td>
<td>Lucas Cohen 3.00</td>
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**Chair of Music Humanities**

Prof. Elaine Sisman
604 Dodge Hall
The focus of Music Humanities is on the many forms of the Western musical imagination in art music, through works studied in their historical and cultural contexts. The specific goals of the course are to awaken and encourage active, critical, and comparative listening practices, to provide tools to respond verbally to a variety of musical idioms, and to create engagement with the debates about the character and purposes of music that have occupied composers and musical thinkers since ancient times. The extraordinary richness of musical life in New York is an integral part of the course.

The course moves chronologically from the Middle Ages to the present, examining the choices and assumptions of composers, their patrons, audiences, and performers, and exploring what we can and can’t know about how music of the past may have sounded. Students’ critical perceptions and articulate responses to the music, and to the source readings that are a hallmark of the Core, will be a vital part of the class.

REGISTRATION PROCEDURE
All information concerning registration in HUMA UN1123 Masterpieces of Western Music is included in the registration materials sent to students. It is the expectation of the College that all students complete Music Humanities by the end of their third year.

All Core Curriculum courses, including Music Humanities, must be taken for a letter grade. Students may not drop or withdraw from Music Humanities after the Core drop deadline (which is also the end of the Change-of-Program period (p. 4)). For more information, see Registration—Dropping Core Courses.

COURSES OF INSTRUCTION
HUMA UN1123 Masterpieces of Western Music. 3 points.
Analysis and discussion of representative works from the Middle Ages to the present.

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### Exemption from Music Humanities

Although all Columbia students are expected to take *Music Humanities*, there are some students who enter with exceptional musical backgrounds that may qualify them for exemption. Exemption from *Music Humanities* may be obtained by passing an Exemption Exam. In the case of transfer students, exemption may also be obtained by filing a course substitution request.

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**Spring 2022: HUMA UN1123**

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<td>T Th 10:10am - 11:25am</td>
<td>Ashkan Behzadi</td>
<td>3</td>
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<tr>
<td>HUMA 1123</td>
<td>021/11545</td>
<td>T Th 10:10am - 11:25am</td>
<td>Lauren Bernard</td>
<td>3</td>
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</tr>
<tr>
<td>HUMA 1123</td>
<td>022/11546</td>
<td>T Th 10:10am - 11:25am</td>
<td>Anya Wilkening</td>
<td>3</td>
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<tr>
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<td>T Th 1:10pm - 2:25pm</td>
<td>Benjamin Steege</td>
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<tr>
<td>HUMA 1123</td>
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<td>Bradford Garton</td>
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<tr>
<td>HUMA 1123</td>
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<td>Julia Hamilton</td>
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<tr>
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<td>T Th 2:40pm - 3:55pm</td>
<td>Russell O'Rourke</td>
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<tr>
<td>HUMA 1123</td>
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<td>Ralph Whyte</td>
<td>3</td>
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<tr>
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<td>Julia Hamilton</td>
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<tr>
<td>HUMA 1123</td>
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<td>T Th 4:10pm - 5:25pm</td>
<td>Russell O'Rourke</td>
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<td>HUMA 1123</td>
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<td>T Th 8:40am - 9:55am</td>
<td>Alexander Rothe</td>
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<td>26/25</td>
</tr>
</tbody>
</table>
Exemption Exam

The Exemption Exam is offered on the first Friday of the fall semester by the Music Department (621 Dodge Hall). Students who matriculate in the spring semester should take the exam in the following fall term. Students may take the exam only once during their first year at Columbia. If they do not pass the exam, they must enroll in a section of Music Humanities.

Course Substitution

In addition to the Exemption Exam, students with approved transfer credit have the option of requesting exemption on the basis of a similar music course passed with a grade of B or higher at another college or university. This exemption must be requested during the student’s first semester at Columbia. Petitions submitted in subsequent semesters will not be considered by the Center for the Core Curriculum.

FRONTIERS OF SCIENCE

Chair of Frontiers of Science
Prof. David J. Helfand
1020 Pupin Hall
212-854-6876
djh@astro.columbia.edu

Frontiers of Science Website

SCNC CC1000 FRONTIERS OF SCIENCE and SCNC CC1100 FRONTIERS OF SCIENCE-DISC is a one-semester course that integrates modern science into the Core Curriculum. The course includes lectures and seminar sections. On Mondays throughout the semester, each of Columbia’s leading scientists present a mini-series of lectures. During the rest of the week, senior faculty and Columbia post-doctoral science fellows (research scientists selected for their teaching abilities) lead seminar sections limited to twenty-two students to discuss the lecture and its associated readings, and to debate the implications of the most recent scientific discoveries. Frontiers of Science satisfies one of the three required courses of the science requirement for Columbia College.

REGISTRATION PROCEDURE

All information concerning registration in SCNC CC1000 FRONTIERS OF SCIENCE is included in the registration materials sent to students. All first-year students are preregistered in Frontiers of Science. Prospective science majors may petition the Committee on Science Instruction to be allowed to postpone taking Frontiers of Science until their sophomore year, if they are enrolled in the following courses during their first-year in the College:

1. Literature Humanities (HUMA CC1001);
2. A mathematics course;
3. A language course at the elementary II level or above;
4. One of the following science major sequences:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
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<tbody>
<tr>
<td>CHEM UN2045</td>
<td>INTENSVE ORGANIC CHEMISTRY</td>
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<tr>
<td>- CHEM UN2046</td>
<td>and INTENSVE ORG CHEM-FOR 1ST YEAR (formerly CHEM W3045-CHEM W3046)</td>
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<tr>
<td>PHYS UN1601</td>
<td>Physics, I: Mechanics and Relativity</td>
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<tr>
<td>- PHYS UN1602</td>
<td>and Physics, II: Thermodynamics, Electricity, and Magnetism</td>
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<tr>
<td>PHYS UN2801</td>
<td>Accelerated Physics I</td>
</tr>
<tr>
<td>- PHYS UN2802</td>
<td>and Accelerated Physics II</td>
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</table>

Students wishing to petition to postpone should do so in the Berick Center for Student Advising located in 403 Lerner.

All Core Curriculum courses, including Frontiers of Science, must be taken for a letter grade. Students may not drop or withdraw from Frontiers of Science after the Core drop deadline (which is also the end of the Change-of-Program period (p. 4)). For more information, see Registration—Dropping Core Courses.

COURSES OF INSTRUCTION

SCNC CC1000 FRONTIERS OF SCIENCE. 4.00 points.

Corequisites: SCNC CC1100

Corequisites: SCNC CC1100 The principal objectives of Frontiers of Science are to engage students in the process of discovery by exploring topics at the forefront of science and to inculcate or reinforce the specific habits of mind that inform a scientific perspective on the world. Sample topics include the brain and behavior, global climate change, relativity, and biodiversity, among others. Taught by members of natural science departments and Columbia Science Fellows

<table>
<thead>
<tr>
<th>Term</th>
<th>Course Number</th>
<th>Section/Call Number</th>
<th>Times/Location</th>
<th>Instructor</th>
<th>Points</th>
<th>Enrollment</th>
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<tr>
<td>Fall 2021</td>
<td>SCNC 1000</td>
<td>001/15785</td>
<td>M 10:30am - 12:00pm</td>
<td>Ivana Hughes</td>
<td>4.00</td>
<td>627/630</td>
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<td>Theater Miller Theater</td>
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<tr>
<td>Spring 2022</td>
<td>SCNC 1000</td>
<td>001/11039</td>
<td>M 10:30am - 12:00pm</td>
<td>Ivana Hughes</td>
<td>4.00</td>
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<tr>
<td></td>
<td>SCNC 1000</td>
<td>002/15856</td>
<td>M 2:30pm - 4:00pm</td>
<td>Ivana Hughes</td>
<td>4.00</td>
<td>289/293</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>309 Havemeyer Hall</td>
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</tbody>
</table>

University Writing

Director of the Undergraduate Writing Program
Dr. Nicole B. Wallack
310 Philosophy
212-854-3886
nw2108@columbia.edu
Undergraduate Writing Program Office
310 Philosophy
212-854-3886
uwp@columbia.edu

Undergraduate Writing Website

ENGL CC1010 University Writing is a one-semester seminar designed to facilitate students’ entry into the intellectual life of the university by teaching them to become more capable and independent academic readers and writers. The course emphasizes habits of mind and skills that foster students’ capacities for critical analysis, argument, revision, collaboration, meta-cognition, and research. Students read and discuss essays from a number of fields, complete regular informal reading and writing exercises, compose several longer essays, and devise a research-based project of their own design.

COURSES OF INSTRUCTION

ENGL CC1010 University Writing, 3 points.
ENGL CC/GS1010: University Writing (3 points) focuses on developing students’ reading, writing, and thinking, drawing from readings on a designated course theme that carry a broad appeal to people with diverse interests. No University Writing class presumes that students arrive with prior knowledge in the theme of the course. We are offering the following themes this year: UW: Contemporary Essays, CC/GS1010.001-.099 UW: Readings in American Studies, CC/GS1010.1xx UW: Readings in Gender and Sexuality, CC/GS1010.2xx UW: Readings in Film and Performing Arts, CC1010.3xx UW: Readings in Human Rights, CC/GS1010.4xx UW: Readings in Data and Society, CC/GS1010.5xx UW: Readings in Medical Humanities, CC/GS1010.6xx UW: Readings in Law & Justice, CC1010.7xx UW: Readings in Race and Ethnicity, CC/GS1010.8xx University Writing for International Students, CC/GS1010.9xx

For further details about these classes, please visit: http://www.college.columbia.edu/core/uwp

<table>
<thead>
<tr>
<th>Fall 2021: ENGL CC1010 Course</th>
<th>Times/Location</th>
<th>Instructor</th>
<th>Points</th>
<th>Enrollment</th>
</tr>
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<tbody>
<tr>
<td>ENGL 1010 002/16030</td>
<td>M W 8:40am - 9:55am 201d Philosophy Hall</td>
<td>Conor Macvarish</td>
<td>3</td>
<td>14/14</td>
</tr>
<tr>
<td>ENGL 1010 004/16031</td>
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<td>M Constantine</td>
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<tr>
<td>ENGL 1010 005/16032</td>
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<td>Samuel Granoff</td>
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</tr>
<tr>
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<td>M W 11:40am - 12:55pm 408a Philosophy Hall</td>
<td>Mary Catherine Stoumbos</td>
<td>3</td>
<td>14/14</td>
</tr>
<tr>
<td>ENGL 1010 011/18880</td>
<td>M W 11:40am - 12:55pm 407 Mathematics Building</td>
<td>Emily Weitzman</td>
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<tr>
<td>ENGL 1010 025/16034</td>
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<td>Aseel Najib</td>
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<td>ENGL 1010 030/16037</td>
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<td>Erag Ramazi</td>
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<td>Joseph Romano</td>
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<tr>
<td>ENGL 1010 132/16048</td>
<td>T Th 10:10am - 11:25am 652 Schermerhorn Hall</td>
<td>Christopher Hoogstraten</td>
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<tr>
<td>ENGL 1010 156/18301</td>
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<td>Elizabeth Walters</td>
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<td>Christine Prevas</td>
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<tr>
<td>ENGL 1010 246/16051</td>
<td>T Th 2:40pm - 3:55pm 408a Philosophy Hall</td>
<td>Brianne Baker</td>
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<td>ENGL 1010 248/16052</td>
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<td>Annabelle Tseng</td>
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| ENGL 1010 249/18227 | T Th 4:10pm - 5:25pm  
418 International Affairs Bldg | Natalie Adler 3 | 14/14 | 408a Philosophy Hall |
| ENGL 1010 314/16054 | M W 1:10pm - 2:25pm  
Sat Alfred Lerner Hall | Fiona Gorry-Hines 3 | 12/14 | ENGL 1010 624/16068  
M W 5:40pm - 6:55pm  
307 Mathematics Building |
| ENGL 1010 319/16055 | M W 2:40pm - 3:55pm  
307 Mathematics Building | Geoffrey Lokke 3 | 13/14 | ENGL 1010 629/16069  
T Th 8:40am - 9:55am  
408a Philosophy Hall |
| ENGL 1010 321/16056 | M W 4:10pm - 5:25pm  
408a Philosophy Hall | Alice Clapie 3 | 14/14 | ENGL 1010 631/16070  
T Th 10:10am - 11:25am  
B60 Alfred Lerner Hall |
| ENGL 1010 337/16057 | T Th 11:40am - 12:55pm  
307 Mathematics Building | Kevin Wang 3 | 14/14 | ENGL 1010 635/16071  
T Th 11:40am - 12:55pm  
B60 Alfred Lerner Hall |
| ENGL 1010 354/18391 | T Th 5:40pm - 6:55pm  
114 Knox Hall | Milan Terhunen 3 | 14/14 | ENGL 1010 638/16072  
T Th 11:40am - 12:55pm  
652 Schermerhorn Hall |
| ENGL 1010 410/18859 | M W 11:40am - 12:55pm  
307 Mathematics Building | Eman Elhadad 3 | 14/14 | ENGL 1010 639/16073  
T Th 1:10pm - 2:25pm  
652 Schermerhorn Hall |
| ENGL 1010 413/16058 | M W 1:10pm - 2:25pm  
408a Philosophy Hall | Kendall Collins 3 | 14/14 | ENGL 1010 701/16074  
M W 8:40am - 9:55am  
408a Philosophy Hall |
| ENGL 1010 416/16059 | M W 2:40pm - 3:55pm  
652 Schermerhorn Hall | Mieko Anders 3 | 14/14 | ENGL 1010 708/16075  
M W 11:40am - 12:55pm  
201b Philosophy Hall |
| ENGL 1010 422/16060 | M W 4:10pm - 5:25pm  
201b Philosophy Hall | Tyler Grand 3 Pre | 13/14 | ENGL 1010 720/16076  
M W 4:10pm - 5:25pm  
307 Mathematics Building |
| ENGL 1010 443/16061 | T Th 2:40pm - 3:55pm  
201d Philosophy Hall | Nicole Wallack 3 | 13/14 | ENGL 1010 733/16077  
T Th 10:10am - 11:25am  
502 Northwest Corner |
| ENGL 1010 452/16063 | T Th 5:40pm - 6:55pm  
201b Philosophy Hall | Yiran Wang 3 | 14/14 | ENGL 1010 744/16078  
T Th 2:40pm - 3:55pm  
307 Mathematics Building |
| ENGL 1010 457/18530 | T Th 4:10pm - 5:25pm  
652 Schermerhorn Hall | Aisha Carter 3 | 14/14 | ENGL 1010 803/18761  
M W 8:40am - 9:55am  
502 Northwest Corner |
| ENGL 1010 506/16064 | M W 10:10am - 11:25am  
408a Philosophy Hall | Ruilin Fan 3 | 13/14 | ENGL 1010 823/18762  
M W 4:10pm - 5:25pm  
316 River Side Church |
| ENGL 1010 512/18240 | M W 1:10pm - 2:25pm  
413 Hamilton Hall | Craig Moreau 3 | 13/14 | ENGL 1010 850/18763  
T Th 4:10pm - 5:25pm  
408a Philosophy Hall |
| ENGL 1010 515/16065 | M W 1:10pm - 2:25pm  
652 Schermerhorn Hall | Stephanie Philipp 3 | 14/14 | ENGL 1010 855/18409  
M W 11:40am - 12:55pm  
320 River Side Church |
| ENGL 1010 528/16066 | T Th 8:40am - 9:55am  
201b Philosophy Hall | Julia Ryan 3 | 14/14 | ENGL 1010 907/16079  
M W 10:10am - 11:25am  
307 Mathematics Building |
| ENGL 1010 542/16067 | T Th 1:10pm - 2:25pm | Margaret Banks 3 | 14/14 | ENGL 1010 936/16080  
T Th 11:40am - 12:55pm  
Vanessa Guida |
<p>| Course Number | Section/Call Number | Times/Location | Instructor       | Points | Enrollment | |
|---------------|---------------------|----------------|------------------|--------|------------| |
| ENGL 1010 001/15243 | M W 8:40am - 9:55am | 201d Philosophy Hall | Ali Yalgin | 3      | 14/14      | |
| ENGL 1010 002/15255 | M W 8:40am - 9:55am | 408a Philosophy Hall | Erag Ramizi | 3      | 14/14      | |
| ENGL 1010 004/15256 | M W 10:10am - 11:25am | 652 Schermerhorn Hall | Samuel Granoff | 3      | 14/14      | |
| ENGL 1010 011/15257 | M W 11:40am - 12:55pm | 201d Philosophy Hall | Elena Duda | 3      | 14/14      | |
| ENGL 1010 015/15258 | M W 1:10pm - 2:25pm | 305 Uris Hall | Susan Mendelsohn | 3     | 14/14      | |
| ENGL 1010 016/15259 | M W 1:10pm - 2:25pm | 408a Philosophy Hall | Mary Catherine Stoombos | 3     | 14/14      | |
| ENGL 1010 017/15260 | M W 1:10pm - 2:25pm | 606 Lewisohn Hall | M Constantine | 3      | 14/14      | |
| ENGL 1010 021/15261 | M W 2:40pm - 3:55pm | 652 Schermerhorn Hall | Glenn Gordon | 3      | 14/14      | |
| ENGL 1010 024/15262 | M W 4:10pm - 5:25pm | 408a Philosophy Hall | Joseph Romano | 3      | 14/14      | |
| ENGL 1010 027/15273 | M W 4:10pm - 5:25pm | 652 Schermerhorn Hall | Victoria Rucinski | 3     | 14/14      | |
| ENGL 1010 031/15264 | M W 5:40pm - 6:55pm | 201d Philosophy Hall | Justin Snider | 3      | 14/14      | |
| ENGL 1010 043/15265 | T Th 11:40am - 12:55pm | 408a Philosophy Hall | Emily Suazo | 3      | 13/14      | |
| ENGL 1010 046/15266 | T Th 1:10pm - 2:25pm | 201d Philosophy Hall | Conor Macvarish | 3     | 13/14      | |
| ENGL 1010 047/15267 | T Th 1:10pm - 2:25pm | 502 Northwest Corner | Evelyn MacPherson | 3     | 14/14      | |
| ENGL 1010 048/15268 | T Th 1:10pm - 2:25pm | 608 Lewisohn Hall | Megan Lonsinger | 3      | 13/14      | |
| ENGL 1010 050/15252 | T Th 2:40pm - 3:55pm | 408a Philosophy Hall | Sophia Pedatella | 3     | 14/14      | |</p>
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<tr>
<th>Course Code</th>
<th>Days and Times</th>
<th>Location</th>
<th>Instructor</th>
<th>Sections</th>
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<td>ENGL 1010 423/15290</td>
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<td>606 Lewisohn Hall</td>
<td>Kendall Collins</td>
<td>3 14/14</td>
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<td>ENGL 1010 426/15291</td>
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<td>502 Northwest Corner</td>
<td>Meiko Anders</td>
<td>3 14/14</td>
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<td>ENGL 1010 429/15292</td>
<td>M W 5:40pm - 6:55pm</td>
<td>652 Schermerhorn Hall</td>
<td>Tyler Grand Pre</td>
<td>3 14/14</td>
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<tr>
<td>ENGL 1010 432/15293</td>
<td>T Th 8:40am - 9:55am</td>
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<td>Yiran Wang</td>
<td>3 14/14</td>
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<tr>
<td>ENGL 1010 444/15295</td>
<td>T Th 11:40am - 12:55pm</td>
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<td>Aisha Carter</td>
<td>3 14/14</td>
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<tr>
<td>ENGL 1010 503/15296</td>
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<tr>
<td>ENGL 1010 506/15297</td>
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<td>Craig Moreau</td>
<td>3 13/14</td>
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<tr>
<td>ENGL 1010 533/15301</td>
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<td>408a Philosophy Hall</td>
<td>Margaret Banks</td>
<td>3 14/14</td>
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<tr>
<td>ENGL 1010 551/15302</td>
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<tr>
<td>ENGL 1010 605/15303</td>
<td>M W 10:10am - 11:25am</td>
<td>201d Philosophy Hall</td>
<td>Ayesha Verma</td>
<td>3 14/14</td>
</tr>
<tr>
<td>ENGL 1010 628/15304</td>
<td>M W 5:40pm - 6:55pm</td>
<td>201b Philosophy Hall</td>
<td>Johanna King-Slutzky</td>
<td>3 14/14</td>
</tr>
<tr>
<td>ENGL 1010 635/15306</td>
<td>T Th 10:10am - 11:25am</td>
<td>502 Northwest Corner</td>
<td>Kristie Schlauraff</td>
<td>3 14/14</td>
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<tr>
<td>ENGL 1010 639/15307</td>
<td>T Th 11:40am - 12:55pm</td>
<td>502 Northwest Corner</td>
<td>Kristie Schlauraff</td>
<td>3 14/14</td>
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<tr>
<td>ENGL 1010 707/15308</td>
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<td>Aya Labanieh</td>
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<tr>
<td>ENGL 1010 708/15310</td>
<td>M W 11:40am - 12:55pm</td>
<td>652 Schermerhorn Hall</td>
<td>Valeria Tsygankova</td>
<td>3 14/14</td>
</tr>
<tr>
<td>ENGL 1010 738/15312</td>
<td>T Th 10:10am - 11:25am</td>
<td>141 Uris Hall</td>
<td>Craig Gurian</td>
<td>3 13/14</td>
</tr>
<tr>
<td>ENGL 1010 744/15314</td>
<td>T Th 1:10pm - 2:40pm</td>
<td>408a Philosophy Hall</td>
<td>Lindsay Stewart</td>
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<tr>
<td>ENGL 1010 752/15315</td>
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<td>Pranav Menon</td>
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<tr>
<td>ENGL 1010 756/15316</td>
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<tr>
<td>ENGL 1010 834/15319</td>
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<td>201 Philosophy Hall</td>
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<td>3 14/14</td>
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<tr>
<td>ENGL 1010 837/15320</td>
<td>T Th 10:10am - 11:25am</td>
<td>408a Philosophy Hall</td>
<td>Alex Valin</td>
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<tr>
<td>ENGL 1010 855/15321</td>
<td>T Th 4:10pm - 5:25pm</td>
<td>408a Philosophy Hall</td>
<td>Anirbaan Banerjee</td>
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<tr>
<td>ENGL 1010 913/15322</td>
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<td>329 Uris Hall</td>
<td>Kathleen Tang</td>
<td>3 14/14</td>
</tr>
<tr>
<td>ENGL 1010 940/15324</td>
<td>T Th 11:40am - 12:55pm</td>
<td>652 Schermerhorn Hall</td>
<td>Vanessa Guida</td>
<td>3 14/14</td>
</tr>
</tbody>
</table>

**Writing Center**

The Undergraduate Writing Program sponsors The Writing Center in 310 Philosophy, which offers individual writing instruction and consultations to undergraduate and graduate students enrolled in Columbia University courses. Students may visit the center to work on any writing project, academic or non-academic, and at any stage in the writing process. Students may use the Writing Center’s online scheduling system to make appointments and view drop-in hours.

**Foreign Language Requirement**

**General Information:**
Academic Affairs
202 Hamilton
212-851-9814
cc-academic@columbia.edu

The Foreign Language Requirement Website

The foreign language requirement forms part of Columbia College’s mission to prepare students to be tomorrow’s
conscientious and informed citizens. Knowledge of another’s language and literature is the most important way to begin to know a country and people. The study of a foreign language:

1. Introduces students to world cultures, also making them aware of their own culture within that context;
2. Informs students of the differences in structure, grammar, and syntax that distinguish languages from each other, and clarifies the intimate links between language and cultural meaning;
3. Contributes to the development of students’ critical, analytical, and writing skills.

The requirement may be satisfied in one of the following ways:

1. Satisfactory completion of the second term of an intermediate language sequence.
2. Demonstration of an equivalent competence through the appropriate score on the SAT II Subject Test or Advanced Placement Tests.
3. Demonstration of an equivalent competence through the College’s own placement tests (consult the department through which the language is offered).
4. The successful completion of an advanced level foreign language or literature course that requires 2102 or the equivalent as a prerequisite. This course must be taken for a letter grade.
5. Students whose native language is not English are not required to take an additional foreign language or an achievement test if they have completed the secondary school requirement in the native language.

Because success in learning a foreign language is dependent on the full engagement of the students enrolled in a language course, all terms of language instruction/conversation courses, whether being used toward fulfillment of the foreign language requirement or not, must be taken in order and for a letter grade. These courses may not be taken for a grade of Pass/D/Fail.

Students wishing to satisfy the requirement in any other language should consult with their advising dean. In some instances, equivalent language courses offered at Barnard College and in the School of General Studies may be used to satisfy the requirement; however, students should speak with the Columbia department to ensure that courses from these schools are approved for the requirement.

Any student who wishes to submit a language course taken at another institution in fulfillment of the language requirement must pass a departmental placement examination.

In order to ensure that students achieve foreign-language proficiency without a significant break in progress, this requirement must be completed before a student can be eligible to study abroad, even if the language of instruction of the study-abroad program is English. For students seeking to study abroad in other languages, more advanced foreign-language study is usually required (see Special Programs).

The following languages are offered in the College toward satisfaction of the requirement:

- Akkadian  
  Language Resource Center
- Arabic  
  Middle Eastern, South Asian, and African Studies
- Armenian  
  Middle Eastern, South Asian, and African Studies
- Bengali  
  Language Resource Center
- Bosnian-Croatian-Serbian  
  Slavic Languages
- Catalan  
  Latin American and Iberian Cultures
- Chinese  
  East Asian Languages and Cultures
- Czech  
  Slavic Languages
- Dutch  
  Germanic Languages (p. 281)
- Filipino  
  Language Resource Center
- Finnish  
  Germanic Languages
- French  
  French and Romance Philology
- German  
  Germanic Languages
- Greek, Classical and Modern  
  Classics
- Hebrew  
  Middle Eastern, South Asian, and African Studies
- Hindi-Urdu  
  Middle Eastern, South Asian, and African Studies
- Hungarian  
  Italian
- Italian  
  Italian
- Japanese  
  East Asian Languages and Cultures
- Korean  
  East Asian Languages and Cultures
- Latin  
  Classics
- Persian  
  Middle Eastern, South Asian, and African Studies
- Polish  
  Slavic Languages
- Portuguese
Latin American and Iberian Cultures
• Pulaar
  Middle Eastern, South Asian, and African Studies
• Punjabi
  Middle Eastern, South Asian, and African Studies
• Romanian
  Language Resource Center
• Russian
  Slavic Languages
• Sanskrit
  Middle Eastern, South Asian, and African Studies
• Spanish
  Latin American and Iberian Cultures
• Swahili
  Middle Eastern, South Asian, and African Studies
• Swedish
  Germanic Languages
• Tamil
  Middle Eastern, South Asian, and African Studies
• Tibetan
  East Asian Languages and Cultures
• Turkish, Modern
  Middle Eastern, South Asian, and African Studies
• Ukrainian
  Slavic Languages
• Vietnamese
  East Asian Languages and Cultures
• Wolof
  Middle Eastern, South Asian, and African Studies
• Yiddish
  Germanic Languages
• Yoruba
  Language Resource Center
• Zulu
  Language Resource Center

The Global Core requirement asks students to engage directly with the variety of civilizations and the diversity of traditions that, along with the West, have formed the world and continue to interact in it today. Courses in the Global Core typically explore the cultures of Africa, Asia, the Americas, and the Middle East in an historical context. These courses are organized around a set of primary materials produced in these traditions and may draw from texts or other forms of media, as well as from oral sources or performance, broadly defined.

Global Core courses fall into two categories, and can be, on occasion, a hybrid of the two types: those with a comparative, multidisciplinary, or interdisciplinary focus on specific cultures or civilizations, tracing their existence across a significant span of time, and may include Europe and/or the U.S.; and those that address a common theme or set of analytic questions comparatively (and may include Europe and the U.S.). The Global Core requirement consists of courses that examine areas not the primary focus of Literature Humanities and Contemporary Civilization and that, like other Core courses, are broadly introductory, interdisciplinary, and temporally and/or spatially expansive.

Students must complete two courses from the approved list of Global Core courses for a letter grade.

**SUMMER 2022 APPROVED COURSES**

As Summer 2022 schedules become available, more courses will be added to this list. Please check back for additional updates. Last updated on March 3, 2022.

<table>
<thead>
<tr>
<th>Art History and Archaeology</th>
<th>AHUM S2064 Arts of China, Japan, and Korea</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>AHUM S2901 Masterpieces of Indian Art and Architecture</td>
</tr>
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<table>
<thead>
<tr>
<th>Classics</th>
<th>CLCV UN3059</th>
<th>WORLDS OF ALEXANDER THE GREAT</th>
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<table>
<thead>
<tr>
<th>Film</th>
<th>FILM S2295Q</th>
<th>World Cinema: Mexico</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>FILM S4215D</td>
<td>Contemporary Global Documentary</td>
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<table>
<thead>
<tr>
<th>French</th>
<th>FREN UN3822</th>
<th>Blackness in French: From Harlem to Paris and Beyond</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Middle Eastern, South Asian, and African Studies</th>
<th>MDES UN1001</th>
<th>CRITICAL THEORY: A GLOBAL PERSPECTIVE</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Music</th>
<th>AHMM UN3320</th>
<th>MUSIC IN EAST ASIA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AHMM S3321 Introduction to the Musics of India and West Asia</td>
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<thead>
<tr>
<th>Religion</th>
<th>RELI UN1612</th>
<th>Religion and the History of Hip Hop</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>RELI S2305</td>
<td>ISLAM</td>
</tr>
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</table>

Global Core Requirement

Chair of the Committee on Global Core
Prof. Patricia Grieve
globalcore@columbia.edu

General Information
Academic Affairs
202 Hamilton
212-851-9814
cc-academic@columbia.edu

Global Core Requirement Website
## SPRING 2022 APPROVED COURSES

As Spring 2022 schedules become available, more courses will be added to this list. Please check back for additional updates. Last updated on March 3, 2022.

<table>
<thead>
<tr>
<th>Field</th>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td><strong>Anthropology</strong></td>
<td>ANTH UN2141</td>
<td>Frontier Imaginaries</td>
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<tr>
<td></td>
<td>ANTH UN3465</td>
<td>Women and Gender Politics in the Muslim World</td>
</tr>
<tr>
<td></td>
<td>ANTH UN3947</td>
<td>Text, Magic, Performance</td>
</tr>
<tr>
<td></td>
<td>ANTH UN3933</td>
<td>ARABIA IMAGINED</td>
</tr>
<tr>
<td><strong>Art History and Archaeology</strong></td>
<td>AHIS UN2600</td>
<td>THE ARTS OF CHINA</td>
</tr>
<tr>
<td></td>
<td>AHUM UN2604</td>
<td>Art In China, Japan, and Korea</td>
</tr>
<tr>
<td></td>
<td>AHUM UN2901</td>
<td>MASTERPIECES-INDIAN ART # ARCH</td>
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<tr>
<td></td>
<td>AHIS UN3503</td>
<td>Contemporary Arts of Africa</td>
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<td>AFCV UN1020</td>
<td>African Civilizations</td>
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<td>LACV UN1020</td>
<td>Primary Texts of Latin American Civilization</td>
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<td><strong>Center for the Study of Ethnicity and Race</strong></td>
<td>CSER UN3928</td>
<td>Colonization/Decolonization</td>
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<tr>
<td><strong>Committee on Global Thought</strong></td>
<td>CGTH UN3402</td>
<td>Topics in Global Thought: Global 20-Youth in an Interconnected World</td>
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<tr>
<td><strong>Dance- Barnard</strong></td>
<td>DNCE BC2565</td>
<td>World Dance History</td>
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<tr>
<td><strong>East Asian Languages and Cultures</strong></td>
<td>ASCE UN1359</td>
<td>Introduction to East Asian Civilizations: China</td>
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<td></td>
<td>ASCE UN1361</td>
<td>INTRO EAST ASIAN CIV: JPN</td>
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<tr>
<td></td>
<td>ASCE UN1363</td>
<td>Introduction to East Asian Civilizations: Korea</td>
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<td>AHUM UN1400</td>
<td>Colloquium on Major Texts: East Asia</td>
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<td>EAAS UN3322</td>
<td>East Asian Cinema</td>
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<td>EAAS GU4111</td>
<td>Modern Chinese Poetry in a Global Context (was formerly EAS UN3122 &quot;Modern Chinese Poetry in a Global Context&quot;)</td>
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<td>EAAS UN3927</td>
<td>China in the Modern World</td>
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<td>EAAS GU4160</td>
<td>CULTURES IN COLONIAL KOR</td>
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<td>EEARL GU4310</td>
<td>Life-Writing in Tibetan Buddhist Literature</td>
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<tr>
<td></td>
<td>EAAS GU4445</td>
<td>Proletarian Asia - working-class culture from 1930s to present</td>
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<tr>
<td></td>
<td>EAAS GU4565</td>
<td>TIBET IN THE WORLD: CULTURAL PRODUCTION AND SOCIAL CHANGE</td>
</tr>
<tr>
<td><strong>English</strong></td>
<td>ENTA GU4729</td>
<td>GLOBAL ANGLOPHONE DRAMA (Effective beginning Spring 2022)</td>
</tr>
</tbody>
</table>

**French and Francophone Studies**

- FREN OC3719  
  Violence by and against Women  
  (This course will be offered abroad- Reid Hall, Paris.)

- FREN OC3817  
  Black Paris  
  (This course will be offered abroad- Reid Hall, Paris.)

- CLFR OC3821  
  CITY DIPLOMACY  
  (This course will be offered abroad- Reid Hall, Paris.)

- CLFR GU4002  
  French Theory in a Global Context

**Germanic Languages**

- GERM UN3780  
  Berlin/Istanbul: Migration, Culture, Values (GER)

**History**

- HIST UN2377  
  INTERNATIONAL & GLOBAL HISTORY SINCE WWII

- HIST UN2660  
  LATIN AMERICAN CIVILIZATION I

- HIST UN2701  
  THE OTTOMAN EMPIRE

- HIST UN2881  
  Vietnam in the World

- HSEA UN3898  
  The Mongols in History

**Italian**

- ITAL GU4022  
  The Qur'an in Europe

**Jewish Studies**

- JWST GU4145  
  Topics in Israeli Cinema

**Latin American and Iberian Cultures**

- SPJS UN3303  
  Jewish Culture in Translation in Medieval Iberia

- SPAN UN3349  
  Hispanic Cultures I: Islamic Spain through the Colonial Period

- PORT UN3350  
  Lusophone Africa and Afro Brazilian Culture

- SPAN UN3350  
  Hispanic Cultures II: Enlightenment to the Present

- PORT UN3490  
  Brazilian Society and Civilization

- SPAN UN3361  
  ARTISTIC HUMANITY

**Middle Eastern, South Asian, and African Studies**

- MDES UN1001  
  CRITICAL THEORY: A GLOBAL PERSPECTIVE

- AHUM UN1399  
  COLLOQUIUM ON MAJOR TEXTS

- MDES UN2006  
  What is Islam?

- ASCM UN2008  
  CONTEMP ISLAMIC CIVILIZATION

- CLME UN3221  
  ARABIC LITERATURE AS WORLD LITERATURE

- MDES UN3260  
  Rethinking Middle East Politics

- MDES UN3930  
  Iraq: War, Love, and Exile

- CLME UN3266  
  Decolonizing the Arabian Nights (formerly MDES GU4266 "Decolonizing the Arabian Nights")

**Music**

- AHMM UN3320  
  MUSIC IN EAST ASIA

**Religion**

- 108
RELI UN2308  Buddhism: East Asian
RELI UN2309  Hinduism
RELI GU4314  Bhakti Poets

Slavic Languages
GEOR GU4042  CLT HERITAGE: A GEOR CASE STUDY

Urban Studies
URBS UN3351  URBAN ELSEWHERE: EXPLORING A WORLD OF CITIES

**FALL 2021 APPROVED COURSES**

As Fall 2021 schedules become available, more courses will be added to this list. Please check back for additional updates. Last updated on November 23, 2021.

**African-American Studies**
AFAS UN1001  INTRO TO AFRICAN-AMER STUDIES

**Anthropology**
ANTH UN1008  The Rise of Civilization
ANTH UN3821  Native America

**Art History**
AHUM UN2604  Art In China, Japan, and Korea

**Center for the Core Curriculum**
LACV UN1020  Primary Texts of Latin American Civilization

**Center for the Study of Ethnicity and Race**
CSER UN1010  Introduction to Comparative Ethnic Studies
CSER UN3922  Race and Representation in Asian American Cinema
CSER UN3926  Latin Music and Identity
CSER UN3928  Colonization/Decolonization

**Classics**
CSGM UN3567  Thessaloniki Down the Ages
CLGM GU4600  Multilingual America: Translation, Migration, Gender

**Comparative Literature and Society**
CPLS UN3333  EAST/WEST FRAMETALE NARRATIVES

**Dance**
DNCE BC3567  Dance of India

**East Asian Languages and Cultures**
ASCE UN1002  Introduction to Major Topics in Asian Civilizations: East Asia
ASCE UN1359  Introduction to East Asian Civilizations: China
ASCE UN1361  INTRO EAST ASIAN CIV: JPN
ASCE UN1365  Introduction to East Asian Civilizations: Tibet
AHUM UN1400  Colloquium on Major Texts: East Asia
EAAS UN2342  Mythology of East Asia
EAAS UN3116  Supernatural in East Asia

**EAAS UN3844**  CULTURE, MENTAL HEALTH, AND HEALING IN EAST ASIA
EAAS UN3844  CULTURE, MENTAL HEALTH, AND HEALING IN EAST ASIA
HSEA GU4880  History of Modern China I

**English and Comparative Literature**
CLEN UN3933  Postcolonial Literature

**Film**
FILM GU4020  Brazilian Cinema: Cinema Novo and Beyond

**French and Romance Philology**
CLFR OC3821  CITY DIPLOMACY (will be offered virtually Fall 2021)

**History**
HIST UN2003  Empire # Nation-Building East Central Europe
HIST UN2580  THE HISTORY OF UNITED STATES RELATIONS WITH EAST ASIA
HIST UN2618  The Modern Caribbean
HIST UN2719  History of the Modern Middle East
HSWM UN2761  Gender and Sexuality in African History
HIST UN3601  Jews in the Later Roman Empire, 300-600 CE
HIST GU4301  Politics and Justice in Latin America through Crime Fiction (Effective beginning Fall 2021)
HIST GU4660  Indigenous Worlds in Early Latin America (Effective beginning Fall 2021)

**Italian**
CLIA GU4500  Mediterranean Humanities

**Latin American and Iberian Cultures**
SPAN UN3349  Hispanic Cultures I: Islamic Spain through the Colonial Period
SPAN UN3350  Hispanic Cultures II: Enlightenment to the Present
SPAN UN3361  ARTISTIC HUMANITY
PORT UN3490  Brazilian Society and Civilization

**Linguistics**
LING UN3102  Endangered Languages in the Global City: Lang, Culture, and Migration in Contemprary NYC

**Middle Eastern, South Asian, and African Studies**
MDES UN1030  “Game of Thrones”: On Epics and Empires (Effective beginning Fall 2021)
AHUM UN1399  COLLOQUIUM ON MAJOR TEXTS
ASCN UN2003  Introduction to Islamic Civilization
ASCN UN2357  Introduction to Indian Civilization
MDES UN3000  Theory and Culture
MDES UN3130  E AFRICA # THE SWAHILI COAST
CLME UN3928  Arabic Prison Writing
CLME GU4262  Themes in the Arabic Novel
MDES GU4266  Decolonizing the Arabian Nights
## Global Core Requirement

### Music
- **AHMM UN3321** Introduction To the Musics of India and West Asia

### Physics
- **SCNC UN3001** Nuclear Weapons and Nuclear Testing: Marshall Islands

### Religion
- **RELI UN2205** BUDDHISM: INDO-TIBETAN
- **RELI UN2306** Intro to Judaism
- **RELI GU4304** Krishna

### Slavic Languages
- **SLCL UN3001** Slavic Cultures

### Sociology
- **SOCI UN3324** Global Urbanism

### Theatre
- **THTR UN3154** Theatre Traditions in a Global Context

## Summer 2021 Approved Courses

As Summer 2021 schedules become available, more courses will be added to this list. Please check back for additional updates. Last updated on May 10, 2021.

### Art History and Archaeology
- **AHIS S2600** THE ARTS OF CHINA
- **AHUM S2604** Art in China, Japan, and Korea
- **AHIS UN2614** Chinese Painting of the Song Dynasty (960-1279)
- **AHUM S2901** Masterpieces of Indian Art and Architecture

### Classics
- **CLCV UN3059** WORLDS OF ALEXANDER THE GREAT
- **GRKM S3935** Hellenism and the Topographical Imagination

### Comparative Literature and Society
- **CPLS UN3333** EAST/WEST FRAMETALE NARRATIVES

### East Asian Languages and Cultures
- **AHUM UN1400** Colloquium on Major Texts: East Asia

### English and Comparative Literature
- **ENGL UN3851** INDIAN WRITING IN ENGLISH

### Film
- **FILM S4215D** Contemporary Global Documentary
- **FILM GU4294** World Cinema: Latin America

### French
- **CLFR OC3821** CITY DIPLOMACY (will be offered virtually Summer 2021)
- **FREN UN3822** Blackness in French: From Harlem to Paris and Beyond (Effective beginning Summer 2021)
- **CLFR GU4321** The Maghreb in Transition: Society # Culture in North Africa Since 1990

### History
- **HIST UN3779** AFRICA AND FRANCE

### Jewish Studies
- **JWST S4145** Course JWST S4145 Not Found

### Latin American and Iberian Cultures
- **SPAN UN3349** Hispanic Cultures I: Islamic Spain through the Colonial Period
- **SPAN UN3350** Hispanic Cultures II: Enlightenment to the Present

### Linguistics
- **LING UN3102** Endangered Languages in the Global City: Lang. Culture, and Migration in Contemorary NYC

### Middle Eastern, South Asian, and African Studies
- **MDES UN1001** CRITICAL THEORY: A GLOBAL PERSPECTIVE
- **AHUM UN1399** COLLOQUIUM ON MAJOR TEXTS

### Music
- **MUSI S2020** Salsa, Soca, and Reggae: Popular Musics of the Caribbean
- **AHMM UN3320** MUSIC IN EAST ASIA
- **AHMM UN3321** Introduction To the Musics of India and West Asia

### Science (SCNC)
- **SCNC UN3001** Nuclear Weapons and Nuclear Testing: Marshall Islands

### Religion
- **RELI UN1612** Religion and the History of Hip Hop
- **RELI S2205** Course RELI S2205 Not Found
- **RELI S2305** ISLAM
- **RELI GU4214** African and North African Philosophy: An Introduction (Effective beginning Summer 2021)

### Slavic Languages
- **GEOR GU4042** CLT HERITAGE: A GEOR CASE STUDY

## All Approved Courses: Morningside Campus

Not all courses are taught each academic year. Below is the full list of all courses offered on the Morningside Heights campus that are approved for the Global Core Requirement, regardless of semester offered. Last updated on March 3, 2022.

### African-American Studies
- **AFAS UN1001** INTRO TO AFRICAN-AMER STUDIES

### Anthropology
- **ANTH UN1008** The Rise of Civilization
- **ANTH UN1130** Africa and the Anthropologist
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
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<tbody>
<tr>
<td>ANTH UN2007</td>
<td>Indian and Nigerian Film Cultures (Effective beginning Fall 2017 semester)</td>
</tr>
<tr>
<td>ANTH V2013</td>
<td>Africa in the 21st Century: Aesthetics, Culture, Politics</td>
</tr>
<tr>
<td>ANTH V2014</td>
<td>Archaeology and Africa: Changing Perceptions of the African Past</td>
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<tr>
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<td>Rome Beyond Rome: Roman Art and Architecture in a Global Perspective (Effective beginning Spring 2018)</td>
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<td>Chinese Painting of the Song Dynasty (960-1279) (Effective beginning Summer 2021)</td>
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<td>Arts of Islam: The First Formative Centuries (circa 700-1000) (Effective beginning Fall 2017 semester)</td>
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<td>African Art: The Next Generation. Focus: Congo (Effective Spring 2017)</td>
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### Dance- Barnard

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<td>EAAS UN3121</td>
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<td>TIBET IN THE WORLD: CULTURAL PRODUCTION AND SOCIAL CHANGE (Effective beginning Spring 2022)</td>
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<td>Troubled Islands of the Indo Pacific (Effective beginning Spring 2017)</td>
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<td>Lusophone Africa and Afro Brazilian Culture</td>
</tr>
<tr>
<td>SPAN UN3350</td>
<td>Hispanic Cultures II: Enlightenment to the Present</td>
</tr>
<tr>
<td>SPAN UN3361</td>
<td>ARTISTIC HUMANITY (Effective beginning Spring 2017)</td>
</tr>
<tr>
<td>PORT UN3490</td>
<td>Brazilian Society and Civilization (Effective beginning Fall 2017 semester)</td>
</tr>
<tr>
<td>SPAN UN3490</td>
<td>Latin American Humanities I: From Pre-Columbian Civilizations to the Creation of New Nations</td>
</tr>
<tr>
<td>SPAN W3491</td>
<td>Latin American Humanities II: From Modernity to the Present [In English]</td>
</tr>
<tr>
<td>PORT UN3601</td>
<td>Race, Medicine and Literature in 19th-Century Brazil (Effective beginning Fall 2020)</td>
</tr>
<tr>
<td>Linguistics</td>
<td></td>
</tr>
<tr>
<td>LING UN3102</td>
<td>Endangered Languages in the Global City: Lang, Culture, and Migration in Contempory NYC (Effective beginning Fall 2019)</td>
</tr>
<tr>
<td>Middle Eastern, South Asian, and African Studies</td>
<td></td>
</tr>
<tr>
<td>MDES UN1001</td>
<td>CRITICAL THEORY: A GLOBAL PERSPECTIVE (Effective beginning Spring 2018)</td>
</tr>
<tr>
<td>MDES UN1030</td>
<td>“Game of Thrones”: On Epics and Empires (Effective beginning Fall 2021)</td>
</tr>
<tr>
<td>AHUM UN1399</td>
<td>COLLOQUIUM ON MAJOR TEXTS (formerly AHUM UN3399, new course number effective Fall 2018)</td>
</tr>
<tr>
<td>ASCM V2001</td>
<td>Introduction to Major Topics in the Civilizations of the Middle East and India</td>
</tr>
<tr>
<td>ASCM UN2003</td>
<td>Introduction to Islamic Civilization</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
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<tr>
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</tr>
<tr>
<td>MDES UN2006</td>
<td>What is Islam? (Effective beginning Spring 2022)</td>
</tr>
<tr>
<td>ASCM UN2008</td>
<td>CONTEMP ISLAMIC CIVILIZATION</td>
</tr>
<tr>
<td>MDES UN2030</td>
<td>Major Debates in the Study of Africa</td>
</tr>
<tr>
<td>MDES W2041</td>
<td>Introduction to Indian Philosophy (Effective beginning Spring 2015)</td>
</tr>
<tr>
<td>ASCM UN2357</td>
<td>Introduction to Indian Civilization</td>
</tr>
<tr>
<td>MDES UN2641</td>
<td>Cinemas of India (Effective beginning Fall 2020)</td>
</tr>
<tr>
<td>MDES UN2650</td>
<td>Gandhi and His Interlocutors (Gandhi and His Interlocutors; Effective beginning Spring 2015)</td>
</tr>
<tr>
<td>MDES UN3000</td>
<td>Theory and Culture</td>
</tr>
<tr>
<td>CLME W3032</td>
<td>Colonialism: Film, Fiction, History &amp; Theory</td>
</tr>
<tr>
<td>HSME UN3044</td>
<td>From Colonial to Global Health (Effective beginning Fall 2017 semester)</td>
</tr>
<tr>
<td>MDES UN3047</td>
<td>MESAAS # History: Court Cultures 350-1750 (Effective beginning Spring 2021)</td>
</tr>
<tr>
<td>MDES UN3121</td>
<td>Literature and Cultures of Struggle in South Africa (Effective beginning Spring 2017)</td>
</tr>
<tr>
<td>MDES UN3130</td>
<td>E AFRICA # THE SWAHILI COAST</td>
</tr>
<tr>
<td>CLME UN3221</td>
<td>ARABIC LITERATURE AS WORLD LITERATURE (Effective beginning Fall 2017 semester- course number changed to CLME GU4272 beginning Spring 2020)</td>
</tr>
<tr>
<td>MDES UN3260</td>
<td>Rethinking Middle East Politics (Effective beginning Spring 2017)</td>
</tr>
<tr>
<td>CLME UN3266</td>
<td>Decolonizing the Arabian Nights (Was formerly MDES GU4266 &quot;Decolonizing the Arabian Nights&quot;. New course number effective beginning Spring 2022.)</td>
</tr>
<tr>
<td>MDES UN3421</td>
<td>Islamic Central Asia (Effective beginning Fall 2020)</td>
</tr>
<tr>
<td>MDES UN3445</td>
<td>SOCIETIES/CULTRS: INDIAN OCEAN (Effective beginning Fall 2013)</td>
</tr>
<tr>
<td>CLME UN3928</td>
<td>Arabic Prison Writing</td>
</tr>
<tr>
<td>MDES UN3930</td>
<td>Iraq: War, Love, and Exile (Effective beginning Spring 2021)</td>
</tr>
<tr>
<td>CLME GU4031</td>
<td>Cinema and Society In Asia and Africa</td>
</tr>
<tr>
<td>MDES G4052</td>
<td>Locating Africa in the Early 20th Century World</td>
</tr>
<tr>
<td>MDES GU4150</td>
<td>Introduction to African Philosophy (Effective beginning Spring 2017)</td>
</tr>
<tr>
<td>CLME GU4225</td>
<td>New Millenium Challenges in Arabic Literary Production (Effective beginning Spring 2019- formerly &quot;Arabic Literary Production&quot;; New title effective Fall 2019)</td>
</tr>
<tr>
<td>CLME GU4226</td>
<td>Arabic Autobiography: Global Dimensions (Effective beginning Spring 2018)</td>
</tr>
<tr>
<td>CLME GU4229</td>
<td>Afro-Mediterranean Cultural Geographies: Ifriqiya-Tunis (Effective beginning Fall 2018))</td>
</tr>
<tr>
<td>CLME GU4231</td>
<td>Cold War Arab Culture</td>
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<tr>
<td>CLME GU4241</td>
<td>Sufism: Primary Texts and Contexts</td>
</tr>
<tr>
<td>CLME G4261</td>
<td>Popular Islam: Asia and Africa</td>
</tr>
<tr>
<td>MDES GU4259</td>
<td>War Narrative: The Arab World (Effective beginning Fall 2019)</td>
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<tr>
<td>CLME GU4262</td>
<td>Themes in the Arabic Novel (Effective beginning Fall 2018)</td>
</tr>
<tr>
<td>MDES GU4266</td>
<td>Decolonizing the Arabian Nights (Effective beginning Fall 2021. Effective Spring 2022- new course number CLME UN3266)</td>
</tr>
<tr>
<td>CLME GU4272</td>
<td>ARABIC LITERATURE AS WORLD LITERATURE (was formerly CLME UN3221- change of course number effective Spring 2020)</td>
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<tr>
<td>MDES G4326</td>
<td>The Armenian Genocide and the Holocaust: Memory and Representation</td>
</tr>
<tr>
<td>MDES GU4637</td>
<td>Cinema and Colonialism in South Asia (Effective beginning Spring 2018)</td>
</tr>
<tr>
<td>Music</td>
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<tr>
<td>MUSI UN2020</td>
<td>Salsa, Soca, and Reggae: Popular Musics of the Caribbean</td>
</tr>
<tr>
<td>MUSI V2430</td>
<td>Listening and Sound in Cross-Cultural Perspective (Effective beginning Fall 2014; formerly MUSI W4430)</td>
</tr>
<tr>
<td>AHMM UN3320</td>
<td>MUSIC IN EAST ASIA</td>
</tr>
<tr>
<td>AHMM UN3321</td>
<td>Introduction To the Musics of India and West Asia</td>
</tr>
<tr>
<td>MUSI GU4466</td>
<td>Sound and Image in Modern East Asian Music (Effective Spring 2017)</td>
</tr>
<tr>
<td>Physics</td>
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</tr>
<tr>
<td>SCNC UN3001</td>
<td>Nuclear Weapons and Nuclear Testing: Marshall Islands (Effective beginning Spring 2021)</td>
</tr>
<tr>
<td>Religion</td>
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<tr>
<td>RELI UN1612</td>
<td>Religion and the History of Hip Hop (Effective beginning Spring 2020)</td>
</tr>
<tr>
<td>RELI UN2205</td>
<td>BUDDHISM: INDO-TIBETAN (effective Fall 2016)</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
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<tr>
<td>RELI UN2305</td>
<td>Islam</td>
</tr>
<tr>
<td>RELI UN2306</td>
<td>Intro to Judaism (Effective beginning Fall 2018)</td>
</tr>
<tr>
<td>RELI UN2405</td>
<td>CHINESE RELIGIOUS TRADITIONS (formerly RELI UN2307)</td>
</tr>
<tr>
<td>RELI UN2308</td>
<td>Buddhism: East Asian</td>
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<tr>
<td>RELI UN2309</td>
<td>Hinduism</td>
</tr>
<tr>
<td>RELI UN2335</td>
<td>RELI IN BLACK AMERICA: AN INTRO (formerly RELI V2645)</td>
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<tr>
<td>RELI UN3303</td>
<td>Judaism and Translation in the Medieval and Early Modern Mediterranean (effective Spring 2017)</td>
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<tr>
<td>RELI UN3407</td>
<td>Muslims in Diaspora (Effective beginning Spring 2016; formerly RELI V3307)</td>
</tr>
<tr>
<td>RELI UN3425</td>
<td>Judaism and Courtly Literature in Medieval and Early Modern Iberia and Italy (Effective beginning Fall 2016)</td>
</tr>
<tr>
<td>RELI Q3511</td>
<td>Tantra in South Asia, East Asia &amp; the West (Effective beginning Spring 2015; formerly RELI V3411)</td>
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<tr>
<td>RELI UN3521</td>
<td>Muslim Masculinities (Effective beginning Spring 2019)</td>
</tr>
<tr>
<td>RELI GU4214</td>
<td>African and North African Philosophy: An Introduction (Effective beginning Summer 2021)</td>
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<tr>
<td>RELI GU4215</td>
<td>Hinduism Here (Effective beginning Fall 2019)</td>
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<tr>
<td>RELI GU4204</td>
<td>Religions of the Iranian World (Effective Spring 2020)</td>
</tr>
<tr>
<td>RELI GU4304</td>
<td>Krishna (Effective beginning Fall 2017)</td>
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<tr>
<td>RELI GU4314</td>
<td>Bhakti Poets (Effective beginning Spring 2022)</td>
</tr>
<tr>
<td>RELI GU4322</td>
<td>Exploring the Sharia: Topics in Islamic Law (Effective beginning Fall 2018)</td>
</tr>
<tr>
<td>RELI GU4418</td>
<td>On African Theory: Religion, Philosophy, Anthropology (Effective beginning Spring 2019)</td>
</tr>
<tr>
<td>RELI GU4999</td>
<td>GLOBAL INDIGENOUS RELIGIOUS HISTORIES (Effective beginning Fall 2020)</td>
</tr>
<tr>
<td>SLCL UN3001</td>
<td>Slavic Cultures</td>
</tr>
<tr>
<td>SLCL UN3100</td>
<td>FOLKLORE PAST # PRESENT (Effective beginning Fall 2021 semester)</td>
</tr>
<tr>
<td>CLRS GU4022</td>
<td>Russia and Asia: Orientalism, Eurasianism, Internationalism</td>
</tr>
<tr>
<td>GEOR GU4042</td>
<td>CLT HERITAGE: A GEOR CASE STUDY (Effective beginning Spring 2017)</td>
</tr>
<tr>
<td>CLRS W4190</td>
<td>Race, Ethnicity, and Narrative, in the Russian/Soviet Empire</td>
</tr>
<tr>
<td>Sociology</td>
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<tr>
<td>SOCI UN3324</td>
<td>Global Urbanism</td>
</tr>
<tr>
<td>Theatre</td>
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</tr>
<tr>
<td>THTR UN3154</td>
<td>Theatre Traditions in a Global Context (formerly THTR UN3000)</td>
</tr>
<tr>
<td>Urban Studies</td>
<td></td>
</tr>
<tr>
<td>URBS UN3351</td>
<td>URBAN ELSEWHERE$: EXPLORING A WORLD OF CITIES (Effective beginning Spring 2021)</td>
</tr>
</tbody>
</table>

### ALL APPROVED COURSES: OFFERED ABROAD

Not all courses are taught each academic year. Below is the full list of all courses offered abroad through Columbia-sponsored programs that are approved for the Global Core Requirement, regardless of semester offered. For more information, consult the Office of Global Programs. Last updated on April 5, 2021.

#### Center for the Study of Ethnicity and Race

- CSER OC3928 Colonization/Decolonization (Effective beginning Summer 2017; taught in Mexico City)

#### Columbia in Amman and Paris: Middle Eastern and North African Studies (MENA) Program


#### Columbia in Amman and Tunis: Middle Eastern and North African Studies

- MENA OC4101 Culture/History Seminar of the Middle East-North Africa Summer Program in Amman & Tunis (Effective beginning Summer 2019)

#### Columbia Global Seminar in Istanbul

Not offered during the Spring 2018 semester

- CLGM OC3920 The World Responds to the Greeks: Modernity, Postmodernity, Globality (Effective beginning Spring 2015; taught in Istanbul)

#### Columbia in London- Queen Mary University

- CLEN OC3500 LONDON IN POSTCOLONIAL FICTION: ‘WE ARE HERE BECAUSE YOU WERE THERE’ (Effective beginning Fall 2018)

#### Latin American and Caribbean Studies (Global Scholars Program)

- LCRS OC3501 Latin American Cities (Effective beginning Summer 2017)
Science Requirement

General Information:
Academic Affairs
202 Hamilton
212-851-9814
cc-academic@columbia.edu

Science Requirement Website

The objective of the science component of Columbia College's Core Curriculum is identical to that of its humanities and social science counterparts, namely to help students “to understand the civilization of their own day and to participate effectively in it.” The science component is intended specifically to provide students with the opportunity to learn what kinds of questions are asked about nature, how hypotheses are tested against experimental or observational evidence, how results of tests are evaluated, and what knowledge has been accumulated about the workings of the natural world.

Three courses bearing at least 3 points each (for a total of at least 10 points) must be completed to meet this portion of the Core Curriculum. All courses used to satisfy the science requirement must be taken for a letter grade.

Students normally take SCNC CC1000 FRONTIERS OF SCIENCE in their first year in the term in which they are not taking ENGL CC1010 University Writing.

For the remainder of the requirement, students may choose any two courses from the list of approved courses below. These courses may be taken in the same department or in different departments. However, at least one course must be taken in the Departments of Astronomy; Biological Sciences; Chemistry; Earth and Environmental Sciences; Ecology, Evolution, and Environmental Biology; Physics; or Psychology.

Students who wish to request an exception to these policies must petition the Committee on Science Instruction (202 Hamilton) prior to their final term at the College.

Guidelines for Courses Approved for the Science Requirement

Unless otherwise indicated, students may not use Barnard College courses to fulfill the Columbia College science requirement.

Students who wish to have a course not included on the lists below count toward fulfilling the science requirement must petition the Committee on Science Instruction (202 Hamilton) prior to registration for the term in which they intend to take the course.

Students should pay careful attention to the prerequisites and instructor approvals required for certain courses. Prerequisite and instructor approval requirements can be found in the course descriptions for each course located in specific departments' sections of this bulletin.

While students are not required to complete a two-term sequence, students may choose to do so. For this reason, the Committee on Science Instruction has indicated recommended sequences below. Unless otherwise noted, the first course in the sequence must be taken before the second course in the sequence.

Courses Designed for Nonscience Majors

Astronomy

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTR UN1234</td>
<td>The Universal Timekeeper: Reconstructing History Atom by Atom</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTR UN1403</td>
<td>Earth, Moon and Planets (Lecture)</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
</tr>
<tr>
<td>------------</td>
<td>------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>ASTR UN1404</td>
<td>STARS, GALAXIES # COSMOLOGY</td>
</tr>
<tr>
<td>ASTR UN1420</td>
<td>Galaxies and Cosmology</td>
</tr>
<tr>
<td>ASTR UN1404 - ASTR BC1753</td>
<td>STARS, GALAXIES # COSMOLOGY and LIFE IN THE UNIVERSE</td>
</tr>
<tr>
<td>ASTR UN1453</td>
<td>Another Earth</td>
</tr>
<tr>
<td>ASTR UN1610</td>
<td>THEOR-UNIVERS: BABYLON-BIG BANG</td>
</tr>
<tr>
<td>ASTR BC1753</td>
<td>LIFE IN THE UNIVERSE</td>
</tr>
<tr>
<td>ASTR BC1754</td>
<td>Stars, Galaxies, and Cosmology</td>
</tr>
<tr>
<td>ASTR UN1836</td>
<td>Stars and Atoms</td>
</tr>
</tbody>
</table>

**Recommended Sequences:**

| ASTR UN1403 - ASTR UN1404 | Earth, Moon and Planets (Lecture) and STARS, GALAXIES # COSMOLOGY     |
| ASTR UN1403 - ASTR UN1420 | Earth, Moon and Planets (Lecture) and Galaxies and Cosmology            |
| ASTR UN1403 - ASTR UN1836 | Earth, Moon and Planets (Lecture) and Stars and Atoms                   |
| ASTR BC1753 - ASTR UN1404 | LIFE IN THE UNIVERSE and STARS, GALAXIES # COSMOLOGY                    |
| ASTR BC1753 - ASTR BC1754 | LIFE IN THE UNIVERSE and Stars, Galaxies, and Cosmology                  |

**Biology**

| BIOL UN1002 | Theory and Practice of Science: Biology                                    |
| BIOL UN1130 | Genes and Development                                                       |

**Computer Science**

| COMS W1001 | Introduction to Information Science                                        |
| COMS W1002 | COMPUTING IN CONTEXT                                                        |

**Earth and Environmental Engineering**

| EAE E2100 | A BETTER PLANET BY DESIGN                                                   |

**Earth and Environmental Sciences**

| EESC UN1001 | Dinosaurs and the History of Life: Lectures and Lab, students will only receive credit for one of these courses: 1001, 1004, 1401 |
| EESC UN1003 | Climate and Society: Case Studies                                           |
| EESC S1004 | Dinosaurs and the History of Life: students will only receive credit for one of these courses: 1001, 1004, 1401 |
| EESC UN1009 | GLOBAL WARMING FOR GLOBAL LEADERS                                          |
| EESC UN1011 | Earth: Origin, Evolution, Processes, Future, students will only receive credit for one of these courses: 1011, 1411 |
| EESC UN1030 | OCEANOGRAPHY                                                                |
| EESC UN1053 | Planet Earth                                                                |
| EESC UN1201 | Environmental Risks and Disasters                                           |

| EESC UN1401 | Dinosaurs and the History of Life: Lectures, students will only receive credit for one of these courses: 1001, 1004, 1401 |
| EESC UN1411 | Earth: Origin, Evolution, Processes, Future: Lectures, students will only receive credit for one of these courses: 1011, 1411 |
| EESC UN1600 | Earth Resources and Sustainable Development                                |

**Ecology, Evolution, and Environmental Biology**

| EEEB UN1001 | Biodiversity                                                                |
| EEEB UN1011 | Behavioral Biology of the Living Primates                                   |
| EEEB UN1010 | Human Origins and Evolution                                                 |
| EEEB S115Q | The Life Aquatic                                                            |

**Recommended Sequences:**

| EEEB UN1001 - EEEB UN3087 | Biodiversity and Conservation Biology (see Additional Courses Approved for the Sequence Requirement) |
| EEEB UN1010 - EEEB UN1011 | Human Origins and Evolution and Behavioral Biology of the Living Primates |

**Electrical Engineering**

| ELEN E1101 | THE DIGITAL INFORMATION AGE                                                |

**Food Studies**

| FSEB UN1020 | Food and the Body (This course is offered through the Ecology, Evolution, and Environmental Biology Department) |
| FSPH UN1100 | FOOD, PUBLIC HEALTH & PUBLIC POLICY                                        |

**Mathematics**

| MATH UN1003 | COLLEGE ALGEBRA-ANLYTIC GEOMTRY                                            |
| PHIL UN3411 | SYMBOLIC LOGIC                                                              |
| PHIL GU4424 | Modal Logic                                                                 |

**Physics**

| PHYS UN1001 | Physics for Poets                                                          |
| PHYS UN1018 | Weapons of Mass Destruction                                                |
| PHYS UN1111 | Origins and Meaning (Effective beginning Fall 2018)                        |

**Psychology**

| PSYC UN1001 | The Science of Psychology                                                 |
| PSYC UN1010 | Mind, Brain and Behavior (Effective Fall 2018, this course will no longer be offered. For students who took this course before Fall 2018, it may be used to partially satisfy the Science Requirement.) |
| PSYC UN1021 | Science of Psychology: Explorations and Applications (Effective beginning Spring 2021) |

**Science**
### Additional Courses Approved for the Science Requirement

Most of the following courses have required prerequisites and/or require instructor approval. Prerequisite and instructor approval requirements can be found in the course descriptions for each course located in specific departments’ sections of the on-line bulletin. Unless otherwise indicated, students may not use Barnard College courses to fulfill the Columbia College science requirement.

#### Astronomy
Any 3-point ASTR course numbered 2000 or higher

#### Biology
Any 3-point BIOL course numbered 2000 or higher

#### Chemistry
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
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<tbody>
<tr>
<td>CHEM UN1403</td>
<td>GENERAL CHEMISTRY I-LECTURES</td>
</tr>
<tr>
<td>CHEM UN1404</td>
<td>GENERAL CHEMISTRY II-LECTURES</td>
</tr>
<tr>
<td>CHEM UN1500</td>
<td>GENERAL CHEMISTRY LABORATORY</td>
</tr>
<tr>
<td>CHEM UN1604</td>
<td>2ND TERM GEN CHEM (INTENSIVE)</td>
</tr>
<tr>
<td>CHEM UN1507</td>
<td>Intensive General Chemistry Laboratory</td>
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Any CHEM course numbered 3000 or higher

#### Computer Science
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
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<tbody>
<tr>
<td>COMS W1004</td>
<td>Introduction to Computer Science and Programming in Java</td>
</tr>
<tr>
<td>COMS W1005</td>
<td>Introduction to Computer Science and Programming in MATLAB</td>
</tr>
<tr>
<td>ENGI E1006</td>
<td>INTRO TO COMP FOR ENG/APP SCI (Effective beginning Spring 2017)</td>
</tr>
<tr>
<td>COMS W1007</td>
<td>Honors Introduction to Computer Science</td>
</tr>
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</table>

Any 3-point COMS course numbered 3000 or higher

#### Earth and Environmental Sciences
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
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<tbody>
<tr>
<td>EESC UN2100</td>
<td>Earth's Environmental Systems: The Climate System</td>
</tr>
<tr>
<td>EESC UN2200</td>
<td>EARTHS ENVIRONMENTAL SYSTEMS: THE SOLID EARTH</td>
</tr>
<tr>
<td>EESC UN2300</td>
<td>Earth's Environmental Systems: The Life System</td>
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#### EESC UN2330
SCIENCE FOR SUSTAINABLE DEVPT
Any EESC course numbered 3000 or higher

#### Ecology, Evolution, and Environmental Biology
<table>
<thead>
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<th>Course Code</th>
<th>Course Name</th>
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<tbody>
<tr>
<td>EEEB UN2001</td>
<td>Environmental Biology I: Elements to Organisms</td>
</tr>
<tr>
<td>EEEB UN2002</td>
<td>Environmental Biology II: Organisms to the Biosphere</td>
</tr>
<tr>
<td>EEEB UN3087</td>
<td>Conservation Biology</td>
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Any EEEB course numbered 3000 or higher except 4321 and 4700

#### History - Applied Math
<table>
<thead>
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<th>Course Code</th>
<th>Course Name</th>
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<tbody>
<tr>
<td>HSAM UN2901</td>
<td>Data: Past, Present, and Future</td>
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</table>

(Effective beginning Spring 2018)

#### Mathematics
<table>
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<th>Course Code</th>
<th>Course Name</th>
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<tbody>
<tr>
<td>CSPH GU4801</td>
<td>MATH LOGIC:COMPLETENESS RESULT</td>
</tr>
<tr>
<td>CSPH GU4802</td>
<td>Math Logic II: Incompleteness</td>
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</table>

#### Physics
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
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<tbody>
<tr>
<td>PHYS UN1201</td>
<td>General Physics I</td>
</tr>
<tr>
<td>PHYS UN1202</td>
<td>General Physics II</td>
</tr>
<tr>
<td>PHYS UN1401</td>
<td>Introduction To Mechanics and Thermodynamics</td>
</tr>
<tr>
<td>PHYS UN1402</td>
<td>INTRO ELEC/MAGNETSM # OPTCS</td>
</tr>
<tr>
<td>PHYS UN1403</td>
<td>Introduction to Classical and Quantum Waves</td>
</tr>
<tr>
<td>PHYS UN1601</td>
<td>Physics, I: Mechanics and Relativity</td>
</tr>
<tr>
<td>PHYS UN1602</td>
<td>Physics, II: Thermodynamics, Electricity, and Magnetism</td>
</tr>
</tbody>
</table>

Any 3-point PHYS course numbered 2000 or higher

#### Psychology
With prior departmental approval, 3- and 4-point courses numbered in the 22xx, 24xx, 32xx, 34xx, 42xx, and 44xx, as well as some additional courses, may partially fulfill the Science Requirement.

#### Statistics
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
</table>
| Any 3-point STAT course except STAT 3997

#### Special Summer Program
The following special program fulfills two of the three terms of the science requirement.

#### Earth Institute Center for Environmental Sustainability
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>EICES</td>
<td>Summer Ecosystem Experiences for Undergraduates (SEE-U). Locations change yearly and there is rolling admissions.</td>
</tr>
</tbody>
</table>

* Please check with EICES for details: [http://eices.columbia.edu/education-training/see-u/](http://eices.columbia.edu/education-training/see-u/)
SUMMER SESSION COURSES
Students who wish to take summer courses may do so through the Summer Session offered by the School of Continuing Education. For policies regarding summer study, see the Academic Regulations—Summer Study section of this Bulletin. For a list of summer courses approved for the science requirement, students should consult the annually updated List of Approved Summer Courses.

PHYSICAL EDUCATION REQUIREMENT

General Information
Physical Education Department
Dodge Physical Fitness Center
212-854-3439

Physical Education Website

Successful completion of two physical education courses is required for the degree. All students are also required to pass a swim test or take beginning swimming for one term to fulfill the swim requirement. A waiver of the swim test requirement may be granted if a student has a disability certified by Columbia Health that precludes swimming. Students may also request waivers and accommodations on the grounds of religious observance or gender identity/expression. All requests for waivers and accommodations are reviewed by the director of physical education.

Students may not register for more than one section of physical education each term.

To pass the course, students must fulfill the attendance and participation requirements outlined by each section and available on the physical education website. Students who are absent more than the permissible number of times are given a mark of W (Withdrawal), unless they complete and file a drop form by the official deadline to drop a course.

No more than 4 points of physical education courses may be counted toward the degree. One course of the physical education requirement may be a Barnard Physical Education course. Two courses of the physical education requirement may be a Barnard Dance/Studio Technique course.

A student who intends to participate in an intercollegiate sport should register for the appropriate section of PHED UN1005 Intercollegiate Athletics. Intercollegiate athletes who attend regularly receive 1 point of credit up to a maximum of 4. Student athletes who leave the team in mid-term but still wish to receive academic credit must notify the Physical Education Office and be placed in another physical education course to complete the attendance requirement. Student athletes are also responsible for fulfilling the swim requirement.

ELIGIBILITY FOR INTERCOLLEGiate ATHLETICS

Any student in the College who is pursuing the undergraduate program or a combined program toward a first degree is eligible for intercollegiate athletics. To be eligible for athletic activities, the student must make appropriate progress toward the degree as defined by the NCAA, the Ivy League, and Columbia University. These criteria are monitored by the Center for Student Advising and certified by the Office of the Registrar.

Questions about athletic eligibility should be referred to the appropriate advising dean or the compliance office in the Department of Intercollegiate Athletics and Physical Education.

For more information, visit www.gocolumbialions.com.
ACADEMIC REGULATIONS

POINTS PER TERM

Every Columbia College student must complete 124 points of academic credit to earn the B.A. degree from Columbia College. To complete this number of credits over 8 semesters, students will need to complete an average of 15.5 credits per semester, which typically represents 4 to 5 academic courses per term.

A full-time course load is defined as an academic program carrying 12-18 points per semester.

All Columbia College students are required to be full-time students and must therefore be registered for a minimum of 12 points of credit per term.

- Columbia College students are not permitted to enroll as part-time students, and any student who has not registered for at least 12 points of credit by the end of the Change of Program period may be withdrawn from Columbia College.
- Students in their final term who need fewer than 12 points of credit to complete their degree requirements may petition the Committee on Academic Standing to register for fewer than 12 points and should consult with their advising deans in the Berick Center for Student Advising. If they are approved to take fewer than 12 points of credit, they will still be considered full-time students of Columbia College and be responsible for all relevant tuition and fees.
- Students may not enroll in more than 18 points of credit unless they petition the Committee on Points in the Berick Center for Student Advising and receive permission to do so. Students in their first semester at Columbia (i.e., first-year students and new transfer students in their first semester) may not petition to register for more than 18 points.

Attendance

Attendance in all class meetings, laboratory periods and other required events for a course is a basic expectation of all students enrolled in the course, whether or not attendance is noted as a requirement on a course syllabus.

Instructors may take attendance into account in assessing a student’s performance. In many courses, particularly those with a participation requirement, multiple absences could lead to a failing grade for the course, even before the conclusion of the semester. Students are accountable for absences that result from enrolling in a course after the semester begins. For related information about attendance, see Columbia University Policies—Religious Holidays.

LENGTH OF CANDIDACY

Students are expected to earn the Bachelor of Arts (B.A.) degree at Columbia College in 8 Fall and Spring semesters.

Students may continue to take required coursework for the B.A. degree past the eighth semester only with permission from the Committee on Academic Standing, after first discussing such requests with their advising deans in the Berick Center for Student Advising. Study beyond the eighth term is granted only for students who have found themselves in emergent circumstances beyond their control which have prevented them from completing the degree in eight terms. Study beyond the eighth term is not granted for the purposes of changing or adding a major or concentration.

REGULATIONS FOR TRANSFER STUDENTS

Regulations on Transfer Credit

In order to receive the Columbia College degree, transfer students must complete a minimum of 60 points while enrolled in the College (including credits earned on Columbia-sponsored study abroad programs). Transfer students may apply a maximum of 64 points taken elsewhere toward advanced standing at the College. Credit granted on the basis of Advanced Placement, International Baccalaureate and other standardized examinations is counted toward the 64-point maximum, as are credits earned on study-abroad programs outside of Columbia. Credit is not granted for college courses taken while in high school.

Credit Toward the Degree and Core/Major Requirements

Transfer students receive credit for non-Columbia courses that are substantially similar to Columbia College courses only when the grades received are C- or better. Once a transfer student is admitted, a credit review is conducted by the Berick Center for Student Advising and a tentative credit evaluation is sent to the student. A final credit evaluation is conducted once the student has matriculated at Columbia College and has submitted a final official transcript for coursework taken elsewhere. Course descriptions and syllabi requested by Columbia College in order for certain courses to be considered for transfer credit and/or for certain courses to be considered for exemption to Columbia College requirements. Transfer students should consult with their advising deans in the Berick Center for Student Advising, where all appropriate approvals will be coordinated with the relevant academic departments.

Degree Completion

Transfer students are expected to complete the requirements for the B.A. degree in eight Fall and Spring semesters, including terms completed at other colleges or universities before entering Columbia. Transfer students cannot petition for extended time to complete the degree.
Some majors may be difficult for transfer students to complete due to the number of credits required, the specific course sequencing, and the number of terms remaining for transfer students to complete all Core and major requirements. There is no guarantee that a transfer student can complete every major and concentration offered, and all transfer students must declare a major or concentration that they are capable of completing in the time available to them while at Columbia College.

Study beyond the eighth term is not granted for the purposes of changing or adding a major or concentration. Therefore, transfer students should be especially careful when planning their academic schedules and are strongly urged to do so with the guidance of their advising deans in the Berick Center for Student Advising and the relevant departmental Directors of Undergraduate Studies.

PROGRESS TOWARD THE DEGREE
At the end of each Fall and Spring semester, the Committee on Academic Standing reviews the records of all students enrolled in Columbia College to determine student standing, and to determine whether academic action is warranted—including academic warning, academic probation, suspension and dismissal.

Academic Probation
Students may be placed on academic probation for the following reasons:

- completing fewer than the required minimum of 12 points of credit in a term;
- earning a term or cumulative grade point average below 2.0;
- failing a Core Curriculum class; or
- failing to complete Literature Humanities, University Writing, or Frontiers of Science in their first year.

Students may also be placed on academic probation for failing to make satisfactory progress toward the degree (i.e., taking less than an average of 15.5 points per term).

Students are expected to complete their degrees in eight semesters. Students who do not make adequate progress toward the degree may be placed on academic probation. Adequate progress toward the degree is defined according to cumulative earned credits, as noted by the number of credits listed in the column of the chart below titled “Threshold for Academic Probation.”:

<table>
<thead>
<tr>
<th>Semester</th>
<th>Points for typical progress</th>
<th>Threshold for academic probation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>12</td>
<td>&lt;12</td>
</tr>
<tr>
<td>2</td>
<td>31</td>
<td>&lt;24</td>
</tr>
<tr>
<td>3</td>
<td>46</td>
<td>&lt;38</td>
</tr>
<tr>
<td>4</td>
<td>62</td>
<td>&lt;52</td>
</tr>
<tr>
<td>5</td>
<td>77</td>
<td>&lt;70</td>
</tr>
<tr>
<td>6</td>
<td>93</td>
<td>&lt;88</td>
</tr>
</tbody>
</table>

Students may not appeal the actions of academic warning or academic probation.

The action of academic warning does not remain on a student’s record. The action of academic probation remains on a student’s record for internal use only. The status of Academic Probation is not noted on students’ transcripts.

Students who are on academic probation are not eligible to study abroad.

Students and parents/guardians are notified when students are placed on academic probation or suspension. The advising deans in the Berick Center for Student Advising provide support to help students who are on academic action return to good standing.

Academic Suspension/Dismissal
Students who fail to improve after being on academic probation, as well as students with extremely poor records during a single term, may be suspended and required to withdraw from Columbia College for at least one year. Conditions for readmission are specified at the time of suspension. If a student is readmitted after having been suspended and again fails to achieve satisfactory grades or to make normal progress toward the degree, the student may be dismissed from the College.

Students are notified by email and express mail of the actions of suspension or dismissal, and they will have a limited time in which to appeal the decision. The decision of the appeals committee is final.

The actions of academic suspension or academic dismissal remain on students’ records and are recorded on the students’ transcripts. Parents and/or guardians are notified when students are suspended or dismissed for academic reasons.

International students with F-1 or J-1 status are not allowed to remain in the United States while suspended or dismissed from the University. Any international student who is dismissed or suspended should immediately contact the International Students and Scholars Office (ISSO) to discuss available options.

EXAMINATIONS
Midterm Examinations
Midterm examinations are given during the course of each term.

Midterm examinations are scheduled by each instructor, based on the pedagogical structure of a course. Therefore, while many midterm exams may be scheduled around the mid-point of a term (e.g., late October or mid-March), midterm exams may also fall earlier or later in the term, and a course may require multiple exams during the course of the semester. Students should consult
the syllabus of each course in which they are registered for the schedule of required midterm exams.

Final Examinations

Final examinations are given at the end of each term.

Exams are scheduled according to a University-wide Final Exam Schedule available shortly after midterms. The definitive schedule of final examinations is usually available in early November for the Fall term and early April for the Spring term. Prior to its availability, students and faculty should consult the Projected Exam Schedule. Students may access their individual exam schedule in SSOL by clicking on “Schedule,” then "My Exam Schedule."

Students who have trouble locating a class on either the University-wide Final Exam Schedule or on their individual SSOL exam schedule should contact the instructor to make sure the class has an exam.

Rescheduling Exams

Under certain rare circumstances, it may be necessary for an instructor to reschedule a final exam. Any change to the day or time assigned by the Master University Examination Schedule must be agreed upon by the instructor and the students enrolled in the class. All students unable to take the exam at the new agreed-upon time must be given a make-up exam at a time that they are able to attend.

Examinations will not be rescheduled in order to accommodate students’ travel plans. Students should not make travel plans for holidays or breaks until they are certain that they will be present for all required exams.

Student Examination Conflicts

Students may request a change of schedule for a final exam under either of the following two circumstances:

1. if a student is enrolled in two or more classes whose final exams are scheduled by the Master University Examination Schedule to be held at the same time;

2. if a student has three exams scheduled on any given calendar day (i.e., between 9:00 a.m. and 10:00 p.m. on the same calendar date).

Students in either circumstance should meet with their advising deans in the Berick Center for Student Advising as soon as possible after the final exam schedule is published in order to initiate the process for arranging a make-up exam.

Failure to Complete a Final Exam

If a student does not take a final exam, or begins but does not complete a final exam, a grade of zero or F may be factored for that portion of the final grade. Make-up examinations are not guaranteed for any student who does not take or does not finish a final exam.

Incompletes

Students facing medical, personal, or family emergencies at the time of a final exam or at the due date of a final paper or project may petition the Committee on Academic Standing for permission to complete the final exam, paper, or project at a later date. Students will receive a temporary mark of IN (Incomplete) until the work is completed. For more information, see the Grades section of this Bulletin.

Grades

Columbia College uses the following system of grading: A, excellent; B, good; C, fair; D, poor but passing; F, failure (a final grade, not subject to reexamination). The grades of A, B, and C may be modified by a plus or minus. Pass (P) is awarded when students receive a C- or higher in a course which they have elected to take on a Pass/D/Fail basis, or when they have passed a course that is offered only on a Pass/Fail basis.

The Committee on Instruction of Columbia College has instructed the Registrar to calculate a cumulative grade point average for external purposes, such as official transcripts. The Registrar also calculates term and cumulative grade point averages for internal purposes, such as determining eligibility for the Dean’s List.

When the Registrar computes a student’s Columbia College grade point average, only grades earned while enrolled in Columbia College in the Fall and Spring terms (including Columbia-owned study abroad programs), and in the Columbia School of Professional Studies in the Summer Sessions, are counted. Courses are weighted according to the number of credits.

The following scale is used:

<table>
<thead>
<tr>
<th>Grade</th>
<th>GPA Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>4.33</td>
</tr>
<tr>
<td>A</td>
<td>4.0</td>
</tr>
<tr>
<td>A-</td>
<td>3.67</td>
</tr>
<tr>
<td>B+</td>
<td>3.33</td>
</tr>
<tr>
<td>B</td>
<td>3.0</td>
</tr>
<tr>
<td>B-</td>
<td>2.67</td>
</tr>
<tr>
<td>C+</td>
<td>2.33</td>
</tr>
<tr>
<td>C</td>
<td>2.0</td>
</tr>
<tr>
<td>C-</td>
<td>1.67</td>
</tr>
<tr>
<td>D</td>
<td>1.0</td>
</tr>
<tr>
<td>F</td>
<td>0</td>
</tr>
</tbody>
</table>

The Pass/D/Fail Option

The purposes of the Pass/D/Fail option are to encourage students to take courses of interest to them outside of their field of specialization and to permit those who have not decided upon a major to test their talents in a particular field that may be of interest. Instructors are not informed if a student in their classes elect to use the Pass/D/Fail option. Students who wish to utilize
the Pass/D/Fail option can do so in Student Services Online (SSOL).

In order to encourage students to engage more fully in the courses they elect to take for a grade of Pass/D/Fail, students are allowed to uncover a grade of Pass in SSOL until the end of the Change of Program period of the following semester. Students have until the end of the Change of Program period in the Spring semester to uncover the grade of a course taken in the previous Fall term, and until the end of the change of program period in the Fall semester to uncover the grade of a course taken in the previous Spring or Summer term. Seniors who graduate in May have until June 1 to uncover the grade of a course taken in their final Spring semester. Students who wish to uncover a grade of Pass can do so in Student Services Online (SSOL).

The grade of Pass is not included in the calculation of grade point averages; the grades of D and Fail are included in the calculation of grade point averages.

The Pass/D/Fail option cannot be utilized for courses taken in fulfillment of the Core Curriculum or, for the most part, for courses taken in fulfillment of a major or a concentration.

For Fall 2021, the deadline for declaring the Pass/D/Fail option for a course was extended to December 15, 2021, the end of the reading period.

- Students were able to elect the Pass/D/Fail option for one class in this semester without restriction — i.e., the course chosen for this grading option could fulfill a requirement for the Core Curriculum; a requirement for a major, concentration, or special concentration; or an elective.
- The usual policy for lifting a “P” to uncover a grade continued. Students were able to see their assigned grade for the course in question in SSOL and decide by the end of the second week of the Spring 2022 semester (January 28, 2022) whether to uncover the grade or let the “P” remain on the transcript permanently.
- Other policies governing the use of the Pass/D/Fail option remained in place.

For Spring 2022, the deadline for declaring the Pass/D/Fail option was extended to Monday, May 2, 2022, the last day of classes for Spring 2022.

- Other than the change to the deadline for declaring, typical policies regarding the Pass/D/Fail option remained in place. Students could use the Pass/D/Fail option for a maximum of one class in the Spring 2022 semester, and the Pass/D/Fail option could not be used for a class required for a major or concentration and could not be used for a class required for the Core Curriculum.
- The usual policy for lifting a “P” to uncover a grade continued. Students were able to see their assigned grade for the course in question in SSOL and decide by the end of the second week of the Fall 2022 semester (September 16, 2022) whether to uncover the grade or let the “P” remain on the transcript permanently.

- Special Note: If students were enrolled in Fall 2021 in a course that could not be completed because of the graduate student strike, and were required to do work for the course assigned after the completion of the Fall semester (i.e., any time after January 2), the students could choose to declare retroactively the Pass/D/Fail option for the course—if they had not already used the Pass/D/Fail option for another Fall course. The policies for the Pass/D/Fail option that were determined for Fall 2021, as noted in the Columbia College Bulletin, apply to any Fall 2021 course, regardless of when the declaration is made.

The Committee on Instruction continues to monitor the student academic experience on campus, and typical policies and procedures will be in place after the completion of the Spring 2022 semester.

The Grade of D

As noted above, the grade of D is considered “poor but passing.” Therefore, no more than six points of credit earned with the grade of D may be credited toward the degree in any academic year, and no more than a cumulative total of 12 points of credit earned with the grade of D may be credited toward the 124 credits required for the degree credit. These credits will be given only for courses taken at Columbia; transfer credit will not be awarded for courses taken elsewhere with a grade of D. The decision as to whether or not a D may be used to satisfy the requirements for a major or concentration is made in each relevant academic department. In any given semester, the grade of D precludes the attainment of Dean’s List status (see Academic Honors, Prizes, and Fellowships—Dean’s List). The Mark of W (Withdrawal)

Students may drop a course from their academic programs by the fifth week of the semester, as long as they keep a program that carries a minimum of 12 points of credit. After the fifth week of the term and until the tenth week of the term, if a student has a compelling reason to stop taking a course, the student can withdraw from the course.

If a student withdraws from a course, the transcript will show a mark of W, indicating official withdrawal from that course after the drop deadline. This notation is permanent and will remain on the transcript even if the student repeats the course. No points of academic credit are earned for classes in which they receive the mark of W. In any given semester, the mark of W precludes the attainment of Dean’s List status (see Academic Honors, Prizes, and Fellowships—Dean’s List).

When considering the option to withdraw from a course, students should be aware that, in order to remain in good academic standing, they must successfully complete no fewer than 12 points in a given term. Students who do not earn at least 12 points per term will face academic action, such as academic
probation, suspension, or dismissal. Students who do not make adequate progress toward the degree (an average of 15.5 points per term) may also face academic probation, suspension, or dismissal.

To withdraw from a class, students must first meet with their advising deans in the Berick Center for Student Advising, 403 Lerner, to discuss their plans and then submit a Columbia College Acknowledgment of Course Withdrawal form to their advising deans. A withdrawal will be official only after these steps are taken; failure to attend classes does not constitute dropping or withdrawing from a course, nor does a communication to the instructor. Students who stop attending classes without dropping or officially withdrawing are assigned the letter grade earned by factoring a zero or F for any missing work.

For Fall 2021, the deadline to withdraw from a course was extended to Monday, December 6, 2021, one week before the last day of classes.

For Spring 2022, the deadline to withdraw from a course was extended to Monday, April 25, 2022, one week before the last day of classes.

The Committee on Instruction continues to monitor the student academic experience on campus, and typical policies and procedures will be in place after the completion of the Spring 2022 semester.

The Mark of AR (Administrative Referral)
The AR is a temporary notation for the transcript when an instructor needs additional time and/or additional consultation in order to determine a student’s final grade for a course. The submission of an AR grade will alert the appropriate advising dean in the Berick Center for Student Advising, who will consult with the instructor to help determine what final grade is appropriate. The course instructor has ultimate authority over the final grade awarded.

The AR notation is also used while a student applies for an Incomplete. If the Incomplete is approved, the instructor will submit a mark of AR for the student, which will subsequently be altered to an IN by the Berick Center for Student Advising.

The Mark of IN (Incomplete)
The IN is a temporary notation for the transcript approved by the Committee on Academic Standing for students who, due to serious extenuating circumstances, cannot complete their coursework or are unable to take a final examination by the end of the term. An IN is typically granted only in cases of severe illness (as certified by a healthcare practitioner or by Columbia Health) or extreme personal or family emergencies.

Students will be granted an IN only by first speaking with their advising deans and then filing a petition with the Committee on Academic Standing. Petition forms are available in the Berick Center for Student Advising. For classes that require a final paper or project, petitions must be submitted no later than the last day of classes. For classes that require a final examination, petitions must be submitted no later than the day before the exam.

To be granted an IN, students should have completed all work for the relevant class with the exception of the final paper, project or exam. If a student has additional uncompleted work in the class in addition to the final paper, project, or exam, an IN will not be granted.

Students may not arrange unofficial incompletes or extended deadlines simply through consultation with their instructors; any incomplete must be officially approved by the Committee on Academic Standing. If an instructor is willing to entertain an incomplete, pending approval by the Committee on Academic Standing, the instructor should submit an AR, along with a contingency grade that represents the grade that the student should be given at the time of submission—i.e., the grade that would be earned based solely on work completed at the time of submission, assuming no further work were to be completed during the period allotted by the incomplete.

Students who are granted an IN are assigned a deadline for completion of the incomplete paper or project or a date by which a deferred examination must be taken. Those who fail to meet the assigned deadline or who miss the deferred examination will receive the contingency grade indicated by the instructor. All other marks of IN that remain unresolved by the end of one calendar year will be converted to the contingency grade. Questions about incompletes may be directed to the advising deans in the Berick Center for Student Advising.

Students who receive the grade of IN, approved in advance by the Committee on Academic Standing, may be considered for Dean’s List only after all IN grades are changed to letter grades (see Academic Honors, Prizes, and Fellowships—Dean’s List).

The Mark of R (Registration Credit)
An R indicates regular attendance and participation in a course without the submission of work for evaluation (i.e., auditing a course). The R credit option is available only to Columbia College seniors.

Students who take a course for R credit must have the permission of both the instructor and the Committee on Academic Standing in the Berick Center for Student Advising. No point credit is given for R credit, and an R has no role in the calculation of a student’s GPA. The deadline for registering for R credit is the same deadline to elect the Pass/D/Fail option for a class, as specified on the Academic Calendar in this Bulletin. Registering for R credit is allowed only when:

1. the courses are taken in the last two terms of the student’s attendance in Columbia College;
2. the courses are not used to fulfill a requirement for the B.A. degree;
3. the credit for courses for R credit will be in excess of the 124 points required for the B.A. degree; and
4. the student has the permission of the Committee on Academic Standing and the instructor.

Students may be required to complete certain work for R credit as specified by that instructor. The exact nature of the work should be determined by the instructor when the student petitions for an R for the course. An instructor may fail a student who has not completed the assigned work.

The Mark of YC (Year Course)
The YC is a notation given at the end of the first term of a year-long course in which the full year’s work must be completed before a qualitative grade can be assigned. The YC notation for the first term must be approved by the Berick Center for Student Advising, so the instructor will submit a notation of AR[YC], which will be converted to a YC upon request by the instructor. The final grade given at the end of the second term of the year-long course is the grade for the entire course; therefore, when the final grade is assigned at the end of the second term, the YC for the first term of the course will be replaced by the same grade. In any given semester, the mark of YC precludes the attainment of Dean’s List status until the grade for the entire year’s coursework is awarded (see Academic Honors, Prizes, and Fellowships—Dean’s List).

The Mark of CP (Credit Pending)
For the Fall of 2021, the mark of CP (Credit Pending) signifies that instruction and/or grading in a course have not been completed. The grade of CP is a temporary transcript notation and will be replaced by an evaluative letter grade once instruction and grading are completed. Satisfactory progress by the student is implied.

Report of Grades
Grades are available to view on Student Services Online (SSOL) on the first business day after they are submitted by the instructor. Paper and electronic transcripts may be ordered by currently enrolled students via SSOL. Students who find discrepancies in, or have questions about their records should contact their academic advisor.

LANGUAGE PLACEMENT EXAMINATIONS
Students who wish to begin language studies at a level above “Elementary I” (or its equivalent) should plan to take a placement exam in the relevant Columbia language program. Most placement exams take place during the New Student Orientation Program (NSOP), and exact times and dates of exams will be provided to students shortly before NSOP begins. Returning students who wish to take a placement exam but who are not participating in NSOP should contact the relevant Columbia departments before the beginning of each term to inquire about other placement exam options.

First-year students can also be placed into upper levels of French, German, Hebrew, Italian, Japanese, Korean, Latin, or Spanish on the basis of scores on SAT II: Subject Tests or Advanced Placement examinations. Students with scores on these exams should consult their advising dean in the Berick Center for Student Advising and should ensure that the scores have been sent through official channels to Columbia College.

ADVANCED STANDING
All entering first-year students are subject to the rules for first-year students, regardless of any credits they have earned before matriculation at Columbia College through approved advanced standing programs.

The College grants credit for up to one semester (16 points) of college-level work completed before matriculation at Columbia College. This work may be done under the College Board Advanced Placement (AP) Program, GCE Advanced Level Examinations, International Baccalaureate Examination, or other national systems.

Advanced credit is awarded upon completion of the first year at Columbia, and is determined in accordance with College and departmental policies. Students wishing to arrange such credit must meet with their advising dean in the Berick Center for Student Advising and provide the relevant transcript/certificate.

Entering first-year students are not granted credit for courses taken at other colleges or universities before their graduation from secondary school. Students may receive a maximum of 6 points of credit for college courses taken after graduation from secondary school and prior to matriculation at Columbia. In order to receive this credit, students must submit an official university or college transcript and the syllabus for each relevant course taken elsewhere to their advising deans in the Berick Center for Student Advising. Final determination will be made by the dean of advising.

Students who wish to receive advanced credit or exemption for the language requirement may not take courses at Columbia that cover similar or more basic material than the advanced work already completed. Nor may students receive credit for two exams that cover the same material (e.g., Calculus AP and Mathematics GCE Advanced Level Exam). In some cases, credit is awarded only when students successfully complete a higher-level course in the same field of study.

For information about advanced standing for transfer students, see Academic Regulations—Regulations for Transfer Students.

ADVANCED PLACEMENT (AP) EXAMINATIONS
Students can earn a maximum of 16 points of credit earned through college-level coursework taken as part of a high school curriculum prior to matriculation at Columbia.
Each year, individual departments review the College Board AP curriculum and determine appropriate placements, credit, and/or exemptions.

Students entering in the 2021–2022 academic year may be awarded AP credit for the following subjects and should refer to the relevant department sections in this Bulletin for specific information on credit granted, placement, and exemptions:

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<th>Subject</th>
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<tr>
<td>Biology</td>
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<td>Chemistry</td>
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<td>Computer Science</td>
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<td>Economics</td>
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<td>English</td>
<td>English and Comparative Literature</td>
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<td>French</td>
<td>French and Romance Philology</td>
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<td>German</td>
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<td>Government and Politics</td>
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<td>Spanish</td>
<td>Latin American and Iberian Cultures</td>
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<td>Statistics</td>
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College Board Advanced Placement (AP) scores cannot be used toward exemption from any of the shared Core Curriculum courses, the Global Core Requirement, or the Science Requirement. AP scores may be used toward satisfying the Foreign Language Requirement (see The Core Curriculum—Foreign Language Requirement).

Students who wish to receive advanced credit or exemption for the language requirement may not take courses at Columbia that cover similar or more basic material than the advanced work already completed. For further information, students should consult with their advising dean in the Berick Center for Student Advising.

**BRITISH ADVANCED LEVEL EXAMINATIONS**

Students can earn a maximum of 16 points of credit earned through college-level coursework taken as part of a British Advanced Level (A-Levels) high school curriculum prior to matriculation at Columbia.

Entering students are granted six points of credit for each grade of A or B on A-Levels examinations, if taken in disciplines offered as undergraduate programs at Columbia College.

A-Levels scores cannot be used toward exemption from any of the shared Core Curriculum courses, the Global Core Requirement, or the Science Requirement. A-Levels scores may be used toward satisfying the Foreign Language Requirement (see The Core Curriculum—Foreign Language Requirement).

Students who wish to receive advanced credit or exemption for the language requirement may not take courses at Columbia that cover similar or more basic material than the advanced work already completed. For further information, students should consult with their advising dean in the Berick Center for Student Advising.

**OTHER NATIONAL SYSTEMS**

Students can earn a maximum of 16 points of credit earned through college-level coursework taken as part of a high school curriculum prior to matriculation at Columbia.

Pending review by the appropriate academic department at Columbia, students who complete secondary school work in other national systems may be granted credit in certain disciplines for sufficiently high scores. For further information, students should consult with their advising deans in the Berick Center for Student Advising.

**INTERNATIONAL BACCALAUREATE**

Students can earn a maximum of 16 points of credit earned through college-level coursework taken as part of an International Baccalaureate (IB) high school curriculum prior to matriculation at Columbia.

Entering students are granted six points of credit for each score of six or seven in IB Higher Level examinations, if taken in disciplines offered as undergraduate programs at Columbia College.

IB scores cannot be used toward exemption from any of the shared Core Curriculum courses, the Global Core Requirement, or the Science Requirement. IB scores may be used toward satisfying the Foreign Language Requirement (see The Core Curriculum—Foreign Language Requirement).

Students who wish to receive advanced credit or exemption for the language requirement may not take courses at Columbia that cover similar or more basic material than the advanced work already completed. For further information, students should consult with their advising dean in the Berick Center for Student Advising.

**COURSES TAKEN IN OTHER COLUMBIA UNDERGRADUATE SCHOOLS**

Columbia College students may take any course for credit listed in this Bulletin or in the course catalogues of Barnard College and the School of General Studies without any special approval for enrollment, unless so indicated in the descriptions of the relevant course, department and/or program.

Columbia College students may take a maximum of four courses for credit offered by the Fu Foundation School of Engineering
and Applied Science on a space-available basis. This four-course limit does not apply to courses offered by the Computer Science Department, nor does it apply to students in the 3-2 Combined Plan program.

COURSES TAKEN IN THE GRADUATE SCHOOL OF ARTS AND SCIENCES

Columbia College students may take courses offered by the Graduate School of Arts and Sciences if they receive the permission of the instructor of the course, as well as the director of undergraduate studies in the department in which the course is taught. Students will typically be required to have previous coursework in the field or topic of the courses.

If students enrolled in graduate-level courses wish to use the courses to fulfill requirements for a major or concentration, they must receive permission from the director of undergraduate studies in the department of their major or concentration.

COURSES TAKEN IN OTHER DIVISIONS OF THE UNIVERSITY

Columbia College students may take a maximum of four courses for credit in the professional schools at Columbia University listed below, with permission. These courses will count as elective credit toward the 124 points necessary for the B.A. degree.

Columbia College students may also take courses in the professional schools at Columbia University listed below for credit that goes beyond the 124 points necessary for the B.A. degree, if they receive permission to do so from their advising deans from the Berick Center for Student Advising.

Columbia College students enrolled in courses in these professional schools must follow the policies established by those schools; they must have the permission of the instructor of the course to enroll; and, in some instances, they must have the permission of the school in which the course is offered.

Following is a list of schools and programs that allow undergraduates to register for courses, with their policies regarding the enrollment of Columbia College students. Students who wish to take a course in a Columbia school not listed below should first consult with their advising deans in the Berick Center for Student Advising.

Columbia University School of the Arts

Qualified Columbia College students may enroll in graduate courses offered by the School of the Arts on a space-available basis.

Columbia Business School

The Business School offers courses that are designed specifically for undergraduates, which are listed in the section of this Bulletin titled Departments, Programs, and Courses—Business. Columbia College seniors may be able to take other Business School courses on a space-available basis if they have completed the required prerequisites. These courses do not count towards the limit of four professional school courses that can be taken for credit towards the Columbia College degree.

Students must follow the cross-registration guidelines of the Business School. Please note that registration deadlines for these classes are often earlier than the College registration and Change of Program deadlines.

Columbia University School of Professional Studies

Columbia College students are not permitted to enroll during the academic year—i.e., Fall and Spring terms—in courses offered through the School of Professional Studies, unless those courses have been approved by the Committee on Instruction.

The School of Professional Studies (SPS) is responsible for the Summer Session at Columbia University. For information on taking courses at Columbia during the summer, please see the Summer Study section. Please note that not all summer courses offered by SPS in Summer Session will count towards the 124 credits required for the B.A. Students interested in summer courses offered by the SPS should consult with their advising deans in the Berick Center for Student Advising before completing their enrollment.

Columbia University School of International and Public Affairs

The School of International and Public Affairs (SIPA) offers Open Enrollment Courses to all Columbia students on a space-available basis. Students interested in registering for a SIPA Open Enrollment Course at the 6000-level or above must receive instructor permission and then should complete and submit, along with documentation indicating instructor permission, a SIPA registration request form to the SIPA Registration office on the 6th floor of the International Affairs Building. If the class is not full, approval will be granted.

Columbia University School of Journalism

Columbia College students may enroll in certain courses offered by the School of Journalism on a space-available basis. Students must have signed permission from the School of Journalism's
Columbia Law School

In general, Columbia College students are not permitted to enroll in courses offered through the Law School. Exceptions to this policy may be granted under the following circumstances:

1. Law School courses may be taken by students in the Accelerated Interdisciplinary Legal Education (AILE) program. Students must have signed permission from the Law School Office of the Assistant Dean of Academic Services, 500 William and June Warren Hall.
2. Faculty in the Law School sometimes open a small number of spaces in their seminars to Columbia College seniors, to be selected through an application process. Such opportunities will be shared with students as they become available.

Columbia Mailman School of Public Health

The Mailman School of Public Health offers courses designed for undergraduates through the Special Concentration in Public Health. Qualified Columbia College students may enroll in other courses offered by the Mailman School of Public Health on a space-available basis with the permission of the relevant Mailman department. Students must complete the Public Health Cross Registration Application Form and receive signed permission from the department, as well as from the School of Public Health's Office of Student Affairs, 722 West 168 Street, Suite 1014. Once School of Public Health permissions are secured, students must also receive signed permission from the Berick Center for Student Advising, 403 Lerner, before proceeding to register for the course at the Registrar's Office, 205 Kent.

Columbia University School of Social Work

Columbia College students may enroll in courses offered by the School of Social Work on a space-available basis.

Teachers College, Columbia University

In general, Columbia College students may not enroll in courses offered by Teachers College. Exceptions to this policy may be granted under the following circumstances:

1. In rare instances, a student’s faculty adviser may deem a course offered by Teachers College as essential to the student’s undergraduate major or concentration. Students with such permission from their faculty adviser should submit a petition to Larry Jackson, the Associate Dean of Academic Affairs, Core Curriculum, and Undergraduate Programs of Columbia College, 202 Hamilton.
2. In certain instances, instrumental music instruction in a particular instrument may be available at Teachers College and not through the Music Department. If students are accepted into the music instruction program at Teachers College, they will be charged per credit for the course over and above their Columbia tuition. Students should submit a petition to Andrew Plaa, Dean of Advising in the Berick Center for Student Advising, 403 Lerner.

SUMMER STUDY

Columbia Summer

The Columbia University School of Professional Studies (SPS) is responsible for Columbia Summer, and students who enroll in summer courses offered by SPS are subject to the policies and procedures of SPS, which may differ from the policies and procedures that govern their undergraduate coursework in Fall and Spring semesters. Columbia College students interested in summer coursework should consult their advising dean in the Berick Center for Student Advising for information on the different policies and procedures governing Columbia Summer.

Not all courses offered in the Summer Session are accepted by Columbia College for credit. Students should also consult the annually updated List of Approved Summer Courses.

Normally, Columbia College students may earn credit toward the B.A. through summer coursework only for courses taken in the Columbia Summer. Columbia College students may enroll in a maximum of 8 points of credit in any Columbia Summer session (or in overlapping sessions), and may earn a maximum of 16 credits in any Columbia Summer term.

Columbia College students enrolled in coursework in Columbia Summer may utilize the Pass/D/Fail option only under the following circumstances:

- Columbia College students may utilize the Pass/D/Fail option a maximum of twice during a year that spans Fall, Spring, and Summer. Students have the opportunity to use the Pass/D/Fail option one time during the Fall semester and one time during the Spring semester.
- Students who have not utilized one or both of these Pass/D/Fail option(s) in the previous academic year may elect, in the summer immediately following, to take one course in a Summer session on a Pass/D/Fail basis.
- For additional information on and restrictions governing Pass/D/Fail credit, see the Academic Regulations—Exams and Grades section of this Bulletin.

Students who wish for summer coursework to count toward their major or concentration should receive permission from the director of undergraduate studies of their major department.

Summer Study Outside Columbia University

In general, Columbia College students may not take courses toward the B.A. degree during the summer at another college or university outside Columbia University except in the case of approved study abroad programs.
In some circumstances, permission may be granted to students to take courses in the summer toward the B.A. during the summer at another college or university. Those circumstances include the following:

- A student has fallen behind in credits and wishes to catch up on coursework in order to make adequate progress toward the degree in the expected 8 semesters.
- A student wishes to take a course that is a prerequisite for a course that should be taken in the following fall for the student’s major or concentration.
- A student wishes to take a language course toward the Foreign Language requirement. Students should note that introductory and intermediate language courses are only approved pending the successful completion of the departmental placement test into the next higher level language course. Students are responsible for arranging departmental testing upon return to campus in the Fall. If students do not place into the next level of the language course, credit will not be granted. Students who elect to discontinue study of the language or do not take the relevant departmental placement test will not be granted credit for the summer courses taken.

Students who wish to take summer coursework in one of the above categories should discuss their study plans with their advising dean in the Berick Center for Student Advising. Students should then go through the following steps for approval for summer coursework taken elsewhere:

1. Obtain a copy of Columbia College's Pre-Approval for a Course Taken at Another U.S. Institution form, available in the Berick Center for Student Advising, 403 Lerner.
2. Carefully read the following procedures to apply for such credit.
3. Complete the approval request form, outlining their reasons for taking summer courses and listing the specific courses in which they wish to enroll.
4. Submit the completed approval request form to the advising dean.

Once submitted to students’ advising deans in the Berick Center for Student Advising, the Committee on Academic Standing reviews requests for approval. Students should secure pre-approval prior to enrolling in courses at other institutions, to avoid the loss of time and expense of enrolling in a course that is ultimately not approved.

Students may not receive credits for study abroad during the summer except in Columbia-sponsored programs or approved foreign-language, archaeology, and field-studies programs. Students seeking summer study abroad credits must receive permission from the Center for Undergraduate Global Engagement, 606 Kent.

Students applying for summer school credit for courses that they wish to use in partial fulfillment of the science or Global Core requirements must submit the relevant course approval petition to their advising dean in the Berick Center for Student Advising for approval by the appropriate faculty committee, prior to taking the course. Note that students can only petition to have non-Columbia study abroad courses count towards fulfilling the Global Core requirement. Approval to receive College credit for summer school courses does not ensure approval of the course to fulfill one of these requirements.

**STUDY OUTSIDE COLUMBIA UNIVERSITY IN THE ACADEMIC YEAR**

In general, Columbia College students may not take courses for credit toward the B.A. degree at another college or university during the academic year (i.e., Fall and/or Spring). Permission to study at another school for a term or a year is granted only for study at institutions outside of the United States, as part of an approved study abroad program, or for study through one of the established domestic study-away programs. Exceptions may be granted for study during the summer. See the Summer Study section for more information.

Students who matriculate into degree programs at other institutions will not be eligible to continue study at Columbia. Columbia College students who matriculate at another post-secondary institution and/or are considered a degree-seeking student at a college or university other than Columbia College will be withdrawn from Columbia with no opportunity to return and complete the Columbia College degree.

**LEAVES OF ABSENCE AND WITHDRAWALS FROM COLUMBIA COLLEGE**

Students can request a leave of absence prior to the start of a term or during the term. When a student takes a leave of absence during a term, this action is also considered a withdrawal, defined as the dropping of one’s entire academic program in a given term after the first day of classes of the term and, as a result, withdrawing from Columbia College.

Withdrawing from Columbia College after the start of the semester can have implications for financial aid, and students are strongly advised to talk with their advising deans and with the Office of Financial Aid about any financial consequences of a necessary withdrawal. Any student withdrawing from Columbia College must notify the Berick Center for Student Advising in writing; it is not sufficient for a withdrawal to notify instructors of plans to withdraw or to stop attending classes. Absence from classes without officially withdrawing from Columbia College can result in failing grades in all courses.

Students who matriculate at another post-secondary institution and/or are considered a degree-seeking student at a college or university other than Columbia College will not be eligible to continue study at Columbia.
**Voluntary Medical Leave of Absence**

A medical leave is granted to a student whose health condition interferes with successful full-time study. A leave can be granted for a minimum of one term and a maximum of two years.

Unless a student is granted an exception due to extenuating circumstances, a student will be permanently withdrawn after the maximum time period of two years.

Students must consult with their advising deans in the Berick Center for Student Advising to initiate a leave, and then provide medical documentation to support the request. Medical leaves must be accompanied by an individualized assessment of students' individual healthcare needs.

While on leave, students must be actively engaged in a course of medical treatment that leads to recovery. In addition, students are required to continue to access their Columbia email, which is the official means of communication by the University.

When applying for readmission to Columbia College, students must provide medical documentation supporting their readmission. Normally, students may only return in the Fall or Spring term. Only in rare circumstances will students be readmitted from medical leave to enroll in courses for the Columbia Summer Session.

All questions about medical leaves should be addressed to the students' advising deans in the Berick Center for Student Advising.

**Academic Standing and Transcript Notations**

Students who take a leave while in good academic standing will return in good academic standing; students who take a leave while on academic action will return on academic action. When a leave begins when a term is already in session, the student’s transcript will reflect the action of withdrawal and the date of withdrawal for the semester in question. If the date of withdrawal for a medical leave is on or before the Columbia College withdrawal deadline (noted on the academic calendar), the student’s transcript will not reflect the individual courses attempted during the term. If the date of withdrawal for a leave begins after the Columbia College withdrawal deadline, individual courses will remain on the transcript.

Ordinarily, Columbia College students who are authorized to withdraw for medical reasons after the withdrawal deadline will receive a mark of W for each of their courses for the term. These notations indicate an authorized withdrawal from the courses. In rare cases, when a student must leave for medical reasons beyond the relevant deadline, a student and advising dean in the Berick Center for Student Advising can work together with the faculty to determine whether an Incomplete would be a more appropriate notation on the transcript. In order to be eligible for an Incomplete, the student must have completed all work for the course except the final paper, exam, or project. The student must also obtain the approval of the relevant advising dean(s) in the Berick Center for Student Advising as well as the appropriate faculty member(s). Students should consult with their advising deans in the Berick Center for Student Advising for more details.

Students who have been approved for authorized Incompletes in the last semester before their medical leave must complete the work of each course upon their return to campus by the end of the Change of Program period. If the work is not completed by the end of the Change of Program period of the term in which the student returns, the grade may convert to the contingency grade or to an F. Due dates for incomplete work should be determined in consultation with the advising dean in the Berick Center for Student Advising upon notification of readmission.

When students begin a leave after the Columbia College withdrawal deadline, they should be aware of the points of credit necessary to remain in good academic standing in future semesters. Students should keep in mind that Columbia College students should complete an average of 15.5 points per term to remain in good academic standing. Students should consult with their advising deans in the Berick Center for Student Advising to learn whether or not they will fall below the low points threshold (see section on Academic Standing) established for Columbia College students and, if so, work with their advising deans and departments to create a reasonable academic plan to ensure the timely completion of their degree.

Students are not permitted to earn transferable credits toward the degree while on medical leave from the University, as the purpose of the leave is to regain full health in order to return and resume full-time study. In some cases, healthcare practitioners may recommend that students take courses at home institutions as part of the recovery process. It is recommended that students follow the advice of their healthcare practitioners; however, they should make their decisions knowing that coursework taken elsewhere while on medical leave will not be transferred back to Columbia to count towards their degree.

If a student matriculates at another institution in a degree program while on leave from Columbia, the student will be considered to have transferred to another institution and will be permanently withdrawn from Columbia College.

**Readmission from Medical Leave of Absence**

Students must complete all parts of the following readmission procedures by the following deadlines:

- Fall term readmission – June 1
- Spring term readmission – November 1
- Summer term readmission – not permitted

In order to begin the readmission process, students must first discuss their plans with their advising deans in the Berick Center for Student Advising.
for Student Advising and then submit the following letters to their advising deans by email or fax:

1. Request for readmission: This letter should review the circumstances that led to the leave, describe in detail any activities pursued while away, explain why studies can now be successfully resumed, and outline a plan for continued support. The letter should also indicate whether or not campus housing will be required.

2. Letter from medical practitioner supporting readmission: This letter should describe the treatment prescribed for the student and progress made by the student, provide an evaluation of the student’s readiness to return to full-time study at Columbia, and outline the recommended continued care plan upon readmission.

The Medical Leave Readmission Committee is comprised of representatives of Columbia Health, the Berick Center for Student Advising, and other key offices of the College and the University. It meets in June and November to consider readmission requests for the Fall and Spring terms, respectively. Committee review is not guaranteed if documentation is submitted after the stated deadlines. Students will receive notification regarding one of the following three outcomes of the committee’s assessment of readmission requests:

1. Applicants are approved for an interview by a Columbia Health practitioner for an interview. Pending the results of the interview, a student may be officially readmitted or denied readmission and will be notified of a decision by the Berick Center for Student Advising by letter and email.
2. Additional information is requested.
3. Readmission is denied. Students may reapply the following semester for readmission.

Once officially readmitted, students will be provided an online registration appointment in order to enroll for the coming term. Normally, students will be able to register in late August for the Fall and in mid-January for the Spring term. In addition, students who are guaranteed housing upon readmission may submit a housing application by following the instructions in their readmission letter. Students on leave cannot participate in housing lotteries before being formally readmitted.

Students must address all financial or other obligations to the University that may still be outstanding from the beginning of their leave. If holds have been placed on their account, these holds must be cleared before they can enroll in classes or move into housing. If, after being readmitted for the following semester, a student cannot register by the end of the Change of Program period of that semester, then the student will be placed on another leave of absence.

Students are urged to meet with their advising deans in the Berick Center for Student Advising and, if they live in campus housing, a Residential Life staff member, during the first two weeks of their return to campus, to ensure a smooth transition back to the campus community.

**Voluntary Personal Leave of Absence (Nonmedical)**

A voluntary leave of absence may be granted by the Committee on Academic Standing to undergraduate students who request a temporary withdrawal from Columbia College for a nonmedical reason during the semester. Students do not need to petition the Committee on Academic Standing if they request a voluntary leave of absence prior to the start of the semester. Students considering a voluntary leave must discuss this option in advance with their advising deans in the Berick Center for Student Advising.

Voluntary leaves are granted for a period of one to four semesters. Students must be in good academic standing at the time of the leave, and must be able to complete their degree in a total of eight semesters.

When a leave begins after a term is in session, the student’s transcript will reflect the action of withdrawal and the date of withdrawal. If the date of withdrawal for a personal leave is on or before the Columbia College withdrawal deadline (noted on the academic calendar), the student’s transcript will not reflect the individual courses attempted during the term.

Normally, if a voluntary leave of absence begins after the Columbia College withdrawal deadline, the student’s transcript will include all courses attempted, with each course receiving a mark of W (indicating authorized withdrawal). In certain circumstances, a student may qualify for an Incomplete for a course, and the remaining work for the course would have to be completed by the end of the Change of Program period of the semester in which the student returns to Columbia. If the Incomplete is not completed by that time, the contingency grade or a W will be inserted as the final grade.

Students may not take courses for transferable credit while on leave. If a student matriculates at another institution in a degree program while on leave from Columbia, the student will be considered to have transferred to another institution and will be permanently withdrawn from Columbia College. Students who choose to take voluntary leaves are not guaranteed housing upon return to the University. International students should contact the International Students and Scholars Office to ensure that a leave will not jeopardize their ability to return to Columbia College.

To return to Columbia College, students must notify the Berick Center of Student Advising by June 1 for the Fall term or November 1 for the Spring term. Students must request readmission in writing and submit a statement describing their readiness to return.
FAMILY EMERGENCY LEAVE OF ABSENCE

Columbia College students who must leave the university for urgent family reasons that necessitate a semester-long absence (e.g., family death or serious illness in the family) may request an emergency family leave of absence. Documentation of the serious nature of the emergency must be provided. Students must request an emergency family leave of absence from their advising deans in the Berick Center for Student Advising.

When an emergency family leave begins after a term is in session, the student’s transcript will reflect the action of withdrawal and the date of withdrawal. If the date of withdrawal for an emergency family leave of absence is on or before the Columbia College withdrawal deadline (noted on the academic calendar), the student’s transcript will not reflect the individual courses attempted during the term. Normally, if an emergency family leave begins after the Columbia College withdrawal deadline, the student’s transcript will include all courses attempted, with each course receiving a mark of W (indicating authorized withdrawal). In certain circumstances, a student may qualify for an Incomplete for a course, and the remaining work for the course would have to be completed by the end of the Change of Program period of the semester in which the student returns to Columbia. If the Incomplete is not completed by that time, the contingency grade or a W will be inserted as the final grade.

To return to Columbia College, students must notify the Berick Center for Student Advising by June 1 for the Fall term or November 1 for the Spring term. Students must request readmission in writing and submit a statement describing their readiness to return. Once readmission is granted, housing will be guaranteed.

FAILURE TO GRADUATE

Students who fail to graduate and who have been withdrawn from the College must apply for readmission within a two-year period in order to have an opportunity to complete the degree. If they do not complete their degree within two years, then they may be permanently withdrawn. To apply for readmission, students must have successfully completed no fewer than 90 points of academic credit and earned a GPA of no less than 2.0. Students must fulfill the degree and major or concentration requirements in place at the point of original matriculation. Readmission will be predicated upon the assessment of the student’s ability to successfully complete the degree within one calendar year. Inquiries regarding readmission should be directed to the Berick Center for Student Advising.

READMISSION

In general, students seeking readmission to Columbia College must submit evidence that they have achieved the purposes for which they left. Consequently, specific readmission procedures are determined by the reasons for the withdrawal. Policy statements outlining the readmission procedures for voluntary or medical leaves of absences are available in the Berick Center for Student Advising. Students should consult their advising deans for further information.

Students applying for readmission should complete all parts of the appropriate readmission procedures by June 1 for the Fall term or November 1 for the Spring term. Once an international student with F-1 or J-1 status is readmitted, the student should contact the International Students and Scholars Office to obtain a new visa certificate (form I-20 or form DS-2019).

Students may not take courses for transferable credit while on leave. If a student matriculates at another institution in a degree program while on leave from Columbia, the student will be considered to have transferred to another institution and will be permanently withdrawn from Columbia College.

DEGREE REQUIREMENTS

The faculty Committee on Instruction of Columbia College reviews Columbia College degree requirements and curricular matters each year. This Bulletin reflects all faculty recommendations and curricular changes in its annual publication.

Columbia College policy requires students to fulfill the general degree requirements (i.e., all degree requirements besides the major or concentration) that are stated in the Bulletin of the first year of their matriculation at Columbia College, and to fulfill the major or concentration requirements that are stated in the Bulletin at the time that students declare their major or concentration (typically in the second year of study).

MODIFICATION OF REQUIREMENTS

The requirements for the degree may be modified or waived in individual and rare cases only with the approval of the Dean of Academic Affairs of Columbia College, acting on behalf of the faculty Committee on Instruction of Columbia College. Students wishing to petition for a modification of degree requirements should discuss their requests with their advising deans in the Berick Center for Student Advising.

THE COLUMBIA COLLEGE COMMITTEE ON ACADEMIC STANDING

The Columbia College Committee on Academic Standing implements academic policies and regulations for Columbia College students as set forth by the faculty Committee on Instruction, the University Senate, or the faculty as a whole. The Committee on Academic Standing is expected to uphold the policies and regulations of the Committee on Instruction.

The Committee on Academic Standing is composed of advising deans, an associate dean of advising, and the dean of advising of the Berick Center for Student Advising.
REGISTRATION

Student Service Center
210 Kent
212-854-4400
ssc@columbia.edu

REGISTRATION AND ENROLLMENT

Registration is the process by which eligible students reserve a seat for themselves in current or future classes. Students receive information from the Registrar’s Office each semester that detail the procedures for each term’s registration period.

Enrollment is the completion of the registration process and affords the full rights and privileges of student status. It is accomplished by the payment or other satisfaction of tuition and fees and by the satisfaction of other obligations to the University.

All Columbia College students must be registered for a minimum of 12 points of credit in any given semester. Each Columbia College student must be registered for at least 12 points of credit by the close of the Change of Program period, and those students who are registered for fewer than 12 points by this time will be withdrawn from the College. Graduating seniors who need fewer than 12 points of credit to complete their degree can petition the Committee on Academic Standing for permission to register for fewer than 12 points of credit, with the understanding that they will still be required to enroll as full-time students paying full-time tuition. Questions about registration should be directed to the Berick Center for Student Advising.

Students are held accountable for absences incurred owing to late enrollment. The University reserves the right to withhold the privilege of registration or any other University privilege from any person with an unpaid debt to the University.

Registration alone does not guarantee enrollment, nor does registration alone guarantee the right to participate in a class. In some cases, students need to obtain the approval of the instructor or of a representative of the department offering the course. In other cases, students may be required to attend the first few class sessions prior to official registration or to confirm official registration. Please check the course information in the Departments, Programs, and Courses section of this Bulletin and the registration instructions contained in the Directory of Classes for all of the approvals required.

According to University regulations, each person who completes registration is considered a student of the University during the term for which they register, unless the student’s connection with the University is officially severed by withdrawal or otherwise. No student registered or enrolled in any school/college of the University shall at the same time be registered or enrolled in any other school/college, either of the University or of any other institution, without specific authorization from the dean/director of the school/college in which the student is first registered.

The privileges of the University are not available to any student until they have completed registration. Typically, a student who is not officially registered for a University course may not attend the course; however, some courses may require students to attend the first few class sessions prior to official registration. Students are expected to register for courses during the time periods explicitly identified by the Office of the Registrar, and may be required to obtain written consent of a faculty member or of the Committee on Academic Standing to register at any time during an academic term.

To comply with current and anticipated Internal Revenue Service mandates, the University requires all students to report their Social Security numbers at the time of admission. Newly admitted students who do not have Social Security numbers should obtain one in advance of first registration.

International students should consult with the International Students and Scholars Office, located at 524 Riverside Drive (+1-212-854-3587) for more information.

Registration and Change of Program Instructions

Registration instructions are announced in advance of each registration period. Students’ individual registration times are listed in Student Services Online (SSOL) and registration dates are listed on the Academic Calendar. Students should also consult the Registrar’s website for additional information.

REGISTERING FOR CLASSES

Registration for classes is by appointment online via Student Services Online (SSOL). Students are responsible for ensuring that their academic programs are in accordance with the policies noted here.

Some classes may be blocked for online registration and require written approval; students should check Vergil or the Directory of Classes for approval information. Courses blocked from online registration require additional approval, either in SSOL or through your academic advisor. A completed Registration Adjustment Form, with all necessary approvals confirmed may be required. A student cannot use the Registration Adjustment Form to register for a course if the course is not blocked from online registration or if the student is eligible to join the course Wait List. Speak with your academic advisor for more information on this process.

Students otherwise unable to register through SSOL must submit a completed Registration Adjustment form to the Berick Center for Student Advising, with all necessary approvals confirmed.

Students are allowed to register for a maximum of 18 points of credit in any given semester. Students may not register for
courses whose meeting times overlap. If students are accepted into courses through the Wait List so that their programs contain more than 18 points and/or overlapping courses, students are required to bring their enrollments into compliance with these registration policies by the end of the Change of Program period, either by reducing their course registrations to 18 points or fewer, and/or by dropping courses that overlap with others.

The Committee on Academic Standing in the Berick Center for Student Advising is tasked with upholding the academic policies of the College and will make changes to students’ registration if the students fail to ensure that their academic programs comply with these policies set by the faculty.

**DROPPING OR WITHDRAWING FROM COURSES**

Students may drop a course from their academic program through the deadline noted during the fifth week of classes. Until this deadline, students can drop a course themselves online via Student Services Online (SSOL), although they are encouraged to talk with their advising dean about their choice to drop in order to consider all of their options.

Between the fifth week of classes and the tenth week of classes, students may withdraw from a course. To withdraw from a class, students must first meet with their advising dean in the Berick Center for Student Advising, 403 Lerner, to discuss their choice to withdraw in order to consider all of their options. Students must then submit a Columbia College Acknowledgment of Course Withdrawal form to their advising dean in the Berick Center for Student Advising.

After the course withdrawal deadline, students may not withdraw from any course and will receive the letter grade earned in the course.

When considering the option to drop or withdraw from a course, students should be aware that, in order to remain in good academic standing, they must successfully complete no fewer than 12 points in a given semester. Students who do not earn at least 12 points per term will be placed on academic probation, or be suspended or dismissed. Students who do not make adequate progress to the degree (an average of 15.5 points per term) will also face academic probation, suspension, or dismissal.

Neither failure to attend classes nor giving unofficial notification to the instructor will constitute dropping or withdrawing from a course. Students who stop attending classes without dropping or officially withdrawing are assigned the letter grade earned by factoring a zero or F for any missing work.

**For Fall 2021, the deadline to withdraw from a course was extended to Monday, December 6, 2021, one week before the last day of classes.**

For Spring 2022, the deadline to withdraw from a course was extended to Monday, April 25, 2022, one week before the last day of classes.

The Committee on Instruction continues to monitor the student academic experience on campus, and typical policies and procedures will be in place after the completion of the Spring 2022 semester.

**DROPPING OR WITHDRAWING FROM CORE CURRICULUM COURSES**

The deadline to drop one of the shared Core Curriculum courses (i.e., Art Humanities, Contemporary Civilization, Frontiers of Science, Literature Humanities, Music Humanities, and University Writing) from an academic program is the end of the Change of Program period, or the end of the first two weeks of classes. After this point, students can withdraw from these courses according to the withdrawal processes noted above.

Please note that students can be placed on academic probation if they fail to complete certain Core classes in their first year. Students considering dropping a Core class should consult their advising deans before taking any action.

**CHANGING GRADING OPTIONS**

The deadline for declaring the Pass/D/Fail option for a course falls during the tenth week of classes. Up until this deadline, students may elect to change their course grading options from letter grading to Pass/D/Fail or from Pass/D/Fail to letter grading online via Student Services Online (SSOL).

The Pass/D/Fail option is available only for certain courses in a students’ program. Students should refer to Academic Regulations—Exams and Grades listed in this Bulletin for more information regarding this grading option.

**For Fall 2021, the deadline for declaring the Pass/D/Fail option for a course was extended to December 15, 2021, the end of the reading period.**

- Students were able to elect the Pass/D/Fail option for one class in this semester without restriction — i.e., the course chosen for this grading option could fulfill a requirement for the Core Curriculum; a requirement for a major, concentration, or special concentration; or an elective.
- The usual policy for lifting a “P” to uncover a grade continued. Students were able to see their assigned grade for the course in question in SSOL and decide by the end of the second week of the Spring 2022 semester (January 28, 2022) whether to uncover the grade or let the “P” remain on the transcript permanently.
- Other policies governing the use of the Pass/D/Fail option remained in place.

**For Spring 2022, the deadline for declaring the Pass/D/Fail option was extended to Monday, May 2, 2022, the last day of classes for Spring 2022.**
• Other than the change to the deadline for declaring, typical policies regarding the Pass/D/Fail option remained in place. Students could use the Pass/D/Fail option for a maximum of one class in the Spring 2022 semester, and the Pass/D/Fail option could not be used for a class required for a major or concentration and could not be used for a class required for the Core Curriculum.

• The usual policy for lifting a “P” to uncover a grade continued. Students were able to see their assigned grade for the course in question in SSOL and decide by the end of the second week of the Fall 2022 semester (September 16, 2022) whether to uncover the grade or let the “P” remain on the transcript permanently.

• **Special Note:** If students were enrolled in Fall 2021 in a course that could not be concluded because of the graduate student strike, and were required to do work for the course assigned after the conclusion of the Fall semester (i.e., any time after January 2), the students could choose to declare retroactively the Pass/D/Fail option for the course—if they had not already used the Pass/D/Fail option for another Fall course. The policies for the Pass/D/Fail option that were determined for Fall 2021, as noted in the Columbia College Bulletin, apply to any Fall 2021 course, regardless of when the declaration is made.

The Committee on Instruction continues to monitor the student academic experience on campus, and typical policies and procedures will be in place after the completion of the Spring 2022 semester.
STUDY ABROAD

Suspension of Fall 2021 study abroad

Given the ongoing COVID-19 pandemic and its impact on worldwide travel and global health risks, Columbia University is suspending undergraduate student participation in study abroad programs for Fall 2021.

Undergraduate Global Engagement (UGE) continues to work on providing global learning experiences for students throughout the upcoming academic year. We are planning for the resumption of in-person study abroad activities in Spring 2022.

GLOBAL ENGAGEMENT

The Columbia University Center for Undergraduate Global Engagement (UGE) develops, coordinates, implements, and collaborates with other units at Columbia to support academic and co-curricular opportunities—including study abroad, global internships, global service-learning, global research and global courses on campus and abroad—for global learning and engagement for all undergraduates during their Columbia University journey; and works closely with faculty in their global research and teaching to ensure visibility and access to opportunities that build global awareness and the accomplishment of global competencies. UGE enhances access and support for undergraduates to global opportunities and brings students and faculty together in a central location that creates a hub of global activity at Columbia, allowing students to better connect and learn about potential programs; faculty and staff to share their global and regional expertise and advice; and for the collaborative development, implementation and assessment of new and existing undergraduate global programs and opportunities for global engagement across Columbia and around the world.

Center for Undergraduate Global Engagement
606 Kent
212-854-2559
uge@columbia.edu

Eligibility

The College maintains the authority over students’ participation in study abroad programs and upholds standards for all potential candidates. To be eligible for participation in a Columbia-approved study abroad program, students must meet the following criteria:

- Have a minimum cumulative GPA of 3.0, including the semester before going abroad;
- Have at least junior standing for semester study abroad (students in any class year can study abroad during the summer);
- Make progress toward finishing the Core Curriculum, specifically, Literature Humanities, Contemporary Civilizations, University Writing, and Frontiers of Science;
- Demonstrate academic interest by completing at least one course pertaining to the country or region where the student intends to study;
- Maintain good academic and disciplinary standing. A review of each student’s academic and disciplinary records is conducted as part of the required clearance process. Students on academic or disciplinary probation are not permitted to study abroad during the term of their probation.

It is generally possible to arrange for study in most foreign countries through programs sponsored by Columbia or by other institutions, or through direct application to foreign universities. Such studies may be approved for one to two terms in the junior year or during any summer term.

Credit and Grading

Students who enroll in the following Columbia-sponsored programs receive direct Columbia credit for their courses. The grades earned in their studies are reflected on their official transcripts and cumulative GPA:

- Columbia in Paris
- The Berlin Consortium for German Studies
- The Kyoto Center for Japanese Studies
- Columbia in Kenya
- Columbia in London
- Consortium for Advanced Studies in Cuba

Credit from outside approved programs is certified as transfer credit toward the degree when the student returns to the College and upon receipt of appropriate transcripts and other supporting materials. Grades earned during participation in outside approved programs are not reflected on the transcript or the cumulative GPA. College transfer students should note that they are permitted no more than 60 points of outside credit (see Academic Regulations—Regulations for Transfer Students).

All students are reminded that the final 30 credits required for the degree must be taken while enrolled in the College for study on Columbia’s New York campus or on one of the Columbia-
sponsored programs abroad. Any exceptions require special permission from the Committee on Academic Standing.

In addition, the following conditions apply for study abroad:

1. No credit is granted for courses in business, education, journalism, or other subjects that, at Columbia, are typically taught in professional schools.
2. Transfer credit is not awarded for courses taken on a Pass/Fail basis in outside programs. The minimum grade necessary for transfer of credit is C-.

STUDY ABROAD CLEARANCE

Students must be cleared to study on approved programs by the Center for Undergraduate Global Engagement, 606 Kent, by October 1 for the spring semester and by March 1 for the fall semester/academic year. Students must register with this office before November 15 for the spring semester and April 15 for the fall semester/academic year.

UNDERGRADUATE INTERNATIONAL TRAVEL POLICY

All matriculated undergraduates who wish to participate in Columbia-Led, Columbia-Facilitated and/or Recognized international travel must first be cleared to participate in such program and are then required to obtain School Sponsorship at least 4 weeks prior to departure, in accordance with the Undergraduate International Travel Policy.

TUITION AND FINANCES

While abroad, students remain enrolled at the College; tuition is paid to Columbia. Columbia, in turn, pays the academic costs of the overseas program. Students are financially responsible for room, board, and any other miscellaneous costs. Students receiving financial aid at Columbia remain eligible for aid when they study abroad with Columbia’s approval.

Students may direct financial aid and study abroad inquiries to the Financial Aid and Educational Financing, 618 Lerner; 212-854-3711; ugrad-finaid@columbia.edu.

For a full list of semester and study abroad opportunities, please visit the Undergraduate Global Engagement website: https://global.undergrad.columbia.edu/.

VIRTUAL EXCHANGE

Global Columbia Collaboratory

The Global Columbia Collaboratory works with students and the Columbia global network from around the world to create a space for global learning. Framed by the United Nations Sustainable Development Goals, it serves as a platform for virtual exchange opportunities for all involved to learn, reflect, and work collaboratively on projects and ideas relevant to today’s world.

Selected participants for the Collaboratory will participate in theme-based global seminars from faculty and experts drawn from Columbia’s global networks; exchange perspectives and reflect together on the global challenges framed by the global seminar; and develop ideas with potential to impact today’s society. Participants will be coached through the ideation process with support from the broader Columbia global network to help bring student projects to fruition.

Suspension of Fall 2021 study abroad

Given the ongoing COVID-19 pandemic and its impact on worldwide travel and global health risks, Columbia University is suspending undergraduate student participation in study abroad programs for Fall 2021.

Undergraduate Global Engagement (UGE) continues to work on providing global learning experiences for students throughout the upcoming academic year. We are planning for the resumption of in-person study abroad activities in Spring 2022.

Columbia College students who enroll in the Columbia-sponsored programs listed below have the same access to the financial aid they would have if they were enrolled in classes in New York. Students who plan to apply should consult with the Center for Undergraduate Global Engagement, 606 Kent; 212-854-2559; uge@columbia.edu (ogp@columbia.edu).

AFRICA

Kenya: Columbia in Kenya Program

In partnership with Princeton University, Columbia has developed a field semester abroad program in Kenya on Tropical Biology and Sustainability. Operating during the spring semester, this global immersion experience gives students the opportunity to study ecology, evolutionary biology, conservation biology, environmental engineering, and sustainable development in the environmental hub of East Africa. Based at Princeton’s Mpala Research Centre in central Kenya, and with support from Columbia’s Global Center Africa in Nairobi, students also travel across Kenya to places such as the forested slopes of Mt. Kenya, the wildlife-rich savannas of Laikipia, and the coffee and tea plantations of western Kenya. Students take four three-week course modules taught by Princeton and Columbia faculty who work in Kenya and other parts of East Africa.

For program information, students may consult https://global.undergrad.columbia.edu/ and email uge@columbia.edu (ogp@columbia.edu).

EAST ASIA

Japan: The Kyoto Consortium for Japanese Studies

The Kyoto Consortium for Japanese Studies (KCJS) offers an intensive, two-semester academic program primarily for
undergraduates who wish to do advanced work in Japanese language and Japanese studies. The program is open to qualified students who have completed two or more years of college-level Japanese at the time of enrollment. A limited number of students may be admitted for single semester study in the fall or spring. The KCJS curriculum provides intensive Japanese language study and the opportunity to choose from a broad spectrum of social sciences and humanities courses on premodern and contemporary Japan. The program takes advantage of the numerous social and cultural resources of Kyoto by incorporating into the curriculum field trips, guest speakers, and research projects based on local field work.

For program information, students may consult https://global.undergrad.columbia.edu/program/kcjs-semester and email uge@columbia.edu (ogp@columbia.edu). Students are also advised to consult with the director of undergraduate studies in the Department of East Asian Languages and Cultures.

EUROPE
France: Columbia in Paris
Established in 1966, the Columbia-Penn Program in Paris at Reid Hall offers semester, academic-year, and summer study-abroad options that challenge students to step outside the boundaries of a traditional French language program and use French as a means to further their understanding of their own area of study. Students with a good command of the French language refine their speaking and writing skills through intensive language training and by taking selected disciplinary courses taught in French specifically for the program at Reid Hall and in the French university system at partner institutions: Institut d'Études Politiques (Sciences Po), University of Paris I (Panthéon Sorbonne), University of Paris IV (Sorbonne), and University of Paris VII (Denis Diderot). Opportunities for participating in joint honors seminars and directed research are also available.

For program information, students may consult https://global.undergrad.columbia.edu/ and email uge@columbia.edu (reidhall@columbia.edu).

Germany: The Berlin Consortium for German Studies
The Berlin Consortium for German Studies (BCGS) provides students with the opportunity to enroll in courses at the Freie Universität Berlin (FU Berlin) for the fall semester or a full academic year. The program begins with a six-week intensive language practicum which, in conjunction with a month-long homestay, prepares students for study at the FU Berlin. Upon completion of the practicum, students enroll in one course taught by the BCGS directors on a topic such as cultures, politics, history, literature, theater, or cinema; and for at least two, possibly more, FU Berlin courses for which they meet the prerequisites.

The FU Berlin offers a wide range of courses in the humanities, social sciences, and natural sciences. Students majoring in a variety of disciplines may choose from an array of appropriate courses.

For program information, students may consult https://global.undergrad.columbia.edu/program/bcgs and email uge@columbia.edu (ogp@columbia.edu). Students are also advised to consult with the director of undergraduate studies in the Department of Germanic Languages.

Italy: Columbia in Venice
The Columbia in Venice program allows students to take up to two Columbia-taught interdisciplinary courses: a Global Core course Nobility and Civility, and an Italian Studies course Boiardo and Ariosto. The remaining courses that comprise the program include Italian language and one or two Venetian themed courses taught in English at Ca’Foscari University.

For program information, students may consult https://global.undergrad.columbia.edu/ and email uge@columbia.edu (reidhall@columbia.edu).

United Kingdom: Columbia in London Program
The Columbia in London Program operates under the direction of Columbia’s Department of English and Comparative Literature, in partnership with Queen Mary University of London (QMUL), one of the UK’s most prestigious academic institutions.

The program’s Global Seminar, London as Literature, studies major works of English and Anglophone literature from all periods and genres in a London context. Each fall, the program will be led by one Columbia faculty member whose research directly engages the literary culture of London. That faculty member will offer a version of the global seminar that will enable participating students to study literary texts in their immediate geographical and cultural settings, transforming their relationship to their objects of study and encouraging them to develop a wider range of reading practices and research methodologies. In addition to regular class meetings, the Global Seminar will involve regular outings to urban sites, designed to complement and enhance the readings and classroom discussions. Destinations will include the British Library, the British Museum, the Victoria and Albert Museum, the Tate Museums, the Globe Theater, and a host of other London cultural institutions.

In addition to the Global Seminar, students will also enroll alongside local students in courses offered by the host institution. QMUL offers programs across a broad range of disciplines, including physical and natural sciences, business and management, engineering, humanities, and social sciences.
Study Abroad

For program information, students may consult https://global.undergrad.columbia.edu/ and email uge@columbia.edu (reidhall@columbia.edu).

**United Kingdom: The Oxford/Cambridge Scholars Program**

Columbia students interested in spending their junior year at Oxford or Cambridge should apply for admission to the Oxford/Cambridge Scholars Program during the first term of their sophomore year. Application to the program is made through the Center for Undergraduate Global Engagement, where a preliminary selection of candidates is made. Designated candidates for admissions then apply to one of the participating colleges of Oxford or Cambridge. Criteria for admission include a very strong academic record at Columbia, as well as commitment to a chosen field of study. Application through the Columbia Oxford/Cambridge Scholars Program is the only way the College authorizes study at either university.

For program information, students may consult https://global.undergrad.columbia.edu/ and email uge@columbia.edu (ogp@columbia.edu).

**Latin America and the Caribbean**

**Cuba: The Consortium for Advanced Studies in Cuba**

The Consortium for Advanced Studies Abroad (CASA) program in Cuba is a collaborative initiative involving eight U.S. universities: Brown, Columbia, Cornell, Dartmouth, Johns Hopkins, Northwestern, University of Pennsylvania, and Vanderbilt University. CASA-Cuba provides students with a unique opportunity to have direct access to Cuba’s leading institution of higher learning, the University of Havana, and to Casa de Las Américas, the Cuban government’s premier research institution on Caribbean and Latin American studies, Cuban culture, and the arts. Comprehensive student services support the academic and social experience. The program runs in both fall and spring semesters.

For program information, students may consult https://global.undergrad.columbia.edu/ and email uge@columbia.edu (ogp@columbia.edu).

**Africa and the Middle East**

**Jordan/Tunisia: The Middle Eastern and North African Studies Program in Amman and Tunis**

This nine-week program allows students to strengthen their skills in Modern Standard Arabic while being introduced to the history in the intersecting regions of the Maghreb and the Middle East. Students take the equivalent of a year of Modern Standard Arabic and receive training in the dialects of the the Mashrek and the Maghreb. The language program is complemented by a cultural and historical seminar featuring lectures by prominent specialists from Columbia University and partner institutions in the Middle East and North Africa.

For program information, students may consult https://global.undergrad.columbia.edu/ and email uge@columbia.edu (ogp@columbia.edu).

**East Asia**

**China: Columbia Summer in Beijing: Business Chinese**

This ten-week program is based at Peking University and offers advanced Chinese language students an opportunity to gain firsthand experience in the language, culture, and customs that drive the economic development of the world’s most populated nation. Students enroll in six weeks of intensive, personalized instruction in business Chinese language classes and four weeks of language practicum placements in Beijing offices of local/multinational companies.

For program information, students may consult https://global.undergrad.columbia.edu/ and email uge@columbia.edu (ogp@columbia.edu).

**China: Columbia Summer in Beijing: Chinese Language**

This nine-week program immerses students in Beijing and offers four levels of intensive Chinese language studies from first through fourth year. Reading, writing, speaking and listening are emphasized in the classroom, in drill sections, and through private tutorials. Group excursions in and around Beijing and a week-long travel break give students insight into Chinese society and provide a variety of environments in which to practice language skills.

For program information, students may consult https://global.undergrad.columbia.edu/ and email uge@columbia.edu (ogp@columbia.edu).

**China: Global Scholars Program: Adaptation to Changing Climates**

The Global Scholars Program (GSP) in China consists of a spring course at Columbia, *Principles of Animal Behavior,*
followed by a three-week field study course in China, *Behavioral Adaptation to Changing Climates*. Throughout the program, students will understand how animals cope with and adapt to changing environments. The program explores a broad range of topics in behavioral ecology, teaches hands-on research skills, and allows students to interact with government officials and students in China.

For program information, students may consult [https://global.undergrad.columbia.edu/](https://global.undergrad.columbia.edu/) and email ube@columbia.edu (ogp@columbia.edu).

**Japan: The Kyoto Consortium for Japanese Studies Program in Advanced and Classical Japanese**

This six- or eight-week program offers intensive training in modern and classical Japanese for students who have completed at least one year or three years of Japanese, or the equivalent.

For program information, students may consult [https://global.undergrad.columbia.edu/](https://global.undergrad.columbia.edu/) and email ube@columbia.edu (ogp@columbia.edu).

**EUROPE**

**France: Columbia Summer in Paris**

The six-week program offers modules at several levels designed to allow students to work together in small classes to integrate language and cultural studies and to progress in French while using Paris as a learning lab for language, culture, and extracurricular activities.

For program information, students may consult [https://global.undergrad.columbia.edu/](https://global.undergrad.columbia.edu/) and email ube@columbia.edu (ogp@columbia.edu).

**France: Columbia Summer Core in Paris: Art Humanities and Music Humanities**

This six-week program enables students to complete two Core Curriculum courses, *Art Humanities* and *Music Humanities*, in Paris. The program emphasizes the musical and visual cultures of Paris. Day trips to important sites in the region, such as Chartres and Giverny, will complement the excursions to monuments and musical performances within Paris.

For program information, students may consult [https://global.undergrad.columbia.edu/](https://global.undergrad.columbia.edu/) and email ube@columbia.edu (ogp@columbia.edu).

**France: Columbia Summer Undergraduate Math Research Program in Paris**

This six-week program provides for intensive mathematical research with students and faculty from Columbia and the Université Denis Diderot in Paris.

For program information, students may consult [https://global.undergrad.columbia.edu/](https://global.undergrad.columbia.edu/) and email ube@columbia.edu (ogp@columbia.edu).

**Germany: Columbia Summer Core in Berlin: Art Humanities and Music Humanities**

This six-week program enables students to complete two Core Curriculum courses, *Art Humanities* and *Music Humanities*, in Berlin. The program emphasizes the musical and visual cultures of Germany. Two overnight excursions to important sites in Germany will compliment the excursions to monuments and musical performances within Berlin.

For program information, students may consult [https://global.undergrad.columbia.edu/](https://global.undergrad.columbia.edu/) and email ube@columbia.edu (ogp@columbia.edu).

**Greece: Columbia Summer in Greece: Athens Curatorial Project**

This five-week program takes place in various locations in Greece and consists of an intensive curatorial workshop grounded in a seminar highlighting historical, anthropological, and literary approaches to aspects of Greek history and culture. It examines these through the organization of an art exhibition under the general theme of the environment.

For program information, students may consult [https://global.undergrad.columbia.edu/](https://global.undergrad.columbia.edu/) and email ube@columbia.edu (ogp@columbia.edu).

**Italy: Columbia Summer in Italy: Archaeological Fieldwork**

This four-week program provides students with the unique opportunity to excavate at Hadrian’s Villa, a UNESCO World Heritage site near Rome and the most important of Roman imperial villas. Students learn archaeological techniques at all levels and think critically about how excavation work allows for deeper insight into the social, political, economic, architectural and artistic history of classical antiquity.

For program information, students may consult [https://global.undergrad.columbia.edu/](https://global.undergrad.columbia.edu/) and email ube@columbia.edu (ogp@columbia.edu).

**Italy: Columbia Summer in Venice**

This six-week program is based at Ca' Foscari University in Venice and uses an interdisciplinary approach to understanding Italian culture and society through study of its language, literature/film, art history and conservation, and economy. Students are given the opportunity to gain a deeper appreciation of the rich Venetian culture, traditions, and history.

For program information, students may consult [https://global.undergrad.columbia.edu/](https://global.undergrad.columbia.edu/) and email ube@columbia.edu (ogp@columbia.edu).
LATIN AMERICA

Mexico: Columbia Summer in Mexico City: Colonization and Decolonization

This four-week program in Mexico City gives students the opportunity to study the dynamics of civilizational contact, exchange, and conflict in the Americas. It offers the Center for the Study of Ethnicity and Race course "Colonization and Decolonization" in a moveable classroom setting to allow students access to sites of historical and architectural significance, including museums, archives, as well as meetings with local scholars and non-governmental organizations.

For program information, students may consult https://global.undergrad.columbia.edu/ and email uge@columbia.edu (ogp@columbia.edu).

SUMMER STUDY ABROAD APPROVAL

Students seeking to study abroad during the summer must be approved by the Center for Undergraduate Global Engagement, 606 Kent. Transfer credit for summer classes taken abroad on outside programs is awarded only for foreign-language courses under these conditions:

- Credits for language study at the elementary and intermediate levels are awarded after the student takes a placement exam to determine his/her progress in the language. Advanced foreign-language instruction courses are accepted for academic credit upon review by the appropriate language department.
- The only non-language instruction courses eligible for credit are courses which will satisfy the major or concentration. The courses must be taken abroad in a foreign language and must receive departmental approval to satisfy major or concentration requirements.

Limited exceptions can be made for awarding credit for summer courses taught in English. College credit can be granted provided that the course offers a unique experience, such as a field-studies program or archaeological dig, where the study-abroad site functions as a constituent part of the course, and the program must be approved by the Center for Undergraduate Global Engagement. Departmental approval is required and the course must satisfy major or concentration requirements.

Suspension of Fall 2021 study abroad

Given the ongoing COVID-19 pandemic and its impact on worldwide travel and global health risks, the Center for Undergraduate Global Engagement (UGE) is suspending undergraduate student participation in study abroad programs for Fall 20201.

UGE continues to work on providing global learning experiences for students throughout the upcoming academic year. We are planning for the resumption of in-person study abroad activities in Spring 2022.

EXCHANGE PROGRAMS

In order to provide the richest and most immersive experience possible to its students, Columbia has established a network of exchange agreements with international institutions. With an exchange agreement, Columbia students may study at a partner institution; in exchange, students from the foreign institution may study at Columbia. Students take regular courses alongside local students, live in campus housing, have an academic adviser, and have access to all university facilities and resources.

Currently, Columbia has undergraduate exchanges with the following institutions:

- Bocconi University
- Boğaziçi University
- Hong Kong University of Science and Technology
- University College London
- University of Hong Kong
- Waseda University

Students who plan to apply to these programs should consult with the Center for Undergraduate Global Engagement, 606 Kent; 212-854-2559; uge@columbia.edu (ogp@columbia.edu).

CREDIT AND GRADING

As with other types of study abroad programs, all academic work completed abroad counts toward the Columbia degree, and students may take classes toward the major with the department's approval.

TUITION AND FINANCES

Columbia College students who attend these exchange programs have the same access to financial aid they would have if they were enrolled in classes on Columbia's New York campus. Columbia students pay their usual Columbia tuition and are responsible for non-academic costs abroad.

Students may direct financial aid and study abroad inquiries to the Financial Aid and Educational Financing, 618 Lerner; 212-854-3711; ugrad-finaid@columbia.edu.
SPECIAL PROGRAMS

Preprofessional Advising
Berick Center for Student Advising
403 Lerner
212-854-6378
preprofessional@columbia.edu

Medical, dental, and other health professional schools prefer that undergraduates complete a four-year program of study culminating in a bachelor’s degree. All health professional schools require prerequisite coursework, but the specific coursework can vary somewhat from program to program and school to school. This coursework can be completed during the undergraduate years along with the Core Curriculum and the major or concentration.

CONCENTRATIONS AND MAJORS

There is no concentration or major preferred by medical school admissions committees. Students are encouraged to pursue a concentration or major in any field that appeals to them. Students concentrating in a non-science area may wish to take one or two extra science courses to demonstrate their interest and aptitude in the sciences. Students should work closely with their advising deans and preprofessional advisers from the Berick Center for Student Advising, as well as their departmental major adviser in planning a program that meets their interests.

PREMEDICAL REQUIREMENTS

It is very important to note that each medical school in the United States and Canada individually determines its own entrance requirements, including prerequisite coursework or expected competencies. Each medical school also sets its own rules regarding acceptable courses or course equivalents. It is therefore essential that students confirm the premedical requirements for all schools to which they intend to apply.

In addition to medical school course requirements, medical schools currently require applicants to sit for the Medical College Admissions Test (MCAT). Students preparing for medical school are advised to take the following courses, as they will meet the prerequisites for most medical schools and will prepare applicants for the MCAT:

- 1 year of General Chemistry and General Chemistry Lab;
- 1 year of Organic Chemistry and Organic Chemistry Labs;
- 1 year of Introductory Biology and Biology Lab;
- 1 year of General Physics and Physics Labs;
- 1 semester Biochemistry;
- 1 semester of Introductory Psychology

At Columbia, the following courses correspond to the above requirements:

Chemistry
Select one of the following three options:

<table>
<thead>
<tr>
<th>Option 1:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM UN1403 - CHEM UN1404</td>
</tr>
<tr>
<td>CHEM UN1500</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Option 2: for students who place into the accelerated track:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM UN1604</td>
</tr>
<tr>
<td>CHEM UN1507</td>
</tr>
<tr>
<td>or CHEM UN1500</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Option 3: available to students depending on results of placement exam:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM UN1507</td>
</tr>
<tr>
<td>CHEM UN2045 - CHEM UN2046</td>
</tr>
<tr>
<td>CHEM UN2545</td>
</tr>
</tbody>
</table>

Organic Chemistry

| CHEM UN2443 - CHEM UN2444 | Organic Chemistry I (Lecture) and ORGANIC CHEMISTRY II-LECTURES (formerly CHEM W3443-W3444) |
| CHEM UN2493 - CHEM UN2494 | Organic Chemistry Laboratory I (Techniques) and ORGANIC CHEM. LAB II SYNTHESIS |

Biology

| BIOL UN2005 - BIOL UN2006 | INTRO BIO I: BIOCHEM,GEN,MOLEC and INTRO BIO II:CELL BIO,DEV/PHYS |
| BIOL UN2501 | Contemporary Biology Laboratory (or other Biology laboratory approved by premedical adviser) |

Physics

Select one of the following three options:

<table>
<thead>
<tr>
<th>Option 1:</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS UN1201 - PHYS UN1202</td>
</tr>
<tr>
<td>PHYS UN1291 - PHYS UN1292</td>
</tr>
</tbody>
</table>
Option 2:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS UN1401</td>
<td>Introduction To Mechanics and Thermodynamics and INTRO ELEC/MAGNETSM # OPTCS</td>
</tr>
<tr>
<td>PHYS UN1601</td>
<td>Physics, I: Mechanics and Relativity and Physics, II: Thermodynamics, Electricity, and Magnetism</td>
</tr>
</tbody>
</table>

Also select one of the following laboratories:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS UN1291</td>
<td>General Physics Laboratory and General Physics Laboratory II</td>
</tr>
<tr>
<td>PHYS UN1493</td>
<td>Introduction to Experimental Physics</td>
</tr>
<tr>
<td>PHYS UN1494</td>
<td>Introduction to Experimental Physics</td>
</tr>
<tr>
<td>PHYS UN2699</td>
<td>Experiments in Classical and Modern Physics</td>
</tr>
<tr>
<td>PHYS UN3081</td>
<td>Intermediate Laboratory Work</td>
</tr>
</tbody>
</table>

Option 3:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS UN2801</td>
<td>Accelerated Physics I and Accelerated Physics II</td>
</tr>
</tbody>
</table>

Also select one of the following laboratories:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS UN1493</td>
<td>Introduction to Experimental Physics</td>
</tr>
<tr>
<td>PHYS UN1494</td>
<td>Introduction to Experimental Physics</td>
</tr>
<tr>
<td>PHYS UN2699</td>
<td>Experiments in Classical and Modern Physics</td>
</tr>
<tr>
<td>PHYS UN3081</td>
<td>Intermediate Laboratory Work</td>
</tr>
</tbody>
</table>

Psychology

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC UN1001</td>
<td>The Science of Psychology</td>
</tr>
</tbody>
</table>

While these courses are recommended for MCAT preparation, students should note the following additional information:

- **English:** Most medical schools require one year of English, emphasizing skill acquisition in writing. Columbia College students fulfill this requirement with University Writing (ENGL CC1010) and *Masterpieces of Western Literature and Philosophy* (Literature Humanities) (HUMA CC1001-HUMA CC1002).

- **Mathematics:** Although not required by most medical schools, calculus is required for Columbia chemistry sequences and therefore all premedical students should have successfully completed the equivalent of one semester of Calculus. Medical schools that do have a mathematics requirement typically expect one semester of calculus and one semester of statistics. Any Columbia calculus and statistics classes will meet the requirement and it is sometimes possible to use AP credit toward this requirement.

- **Biochemistry:** An increasing number of medical schools require one semester of biochemistry. While Columbia’s introductory biology sequence covers many foundational concepts of biochemistry, which may prepare students for the MCAT, many medical schools will require a course in Biochemistry prior to matriculation.

- **Advanced Biology:** A small number of schools require more than one year of introductory biology and many of these recommend specific advanced level classes.

- **Social and Behavioral Science:** A number of schools have begun to add social and behavioral science courses into their requirements, including, but not limited to, psychology and sociology.

Students should note that medical schools’ stated prerequisites are subject to change from year to year and it is the responsibility of students to confirm the prerequisite requirements for the medical schools to which they intend to apply. Most medical schools list their requirements in greater detail on their individual websites. More information can also be found from the Association of American Medical Colleges (AAMC).

### Barnard Courses

While it is preferred that students complete their premedical requirements with Columbia College courses, students may take premedical requirements at Barnard if course prerequisites have been satisfied in advance. However, students should keep in mind that the Columbia Biology and Chemistry Departments may not accept Barnard courses toward the concentration and major. Students should consult their departmental advisers before registering for a Barnard course.

### Students with Advanced Placement

Advanced Placement (AP) credit is accepted by some schools, but not all. Students are responsible for monitoring the requirements of each school to which they intend to apply.

Generally, students with AP credit are strongly advised to take further courses in the field in which they have received such credit.

### Application to Health Profession Programs

For many health professions programs, students apply for admission than a year in advance of matriculation. Most Columbia students take time between undergraduate and health profession school and thus wait to apply to these schools until after graduating. Students who are interested in going directly on to health professional school following graduation should complete all prerequisite courses which will prepare them for the Medical College Admissions Test (MCAT) by the end of the senior year.

Students planning to apply to medical or dental school should meet with preprofessional advisers prior to application and plan to obtain a Premedical Advisory Committee letter as part of their application. A Premedical Advisory Committee application is made available each year in December. For more information...
regarding this process, please consult with a preprofessional adviser in the Berick Center for Student Advising, 403 Lerner preprofessional@columbia.edu.

**CLINICAL AND RESEARCH EXPOSURE**

Preprofessional Advising maintains an online list of many different clinical volunteer and research opportunities across New York City and beyond. These opportunities can offer students the chance to explore the health profession and to interact with patients, and these experiences are viewed by medical schools as essential preparation. Students are therefore strongly encouraged to spend time volunteering or working in clinical and research environments before applying to medical school.

**THE FU FOUNDATION SCHOOL OF ENGINEERING AND APPLIED SCIENCE**

**The Combined Plan (3-2) Program**

The Combined Plan (3-2) Program is a dual degree program that provides Columbia College students the opportunity to earn a B.A. degree from Columbia College and a B.S. degree from The Fu Foundation School of Engineering and Applied Science in five years. Columbia College students must apply in their junior year to The Fu Foundation School of Engineering and Applied Science. In order to apply, students must have completed or be in the process of completing the pre-engineering courses including:

**Mathematics**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH UN1101</td>
<td>CALCULUS I</td>
</tr>
<tr>
<td>MATH UN1102</td>
<td>and CALCULUS II</td>
</tr>
<tr>
<td>MATH UN1201</td>
<td>and Calculus III</td>
</tr>
<tr>
<td>MATH UN1202</td>
<td>CALCULUS IV</td>
</tr>
</tbody>
</table>

**Chemistry**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM UN1403</td>
<td>GENERAL CHEMISTRY LECTURES (at a minimum)</td>
</tr>
</tbody>
</table>

**Physics**

Select one of the following three sequences:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS UN1401</td>
<td>Introduction To Mechanics and Thermodynamics and INTRO ELEC/MAGNETISM # OPTCS</td>
</tr>
<tr>
<td>PHYS UN1402</td>
<td></td>
</tr>
<tr>
<td>PHYS UN1601</td>
<td>Physics, I: Mechanics and Relativity and Physics, II: Thermodynamics, Electricity, and Magnetism</td>
</tr>
<tr>
<td>PHYS UN1602</td>
<td></td>
</tr>
<tr>
<td>PHYS UN2801</td>
<td>Accelerated Physics I and Accelerated Physics II</td>
</tr>
<tr>
<td>PHYS UN2802</td>
<td></td>
</tr>
</tbody>
</table>

Some programs require a third semester of Physics

**Computer Science**

Select one of the following four courses, depending on program:

- ENGI E1006 INTRO TO COMP FOR ENG/APP SCI
- COMS W1004 Introduction to Computer Science and Programming in Java
- COMS W1005 Introduction to Computer Science and Programming in MATLAB
- COMS W1007 Honors Introduction to Computer Science

**Economics**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON UN1105</td>
<td>Principles of Economics</td>
</tr>
</tbody>
</table>

**Laboratory Requirement (choose one of the following)**:

- PHYS UN1493 Introduction to Experimental Physics
- PHYS UN1494 Introduction to Experimental Physics
- CHEM UN1500 GENERAL CHEMISTRY LABORATORY

*Note that some majors require a specific lab in either Chemistry or Physics, or both*

Students must also complete the requirements for a Columbia College major or concentration, as well as any additional pre-curricular requirements for the specific engineering major (see specific requirements on the Undergraduate Admissions website). In the fourth and fifth years of study, to be completed at The Fu Foundation School of Engineering and Applied Science, requirements for the major at The Fu Foundation School of Engineering and Applied Science must be completed in consultation with the major adviser there. Students with more than 35 transfer credits are not eligible for the program. Housing and financial aid will be continued.

Each fall, Undergraduate Admissions conducts information sessions in which students meet with the Combined Plan Program administrator. For more information, students should contact their advising deans in the Berick Center for Student Advising, 403 Lerner, or email combinedplan@columbia.edu.

**The 4+1 Program with Columbia College**

The 4+1 Program provides students in The Fu Foundation School of Engineering and Applied Science (SEAS) the opportunity to obtain a B.A. degree from Columbia College, through the completion of one additional year of study after the completion of four years of study and the fulfillment of all requirements for the B.S. degree in engineering.

SEAS students who are interested in the 4+1 Program must declare their interest in the spring of their sophomore year and plan their next three years of study with the program adviser. The fifth year of study commences in the fall semester and students are required to conclude their studies after two full-time semesters of enrollment. Students are expected to earn 31 credits while enrolled at Columbia College.

The program is selective, and admission is based on the following factors:
1. granting of the B.S. at SEAS at the end of the fourth year;
2. the fulfillment of all Columbia College Core Curriculum requirements by the end of the fourth year at SEAS;
3. maintaining a minimum GPA of 3.0 in Columbia College Core courses as well as those courses counting toward the Columbia College major;
4. creating a plan to complete a Columbia College major or concentration by the end of their fifth year that is approved by the appropriate director of undergraduate studies.

For more information, students may contact their advising dean in the Berick Center for Student Advising, 403 Lerner.

THE GRADUATE SCHOOL OF ARTS & SCIENCES

The B.A./M.A. option allows Columbia College students to enroll in graduate-level courses at Columbia and apply the earned credit toward a Columbia M.A., assuming admission to the Graduate School of Arts and Sciences. Applicants interested in the B.A./M.A. option should apply at least two months prior to the semester in which they intend to begin taking courses that will count toward the M.A. Some academic programs have more specific application deadlines.

Coursework taken toward the B.A./M.A. option is subject to the following guidelines:

1. The credit for the coursework must be in excess of the 124 points required for the B.A. degree.
2. A course used to fulfill a requirement for the B.A. degree may not be counted toward graduate credit.
3. The student must obtain the approval of both the graduate department(s) offering the course(s) and the undergraduate department in which they are majoring or concentrating.
4. The maximum amount of graduate credit that an undergraduate can earn toward the M.A. degree requirement in the Graduate School of Arts & Sciences is 0.50 Residence Unit. For more information on the Residence Units for graduate programs, please consult the relevant website of the Graduate School of Arts & Sciences.

Students who are interested in pursuing the B.A./M.A. option must consult the director of graduate studies (DGS) or program director of their intended M.A. program before applying. This consultation is a required part of the application process and must take place before a B.A./M.A. application may be submitted.

THE JUILLIARD SCHOOL

Exceptionally talented Columbia College students have access to instrumental, composition, and voice instruction at The Juilliard School through two distinct programs.

The Cross-Registration Program

The Cross-Registration Program provides Columbia College students with the opportunity to enroll in weekly instrumental (classical and jazz), composition, and vocal instruction at The Juilliard School. Students must submit a formal application and audition successfully at Juilliard to be accepted into the Cross-Registration Program. Annual juries will be held at Juilliard at the end of each academic year, to determine that students are eligible to continue in the program. The Cross-Registration Program covers weekly instruction only; ensembles and classes at Juilliard are generally not open to participants in the Cross-Registration Program.

Applicants to the Cross-Registration Program may be incoming first-year students or continuing students in Columbia College, and they should submit a Juilliard Application for Admission, including pre-screening materials. Students in the cross-registration program may participate in the program for up to four years of study and have the option of applying to the joint B.A./M.M. program in their junior year.

The Joint B.A./M.M. Program

The joint degree program offers students the opportunity to earn a B.A. degree from Columbia and an M.M. degree from Juilliard in five years. Voice candidates may need six years of study to complete the program depending on preparation.

Columbia College students must have participated in the cross-registration program for at least one year to be eligible to apply to the joint degree program. There are no prerequisite courses required to qualify for admission to the joint program, but students considering the program are encouraged to complement their cross-registration instruction at Juilliard with music classes and participation in ensembles at Columbia.

College students apply to the joint degree program in their junior year. To be considered for the program, Columbia College students must have completed by the end of junior year 94 points of coursework, including the Core Curriculum requirements and the major or concentration requirements for the B.A., and they must have participated in the cross-registration program for at least one year. If accepted to the joint degree program, students will become full-time graduate students at Juilliard in their fourth year and will be subject to Juilliard’s financial aid policies. While it may be possible to complete 1-2 courses required for the B.A. degree at Columbia College in the fourth year, students must receive permission to do so from the College and will not be eligible for financial aid from Columbia College in that fourth year.

Eligible students should submit the Juilliard Application for Admission by the appropriate deadline. The pre-screening (if applicable) is waived, and live auditions are held at The Juilliard School in early March.
Students who wish to pursue the joint program should consult with Alex España, Associate Dean, in the Berick Center for Student Advising.

THE LAW SCHOOL

Accelerated Interdisciplinary Legal Education Program

The Accelerated Interdisciplinary Legal Education (AILE) Program provides Columbia College students with outstanding records the opportunity to earn a B.A. degree from Columbia College and a J.D. degree from Columbia Law School in six years.

To be eligible to apply, students must have enrolled in all six semesters of study for the B.A. from Columbia College on Columbia’s New York campus (i.e., students with transfer credits or study abroad credits, even from Columbia programs, are not eligible to apply to the joint program). Students must have completed by the end of junior year 93 points of credit toward the B.A., including the full Columbia College Core Curriculum requirements and the requirements for a major or concentration. In the fifth and sixth years of study (i.e., the second and third years at the Law School), students must complete 12 points of coursework through the Graduate School of Arts and Sciences, and the coursework must have the prior approval of the student’s pre-professional adviser.

Interested students should submit an application in the spring of their junior year to the Office of Preprofessional Advising in the Berick Center for Student Advising. Columbia College may nominate one or two juniors each year for consideration, and the final admission determination is made by the Law School Admissions Committee. Prospective participants in this program must take the Law School Admission Test (LSAT) or Graduate Record Examination (GRE) no later than the February administration in the year of intended enrollment. After formal admission to the Law School, students are withdrawn from the College to become full-time Law School students in their fourth year, and are subject to the financial aid and housing policies of the Law School from that point forward.

AILE students receive Columbia College and Law School degrees at the same time, at the end of six years. AILE students must apply for the B.A. degree the term before they expect to graduate. Students should inform their advising deans in the Berick Center for Student Advising of their plans to graduate in order to be considered for honors and Phi Beta Kappa.

For more information, students may contact Preprofessional Advising, 403 Lerner, 212-854-6378; preprofessional@columbia.edu.

THE MAILMAN SCHOOL OF PUBLIC HEALTH

The 4+1 program between Columbia College and Columbia School of Public Health is a dual degree program that offers students the opportunity to earn a B.A. degree from Columbia College and an M.P.H. degree from the Mailman School of Public Health (Mailman) in five years.

Students accepted into the program spend the fall semester of their senior year taking the multidisciplinary Public Health Core Curriculum at Mailman, then complete their undergraduate coursework for the College’s B.A. degree in the spring semester of their senior year. After graduation from the College, students in the program enroll full-time at Mailman and engage in coursework, thesis work, and a practicum. The practicum takes place in the summer following the academic year of coursework and thesis work at Mailman.

College students may apply to the program in their junior year. Applicants must have a minimum cumulative GPA of 3.5, and are expected to have taken at least one semester of calculus, statistics or other appropriate quantitative course. Particular M.P.H. disciplines – specifically, the Biostatistics program and the Environmental Health Sciences program – have additional prerequisites. More information, including application instructions, can be found on the Mailman website.

For more information, students may contact their advising dean in the Berick Center for Student Advising, 403 Lerner.

THE SCHOOL OF INTERNATIONAL AND PUBLIC AFFAIRS

The International Affairs Five-Year Program

The International Affairs Five-Year Program offers Columbia College students the opportunity to earn both a B.A. degree and an M.I.A. degree from the School of International and Public Affairs (SIPA) in five years.

Students apply to the program during their junior year through the School of International and Public Affairs Admissions Office. Admission to the joint program does not constitute admission to SIPA. Once admitted to the joint program, students complete their senior year at Columbia College, by taking mostly graduate-level courses that are approved by SIPA to count toward the M.I.A. degree.

To be eligible for the program, students must have, by the end of their junior year, been enrolled in Columbia College for at least four semesters; completed a minimum of 93 credits; achieved competence in a modern foreign language; completed all Columbia College Core Curriculum requirements; and satisfied all major/concentration requirements, with the possible exception of two courses (i.e., needing no more than 6-8 credits to complete the major/concentration). These two courses toward the major or concentration may be taken during the senior year while completing 24 points of other coursework that will be accepted by SIPA. One 3-point course approved by SIPA may be taken in the junior year. It may be possible to take courses toward the M.I.A. degree during the summer between the junior and senior year with prior approval. To progress in the M.I.A. program in the fifth year, students must receive the B.A. from
the College with a satisfactory GPA. Upon formal admission to SIPA after their senior year, students may apply for housing and financial aid through SIPA.

For more information, students may contact their advising deans in the Berick Center for Student Advising, 403 Lerner.

**Public Policy and Administration Five-Year Program**

The 4+1 program in Public Policy and Administration is a dual degree program that offers students the opportunity to earn a B.A. degree from Columbia College and an M.P.A. degree from the School of International and Public Affairs in five years.

Interested students should apply during their junior year through the School of International and Public Affairs Admissions Office. Admission to the joint program does not constitute admission to SIPA. Once admitted to the joint program, students complete their senior year at Columbia College by taking mostly graduate-level courses that are approved by SIPA to count toward the M.P.A.

To be eligible for the program, students must have, by the end of the junior year, been enrolled in Columbia College for at least four semesters; completed a minimum of 93 credits; achieved competence in a modern foreign language; completed all College Core Curriculum requirements; and satisfied all major/concentration requirements, with the possible exception of two courses (i.e., needing no more than 6-8 credits to complete the major/concentration). These two courses toward the major or concentration may be taken during the senior year while completing 24 points of other coursework that will be accepted by SIPA. One 3-point course approved by SIPA may be taken in the junior year. It may be possible to take courses toward the M.P.A. degree during the summer between the junior and senior year, with prior approval. To progress in the M.P.A. program in the fifth year, students must receive the B.A. from the College with a satisfactory GPA. Upon formal admission to SIPA after their senior year, students may apply for housing and financial aid through SIPA.

For more information, students may contact their advising dean in the Berick Center for Student Advising, 403 Lerner.

**Please note: This Columbia College Bulletin page will be updated as information on exchange programs is confirmed. Thank you.**
DEAN’S LIST
During each academic term, students who have earned a minimum GPA of 3.6 or better in 12 or more points of letter credit in the preceding term are placed on the Dean’s List.

The grade P is considered neutral when the averages are figured, and the dividing factor is reduced by the number of points taken for Pass credit. Students who have received grades of D, F, W (or UW pre-Spring 2014) during the term are not eligible for consideration. In any given semester, the mark of YC (year course) precludes the attainment of Dean’s List status until the grade for the entire year’s coursework is awarded. Students who receive the grade of IN (incomplete), approved in advance by the Committee on Academic Standing, are eligible for Dean’s List only after all IN grades are changed to letter grades. Students who have been found responsible by the Office of Student Conduct and Community Standards for a violation of academic integrity will not be eligible for the Dean’s List during the term of the sanction.

COLLEGE (LATIN) HONORS
The Bachelor of Arts degree will be awarded with honors in three categories (cum laude, magna cum laude, summa cum laude) to the top 25 percent of the graduating class. Honors are determined by an undergraduate student’s cumulative GPA for all work at Columbia, with the top 5 percent of the graduating class being awarded summa cum laude, the next 10 percent being awarded magna cum laude, and the remaining 10 percent awarded cum laude.

College honors are the highest academic recognition awarded by the College. There is no separate consideration of honors for October or February graduates. The honor is officially noted on the diploma and transcript of students who have graduated. October and February graduates may ask the Registrar to add an honors notation to an already issued diploma.

Both academic standing and disciplinary standing are taken into consideration when awarding College honors.

VALEDICTORIAN AND SALUTATORIAN
The Committee on Honors, Awards, and Prizes reviews the academic records of the most exceptional students nominated by the faculty for Valedictorian and Salutatorian. Selection is based not on GPA alone, but on the breadth, depth, rigor of academic program, high quality of academic achievement, departmental recommendations, and outstanding academic work beyond that which is required for the degree.

The Committee on Honors, Awards, and Prizes considers both academic standing and disciplinary standing within the College when awarding Valedictorian and Salutatorian.

DEPARTMENTAL HONORS
Departmental honors may be established and awarded by any Columbia College department or academic program, and is recorded on a student’s final transcript. Students should consult with their director of undergraduate studies no later than the beginning of the first term of their senior year if they wish to be considered for departmental honors. Students who are awarded departmental honors are notified by their department in mid-May. Not all departments and programs offer departmental honors.

College guidelines for departmental honors include the following four criteria:

- Departmental honors are awarded to no more than 10%, or, in small departments, one member, of the graduating majors (including all October, February, and May degrees);
- A grade point average (GPA) of at least 3.6 in major courses is expected for a student to be considered for departmental honors;
- An honors thesis or equivalent project of high quality should be required by each department or academic program in order to receive departmental honors;
- Academic departments and programs consider both academic standing and disciplinary standing within the College when awarding departmental honors.

PHI BETA KAPPA
This academic society was founded in 1776 to recognize and celebrate friendship, morality, and learning. The Columbia College Delta chapter was formed in 1869. Each year, 10% of the senior class are inducted into Phi Beta Kappa by faculty who are members of the society. Two percent are elected in the fall and the other eight percent are elected in the spring. Selection is based not only on academic achievement, but also on evidence of intellectual promise, character, and achievement outside the classroom. Academic achievement is measured by strength and rigor of program, as well as by grades and faculty recommendations. Students may not apply for Phi Beta Kappa nor may they solicit faculty for recommendations.

As with graduation honors, October and February graduates are considered along with May graduates. Election to Phi Beta Kappa is noted on a student’s transcript.

The faculty Phi Beta Kappa selection committee considers both academic standing and disciplinary standing within the College when electing new members to the society.
While prizes are typically awarded annually, they are done so at the discretion of the respective selection committees. Hence, should a selection committee decide, in a particular year, that there are no suitable candidates; the prize will not be awarded. Unless otherwise noted, these prizes are awarded to Columbia College students only.

**GENERAL PRIZES**

**ALUMNI ASSOCIATION ACHIEVEMENT AWARD**
(1947) A trophy, in the form of a Columbia lion, awarded annually to the member of the senior class who is judged to be most outstanding for qualities of mind, character, and service to the College.

**ALUMNI PRIZE**
(1858) Awarded annually by the Alumni Association to the senior judged by classmates to be the most faithful and deserving.

**CHARLES H. BJORKWALL PRIZE**
(1937) Established by Ottie Emma Bjorkwall in memory of her brother, Dr. Charles H. Bjorkwall. Awarded annually to a member of the senior class for unselfish service to the College community.

**EDWARD SUTLIFF BRAINARD MEMORIAL PRIZE**
(1920) Established by Miss Phebe Sutliff in memory of her nephew, Edward Brainard Sutliff, CC’21. Awarded annually to the member of the graduating class who is judged by classmates to be most worthy of distinction for qualities of mind and character.

**JAMES CHRISTOPHER CARALEY MEMORIAL PRIZE**
(1984) Established in memory of James Christopher Caraley, 1959–1979, CC’81, by his family and friends. Awarded annually to that member of the junior class who has demonstrated the greatest commitment to the value of preservation of the natural environment or of world peace and order.

**ROBERT LINCOLN CAREY MEMORIAL PRIZE**
(1967) A trophy, in the form of a lion, awarded annually by the Alumni Association to the senior who, through a combination of leadership qualities as exercised in the nonathletic extracurricular program of Columbia College and outstanding achievement in the academic program of the College, best exemplifies the ideals that Robert Lincoln Carey sought to engender in the students of Columbia College.

**STANLEY I. FISHEL/ZETA BETA TAU PRIZE**
Established in honor of Stanley I. Fishel, CC’34, who was president of ZBT while at Columbia and later national president, and who believed in the important role fraternities can play in the development of undergraduates. Awarded to an undergraduate fraternity member who has demonstrated leadership, academic achievement, and participation in athletics or other campus activities.

**RICHARD H. FOX MEMORIAL PRIZE**
(1927) Established by Mr. and Mrs. Leon S. Fox in memory of their son, Richard H. Fox, CC’21. Awarded to the senior who, in the judgment of the King’s Crown Advisory Committee, has shown to the College the greatest interest and helpfulness. The student must have participated in some nonathletic activities and must be one who combines intelligence with a kindly interest in his or her fellows.

**ROBERT SHELOW GERDY PRIZE**
(1969) Established by Mr. and Mrs. Irving Gerdy in memory of their son, Robert Shellow Gerdy, CC’39. Awarded to that member of the graduating class who, throughout the undergraduate years, has made a significant contribution as a member of the staff of one or more College student publications, especially Jester, Columbia Review, and Spectator.

**ROBERT HARRON AWARD**
(1972) Established by his friends in memory of Robert Harron. Awarded annually to a member of the junior class for qualities of grace and generosity.

**KING’S CROWN AWARD**
(1916) Gold and silver insignia in the form of King’s Crowns, each distinguished by a device symbolic of a particular activity, awarded annually by the King’s Crown Advisory Committee in recognition of significant participation in any activity under its jurisdiction. Conferred each spring on the basis of written nominations solicited from the governing board of each eligible organization.

**MILCH PRIZE**
(1948) Established by Dr. and Mrs. Henry Milch. Awarded annually to the member of the junior class who, by leadership in extracurricular as well as scholastic activities, has, in the judgment of teachers and classmates, done the most to enhance the reputation of Columbia College.

**LEONARD A. PULLMAN MEMORIAL PRIZE**
(1965) A certificate and the inscription of the student’s name on a plaque in Alfred Lerner Hall, awarded annually to a member of the senior class who displays those qualities of outstanding scholarship and significant service to the College exemplified in the life of Leonard Pullman, CC’62. The recipient must occupy a position of responsibility in a nonathletic Columbia College activity.

**CHARLES M. ROLKER, JR. PRIZE**
(1909) Established by Mrs. C. M. Rolker in memory of her son, Charles M. Rolker, Jr., CC 1907. Awarded annually to the member of the graduating class who is judged by classmates to be most worthy of special distinction because of scholarship, participation in student activities, or in any combination thereof.

**VAN AM PRIZE**
(1925) Established by the Class of 1898 on the occasion of its twenty-fifth anniversary. Awarded to the member of the sophomore class who is most distinguished for service, character, and courtesy in relations with faculty members, fellow
students, and visitors. A donation is presented to the student activity of the winner’s choice.

**General Academic Prizes**

**Albert Asher Green Memorial Prize**
(1913) Established by Mr. and Mrs. Asher Green in memory of their son, Albert Asher Green, CC 1914. Awarded to the senior who has been a student in good standing in the College for at least three years and who has made the best record of scholarship.

**David B. Truman Alumni Award**
(1970) Established in honor of David B. Truman, former Dean of the College. A lion trophy donated annually by the Alumni Association to the Columbia College student who has made the most distinguished contribution to the academic affairs of the College.

**Prizes in the Core Curriculum**

**Joshua A. Feigenbaum Prize in Literature Humanities**
(2004) Established by Joshua Feigenbaum and awarded to a student who is judged by the faculty to have exhibited excellence in Literature Humanities.

**Wallace A. Gray Prize in Literature Humanities**
(2004) Established in memory of the late Professor Wallace Gray and awarded annually to the Columbia College undergraduate who is judged by the faculty to have written the best essay in Literature Humanities.

**Dean Hawkes Memorial Prize in the Humanities**
(1943) Established by a committee of the Class of 1943 in memory of Dean Herbert E. Hawkes. Awarded annually to the member of the junior class who is judged to be the most deserving on the basis of work in the humanities.

**Jonathan Throne Kopit Prize in Logic and Rhetoric**
(1997) Established by Mrs. Ina Cohen in memory of her husband, Jonathan Throne Kopit, CC’68. Awarded annually to the Columbia College student who, in the opinion of the departmental committee, has made the most significant progress in University Writing.

**James P. Shenton Prize in Contemporary Civilization**
(2004) Established by the Committee on the Core and the Office of the Dean of the College in memory of Professor James P. Shenton, CC’49 and GSAS’55. Awarded annually to the Columbia College undergraduate who is judged by the faculty to have written the best essay in Contemporary Civilization.

**Prizes in the Humanities**

**Dino Bigongiari Prize**
(1954) Established by the former students and friends of Professor Dino Bigongiari, awarded annually to the senior who has written an outstanding essay on Italian civilization or whose work in the regular Italian courses is judged most worthy of distinction.

**Bunner Prize**
(1896) Established by friends of the late Henry Cuyler Bunner. Awarded to the candidate for a degree in Columbia University who has submitted the best essay on a topic dealing with American literature. The topic to be selected in connection with course or seminar work in American literature and approved by the chairman of the Bunner Prize Committee.

**Douglas Gardner Caverly Prize**

**Deutscher Verein Prize in German**
(1917) Awarded annually to the junior or senior who submits the winning essay on a prescribed topic in German literature.

**Earle Prize in Classics**
(1907) Established in memory of Mortimer Lamson Earle, CC 1886, lecturer and professor in the Department of Classics. Awarded for excellence in sight translation of passages of Greek and Latin. Only candidates for the degree of Bachelor of Arts may compete.

**James Gutmann Prize in Philosophy**
(1987) Established in honor of James Gutmann, this prize is awarded to a graduating Columbia College senior in Philosophy who plans to pursue graduate work in the field.

**Adam Leroy Jones Prize in Logic**
(1934) Established by Mrs. Adam Leroy Jones in memory of her husband, who was Associate Professor of Philosophy and Director of University Admissions, 1909–1934. Awarded to a student in the College for the best essay on any topic in the philosophy of science or in the foundation of logic. It may be either a topic connected with seminar work in the Department of Philosophy or one approved by the Jones Prize Committee.

**Helein and Howard R. Marraro Prize**
(1972) Established in honor of Professor Howard R. Marraro. Awarded to an undergraduate of high academic distinction and promise in an area of study concerned with Italian culture, including art, music, comparative literature, history, economics, government, or in any other academic discipline.

**Benjamin F. Romaine Prize Fund**
(1922) Gift of Benjamin F. Romaine to provide an annual prize for proficiency in Greek language and literature.

**Ernest Stadler Prize for the Excellence in the Study of Classical Antiquity**
(2006) Established by Dr. Richard A. Brooks, CC’53, and Dr. Eva Stadler Brooks, BC’53, in memory of Dr. Stadler Brooks’
father, Ernest Stadler, who had a life-long commitment to the study of classical antiquity. The prize may be awarded annually to a graduating senior of Columbia College who is judged by the faculty to have demonstrated academic excellence through coursework and the writing of a senior essay on some aspect of the history or culture of the classical world.

PRIZES IN THE SOCIAL SCIENCES

CHARLES A. BEARD PRIZE IN POLITICAL SCIENCE
(1963) Established by the Honorable Albert Levitt. Awarded to the student who writes the best paper in political science during the academic year.

CARL B. BOYER MEMORIAL PRIZE
(1978) Established by Mrs. Carl B. Boyer in memory of her husband. Awarded annually to the Columbia undergraduate who writes the best essay on any topic in the history of science or mathematics as judged by a faculty committee.

CHANLER HISTORICAL PRIZE
(1877) Established at the bequest of J. Winthrop Chanler, CC 1847. Awarded to the senior who submits the best essay on a topic dealing with the history of civil government in America. The topic to be selected in conjunction with seminar work in one of the social science departments and approved by the chairperson of the Chanler Prize Committee.

TARAKNATH DAS FOUNDATION AWARD
(1957) Annual award for best undergraduate essay in the areas of the American presidency, Congress, or public policy.

ALFRED MORITZ MICHAELIS PRIZE
(1926) Established by Mrs. Jeanette Michaelis in memory of her son, Alfred Moritz Michaelis, CC 1920. Awarded to the member of the graduating class who has completed with the most proficiency the sequence of courses in physics that corresponds most nearly to the sequence given by the late Professor George V. Wendell.

PROFESSOR VAN AMRINGE MATHEMATICAL PRIZE
(1910) Established by George G. DeWitt, CC 1867. Awarded to three College students (a first-year, a sophomore, and a junior) who are deemed most proficient in the mathematical subjects designated during the year of the award.

JOHN DASH VAN BUREN, JR. PRIZE IN MATHEMATICS
(1906) Established by Mrs. Louise T. Hoyt in memory of her nephew, John Dash Van Buren, Jr., CC 1905. Awarded to the degree candidate who writes the best examination on subjects prescribed by the Department of Mathematics.

PRIZES IN THE NATURAL AND PHYSICAL SCIENCES

ALFRED MORITZ MICHAELIS PRIZE
(1926) Awarded to the member of the graduating class who has completed with the most proficiency the sequence of courses in physics that corresponds most nearly to the sequence given by the late Professor George V. Wendell.

PROFESSOR VAN AMRINGE MATHEMATICAL PRIZE
(1910) Established by George G. DeWitt, CC 1867. Awarded to three College students (a first-year, a sophomore, and a junior) who are deemed most proficient in the mathematical subjects designated during the year of the award.

JOHN DASH VAN BUREN, JR. PRIZE IN MATHEMATICS
(1906) Established by Mrs. Louise T. Hoyt in memory of her nephew, John Dash Van Buren, Jr., CC 1905. Awarded to the degree candidate who writes the best examination on subjects prescribed by the Department of Mathematics.

PRIZES IN THE CREATIVE AND PERFORMING ARTS

SEYMOUR BRICK MEMORIAL PRIZE
(1969) Established by Mrs. Seymour Brick and her son, Richard, in honor of their husband and father, Seymour Brick, CC 1934. Awarded to the Columbia College student who submits the best one-act or full-length play as judged by the Department of English and Comparative Literature.

GEORGE WILLIAM CURTIS PRIZE
(1902) Established by the late Samuel Putnam Avery, CC 1896, an associate of George William Curtis. Awarded to students in the College for excellence in the public delivery of English orations.

ROBERT W. GOLDSBY FUND
(2019) Awarded to the Columbia College student who demonstrates excellence in the dramatic arts.

PHILOLEXIAN CENTENNIAL WASHINGTON PRIZE
(1902) Gift of J. Ackerman Coles, CC 1864. Awarded once every four years to the student in the college who shall be deemed most worthy, upon delivery of an original address on a subject concerning public affairs.

PHILOLEXIAN PRIZE FUND
(1904) A gift of the Philolexian Society, the income from which shall be used for prizes in Columbia College for debating, essays, short stories, and poetry.

AUSTIN E. QUIGLEY PRIZE
(2010) The Austin E. Quigley prize for outstanding artistic and intellectual achievement may be awarded to a Columbia College senior majoring in Drama and Theatre Arts. Named in honor of Columbia College’s dean from 1995-2009, the prize is funded by Nobel Laureate Richard Axel, CC ’67 and University Professor of Biochemistry and Molecular Biophysics.

THE LOUIS SUDLER PRIZE IN THE ARTS
(1983) Awarded annually to a senior who, in the opinion of the Faculty, has demonstrated excellence of the highest standards of proficiency in performance or execution or in the field of composition in one of the following general areas of performing and creative arts: music, theatre, painting, sculpture, design, architecture, film or dance.

VAN RENSSELAER PRIZE
(1926) Gift of Maximilian Foster. Awarded to the candidate for a degree in Columbia University who is the author of the best example of English lyric verse. Material must be submitted to the Department of English and Comparative Literature by April 1.

GEORGE EDWARD WOODBERRY PRIZE

Department Prizes

Art History and Archaeology
SENIOR THESIS PRIZE IN ART HISTORY AND ARCHAEOLOGY

Biological Sciences
THE BRIDGES AND STURTEVANT PRIZE IN BIOLOGICAL SCIENCES

CHARLES A. HUEBSCCHMANN PRIZE

Center for the Study of Ethnicity and Race
CSER AWARD FOR ACADEMIC EXCELLENCE

CSER AWARD FOR BEST THESIS

Chemistry
BRIAN BENT AWARD
RICHARD BERSOHN PRIZE

THOMAS J. KATZ PRIZE

Comparative Literature and Society
CATHERINE MEDALIA JOHANNET MEMORIAL PRIZE IN COMPARATIVE LITERATURE AND SOCIETY

Computer Science
THEODORE R. BASHKOW AWARD

COMPUTER SCIENCE DEPARTMENT AWARD
JONATHAN L. GROSS AWARD FOR ACADEMIC EXCELLENCE

ANDREW P. KOSORESOW MEMORIAL AWARD FOR EXCELLENCE IN TEACHING AND SERVICE

RUSSELL C. MILLS AWARD

Creative Writing
ELLIS AVERY PRIZE FOR CREATIVE WRITING

Drama and Theatre Arts
DASHA AMSTERDAM EPSTEIN AWARD IN PLAYWRITING

DESIGN AND PRODUCTION AWARD IN THEATRE

Earth and Environmental Sciences
WALTER PITMAN SENIOR THESIS AWARD

Economics
ROMINE PRIZE

Department Prizes

African American and African Diaspora Studies
ELLA BAKER AWARD FOR OUTSTANDING ACADEMIC ACHIEVEMENT
Ralph Johnson Bunch Award for Leadership and Service
Academic Honors, Prizes, and Fellowships

English and Comparative Literature
ACADEMY OF AMERICAN POETS POETRY PRIZE
CHARLES PATERNOPPOET BARRATT-BROWN MEMORIAL PRIZE
ARTHUR E. FORD POETRY PRIZE
JOHN VINCENT HICKEY PRIZE

Film and Media Studies
PAT ANDERSON PRIZE IN FILM REVIEWING
GUY GALLO MEMORIAL AWARD IN SCREENWRITING
ANDREW SARRIS MEMORIAL AWARD FOR FILM CRITICISM

French and Romance Philology
PROMISE IN FRENCH STUDIES
SENIOR FRENCH PRIZE

History
CHARLES A. BEARD PRIZE IN HISTORY
FACULTY SPECIAL PRIZE
LILY PRIZE IN HISTORY
GARRETT MATTINGLY PRIZE
UNDERGRADUATE EDUCATION COMMITTEE PRIZE

Latin American and Iberian Cultures
SUSAN HUNTINGTON VERNON PRIZE

Music
CHARLES S. MILLER AWARD
DOUGLAS MOORE PRIZE
BORIS AND EDNA RAPPOPORT PRIZE

Philosophy
DAVID H. SIFF PHILOSOPHY OF SCIENCE AWARD

Political Science
THE PHYLLIS STEVENS SHARP FELLOWSHIP IN AMERICAN POLITICS

Religion
PETER AWN UNDERGRADUATE PAPER PRIZE

Slavic Languages
THE AMERICAN COUNCIL OF TEACHERS OF RUSSIAN SCHOLAR LAUREATE AWARD
ROBERT A. MAGUIRE PRIZE IN SLAVIC STUDIES
PUSHKIN POETRY PRIZE

Sociology
GRANT SQUIRES PRIZE IN SOCIOLOGY

Sustainable Development
STUART GAFFIN AWARD FOR LEADERSHIP AND ENGAGEMENT

Women, Gender, and Sexuality Studies
FEMINIST TO THE CORE ESSAY PRIZE
QUEER STUDIES AWARD
WOMEN'S AND GENDER STUDIES ESSAY PRIZE

Fellowships for Graduate Study

HARRY J. CARMAN FELLOWSHIP
(1949) Established by friends and former students of Harry J. Carman GS 1919, former dean of Columbia College, this fellowship is awarded annually to a Columbia College senior who exhibits intellectual promise for advanced study.

JARVIS AND CONSTANCE DOCTOROW FELLOWSHIP
(2005) Established by the Jarvis and Constance Doctorow Foundation, this fellowship is awarded annually to a Columbia College senior for one year of study at St. Edmund Hall, Oxford University.

HENRY EVANS TRAVELLING FELLOWSHIP
(1928) Established by Mrs. Henry Evans in memory of her husband, Henry Evans CC 1881, this fellowship is awarded annually to graduating seniors at Columbia College who are planning to undertake a research project of a creative nature that requires travel rather than formal graduate study.

HOLTHUSEN-SCHINDLER ENDOWMENT FUND
(2000) Established through a bequest from the estate of Lenore S. Holthusen GS’51, the widow of Hen Holthusen CC 1915, LAW 1917, this scholarship is awarded to graduates of Columbia College who continue their education at Columbia Law School.

EURETTA J. KELLETT FELLOWSHIPS
(1932) Established through a bequest from the estate of Euretta Jane Schlegel, this fellowship is awarded to Columbia College seniors who have shown exceptional proficiency in the study of liberal arts for one or two consecutive years of study at Oxford University or Cambridge University.
SPECIAL UNDERGRADUATE FELLOWSHIPS

COLUMBIA COLLEGE SCIENCE SCHOLARSHIP
(2018) Awarded to outstanding undergraduate sophomores majoring in biology, chemistry, chemical physics, biophysics, or neuroscience and behavior for summer undergraduate research in one of the labs of the Columbia College Science Scholars faculty.

BEESEN GLOBAL EXPERIENCE TRAVEL FELLOWSHIPS
(2015) Established by Charles F. Beesen LS’58, this fellowship is awarded annually to undergraduate students of Columbia College and Barnard who are not native speakers of French for summer study abroad in Paris.

THE CLASS OF 1939 SUMMER RESEARCH FELLOWSHIP
(1989) Established by the Class of 1939 in honor of the 50th anniversary of their graduation, this fellowship grants students the opportunity to pursue their intellectual goals, gain valuable research experience, and cultivate stronger relationships with faculty members.

HARVEY KRUEGER GLOBAL EXPERIENCE FELLOWSHIP
Established by Harvey M. Krueger CC’51, LAW’53, this fellowship is awarded to Columbia College students for study abroad or independent research projects in Israel or Poland.

HERBERT DERESIEWICZ SUMMER RESEARCH FELLOWSHIP
(2011) Established by Robert Leslie Deresiewicz CC’79, P: CC’13, CC’16, in memory of his father Herbert Deresiewicz SEAS’48, SEAS’52, P: CC’79, CC’85, BC’78, GSAS’90, GSAS’93, GSAS’98, JRN’87, PT’79, a long time SEAS faculty member and department chairman who held a deep and abiding love for undergraduate teaching. This fellowship is awarded to a Columbia College or SEAS student for full-time laboratory research on the Morningside Heights campus in biological sciences, biomedical engineering, chemistry or chemical engineering.

INTERNATIONAL AFFAIRS FELLOWSHIP FUND
(2019) Established by an anonymous donor, this fellowship is awarded to Columbia College juniors majoring in political science proposing summer research focusing on international relations, human rights, or regional studies.

SOLOMON AND SEYMOUR FISHER CIVIL LIBERTIES FELLOWSHIP
(1989) Established by Solomon Fisher, CC‘36, LAW’38, P: CC’62, GSAS’68 and Seymour Fisher, CC’45, this fellowship is awarded annually to a Columbia College student for work during the summer at the Legal Department of the American Civil Liberties Union National Office in New York City.

KLUGE FELLOWS SUMMER RESEARCH GRANT
(1988) Established by John Kluge, CC’37, P: CC’05 this fellowship. Administered by the Columbia University Scholars Program (CUSP) Summer Enhancement Fellowships, grants are awarded competitively to students from underrepresented groups for independent research project during the summer under the sponsorship of a faculty member. The application process includes a series of seminars and workshops.

RICHARD LEWIS KOHN TRAVELLING FELLOWSHIP
(1959) Established in memory of Richard Lewis Kohn CC’60 from gifts of various donors, this fellowship is awarded annually to a Columbia College student for study during the junior year in Great Britain.

MYRA KRAFT PRIZE FOR EXCEPTIONAL PRACTICAL EXPERIENCE IN HUMAN RIGHTS ADVOCACY
(2013) Established by Robert Kraft CC’63, P: CC’94, in memory of his wife Myra Kraft P: CC’94, this prize is awarded to the rising Columbia College senior majoring in human rights for a summer or one-term human rights internship.

NICHOLAS LUBAR AND FAMILY PRIZE
(2019) Established by Nicholas R. Lubar CC’73, this prize is awarded to Columbia College students for summer research in the field of Latin American politics or policy-making related to economic development and improved standards of living within Latin America and the Caribbean nations.

MELLON MAYS UNDERGRADUATE FELLOWSHIP
(1996) Awarded in the spring semester of the sophomore year to minority students, and other undergraduates with a demonstrated commitment to racial diversity, who wish to pursue a Ph.D. and whose intellectual and social commitments embody those of the late Dr. Benjamin Mays. The fellowship is for a two-year academic enhancement program funded by the Andrew W. Mellon Foundation.

NOBUHISA AND MARCIA ISHIZUKA GLOBAL FELLOWSHIP IN EAST ASIAN STUDIES
(2015) Established by Nobuhisa Ishizuka CC’82, LAW’86 this fellowship is awarded annual to a Columbia College student for an international experience studying Japanese language and culture.

PRESIDENTIAL GLOBAL FELLOWSHIP
(2014) Established by President Lee C. Bollinger, the fellowship is awarded to first-year undergraduates (CC, SEAS, GS) for participation in global engagement opportunities.

SANFORD S. PARKER PRIZE SUMMER FELLOWSHIPS
(1980) Funded by the family and friends of Sanford S. Parker CC’37. Awarded to Columbia College juniors in order to conduct summer research projects. Recipients will show promise of doing original work, and demonstrate boldness of thought and a commitment to excellence.

RICHARD AND BROOKE KAMIN RAPAPORT SUMMER MUSIC PERFORMANCE FELLOWSHIP
Academic Honors, Prizes, and Fellowships

(1993) Established by Brooke Kamin Rapaport and Richard A. Rapaport CC’69, P: CC’22, this music fellowship is awarded to Columbia College students who are particularly gifted in musical performance, composition or conducting.

EDWIN ROBBINS ACADEMIC RESEARCH AND PUBLIC SERVICE FELLOWSHIP
(1991) Established by Edwin Robbins, CC’53, LAW’55, P: LAW’88, this fellowship is awarded each summer to four Columbia College students majoring in political science or history who intend to conduct research into important political or policy making matters, or who will be working as interns, without compensation, in a governmental office, agency, or other public service organization.

ARTHUR ROSE TEACHING ASSISTANTSHIP
(1958) Established by Mr. and Mrs. Bennett Rose in memory of their son, Arthur Rose, this fellowship is awarded to a senior in Columbia College who is to assist the work of a member of the faculty in one of the departments that contribute to the courses in Contemporary Civilization and the Humanities.

THE PHYLLIS STEVENS SHARP FELLOWSHIP IN AMERICAN POLITICS
(2005) Established by John Stevens Sharp CC’79, GSAS’80, GSAS’82, this fellowship is awarded to Columbia College students majoring in political science for research in American politics or policy making or uncompensated internships in a government office, agency, or other organization serving the public.

SUMMER UNDERGRADUATE RESEARCH FELLOWSHIP
Awarded to undergraduate students for hands-on biology related laboratory research on either the Morningside campus or in the biomedical labs at Columbia’s Health Sciences. The fellowship provides for one summer of full time research.

RICHMOND B. WILLIAMS TRAVELLING FELLOWSHIP
(1988) Established through a bequest from the estate of Richmond B. Williams CC’1925, JRN’1925, this fellowship is awarded to Columbia College juniors majoring in English for a summer research project requiring foreign travel.

YATRAKIS SUMMER RESEARCH FELLOWSHIP
(2019) Established in honor of Kathryn B. Yatrakis GSAS’76, GSAS’81, P: CC’94, CC’96, CC’05 by her family, this fellowship is awarded to Columbia College students for summer research in urban studies.

Special Endowments
CLASS OF 1954 URBAN NEW YORK PROGRAM ENDOWMENT
(1981) Established by the Class of 1954, this fund enables students and faculty to jointly experience cultural events through the Urban New York Program.

ARNOLD I. KISCH, M.D., AND VICTORIA L. J. DAUBERT, PH.D FUND FOR STUDENTS TO EXPERIENCE OPERA IN N.Y.C.
(1993) Created for students to experience opera in New York City within the Urban New York Program.
STANDARDS AND DISCIPLINE

As members of the Columbia University community, all Columbia College students are expected to uphold the highest standards of integrity, civility, and respect. Students are therefore expected to conduct themselves in an honest, civil, and respectful manner in all aspects of their lives. Students who violate these standards of behavior interfere with their ability, and the ability of others, to take advantage of the full complement of University life, and are subject to Dean’s Discipline.

The continuance of each student upon the rolls of the University, the receipt of academic credits, the confirmation of graduation, and the conferral of any degree or the granting of any certificate are strictly subject to the disciplinary powers of the University. Ultimate authority on matters of students’ discipline is vested in the Trustees of the University, which is delegated to the Dean of Columbia College and his staff, who establish standards of behavior for Columbia College students beyond the regulations included in the Statutes of the University, and who define procedures by which discipline will be administered.

A full list of behavioral and academic violations can be found through Student Conduct and Community Standards.

BEHAVIORAL VIOLATIONS

Behavioral violations of University policy have been identified for the purposes of maintaining a safe and healthy educational environment. Prohibited conduct includes, but is not limited to, the following:

- Access/Egress, Unauthorized
- Alcohol, Prohibited use of
- Collusion
- Columbia University Identification Card, Prohibited use of
- Columbia Identity (or affiliated organizations), Unauthorized use of
- Copying and/or Distribution, Unauthorized
- Disruptive Behavior
- Endangerment
- Failure to Comply
- Falsification
- Federal, State or Local laws, Violation of
- Fire Safety Policies, Violation of
- Harassment
- Hazing
- Illegal Drugs Policy, Violation of
- Information Technologies Policies, Violation of
- Retaliation
- Smoking Policy, Violation of University
- Surveillance/Photography, Unauthorized
- Theft
- University Policies, Violation of
- Vandalism/Damage to Property
- Weapons

ACADEMIC INTEGRITY

A Columbia College education has two complementary elements: the intellectual development of bodies of knowledge and habits of mind, and the overall development of moral character and personal ethics. These elements are supported by a commitment to academic integrity.

Academic integrity defines an intellectual community and its educational mission. As members of the intellectual community of Columbia College, students are expected to respect and acknowledge the intellectual work of others and denote clearly how their own work relates to that of others.

Violating the standards of academic integrity severely inhibits a student’s opportunity to mature academically, professionally, and socially. Consequently, a violation of academic integrity is one of the most serious offenses a student can commit at the University.

Violations of academic integrity may be intentional or unintentional and can include, but are not limited to:

- Academic Dishonesty, Facilitation of
- Assistance, Unauthorized
- Bribery
- Cheating
- Collaboration, Unauthorized
- Dishonesty
- Ethics, Honor Codes, and Professional Standards, Violation of
- Failing to Safeguard Work
- Giving or Taking Academic Materials, Unauthorized
- Obtaining Advanced Knowledge
- Plagiarism
- Sabotage
- Self-Plagiarism
- Test Conditions, Violation of

ACADEMIC INTEGRITY IN THE VIRTUAL AND HYBRID CLASS ENVIRONMENT

The Columbia undergraduate classroom, whether real or virtual, is a vital and dynamic space for learning, sustained by the expectation that the class experience is shared only by participants in the course. The free and respectful exchange of ideas is the foundation of teaching and learning and can occur only if all course participants agree as a matter of academic
integrity (subject to standard penalties) to respect the guidelines established below.

To support and sustain the class experience, the Columbia undergraduate Committee on Instruction sets forth the following expectations, pertaining both to course materials and to course meetings:

• Course materials, including handouts, readings, slides, and attendant materials must not be broadly shared, distributed, or sold outside the course environment (including on social media) without permission of the instructor. They must be understood as the product of instructors’ intellectual work, and treated as their property.

• The contents of class discussion and breakout rooms may not be circulated outside the classroom, in whole or in part, for non-educational purposes (e.g., on social media) or outside the Columbia community. Students are expected to respect the complex dynamics of class discussion and use discretion when repeating the ideas of others outside of the classroom. The audio and visual recordings of class discussion and breakout rooms belong to the course participants and must be understood in the context of the course. This is especially crucial to protect the identity of speakers; in certain circumstances, failure to do so could be a form of bullying and could endanger course participants.

• Recordings of class sessions must not be shared, in whole or in part, with those outside the class. Students are not permitted to record any portion of class sessions without the explicit consent of the instructor.

**DEAN’S DISCIPLINE OVERVIEW**

It is expected that all students act in an honest way and respect the rights of others at all times. Dean’s Discipline is the process utilized by Columbia College to investigate and respond to allegations of behavioral or academic misconduct. The Dean’s Discipline process aims to educate students about the impact their behavior may have on their own lives as well as on the greater community and, as a result, is not meant to be an adversarial or legal process.

The process is initiated when an allegation is reported that a student has violated Columbia College or University policies. Students may be subject to Dean’s Discipline for any activity that occurs on or off campus that impinges on the rights of other students and community members. This also includes violations of local, State, or Federal laws.

**Student Conduct and Community Standards** is responsible for all disciplinary affairs concerning Columbia College students that are not reserved to some other body.

Columbia College students are expected to familiarize themselves with *Standards and Discipline* and the comprehensive list of policies and expectations available on the [Student Conduct and Community Standards](#) website.
COLUMBIA UNIVERSITY POLICIES

Since policies and procedures are subject to change, please check the Columbia University website for the most current information.

RESERVATION OF UNIVERSITY RIGHTS

This Bulletin is intended for the guidance of persons applying for or considering application for admission to Columbia College of Columbia University and for the guidance of Columbia students and faculty.

In general, the Bulletin sets forth the manner in which the University intends to proceed with respect to the matters set forth herein, but the University reserves the right to depart without notice from the terms of this Bulletin. The Bulletin is not intended to be, and should not be, regarded as a contract between the University and any student or other person.

Valuable information to help students, faculty, and staff understand some of the policies and regulations of the University can now be found in University Policies, which includes information on the following:

- Additional Policy Sources for the Columbia Community
- Central Administration of the University's Academic Programs
- Consumer Information
- Crime Definitions in Accordance with the Federal Bureau of Investigation's Uniform Crime Reporting Program
- Essential Resources:
  - Campus Safety and Security
  - Disability Services
  - Ombuds Office
  - Transcripts and Certifications
- FERPA - Policy on Access to Student Records under the Federal Family Educational Rights and Privacy Act (FERPA) of 1974, as Amended
- Gender-Based Misconduct Policies for Students
- Information Technology Policies
- International Travel Planning Policy
- Involuntary Leave of Absence Policy
- Military Leave of Absence Policy
- Non-Retaliation Policy
- Policies on Alcohol and Drugs
- Policies and Procedures on Nondiscrimination and Harassment
- Policy on Partisan Political Activity
- Protection of Minors
- Social Security Number Reporting
- Student Email Communication Policy
- University Event Policies
- University Regulations (Including Rules of University Conduct)
- Use of Hoverboards on University Campus and Property
- Use of Unmanned Aircraft Systems on University Campus and Property
- Voluntary Leave of Absence Policy
- Involuntary Leave of Absence Policy

POLICY ON ACADEMIC CONCERNS, COMPLAINTS, AND GRIEVANCES

Columbia University is committed to fostering intellectual inquiry in a climate of academic freedom and integrity. Its members, students, and faculty alike, are expected to uphold these principles and exhibit tolerance and respect for others. The following procedures are part of a process to ensure that student concerns about experiences in the classroom or with faculty are addressed in an informed and appropriate manner.

Please note that this policy is meant to address any potential concerns about a faculty member's professional conduct and behavior toward students in the classroom or in other instructional settings. Potential concerns about grades awarded by a faculty member are covered by a separate policy, which can be found on the College’s website under "Academics".

Columbia believes that both students and faculty have the right to express their views freely, within an atmosphere of tolerance and civility. Faculty may present students with ideas and interpretations that surprise, and even offend them. But they must do so in an environment that is open to divergent views. Faculty, of course, must not discriminate on the basis of race, gender, sexual orientation, disability, religion, or other inappropriate categories.

The University offers several avenues of assistance to students who feel that their professors have not lived up to these responsibilities. These range from informal counseling and mediation to formal grievance processes. It is a violation of University policy to retaliate against any student who brings a grievance procedure in good faith.

The Ombuds Office. When students encounter problems that they feel they cannot discuss with their professors, they may, instead, turn to the University Ombuds Office -- http://ombuds.columbia.edu -- for information, clarification of University policies, and confidential advice. The Ombuds Officer may refer students to other offices for further assistance or engage in informal mediation at the request of students. The
Ombuds Officer does not have the authority to conduct formal investigations.

Deans and Department Chairs. Students may also approach the chair of the department in which their course is given for advice and assistance in resolving problems with individual faculty. If they are not satisfied with the assistance they receive or consider the chair to be part of the problem, they may seek assistance from the dean of the School within which they are enrolled or the dean or vice president overseeing the School within which the course is offered. The deans and vice presidents are authorized to conduct formal investigation of student complaints against their professors and, when they consider it appropriate, provide relief to the student or impose sanctions against the professor in a manner that is consistent with the University’s disciplinary policies for faculty. The form such investigations take is left to the discretion of the deans and vice presidents.

Office of Equal Opportunity and Affirmative Action.
When students believe that they have been the victims of discrimination or sexual harassment by faculty, they may seek assistance from the Office of the Associate Provost for Equal Opportunity and Affirmative Action — http://eeoaa.columbia.edu. As described in the University’s Policy Statement on Discrimination and Sexual Harassment, the Associate Provost is empowered to conduct investigations of their complaints, with certain exceptions, as well as provide confidential advice and engage in informal mediation. The Associate Provost may exercise those responsibilities herself or delegate them to a designee. If at any time a complaint is filed with a governmental agency or court, the University procedures must cease immediately.

Time Frame for Proceedings
A student should ordinarily bring any concern or complaint within 30 days of the end of the term in which the offending conduct occurred or by the beginning of the following term. The school process will ordinarily take 30 days.

Confidentiality
At every level, those involved recognize and respect a student’s need for confidentiality when addressing certain kinds of concerns. If the student wishes complete confidentiality, concerns may be raised with the University’s Ombuds Office, a neutral office that can receive complaints of any kind for the University and that offers a range of options and communication channels. Students, however, must be aware that the Ombuds Office has no authority to adjudicate a complaint; it is there as a confidential resource to students, faculty, and administrators to advise on various avenues of redress and to mediate disputes, if both parties agree.

GRADUATION
The B.A. degree is awarded three times during the year: in February, May, and October. There is one University Commencement ceremony in May (see Academic Calendar).

Application or Renewal of Application for the Degree
The Application for the Degree is available on the Registrar’s website. Students may complete the degree application form electronically and submit it to diplomas@columbia.edu. Alternative instructions for submitting the application for the degree are on the form itself.

General deadlines for applying for graduation are September 1 for October degrees; November 1 for February degrees; and December 1 for May degrees. When a deadline falls on a weekend or holiday, the deadline moves to the next business day. Students who fail to earn the degree by the conferral date for which they applied must file another application for a later conferral date.

Diplomas
There is no charge for the preparation and conferral of an original diploma. Students’ names will be printed exactly as they appear on their transcript. Students are advised to check their transcript, and if errors are found, they may email the Office of the University Registrar at registrar@columbia.edu.

If students wish to change their name, they must submit the Name Change Affidavit. The affidavit must be notarized and filed by the application deadline.

If a graduate’s Columbia diploma is lost or damaged, there will be a charge of $100 for a replacement diploma. Note that replacement diplomas carry the signatures of current University officials. Applications for replacement diplomas are available through the Office of the University Registrar.

Additional Information:
• Application for Degree or Certificate — University Registrar
• Graduation and Diplomas — University Registrar
• Commencement Week
• GradZone

IMMUNIZATION REQUIREMENTS
There are several immunization requirements that all students—regardless of credit load—must complete before they are permitted to register for classes. For this reason, a hold is placed on registration for all incoming students.

Documentation is upon admission or at least 30 days prior to a student’s scheduled registration date, except for seasonal influenza.

1. Measles, Mumps, and Rubella (MMR): New York State public health law and University policy requires that all students born on or after January 1, 1957 document immunity to measles, mumps, and rubella.
2. **Meningitis decision**: New York State public health law and University policy requires that students document that they either have received the meningococcus meningitis vaccine or have declined to receive it. Those indicating they have received the vaccine must upload documentation showing the vaccine was received in the last 10 years.

Each fall term (and January for students starting in the Spring) students must also be vaccinated against seasonal influenza.

3. **Seasonal Influenza**: Columbia University policy requires that students receive, or provide documentation they have received, the seasonal influenza vaccine. Vaccines must be administered on or after August 1 of the prevailing season.

For students enrolled in the Fall, this requirement must be met before students are permitted to register for Spring courses. For students new to the University in the Spring term, this requirement applies before a student is permitted to register for their first term at Columbia.

Additionally, the following vaccine is required for all students physically accessing university facilities, campuses, or participating in University-recognized events.

4. **COVID-19**: University policy requires that students must provide documentation of being fully vaccinated (please visit the Immunization Compliance page for the most updated definition of vaccine status).

All students are expected to complete the COVID-19 vaccine process at least 14 days before first accessing University facilities or participating with in-person University-approved activities to ensure they are considered fully vaccinated at the time of first access. For fall 2021 the deadline to submit COVID-19 documents is August 2. International students unable to access one or both vaccine doses before the August 2 deadline will be supported. Check the University's COVID-19 page for more details.

**Submitting Documentation**

**For Meningitis Decision**: Certify your decision online. The process takes two to three minutes to complete. Those indicating they have received the vaccine must upload documentation showing the vaccine was received in the last 10 years.

**For MMR, COVID-19, and Seasonal Influenza**: Submit documentation via the Columbia Health Patient Portal (Immunization Record section under Medical Clearances). Records may also be sent via other options as outlined on the Columbia Health website, though records submitted outside of the Patient Portal process may experience longer processing times.

All forms are processed in the order in which they are received. Columbia does not expedite processing of forms. As such, any delays in submitting will result in registration delays (MMR, Meningitis, & Influenza) or delays in physical access (COVID-19).

Columbia Health provides COVID-19 and seasonal influenza vaccinations with no out of pocket costs for students during the Fall term.

**Exemptions**

Columbia University is committed to providing a safe, inclusive, and supportive experience for all students and recognizes medical contraindications to vaccination as well as student observance of their faith as it pertains to the practice of immunization.

To request a medical or religious exemption, please complete the appropriate request forms, read the required Vaccine Information, attach all supplemental materials, and upload all documents to the Columbia Health Patient Portal (Immunization Record section under Medical Clearances) prior to the deadline. Note that students requesting an exemption must submit separate forms for each vaccine exemption request. Learn more about exemption requests on the Immunization Compliance page.

For information about these requirements visit the Immunization Compliance page, or email immunizationcompliance@columbia.edu.

**IMMUNIZATIONS RECOMMENDATIONS**

Columbia Health recommends that students receive all routine childhood vaccinations, an updated tetanus booster, vaccination for Hepatitis B (three-dose series), and varicella (chicken pox). These vaccines are available at Columbia Health Medical Services.

Students who have paid the Columbia Health & Related Services Fee are not charged for the following vaccines when administered at Columbia Health Medical Services:

1. Measles, Mumps and Rubella (MMR);
2. Hepatitis A;
3. Hepatitis B;
4. Hepatitis Combination A and B;
5. Influenza;
6. Meningococcal Meningitis;
7. Pneumococcal (if clinically indicated);
8. Tetanus-Diphtheria;
9. Tetanus-Diphtheria-Pertussis;
10. Varicella

For all other vaccinations, students are charged for the cost of the vaccine. Vaccinations are available to students who have not paid the Columbia Health & Related Services Fee for a minimal cost.
Columbia University Policies

Notice of Non-Discrimination

Columbia University is committed to providing a learning, living, and working environment free from unlawful discrimination and to fostering a nurturing and vibrant community founded upon the fundamental dignity and worth of all of its members. Consistent with this commitment, and with all applicable laws, it is the policy of the University not to tolerate unlawful discrimination in any form and to provide persons who feel that they are victims of discrimination with mechanisms for seeking redress.

The University prohibits any form of discrimination against any person on the basis of race, color, sex, gender, pregnancy, religion, creed, marital status, partnership status, age, sexual orientation, gender identity, gender expression, national origin, disability, military status, or any other legally protected status in the administration of its educational policies, admissions policies, employment, scholarship and loan programs, and athletic and other University-administered programs.

Nothing in this policy shall abridge academic freedom or the University’s educational mission. Prohibitions against discrimination and discriminatory harassment do not extend to statements or written materials that are relevant and appropriately related to the subject matter of courses.

Inquiries or complaints regarding any form of discrimination or harassment may be directed to:

Title IX Coordinator/Section 504 Officer for Columbia University
Office of Equal Opportunity and Affirmative Action
103 Low Library
212-854-5511

Department of Education
Office for Civil Rights (New York Office)
OCR.NewYork@ed.gov
646-428-3800

Religious Holidays

It is the policy of the University to respect its members’ religious beliefs. In compliance with New York State law, each student who is absent from school because of his or her religious beliefs will be given an equivalent opportunity to register for classes or make up any examination, study, or work requirements that he or she may have missed because of such absence on any particular day or days.

No student will be penalized for absence due to religious beliefs, and alternative means will be sought for satisfying the academic requirements involved.

Officers of Administration and of Instruction responsible for scheduling of academic activities or essential services are expected to avoid conflict with religious holidays as much as possible. If a suitable arrangement cannot be worked out between the student and the instructor involved, they should consult the appropriate dean or director. If an additional appeal is needed, it may be taken to the Provost.

Student Policies and Procedures on Discrimination and Harassment, Gender-Based Misconduct Policies for Students and Consensual Romantic and Sexual Relationships

Columbia University is committed to providing a learning, living, and working environment free from discrimination, harassment and gender-based and sexual misconduct. Consistent with this commitment and with applicable laws, the University does not tolerate discrimination, harassment, or gender-based sexual misconduct in any form and it provides students who believe that they have been subjected to conduct or behavior of this kind with mechanisms for seeking redress. All members of the University community are expected to adhere to the applicable policies, to cooperate with the procedures for responding to complaints of discrimination, harassment and gender-based and sexual misconduct, and to report conduct or behavior they believe to be in violation of these policies to the Office of Equal Opportunity and Affirmative Action or the Gender-Based Misconduct Office within Student Conduct and Community Standards. For additional information on these issues, policies, and resources, please visit the Sexual Respect website.

Complaints against students for gender-based misconduct are processed in accord with the Gender-Based Misconduct Policies for Students. Students who attend Barnard College and Teachers College as well as Columbia University are covered by these policies. The use of the term “gender-based misconduct” includes sexual assault, sexual harassment, gender-based harassment, stalking, and intimate partner violence. Columbia University’s Sexual Respect Online provides additional information and resources for students, faculty, and staff.

Complaints against students for other forms of discrimination and harassment are processed in accord with the Student Policies and Procedures on Discrimination and Harassment and should be filed with the Dean of Students of the school in which the accused student is enrolled.

Complaints against employees and third parties affiliated with the University for discrimination and harassment are processed in accord with the Employment Policies and Procedures on Discrimination, Harassment, Sexual Assault, Domestic Violence, and Stalking. The use of the term “discrimination and
harassment” includes discrimination, discriminatory harassment, gender-based harassment, stalking, intimate partner violence, sexual harassment, and sexual assault.

Columbia University maintains policies regarding consensual romantic and sexual relationships between faculty and students, and staff and students.

The Policy on Romantic and Sexual Relationships between Faculty/Staff and Undergraduate Students states that no faculty or staff member shall initiate or accept sexual or romantic advances or engage in a romantic or sexual relationship with any undergraduate student enrolled in Columbia College, the Fu Foundation School of Engineering and Applied Science, the School of General Studies, or Barnard College or other affiliate of Columbia, regardless of whether the faculty member has a supervisory role over the student.

For further information and assistance, contact:
Office of Equal Opportunity and Affirmative Action
2690 Broadway
103 Low Library
eoaa.columbia.edu
212-854-5511

Title IX Coordinator/Section 504 Officer for Columbia University
Office of Equal Opportunity and Affirmative Action
2690 Broadway
103 Low Library
eoaa.columbia.edu
212-854-5511

Gender-Based Misconduct Office
612 West 115th St.
Watson Hall
8th Fl.
sexualrespect.columbia.edu/gender-based-misconduct-policy-students
212-854-1717

Additional Resources
Columbia offers a number of confidential resources to students who believe they were subjected to discrimination, harassment or gender-based or sexual misconduct and who do not wish to report to the University:

Columbia Health Sexual Violence Response and Rape Crisis/Anti-Violence Support Center (Confidential)
24/7/365 Helpline
health.columbia.edu/svr
212-854-HELP (4357)

Columbia Health Medical Services (Confidential)
health.columbia.edu/emergency
212-854-7426

Columbia Health Counseling and Psychological Services (Confidential)
2920 Broadway
Lerner Hall, 8th Fl.
health.columbia.edu/cps
(212) 854-2878

Ombuds Office
2920 Broadway
710 Lerner Hall
ombuds.columbia.edu
212-854-1493

Office of the University Chaplain
1200 Amsterdam Ave.
660 Schermerhorn Extension
ouc.columbia.edu
212-854-1234

UNDERGRADUATE INTERNATIONAL TRAVEL POLICY
All matriculated undergraduates participating in Columbia-Led, Columbia-Facilitated and/or Recognized international travel will be required to obtain School Sponsorship at least 4 weeks prior to departure.

Application for School Sponsorship is comprised of the following steps. All steps must be completed prior to travel departure:

1. Complete and Submit a School Sponsorship Request Form - including all travel destinations and side trips while abroad.
2. Complete Pre-Departure Orientation.
3. Abide by all University requirements, including:
a. Register all travel with the University’s international travel assistance services – International SOS (ISOS).

b. Maintain a health insurance policy that will also provide coverage outside the U.S. for routine, urgent, and emergent care (such as the Columbia Student Health Insurance Plan).

4. Complete the Assumption of Risk, Waiver and Release Form, which must be signed by the undergraduate.

5. Complete or adhere to any additional safety protocol measures recommended by the Undergraduate Travel Review Committee.

Undergraduates are expected to begin the application for School Sponsorship as soon as an opportunity that would require international travel has been secured, and submit a completed application no later than 4 weeks prior to departure.

Once School Sponsorship is approved and issued, undergraduates may continue their work with a sponsoring unit/program to begin/continue their preparation for a specific Columbia-Led, Columbia-Facilitated and/or Recognized travel program.

Undergraduates are required to immediately notify the Undergraduate Travel Review Committee should any changes to their location occur during the duration of their travel so their School Sponsorship file may be updated.

The undergraduate schools reserve the right to revoke sponsorship, support and funding if any step of the School Sponsorship process is not completed or acknowledged prior to departure and/or if the Undergraduate Travel Review Committee determines after review that the travel would be imprudent, based on assessment of the risk variables involved and/or the particular facts of the application. The purchase of travel protection insurance is strongly recommended to potentially mitigate financial loss in case of trip cancellation or interruption.

If a country or region is placed on the medium, high, or extreme risk list during travel, the Undergraduate Travel Review Committee will assess the risks of remaining in or departure from the country or region. Undergraduates will be advised of the risks and, if necessary, provided a recommended course of action. The undergraduate schools reserve the right to revoke sponsorship, support and funding should the undergraduate not follow the recommendations of the Undergraduate Travel Review Committee.

Link to the full policy: https://www.cc-seas.columbia.edu/travelpolicy/policy.

**Veterans Benefits and Transition Act of 2018**

In accordance with Title 38 US Code 3679 subsection (e), this school adopts the following additional provisions for any students using U.S. Department of Veterans Affairs (VA) Post 9/11 G.I. Bill® (Ch. 33) or Vocational Rehabilitation and Employment (Ch. 31) benefits, while payment to the institution is pending from the VA. This school **will not**:

- Prevent nor delay the student’s enrollment;
- Assess a late penalty fee to the student;
- Require the student to secure alternative or additional funding;
- Deny the student access to any resources available to other students who have satisfied their tuition and fee bills to the institution, including but not limited to access to classes, libraries, or other institutional facilities.

However, to qualify for this provision, such students may be required to:

- Produce the Certificate of Eligibility by the first day of class;
- Provide written request to be certified;
- Provide additional information needed to properly certify the enrollment as described in other institutional policies.
DEPARTMENTS, PROGRAMS, AND COURSES

This section contains a description of the curriculum of each department in the College, along with information regarding degree requirements for majors and concentrators, including course descriptions, registration information, elective courses, and suggestions about courses and programs in related fields.

Columbia College students should use the school Bulletin for academic planning purposes, as not all courses listed on the University-wide Directory of Classes and Vergil are open to Columbia College students.

The College reserves the right to withdraw or modify the courses of instruction or to change the instructors at any time.

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- American Studies (p. 169)
- Ancient Studies (p. 171)
- Anthropology (p. 173)
- Archaeology (p. 176)
- Architecture (p. 178)
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- Colloquia, Interdepartmental Seminars, and Professional School Offerings (p. 210)
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- Earth and Environmental Sciences (p. 232)
- East Asian Languages and Cultures (p. 239)
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- English and Comparative Literature (p. 268)
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- Jewish Studies (p. 297)
- Language Resource Center (p. 299)
- Latin American and Caribbean Studies (p. 300)
- Latin American and Iberian Cultures (p. 302)
- Linguistics (p. 306)
- Mathematics (p. 310)
- Medieval and Renaissance Studies (p. 317)
- Middle Eastern, South Asian, and African Studies (p. 318)
- Music (p. 322)
- Philosophy (p. 326)
- Physical Education and Intercollegiate Athletics (p. 329)
- Physics (p. 331)
- Political Science (p. 334)
- Psychology (p. 342)
- Public Health (p. 354)
- Regional Studies (p. 357)
- Religion (p. 358)
- Slavic Languages (p. 361)
- Sociology (p. 365)
- Statistics (p. 367)
- Sustainable Development (p. 373)
- Urban Studies (p. 378)
- Visual Arts (p. 380)
- Women's and Gender Studies (p. 382)
African American and African Diaspora Studies


Chair, African American and African Diaspora Studies: Professor Kellie Jones; kej2119@columbia.edu

Director, Institute for Research in African American Studies: Professor Mabel O. Wilson, mow6@columbia.edu

Director of Undergraduate Studies: Professor. Kevin Fellezs; 816A Dodge; 212-854-6689; kf2362@columbia.edu

Director of Academic Administration and Finance: Shawn Mendoza; 758 Schermerhorn Extension; 212-854-8789; sm222@columbia.edu

Administrative Assistant: Sharon Harris; 758 Schermerhorn Extension; 212-854-7080; sh2004@columbia.edu

The Institute for Research in African-American Studies was established at Columbia in 1993, expanding the University’s commitment to this field of study. The African-American studies curriculum explores the historical, cultural, social, and intellectual contours of the development of people of African descent. The curriculum enables students to master the basic foundations of interdisciplinary knowledge in the humanities and social sciences in the black American, Caribbean, and sub-Saharan experience.

Courses examine the cultural character of the African diaspora; its social institutions and political movements; its diversity in thought, belief systems, and spiritual expressions; and the factors behind the continuing burden of racial inequality. During their junior and senior years of study, students focus their research within a specific discipline or regional study relevant to the African diaspora.

Students should consider a major in African American and African Diaspora studies if they are interested in careers where strong liberal arts preparation is needed, such as fields in the business, social service, or government sectors. Depending on one’s area of focus within the major, the African American and African Diaspora studies program can also prepare individuals for career fields like journalism, politics, public relations, and other lines of work that involve investigative skills and working with diverse groups. A major in African American and African Diaspora studies can also train students in graduate research skills and methods, such as archival research, and is very useful for individuals who are considering an advanced graduate degree such as the Ph.D.

Departmental Honors

The requirements for departmental honors in African American and African Diaspora studies are as follows:

1. All requirements for major must be completed by graduation date;
2. Minimum GPA of 3.6 in the major;
3. Completion of senior thesis—due to the director of undergraduate studies on the first Monday in April.

A successful thesis for departmental honors must be selected as the most outstanding paper of all papers reviewed by the thesis committee in a particular year. The Thesis Evaluation Committee is comprised of department faculty and led by the director of undergraduate studies. The thesis should be of superior quality, clearly demonstrating originality and excellent scholarship, as determined by the committee. Normally no more than 10% of graduating majors receive departmental honors in a given academic year.

The African American and African Diaspora Studies Department Thesis

Although the senior thesis is a prerequisite for consideration for departmental honors, all African American and African Diaspora studies majors are strongly encouraged to consider undertaking thesis work even if they are ineligible or do not wish to be considered for departmental honors. The senior thesis gives undergraduate majors the opportunity to engage in rigorous, independent, and original research on a specific topic of their choosing, the result of which is a paper of 35-60 pages in length.

The senior thesis must be written under the supervision of at least one faculty member. Should the thesis writer elect to have more than one thesis adviser (either from the outset or added on during the early stages of research), these faculty in the aggregate comprise the Thesis Committee, of which one faculty member must be designated chair. In either case, it is incumbent upon the thesis writer to establish with the thesis chair and committee a reasonable schedule of deadlines for submission of outlines, chapters, bibliographies, drafts, etc.

In many cases, thesis writers may find that the most optimal way in which to complete a thesis is to formally enroll in an AFAS independent study course with their thesis adviser as the instructor. All third year students interested in writing a thesis should notify the director of undergraduate studies and submit the name of the faculty adviser ideally by October 1, but certainly no later than the end of the fall semester of their junior year. In close consultation with the thesis adviser, students develop a viable topic, schedule of
meetings, bibliography, and timeline for completion (including schedule of drafts and outlines).

DEPARTMENTAL PRIZES

Ralph Johnson Bunche Award for Leadership and Service

The Bunche Award recognizes an undergraduate who has demonstrated a tremendous capacity for leadership and provided distinguished service to the Institute for Research in African American Studies.

The award is named in honor of Ralph Johnson Bunche (1901-1971), the highest American official in the United Nations. For his conduct of negotiations leading to an armistice in the First Arab-Israeli War, he received the Nobel Peace Prize in 1950; he was the first African American recipient of this honor.

Ella Baker Award for Outstanding Academic Achievement

The Ella Baker Prize is awarded annually to an undergraduate who has demonstrated academic excellence, intellectual commitment to the field of African American Studies and who has written a thesis that advances our understanding of the African American experience.

The award is named for the brilliant activist, organizer, leader and Harlem resident, Ella Baker. Baker served as a field secretary for the NAACP before organizing the Southern Christian Leadership Conference under the leadership of Dr. Martin Luther King. Following her departure from SCLC she helped student activists organize the Student Non-violent Coordinating Committee. She would serve as an important mentor to these young people throughout the rest of her life.

SENIOR FACULTY

Kevin Fellezs (Music)
Robert Gooding-Williams (Philosophy)
Farah J. Griffin (English and Comparative Literature)
Frank Guridy (History)
Kellie E. Jones (Art History and Archaeology)
Samuel K. Roberts (History)
Josef Sorett (Religion)
Sudhir A. Venkatesh (Sociology)
Mabel O. Wilson (Architecture, Planning and Preservation)

RESEARCH FELLOWS

Vanessa Argard-Jones (Anthropology)
Fredrick C. Harris (Political Science)
Carl Hart (Psychology)
Obery Hendricks (Religion/African-American Studies)
Colin Wayne Leach (Psychology and Africana Studies, Barnard College)
Natasha Lightfoot (History)
Mignon Moore (Sociology - Barnard)

AFFILIATED FACULTY

Belinda Archibong (Economics)
Christopher Brown (History)
Maguette Camara (Dance - Barnard)
Mamadou Diauf (Middle Eastern, South Asian, and African Studies)
Ann Douglas (English and Comparative Literature)
Barbara Fields (History)
Saidiya Hartman (English and Comparative Literature)
Ousmane Kane (School of International and Public Affairs)
Rashid Khalidid (History)
George E. Lewis (Music)
Mahmood Mamdani (Anthropology)
Gregory Mann (History)
Robert O'Meally (English and Comparative Literature)
David Scott (Anthropology)
Susan Strum (Law School)

IN MEMORIUM

Marcellus Blount
Steven Gregory
Manning Marable, founder of IRAAS

GUIDELINES FOR ALL MAJORS AND CONCENTRATORS

Governed Electives

The "governed electives" category must include courses from at least three different departments, providing an interdisciplinary background in the field of African-American Studies. (Note: you cannot count one of your governed electives within your designated area of study).

Designated Area of Study

A Designated Area of Study, preferably within a distinct discipline (for example, history, politics, sociology, literature, anthropology, psychology, etc.). Students may also select courses within a particular geographical area or region or an interdisciplinary field of study.

Any of the departmental disciplines (history, political science; sociology, anthropology, literature, art history; psychology, religion, music, etc.)

Any of the pertinent area studies (African Studies; Caribbean/Latin American; Gender Studies; etc.).

Please note that the major/concentrator is not allowed to “create” or “make up” a designated area of study without the direct approval of the Director of Undergraduate Studies, and that such approval must be sought before the student has embarked on the course of designated area of study, and that such approval will be granted only in very rare and exceptional cases. Under no circumstances should the major/concentrator hope to take a series of courses only later to “create” a Designated Area of Study around these courses.
MAJOR IN AFRICAN AMERICAN AND AFRICAN DIASTORA STUDIES

A minimum of twenty-seven (27) points is required for the completion of the major. The major should be arranged in consultation with the director of undergraduate studies. Students interested in majoring should plan their course of study no later than the end of their sophomore year.

Core Requirements
All majors must complete to satisfaction the core required courses. The core requirements are:

(1) Introduction to African-American Studies - 4 Points
(2) Major Debates in African-American Studies - 4 Points
(3) Governed Elective - 4 Points
(4) Governed Elective - 4 Points
(5) Senior Seminar - 4 Points
(6) Designated Area of Study Course (DAS) - 3 Points
(7) DAS or Senior Pro Seminar - 4 Points

CONCENTRATION IN AFRICAN AMERICAN AND AFRICAN DIASTORA STUDIES

A minimum nineteen (19) points is required for the completion of the concentration.

Core Requirements
All concentrators must complete to satisfaction the core required courses. The core requirements are:

(1) Introduction to African-American Studies - 4 Points
(2) Governed Elective - 4 Points
(3) Governed Elective - 4 Points
(4) Senior Seminar - 4 Points
(5) Designated Area of Study Course (DAS) - 3-4 Points
American Studies

Program Office: 319-321 Hamilton; 212-854-6698
http://www.columbia.edu/cu/amstudies/

Director: Prof. Hilary Hallett, 321 Hamilton; 212-854-6698; hah2117@columbia.edu

Associate Director: Prof. Robert Amdur, 311 Hamilton; 212-854-4049; rla2@columbia.edu

Assistant Director: Angela Darling, 319 Hamilton; 212-854-6698; amd44@columbia.edu

Administrative Assistant: Laken King, 319 Hamilton; 212-854-6698; lk2639@columbia.edu

American Studies offers students the opportunity to explore the experience and values of the people of the United States as embodied in their history, literature, politics, art, and other enduring forms of cultural expression. The program seeks to prepare students to confront with historical awareness the pressing problems that face our society. The program takes advantage of Columbia's location by involving students with the life of the city—working with community service organizations such as the Double Discovery Center, which serves New York City high school students; and by inviting leading figures in the local political and cultural scene to participate in colloquia, public conferences, and classroom discussions. It is an interdisciplinary program designed to be open and flexible while taking seriously the challenge of striving for a liberal education that helps prepare students for responsible citizenship.

Advising

Each American Studies major or concentrator is assigned an academic adviser who monitors their progress through graduation. With at least ten advisers for each academic year, students are assured of individual attention and guidance. Advisers meet with students at least twice a semester.

Departmental Honors

Students with a 3.6 minimum GPA in the major and an outstanding senior project are considered for honors. Normally no more than 10% of graduating majors receive departmental honors in a given year.

Department Faculty

Casey N. Blake
Lynne Breslin
Andrew Delbanco
Todd Gitlin
Hilary Hallett
Michael Hindus
Thai Jones
Roger Lehecka
Paul Levitz
Roosevelt Montas
Valerie Paley
Robert Pollack
Ross Posnock
Cathleen Price
Benjamin Rosenberg
James Shapiro
Maura Spiegel

Affiliated Faculty

Rachel Adams (English and Comparative Literature)
Courtney Bender (Religion)
Casey N. Blake (History; American Studies)
Jeremy Dauber (Germanic Languages)
Andrew Delbanco (English and Comparative Literature; American Studies)
Eric Foner (History)
Todd Gitlin (Journalism; Sociology)
Farah Griffin (English and Comparative Literature)
Frank Guridy (History)
Ira Katznelson (Political and History)
Alice Kessler-Harris (History)
Shamus Khan (Sociology)
Rebecca Kobrin (History)
Roosevelt Montás (Core and American Studies)
Ross Posnock (English and Comparative Literature; American Studies)
Wayne Proudfoot (Religion)
Jonathan Rieder (Sociology, Barnard)
Maura Spiegel (English and Comparative Literature)

Guidelines for all American Studies Majors and Concentrators

Declaring the Major or Concentration

Although students generally declare their major or concentration in the spring of their sophomore year, students may want to take electives early on in areas that interest them but that later connect with the American studies major.

Grading

A grade lower than C- cannot be counted toward the major or concentration in American studies. A grade of C- can be counted...
only with the approval of the director or associate director. Pass/D/Fail courses do not count toward the major or concentration unless the course was taken before the student declared the major or concentration.

**MAJOR IN AMERICAN STUDIES**

A minimum of nine courses is required to complete the major. Please note that as of January 2018 Major requirements have changed, beginning with the Class of 2020. Please consult with the department if there are any questions.

**Two American Studies Core courses.**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMST UN1010</td>
<td>Introduction to American Studies</td>
</tr>
<tr>
<td>HIST UN2478</td>
<td>US INTELLECTUAL HIST 1865-PRES</td>
</tr>
<tr>
<td>or AMST UN3930</td>
<td>Topics in American Studies</td>
</tr>
</tbody>
</table>

Please note, the AMST UN3930 section MUST be Freedom and Citizenship in the U.S. to count towards the core course requirement

**Two seminars in American Studies**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMST UN3930</td>
<td>Topics in American Studies</td>
</tr>
<tr>
<td>AMST UN3931</td>
<td>Topics in American Studies</td>
</tr>
</tbody>
</table>

**Additional Courses**

Select five additional courses drawn from at least two departments, one of which must be in History, and one of which must deal primarily with some aspect of American experience before 1900. (A course in U.S. History before 1900 would fulfill both requirements.)

**Senior Research Project**

The final requirement for the major in American Studies is completion of a senior essay, to be submitted in the spring of senior year. Alternatively, students may fulfill this requirement by taking an additional seminar in which a major paper is required or by writing an independent essay under the supervision of a faculty member. Seniors who wish to do a senior research project are required to take the Senior Project Colloquium AMST UN3920 in the fall of the senior year.

**CONCENTRATION IN AMERICAN STUDIES**

A minimum of 7 courses is required to complete the concentration. Please note that as of January 2018 Concentration requirements have changed, beginning with the Class of 2020. Please consult with the department if there are any questions.

**Two American Studies Core courses.**

<table>
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<th>Course Code</th>
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<td>or AMST UN3930</td>
<td>Topics in American Studies</td>
</tr>
</tbody>
</table>

Please note, the AMST UN3930 section MUST be Freedom and Citizenship in the U.S. to count towards the core course requirement

**Additional Courses**

Select five additional courses drawn from at least two departments, one of which must be in History, and one of which must deal with the period before 1900.
The purpose of this program is to enable the student to explore the cultural context of the ancient Mediterranean as a whole while concentrating on one specific Mediterranean or Mesopotamian culture. Central to the concept of the program is its interdisciplinary approach, in which the student brings the perspectives and methodologies of at least three different disciplines to bear on his or her area of specialization.

Faculty participating in the program are scholars specializing in all aspects of ancient culture and civilization from the Departments of Anthropology; Art History and Archaeology; Classics; History; Middle Eastern, South Asian, and African Studies; Philosophy; and Religion, ensuring that a wide variety of approaches are available.

Course offerings vary year to year. Students are required to discuss their program prior to or during registration. The culmination of the ancient studies major comes in the senior year, when students with different areas of specialization come together to share their ideas in the senior seminar and then to write a substantial piece of original research. Students should think about topics for their senior paper during the junior year and find a faculty adviser at the beginning of the fall term of their senior year, after consulting with the director of undergraduate studies.

In the senior year, students register for ANCS UN3995 during the fall, and ANCS UN3998 Directed Research In Ancient Studies is usually taken during the spring. Sections should be arranged directly with the academic departmental administrator after finding a faculty adviser.

GUIDELINES FOR ALL ANCIENT STUDIES MAJORS

Grading
Advanced placement credits and courses passed with a grade of D may not be counted toward the major.

Courses
In an interdisciplinary program, courses that are available may on occasion have a substantial overlap in content. Since credit cannot be given twice for the same work, no courses may be counted toward the major that overlap significantly with courses already taken or in progress.

It is the student’s responsibility to discuss his or her program with the director of undergraduate studies well in advance and to provide him or her with all the necessary information on the courses concerned, since failure to do so may result in a course not being counted after it has already been taken.

Any course in the Department of Classics may be credited toward the major.

MAJOR IN ANCIENT STUDIES
The major in ancient studies requires 12 courses (a minimum of 36 points), two of which must be:

<table>
<thead>
<tr>
<th>Major Seminar</th>
<th>ANCS UN3995</th>
<th>The Major Seminar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior Thesis</td>
<td>ANCS UN3998</td>
<td>Directed Research In Ancient Studies</td>
</tr>
</tbody>
</table>

The selected program of study for the major must collectively satisfy the following criteria:

Language Study *
Select two courses of an ancient language at or above the intermediate level, i.e., 1200-level or above.

Fundamental Breadth **
Select two introductory courses on some aspect of the ancient Mediterranean. Some examples include:

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>HIST UN1010</td>
<td>The Ancient Greeks 800-146 B.C.E.</td>
<td></td>
</tr>
<tr>
<td>AHIS UN3248</td>
<td>Greek Art and Architecture</td>
<td></td>
</tr>
<tr>
<td>AHIS UN3250</td>
<td>Roman Art and Architecture</td>
<td></td>
</tr>
<tr>
<td>PHIL UN2101</td>
<td>The History of Philosophy I: Presocratics to Augustine</td>
<td></td>
</tr>
<tr>
<td>CLLT UN3132</td>
<td>Classical Myth</td>
<td></td>
</tr>
</tbody>
</table>

Advanced Study
Select two advanced courses on the ancient Mediterranean, typically at the 3000- or 4000-level.

Cultural Concentration
Select four courses on the culture of the language chosen, including one history course.
The minimum language requirement must be completed by the end of the first semester of the student’s senior year, so that the student is equipped to use sources in the original language in their thesis. Students are strongly urged to begin study of an ancient language as soon as possible and to complete more than the minimum requirements, since the best way to gain an understanding of a culture is through the actual words of its people. Those considering graduate work on the ancient world should also be aware that most graduate schools require more than two years of undergraduate language training for admission.

The language offered in fulfillment of this requirement should generally match the student’s area of cultural concentration; special arrangements are available with other universities for students whose cultural concentration require languages not normally taught at Columbia.

Students entering with expertise in their chosen languages are placed in advanced courses as appropriate but are still required to complete at least two semesters of language courses at Columbia; exceptions to this policy may be made in the case of languages not normally taught at Columbia.

Language courses at the 1100-level may not be counted toward the major. Language courses, including those at the 1100-level, must be taken for a letter grade.

Relevant introductory courses are offered by the Department of Classics or from offerings in the Programs or Departments of Ancient Studies, Art History and Archaeology, History, Philosophy, or Religion. Students should confirm a course’s relevance with the director of undergraduate studies as soon as possible.
Anthropology

Departmental Office: 452 Schermerhorn; 212-854-4552
http://www.columbia.edu/cu/anthropology

Director of Undergraduate Studies:
Professor Naor Ben-Yehoyada; 470 Schermerhorn Extension; 212 854-8936; nhb2115@columbia.edu; Professor John Pemberton; 858 Schermerhorn Extension; 212-854-7463; jp373@columbia.edu; (jp373@columbia.edu) Spring term 2022

Departmental Consultants:
Archaeology: Prof. Zoë Crossland, 965 Schermerhorn Extension; 212-854-7465; zc2149@columbia.edu ) Office Hours are by appointment
Biological/Physical Anthropology: Prof. Ralph Holloway, 856 Schermerhorn Extension; 212-854-4570; rlh2@columbia.edu

Anthropology at Columbia is the oldest department of anthropology in the United States. Founded by Franz Boas in 1896 as a site of academic inquiry inspired by the uniqueness of cultures and their histories, the department fosters an expansiveness of thought and independence of intellectual pursuit.

Cross-cultural interpretation, global socio-political considerations, a markedly interdisciplinary approach, and a willingness to think otherwise have formed the spirit of anthropology at Columbia. Boas himself wrote widely on pre-modern cultures and modern assumptions, on language, race, art, dance, religion, politics, and much else, as did his graduate students including, most notably, Ruth Benedict and Margaret Mead.

In these current times of increasing global awareness, this same spirit of mindful interconnectedness guides the department. Professors of anthropology at Columbia today write widely on colonialism and postcolonialism; on matters of gender, theories of history, knowledge, and power; on language, law, magic, mass-mediated cultures, modernity, and flows of capital and desire; on nationalism, ethnic imaginations, and political contestations; on material cultures and environmental conditions; on ritual, performance, and the arts; and on linguistics, symbolism, and questions of representation. Additionally, they write across worlds of similarities and differences concerning the Middle East, China, Africa, the Caribbean, Japan, Latin America, South Asia, Europe, Southeast Asia, North America, and other increasingly transnational and technologically virtual conditions of being.

The Department of Anthropology traditionally offered courses and majors in three main areas: sociocultural anthropology, archaeology, and biological/physical anthropology. While the sociocultural anthropology program now comprises the largest part of the department and accounts for the majority of faculty and course offerings, archaeology is also a vibrant program within anthropology whose interests overlap significantly with those of sociocultural anthropology. Biological/physical anthropology has shifted its program to the Department of Ecology, Evolution, and Environmental Biology. The Anthropology Department enthusiastically encourages cross-disciplinary dialogue across disciplines as well as participation in study abroad programs.

Sociocultural Anthropology

At the heart of sociocultural anthropology is an exploration of the possibilities of difference and the craft of writing. Sociocultural anthropology at Columbia has emerged as a particularly compelling undergraduate liberal arts major. Recently, the number of majors in sociocultural anthropology has more than tripled.

Students come to sociocultural anthropology with a wide variety of interests, often pursuing overlapping interests in, for example, performance, religion, writing, law, ethnicity, mass-media, teaching, language, literature, history, human rights, art, linguistics, environment, medicine, film, and many other fields, including geographical areas of interest and engagement. Such interests can be brought together into provocative and productive conversation with a major or concentration in sociocultural anthropology. The requirements for a major in sociocultural anthropology reflect this intellectual expansiveness and interdisciplinary spirit.

Archaeology

Archaeologists study the ways in which human relations are mediated through material conditions, both past and present. Particular emphases in the program include the development of ancient states and empires, especially in the indigenous Americas; the impact of colonial encounters on communities in the American Southwest, the Levant and Africa; and human-animal relations in prehistory, religion and ritual, and the archaeology of the dead.

Themes in our teaching include the political, economic, social, and ideological foundations of complex societies; and archaeological theory and its relationship to broader debates in social theory, technology studies, and philosophy. Faculty members also teach and research on questions of museum representations, archaeological knowledge practices, and the socio-politics of archaeology. The program includes the possibility of student internships in New York City museums and archaeological fieldwork in the Americas and elsewhere.

Advising

 Majors and concentrators should consult the director of undergraduate studies when entering the department and devising programs of study. Students may also seek academic advice from any anthropology faculty member, as many faculty members hold degrees in several fields or positions in other departments and programs at Columbia. All faculty in the department are committed to an expansiveness of thought and an independence of intellectual pursuit and advise accordingly.
**Senior Thesis**

Anthropology majors with a minimum GPA of 3.6 in the major who wish to write an honors thesis for departmental honors consideration may enroll in ANTH UN3999 The Senior Thesis Seminar in Anthropology. Students should have a preliminary concept for their thesis prior to course enrollment. Normally no more than 10% of graduating majors receive departmental honors in a given academic year.

**Professors**

Nadia Abu El-Haj (Barnard)
Lila Abu-Lughod
Partha Chatterjee
Myron L. Cohen
Terence D’Altroy
Ralph L. Holloway, Professor Emeritus of Anthropology
Claudio Lomnitz
Mahmood Mamdani
Brinkley Messick
Rosalind Morris
Elizabeth Povinelli
Nan Rothschild (Barnard, emerita)
David Scott, Department Chair
Lesley A. Sharp (Barnard)
Michael Taussig, Professor Emeritus of Anthropology
Paige West (Barnard)

**Associate Professors**

Zoe Crossland
Catherine Fennell
Severin Fowles (Barnard)
Marilyn Ivy
Brian Larkin (Barnard)
John Pemberton
Audra Simpson

**Assistant Professors**

Vanessa Agard-Jones
Naor Ben-Yehoyada
Hannah Rachel Chazin
Maria Jose de Abreu

**Lecturers**

Brian Boyd
Ellen Marakowitz
Karen Seeley

**Adjunct Research Scholar**

**Guidelines for all Anthropology Majors and Concentrators**

**Grading**

No course with a grade of D or lower can count toward the major or concentration. Only the first course that is to count toward the major or concentration can be taken Pass/D/Fail.

**Courses**

Courses offered in other departments count toward the major and concentration only when taught by a member of the Department of Anthropology. Courses from other departments not taught by anthropology faculty must have the approval of the director of undergraduate studies in order to count toward the major or concentration.

**Major in Anthropology**

*The requirements for this program were modified on January 29, 2016.*

The program of study should be planned as early as possible in consultation with the director of undergraduate studies.

The anthropology major requires 30 points in the Department of Anthropology.

**Sociocultural Focus**

Students interested in studying sociocultural anthropology are required to take the following courses:

- ANTH UN1002: The Interpretation of Culture
- ANTH UN2004: Intro to Soc # Cultural Theory
- ANTH UN2005: The Ethnographic Imagination

**Archaeology Focus**

Students interested in studying archaeological anthropology are required to take the following courses:

- ANTH UN1002: The Interpretation of Culture
- ANTH UN2004: Intro to Soc # Cultural Theory
- ANTH UN2028: Think Like an Archaeologist: Introduction to Method & Theory

NOTE: Students wishing to pursue an interdisciplinary major in archaeology should see the Archaeology section of this Bulletin.
Biological/Physical Focus
Students interested in studying this field should refer to the
major in evolutionary biology of the human species in the
Department of Ecology, Evolution, and Environmental Biology.

CONCENTRATION IN
ANTHROPOLOGY
The anthropology concentration requires 20 points in the
Department of Anthropology.

Sociocultural Focus
Students interested in studying sociocultural anthropology are
required to take the following course:

ANTH UN1002 The Interpretation of Culture

Archaeology Focus
Students interested in studying archaeological anthropology are
required to take the following course:

ANTH UN2028 Think Like an Archaeologist:
Introduction to Method & Theory

Biological/Physical Focus
Students interested in pursuing study in this field should refer to
the concentration in evolutionary biology of the human species
in the Department of Ecology, Evolution, and Environmental
Biology.
Archaeology is the study of the material conditions inhabited and acted upon by people in the past and present. Investigation of the past through the study of material remains is entangled with historiography, politics, and individual and collective memory, and is implicated in the production of present-day identities. Archaeology has come to mean many things to different generations of scholars, yet all approaches share in common a focus on the physical remains of the past and on the interpretive acts that enliven these remains and are challenged by them.

At Columbia, archaeology is a multidisciplinary field practiced by faculty and students in the humanities, social sciences, and natural sciences. At present, there are faculty in the Departments of Anthropology; Art History and Archaeology; Classics; East Asian Languages and Cultures; Historic Preservation; History; Middle Eastern, South Asian, and African Studies; as well as in the Center for Environmental Research and Conservation, the Institute for Research on Women and Gender, and the Lamont-Doherty Earth Observatory, all of whom conduct research on prehistory, ancient society, or historical archaeology.

Among locations in which students and faculty are conducting or participating in field programs are Argentina, Peru, Central America, the North American Southwest, New York City, upstate New York, the UK, France, Italy, Greece, Turkey, Egypt, Yemen, Israel, Palestine, and Madagascar. Archaeologists at Columbia also work with professionals at a wide range of institutions in New York. Among the institutions at which students in particular programs may conduct research, or work on internships, are the American Museum of Natural History, the Brooklyn Museum, the Metropolitan Museum of Art, the Museum of the City of New York, the National Museum of the American Indian, the New York Botanical Garden, and the South Street Seaport Museum.

Departmental Honors

For the requirements for departmental honors, please check with the program advisers. Normally no more than 10% of graduating majors receive departmental honors in a given academic year.

Professors

Zainab Bahrani
Terence D’Altroy
Holger Klein
Feng Li
Kristina Milnor (Barnard)
Stephen Murray

Esther Pasztory (emerita)
Nan Rothschild (Barnard, emerita)
Marc Van De Mieroop

Associate Professors

Francesco Benelli
Zoë Crossland
Francesco de Angelis
Severin Fowles (Barnard)
Ioannis Mylonopoulos

Assistant Professors

Ellen Morris (Barnard)
Marco Maiuro

Adjunct/Visiting Professors

Brian Boyd
Megan O’Neil (Barnard)
Walter Pitman
Adam Watson
Norman Weiss
George Wheeler

Lecturers

Clarence Gifford
Jill Shapiro

On Leave

Guidelines for all Archaeology Majors and Concentrators

Courses

It is recommended that archaeology students consider introductory courses in Earth and environmental sciences, environmental biology, and/or chemistry for their Core Curriculum science requirement.

For information on upper-level graduate courses and courses in historic preservation, please see the program advisers. Decisions about upper-level, related, or seminar courses that are not on this list and their applicability to the major or concentration in archaeology should be made in consultation with the program advisers.

Graduate Study

Students intending to pursue graduate degrees in archaeology should be aware that a reading knowledge of two languages is often required as part of graduate study. Further, although language courses do not count toward the major or concentration, students are encouraged to acquire language training that is relevant to their particular interests in archaeology.
MAJOR IN ARCHAEOLOGY

Please read Guidelines for all Archaeology Majors and Concentrators above.

The program of study should be planned as early as possible with the program advisers, preferably before the end of the sophomore year and no later than the beginning of the junior year. The major in archaeology requires a total of 30 points within the major and 9 points of related courses as follows:

Two introductory courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>ANTH UN2028</td>
<td>Think Like an Archaeologist: Introduction to Method &amp; Theory</td>
</tr>
<tr>
<td>ANTH UN1008</td>
<td>The Rise of Civilization</td>
</tr>
<tr>
<td>ANTH UN1007</td>
<td>The Origins of Human Society</td>
</tr>
</tbody>
</table>

Select two upper-level courses from different regions of the world, in addition to three other upper-level courses, planned in consultation with the program advisers.

Participation of four to six weeks in field projects with which Columbia University is affiliated, independent study in excavation or other field projects, or relevant museum internship and/or lab work.

Select one laboratory course in archaeology or its equivalent in the field, as approved by the program advisers.

The capstone seminar in archaeology:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH UN3993</td>
<td>World Archaeologies/Global Perspectives</td>
</tr>
</tbody>
</table>

Select 9 points of related courses, planned with the program advisers in accordance with the student’s interests.

A senior thesis is recommended for students planning to pursue a graduate degree. ***

* The field, school, project, or internship must be approved in advance by the program advisers, and arrangements should be made in advance with the director of undergraduate studies for credits to be accepted as part of the degree. For more information, see the Center for Archaeology website.

** Taught alternate years, preferably taken in the junior or senior year, or a substitute seminar to be decided with the advance approval of the director of undergraduate studies. Students who are writing a thesis may substitute a thesis seminar for this requirement.

*** Topics should be discussed with a faculty adviser during the junior year, allowing time for planning, research, and travel during the following summer. In the senior year, students may register for two semesters of senior thesis study with their adviser, e.g., ANTH UN3997 Supervised Individual Research Course in Anthropology or ANTH UN3999 The Senior Thesis Seminar in Anthropology, to cover the writing of the thesis. The final draft of the thesis must be submitted by March 25. (See the Center for Archaeology webpages for more information.)

CONCENTRATION IN ARCHEOLOGY

Please read Guidelines for all Archaeology Majors and Concentrators above.

The program of study should be planned with the program advisers. The concentration in archaeology requires a total of 21 points from within anthropology, art history and archaeology, and other approved departments, with no more than four courses being taken within any single department. Requirements for the concentration are as follows:

Select one of the following introductory courses:

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>ANTH UN1007</td>
<td>The Origins of Human Society</td>
</tr>
<tr>
<td>ANTH UN1008</td>
<td>The Rise of Civilization</td>
</tr>
<tr>
<td>ANTH UN2028</td>
<td>Think Like an Archaeologist: Introduction to Method &amp; Theory</td>
</tr>
</tbody>
</table>

Select one seminar or colloquium in the Departments of Anthropology, Art History and Archaeology, Classics, or History, as approved by the program advisers.

Select three upper-level courses, including at least one from two different regions of the world.

Select one related course, planned with the program advisers in accordance with the student's interests.
architecture

Contact Us

Departmental Office:
500 The Diana Center
212-854-8430
architecture.barnard.edu
architecture@barnard.edu

Director of Undergraduate Studies:
Professor Kadambari Baxi
(212) 854-7238
kbaxi@barnard.edu

Departmental Administrator:
Rachel Garcia-Grossman
(212) 854-8430
rgarciag@barnard.edu

The Department of Architecture

Mission

The Architecture major establishes an intellectual context for students to interpret the relation of form, space, program, materials, and media to human life and thought. Through the Architecture curriculum, students participate in the ongoing shaping of knowledge about the built environment and learn to see architecture as one among many forms of cultural production. At the same time, the major stresses the necessity of learning disciplinary-specific tools, methods, terms, and critiques. Thus, work in the studio, lecture, or seminar asks that students treat architecture as a form of research and speculation which complement the liberal arts mission of expansive thinking.

Undergraduate Study in Architecture

Studying Architecture at Barnard College, Columbia College, and General Studies leads to a liberal arts degree – a Bachelor of Arts with a major in Architecture, and Barnard College is the administrative location for all undergraduate architecture studies at Columbia University and its partner institutions. A liberal arts education in architecture holds a unique position in academia and in relation to the discipline. If the goal of a professional education in architecture is to enable students to participate directly in the world as an architect – a liberal arts education asks that students consider the broader and myriad conditions in which architecture is conceived and practiced, and, in turn, to understand how architecture inevitably alters those conditions. Students are asked to confront and interpret the complex social, cultural, political, and environmental processes that weave through architectural design and urbanism. The purpose of an undergraduate liberal arts degree in architecture is to educate students to think about the world through architecture.

The Architecture curriculum introduces design at a variety of scales, acknowledging that integrated design thinking is effective for problem solving at any scale and in any discipline. Students will experiment with full-scale installations and devices and make small-scale models of urban conditions from which they extract, interpret, and invent new possibilities of inhabitation and use. The curriculum intentionally balances the traditions of handcrafted representation with evolving digital technologies of architectural design and communication.

The Architecture major complements, and makes great use of its University setting. With access to superb libraries, research centers, graduate programs, and abundant intellectual resources, our students have the opportunity to follow their creative instincts to great depth and breadth – and they do. The major depends on New York City as more than a convenient site for many design and research projects and frames the City as one of the key social and architectural, and thus didactic, markers of Modernity. Architecture students study with peers from countries around the world in one of the most diverse cities in the world. A large majority of the Architecture students expand their education by interning in Architecture or a related field during their undergraduate studies. Alumni of the Department are leaders in architecture and design fields around the world. The faculty teaching in the undergraduate program are dedicated teachers who are also at the forefront of practice and research and are similarly drawn to New York City as a nexus of global design thinking.

Students interested in obtaining a professional degree in Architecture continue on to graduate programs after their undergraduate degree, and students from the Barnard Columbia program have enjoyed enormous success in their admissions to the most competitive graduate programs in the country. Students who study Architecture as undergraduates have also pursued graduate degrees in a variety of disciplines including Urban Planning, Law, and Media and Communications.

Student Learning Outcomes

Students in the Architecture Majors who fully engage with the curriculum should be able to complete the following outcomes:

- Apply integrated design thinking to specific problems in and beyond the discipline;
- Visually communicate architectural concepts and research using discipline-specific techniques in multiple media;
- Verbally present independent, group or assigned research, in multiple media formats;
- Organize and concisely write in a variety of formats including reports, case studies, synthetic overviews, etc.;
- Understand and critically interpret major buildings and themes of Architectural history and theory;
- Be intellectually prepared for graduate studies in architecture and related disciplines.
Departmental Honors
Senior requirements (a portfolio and research paper from a previous architecture course) are used to award departmental honors. Students must have a grade point average of at least 3.6 in classes for the major. Normally no more than 10% of the graduating majors in the department each year receive departmental honors.

ADVISING APPOINTMENTS
Current students as well as prospective students with questions about our courses and programs of study are encouraged to meet with our full-time faculty members. Faculty advising appointments are open to anyone who is interested in learning more about our department. During the summer break, all current and prospective students are instead invited to submit their questions by email to architecture@barnard.edu.

FULL-TIME FACULTY
Professors of Professional Practice:
Karen Fairbanks (Chair)
Kadambari Baxi

Assistant Professors:
Anooradha Iyer Siddiqi
Ignacio G. Galán
Ralph Ghoche
Nick Smith

ADJUNCT FACULTY
Adjunct Professors:
Joeb Moore
Madeline Schwartzman
Suzanne Stephens

Adjunct Assistant Professors:
Daisy Ames
Virginia Black
Diana Cristobal
Lindsay Harkema
Jason Kim
Evangelos Kotsioris
Galen Pardee
Todd Rouhe
Michael Schissel
Fred Tang
Irina Verona

THE MAJOR IN ARCHITECTURE
The major in architecture is open to Barnard College students, Columbia College students, and General Studies students. The required classes are broken down into four categories: studio, lectures seminars and workshops, senior courses, and the specialization:

<table>
<thead>
<tr>
<th>Studio Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Four studio courses, to be taken one per semester (studio courses have limited enrollment and priority is given to Architecture majors):</td>
</tr>
<tr>
<td>ARCH UN2101</td>
</tr>
<tr>
<td>ARCH UN2103</td>
</tr>
<tr>
<td>ARCH UN3201</td>
</tr>
<tr>
<td>ARCH UN3202</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lecture, Seminar, and Workshop Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Five courses following the distribution requirement below:</td>
</tr>
<tr>
<td>ARCH UN3117</td>
</tr>
<tr>
<td>Architectural Elective: History</td>
</tr>
<tr>
<td>Architectural Elective: Society, Environment, and the Global</td>
</tr>
<tr>
<td>Architectural Elective: Design, Media, and Technology</td>
</tr>
<tr>
<td>Architectural Elective</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Senior Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH UN3901</td>
</tr>
<tr>
<td>Elective Architecture seminar (another Senior Seminar in the Department, Advanced Architectural Research and Design, or Independent Research)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Specialization Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>All majors are asked to complement their work with a thematic unit (three courses) called the “specialization.” Each student develops a specific specialization that broadens their architectural studies in one of the following areas or combination of areas: History, Society, Environment, Global, Design, Media, and Technology. Courses may be taken from across various departments. All majors, in consultation with their advisers, will develop a short (100 word) description of their specialization and advisers will approve their course selections. Students can request and develop other areas of specialization with adviser approval.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Graduation Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>The major also requires that students submit a portfolio and a writing sample before graduation. The design portfolio includes representative work from all design studios and the writing sample is a paper or essay from a senior level architecture or architecture-related course. Final submissions are archived in the department, the portfolios are displayed at the end of the year show, and both are used to award graduation honors.</td>
</tr>
</tbody>
</table>

OUR PROGRAMS OF STUDY
THE MAJOR IN ARCHITECTURE (p. 179)
THE MAJOR IN THE HISTORY AND THEORY OF ARCHITECTURE
THE MINOR IN ARCHITECTURE
These are courses offered by the architecture department or other applicable departments offered within the University. Students should consult the program office for a list of applicable courses each semester.
ART HISTORY AND ARCHAEOLOGY

Departmental Office: 826 Schermerhorn; 212-854-4505
http://www.columbia.edu/cu/arthistory/

Director of Undergraduate Studies: Prof. Michael Cole,
803 Schermerhorn; 212-854-8490; mc3371@columbia.edu
(hgb1@columbia.edu)

Director of Art Humanities: Prof. Zoë Strother, 811 Schermerhorn; 212-854-8529; zss1@columbia.edu
(nme2106@columbia.edu)

Coordinator for Undergraduate Programs: Emily Benjamin,
826 Schermerhorn; 212-854-4505; eb3061@columbia.edu

The goal of the major in the Department of Art History and Archaeology is to explore the history of art, architecture, and archaeology across a broad historical, cultural, geographic, and methodological spectrum.

Department courses take advantage of the extraordinary cultural resources of New York City and often involve museum assignments and trips to local monuments. The department offers a major and concentration in art history and in the history and theory of architecture, and a combined major in art history and visual arts.

At the heart of the major is AHIS UN3000 INTRO LIT/METHODS OF ART HIST, which introduces students to different methodological approaches to art history and critical texts that have shaped the discipline. The colloquium also prepares students for the independent research required in seminars and advanced lecture courses, and should be taken during the junior year.

Surveys and advanced lecture courses offered by Barnard and Columbia cover the spectrum of art history from antiquity to the present and introduce students to a wide range of materials and methodologies. Limited-enrollment seminars have a narrower focus and offer intensive instruction in research and writing. The opportunity for advanced research with a senior thesis is available to students who qualify.

The major readily accommodates students who wish to study abroad during junior year. Courses taken at accredited programs can generally count as transfer credits toward the major, but students must gain the approval of the director of undergraduate studies. Similarly, any transfer credit for the major must be approved by the director of undergraduate studies. Generally no more than 12 points of transfer credit are applicable to the major. The form to petition for transfer credit can be found on the department website. Eligible Art History courses taken at Reid Hall and through the Berlin Consortium are counted as Columbia courses, not transfer courses.

All newly declared majors and concentrators should visit the department office and speak with the undergraduate program coordinator about the requirements and their planned curriculum.

The director of undergraduate studies regularly communicates with majors by e-mail to announce departmental events, museum internships, and other news. **Students who do not receive these messages should email the undergraduate program coordinator.** The director of undergraduate studies is also available to talk to students about their professional goals and plans to study abroad.

**COURSE INFORMATION**

**Lectures**

Attendance at the first class meeting is recommended.

**Colloquia**

For information about enrollment in the required colloquium AHIS UN3000 INTRO LIT/METHODS OF ART HIST, students should consult the department during the registration period in the semester prior to the one in which the course is offered. Interested students must sign up using an online form; majors will be informed of the sign-up dates and deadline via the majors mailing list. Enrollment is limited and admission is at the discretion of the instructor. It is recommended that students sign up for the colloquium in their junior year.

**Seminars**

Students must submit an application in order to be considered for enrollment in department seminars. These applications are due around the time of early registration (April for fall courses, November for spring courses). Interested students can apply using the Google form applications which are linked below each seminar description on the website, as well as in the "Notes" section of each Directory of Classes listing. Students should then join the SSOL wait-list for any seminars they have applied to.

**Bridge Seminars**

Bridge seminars are open to graduate and undergraduate students. Bridge seminars also require an application, which is due in the semester prior to the semester in which the course is offered (August for fall courses, December for spring courses). Interested students can apply using the Google form applications which are linked below each seminar description on the website, as well as in the "Notes" section of each Directory of Classes listing. Students should then join the SSOL wait-list for any seminars they have applied to.

**Bridge Lectures**

Bridge lectures are open to undergraduate and graduate students. They do not require an application.
Travel Seminar

In the spring, one or more undergraduate seminars in the Department of Art History and Archaeology may be designated as a travel seminar. Travel seminars receive funding to sponsor travel over the spring break to a distant site related to the subject matter of the seminar.

STUDY ABROAD

Reid Hall, Paris

For information about the Columbia University in Paris Art History Program at Reid Hall, including summer session courses, visit the Office of Global Programs website.

Summer Program in Italy: Archaeological Fieldwork at Hadrian's Villa

Columbia University offers a four-week summer program that provides undergraduate and graduate students with the opportunity to excavate and learn together at Hadrian's Villa, a UNESCO World Heritage site near Rome and the most important Roman villa. It synthesizes Roman, Greek, and Egyptian architectural and artistic traditions and has attracted scholarly attention for centuries. For more information, visit the program website.

Columbia Summer Program in Venice

The Department of Art History and Archaeology and the Department of Italian offer a summer program based at Co' Foscari University in Venice. The program uses an interdisciplinary approach to understanding Italian culture through study of its language, literature/film, architecture, art history and conservation, and economy. Students have the opportunity to gain a deeper appreciation of the rich Venetian culture, traditions and history. The program is open to qualified undergraduate and graduate students from the U.S. and Italy. For more information, visit the program website.

Columbia Summer Program in Greece

The Department of Art History and Archaeology and the Program in Hellenic Studies offer a new summer program in Athens. "Curating the Histories of the Greek Present" examines aspects of Greek history and culture through the organization of an art exhibition under the general theme of the environment. The project is structured around classroom seminars, museum and site visits, walking tours, and workshop sessions in which students will learn about and gain experience in all stages of curating an exhibition. For more information, visit the program website.

DEPARTMENTAL HONORS

In order to qualify for departmental honors, students must write a senior thesis and have a GPA of at least 3.7 in the major. The faculty of the Department of Art History and Archaeology submits recommendations to the College Committee on Honors, Awards, and Prizes for confirmation. Normally no more than 10% of graduating majors receive departmental honors in a given academic year.

SENIOR THESIS PRIZE

A prize is awarded each year to the best senior honors thesis written in the Department of Art History and Archaeology.

PROFESSORS

Alexander Alberro (Barnard)
Zainab Bahrani
Barry Bergdoll
Michael Cole
Jonathan Crary
Francesco de Angelis
Vidya Dehejia
David Freedberg
Robert E. Harrist, Jr.
Anne Higonnet (Barnard)
Kellie Jones
Branden W. Joseph
Holger A. Klein
Rosalind Krauss
Matthew McKelway
Jonathan Reynolds (Barnard)
Simon Schama
Avinoam Shalem
Zoë Strother

ASSOCIATE PROFESSORS

Diane Bodart
Zeynep Çelik Alexander
Noam M. Elcott
Elizabeth W. Hutchinson (Barnard)
Ioannis Mylonopoulos
Lisa Trever

ASSISTANT PROFESSORS

Gregory Bryda (Barnard)
Meredith Gamer
Eleonora Pistis
Michael J. Waters

ADJUNCT FACULTY

Dawn Delbanco
Rosalyn Deutsche (Barnard)
John Rajchman
Stefaan Van Liefferinge

LECTURERS

Molly Allen
Margot Bernstein
Frederique Baumgartner
Megan Boomer
Colby Chamberlain
Lucas Cohen
Sophia D'Addio
Catherine Damman
Huffa Frobes-Cross
Nina Horisaki-Christens
Page Knox
Janet Kraynak
Sandrine Larrive-Bass
Martina Mims
Kent Minturn
Nicholas Morgan
Mikael Muehlbauer
Steven Niedbala
Irina Oryshkevich
Elizabeth Perkins
Olivia Powell
Julie Siemon
Susan Sivard
Stefaan Van Liefferinge
Caroline Wamsler
Alex Weintraub
Tingting Xu
Benjamin Young

GUIDELINES FOR ALL ART HISTORY AND ARCHAEOLOGY MAJORS, CONCENTRATORS, AND INTERDEPARTMENTAL MAJORS

Courses

**HUMA UN1121 MASTERPIECES OF WESTERN ART** (Art Humanities) does not count toward the majors or concentrations, and no credit is given for Advanced Placement exams.

Grading

Courses in which a grade of D has been received do not count toward the major or concentration requirements.

Only the first course a student takes in the department may be taken for a grade of Pass/D/Fail. Classes taken in the Architecture or Visual Arts departments to fulfill the studio requirement may be taken for a grade of Pass/D/Fail.

Senior Thesis

The senior thesis project consists of a research paper 35-45 pages in length. It is a year-long project, and students writing a thesis must register for **AHIS UN3002 Senior Thesis** for the fall and spring terms. Much of the fall semester is devoted to research, and the spring semester to writing.

All thesis writers are required to participate in class and, on alternate weeks, meet as a group or individually with the instructor. Group meetings are designed as a series of research and writing workshops geared toward students' research projects. Students receive a total of six credits for successful completion of the thesis and class.

In order to apply, students follow a selection process similar to the one currently used for seminars. Students must identify a thesis topic and secure a faculty adviser in the Department of Art History and Archaeology. Applications must indicate the subject of the thesis, a short annotated bibliography, and the name and the signature of the adviser, followed by a one-page statement (400 words) outlining the topic, goals, and methodology of the thesis.

The application deadline is set for August before the senior year. Please check the department website for exact dates. Applications may be delivered in person or emailed to the coordinator for undergraduate programs. The director of undergraduate studies, in consultation with the thesis adviser, reviews the applications.

Students who intend to write a thesis should begin formulating a research topic and approaching potential faculty sponsors during the spring of the junior year. Currently, the department offers the Summer Research Travel Grant fellowship, which supports thesis-related research and travel during the summer. Additional senior thesis research funding during the academic year is administered through Columbia College and General Studies.

Senior thesis applications may be found at: [http://www.columbia.edu/cu/arthistory/undergraduate/forms.html](http://www.columbia.edu/cu/arthistory/undergraduate/forms.html)

Summer Research Travel Grant

The department offers the Summer Research Travel Grant, which may be used for travel to museums, building sites, libraries, archives, and other places of interest relevant to the thesis project. Students normally use these funds to conduct research during the summer before senior year.

Travel grant applications require a carefully edited thesis proposal, itemized budget, and supporting letter from a faculty sponsor. Applications are due in April of the student's junior year. Students will be notified of deadlines as they become available. Please contact the coordinator for undergraduate programs with any questions.

Major in Art History

Please read Guidelines for all for Art History and Archaeology Majors, Concentrators, and Interdepartmental Majors above.

The year-long senior thesis project (for qualified students; see below) **AHIS UN3002 Senior Thesis** may substitute for one elective lecture course. Seminars may substitute for lecture courses and may count toward fulfillment of the distribution requirements. Barnard Art History courses count toward the majors and concentration requirements.

The requirements for the major are as follows:

| AHIS UN3000 | INTRO LIT/METHODS OF ART HIST |
Seven lecture courses in Art History:

- At least one course in three of four historical periods, listed below
- An additional two courses in two different world regions, listed below
- Two additional lectures of the student's choice
- Two seminars in art history
- A studio course taken in the Visual Arts or Architecture departments (which may be taken Pass/D/Fail)

## Historical Periods

- Ancient (pre-400 CE/AD)
- 400-1400
- 1400-1700
- 1700-Present

## World Regions

- Africa
- Asia
- Europe/North America/Australia
- Latin America
- Middle East

NOTE: These chronological divisions are approximate. In case of ambiguities, please contact the director of undergraduate studies.

### MAJOR IN HISTORY AND THEORY OF ARCHITECTURE

Please read Guidelines for all for Art History and Archaeology Majors, Concentrators, and Interdepartmental Majors above.

Majors can take advantage of one of the strengths of the department by focusing on architectural history. This track combines an introductory studio in architectural design with a slightly modified program in art history. Major requirements were updated in February 2019; please contact the director of undergraduate studies with any questions.

The requirements for the major are as follows:

- **AHIS UN3000** INTRO LIT/METHODS OF ART HIST
- Seven lecture courses in art history, one of which must be AHIS UN1007 Introduction to Architecture, and three of which must focus on architectural history. Courses must cover four of five general areas:
  - Ancient Mediterranean
  - Medieval Europe
  - Renaissance and Baroque
  - 18th-20th century
  - Non-Western
- At least two seminars in art history or architectural history
- Architectural Studio:
- **ARCH UN1020** Introduction To Architectural Design and Visual Culture

NOTE: These chronological divisions are approximate. In case of ambiguities, please contact the director of undergraduate studies.

### MAJOR IN ART HISTORY AND VISUAL ARTS

Please read Guidelines for all for Art History and Archaeology Majors, Concentrators, and Interdepartmental Majors above.

Students interested in the combined major should contact the coordinator for undergraduate programs in the Art History department, as well as the director of undergraduate studies in the Visual Arts department.

Up to two 3-point courses in art history may be replaced by a related course in another department, with approval of the adviser. The combined major requires the completion of sixteen or seventeen courses. It is recommended that students interested in this major begin working toward the requirements in their sophomore year.

The requirements for the major are as follows:

- **AHIS UN3000** INTRO LIT/METHODS OF ART HIST
- Seven lecture courses in art history:
  - At least one course in three of four historical periods, as listed below
  - An additional two courses in two different world regions, as listed below
  - Two additional lectures of the student's choice
- 21 points in Visual Arts covering:
  - **VIAR UN1000** BASIC DRAWING
  - or **VIAR UN2200** Ceramics I
  - Five additional VIAR 3-point studio courses (15 points)
- In the senior year, students must complete either a seminar in the Department of Art History and Archaeology or a senior project in visual arts (pending approval by the Visual Arts Department).

NOTE: These chronological divisions are approximate. In case of ambiguities, please contact the director of undergraduate studies.

### Historical Periods

- Ancient (pre-400 CE/AD)
- 400-1400
- 1400-1700
- 1700-Present
World Regions
- Africa
- Asia
- Europe/North America/Australia
- Latin America
- Middle East

CONCENTRATION IN ART HISTORY

Please read Guidelines for all for Art History and Archaeology Majors, Concentrators, and Interdepartmental Majors above.

The requirements for the concentration are as follows:

Seven lecture courses in art history:

<table>
<thead>
<tr>
<th>At least one course in three of four historical periods, listed below</th>
</tr>
</thead>
<tbody>
<tr>
<td>An additional two courses in two different world regions, listed below</td>
</tr>
<tr>
<td>Two additional lectures of the student’s choice</td>
</tr>
</tbody>
</table>

NOTE: These chronological divisions are approximate. In case of ambiguities, please contact the director of undergraduate studies.

Historical Periods
- Ancient (pre-400 CE/AD)
- 400-1400
- 1400-1700
- 1700-present

World Regions
- Africa
- Asia
- Europe/North America/Australia
- Latin America
- Middle East

Concentrators are not required to take the majors colloquium, a seminar, or a studio course.

CONCENTRATION IN HISTORY AND THEORY OF ARCHITECTURE

Please read Guidelines for all for Art History and Archaeology Majors, Concentrators, and Interdepartmental Majors above.

The requirements for the concentration are as follows:

AHIS UN1007 Introduction to the History of Architecture
Astronomy is, at once, the oldest science and one of the most vibrant fields of modern research. Its goal is to construct testable, quantitative, coherent models of the universe (the UNIty of the diVERSE) and its contents—galaxies, stars, and planets. The department offers two majors, both of which require a solid grounding in the mathematics and physics necessary for the pursuit of the discipline.

The astrophysics major is designed as preparation for graduate study and consists of a standard physics major sequence; a yearlong introduction to astrophysics (typically taken in the sophomore year, but open to first-years with adequate preparation in calculus and physics); and two required courses covering advanced topics in astronomy. Research, in the form of summer internships and/or term-time independent projects, which can lead to a senior thesis, is strongly encouraged. For a research thesis, students should enroll in the parallel, two-semester sequence ASTR UN3997-ASTR UN3998 Independent Research, preferably in their senior year. Students begin the research project in the fall and complete the written thesis in the spring. ASTR UN3997 and ASTR UN3998 cannot be repeated for credit.

The astronomy major provides a basis for further study in the field, but is also designed to be compatible with liberal arts students who pursue other careers and those wishing to combine astronomy with related sciences other than physics, such as chemistry or geology. It requires only two physics courses beyond the introductory sequence and can be completed easily if begun in the sophomore year.

The department offers numerous introductory astronomy courses at the 1000-level that do not have prerequisites. The calculus-based ASTR UN2001 Introduction To Astrophysics, I-ASTR UN2002 INTRO TO ASTROPHYSICS II sequence is recommended for astronomy majors and concentrators and is required for astrophysics majors.

Most 3000-level courses, as well as ASTR GU4260 Modeling the Universe, are offered every other year. Students should inquire with the director of undergraduate studies if they have specific questions on the course schedule. ASTR UN3996 Current Research in Astrophysics is a one-point course offered in the fall, designed to introduce majors to research methods and topics. It requires students to attend the department colloquia and a seminar designed to help students understand the colloquium topic. The 3000-level courses need not be taken in any particular order.

Guidelines for all Astronomy Majors, Concentrators, and Interdepartmental Majors

Courses in which the grade of D has been received do not count toward the major or concentration requirements.

Major in Astronomy

The major requirements, to be planned with the director of undergraduate studies, are as follows:

Mathematics

Calculus sequence through MATH UN1202 Calculus IV or MATH UN1208 Honors Mathematics IV

Astronomy

Select one of the following options:
### Option 1:

- Two 3-point 1000-level astronomy courses
- 12 points in astronomy at the 2000-level or above

### Option 2:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTR UN2001</td>
<td>Introduction To Astrophysics, I</td>
</tr>
<tr>
<td>ASTR UN2002</td>
<td>Introduction TO ASTROPHYSICS II</td>
</tr>
</tbody>
</table>

- 9 points in astronomy at the 3000-level or above

### Physics

Select one of the following physics sequences:

#### Sequence 1:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS UN1401</td>
<td>Introduction To Mechanics and</td>
</tr>
<tr>
<td>- PHYS UN1402</td>
<td>Thermodynamics</td>
</tr>
<tr>
<td>- PHYS UN1403</td>
<td>and INTRO ELEC/MAGNETSM # OPTCS</td>
</tr>
<tr>
<td>- PHYS UN1404</td>
<td>and Introduction to Classical and Quantum Waves</td>
</tr>
</tbody>
</table>

#### Sequence 2:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS UN1601</td>
<td>Physics, I: Mechanics and</td>
</tr>
<tr>
<td>- PHYS UN1602</td>
<td>Relativity</td>
</tr>
<tr>
<td>- PHYS UN2601</td>
<td>and Physics, II: Thermodynamics,</td>
</tr>
<tr>
<td></td>
<td>Electricity, and Magnetism</td>
</tr>
<tr>
<td></td>
<td>and Physics, III: Classical and Quantum Waves</td>
</tr>
</tbody>
</table>

#### Sequence 3:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS UN2801</td>
<td>Accelerated Physics I</td>
</tr>
<tr>
<td>- PHYS UN2802</td>
<td>and Accelerated Physics II</td>
</tr>
</tbody>
</table>

### Additional Physics Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS UN3003</td>
<td>Mechanics</td>
</tr>
<tr>
<td>PHYS UN3007</td>
<td>Electricity and Magnetism</td>
</tr>
<tr>
<td>PHYS UN3008</td>
<td>Electromagnetic Waves and Optics</td>
</tr>
<tr>
<td>PHYS GU4021</td>
<td>Quantum Mechanics I</td>
</tr>
<tr>
<td>- PHYS GU4022</td>
<td>and Quantum Mechanics II</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>PHYS BC3006</td>
<td>Quantum Physics</td>
</tr>
<tr>
<td>- PHYS GU4023</td>
<td>and Thermal and Statistical Physics</td>
</tr>
</tbody>
</table>

### Concentration in Astronomy

An extra 3 points of physics can substitute for 3 points of astronomy, as long as the course submitted is at the equivalent or higher level. The concentration requirements are as follows:

#### Mathematics

- 9 points of mathematics

#### Astronomy

- 15 points of astronomy, nine of which must be at or above the 2000-level

#### Physics

- 9 points of physics

---

### Major in Astrophysics

Students considering an Astrophysics major are encouraged to meet with the director of undergraduate studies. If possible, it is useful to start the physics sequence in the first year.

#### Mathematics

- Calculus sequence through MATH UN1202 Calculus IV or MATH UN1208 Honors Mathematics IV

#### Astronomy

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTR UN2001</td>
<td>Introduction To Astrophysics, I</td>
</tr>
<tr>
<td>- ASTR UN2002</td>
<td>and INTRO TO ASTROPHYSICS II</td>
</tr>
</tbody>
</table>

- 6 points in astronomy at the 3000-level or above

#### Physics

Select one of the following physics sequences:

#### Sequence 1:
For the first term of their introductory biology sequence, students may take either BIOL UN2005 INTRO BIO I: BIOCHEM, GEN, MOLEC, which has a prerequisite of chemistry, or EEEB UN2001 Environmental Biology I: Elements to Organisms, which does not require chemistry. EEEB UN2001 Environmental Biology I: Elements to Organisms may be taken in the first year.

BIOL UN2005 INTRO BIO I: BIOCHEM, GEN, MOLEC should be taken later, after general chemistry. For more details, see Introductory Courses under Requirements—Major in Biology. All students interested in biology are encouraged to take BIOL UN1908 First Year Seminar in Biology in the fall semester of their first year.

Premedical students should consult with their advising dean or the preprofessional office for relevant details of medical school requirements. Students interested in graduate school should consult the biology career adviser, Dr. Molly Przeworski

Nonscience majors who wish to take a biology course to fulfill the science requirement are encouraged to take BIOL UN1130 Genes and Development. Interested students should consult listings in other departments for courses related to biology.

ADVANCED PLACEMENT
The department grants 3 credits for a score of 5 on the AP Biology exam. Placement is determined by the department. Students with a 5 on the AP are encouraged to take BIOL UN2005 INTRO BIO I: BIOCHEM, GEN, MOLEC and BIOL UN2006 INTRO BIO II: CELL BIO, DEV, PHYS, but are not required to do so. For details, visit http://www.columbia.edu/cu/biology/ug/advice/faqs/firstyr.html.

TRANSFER CREDIT

ADVISING

Biology Major and Concentration Advisers:
For a list of current biology, biochemistry, biophysics, and neuroscience and behavior advisers, please visit http://biology.columbia.edu/programs/advisors

- A-F: Prof. Alice Heicklen, 744B Mudd; ah2289@columbia.edu
- G-O: Prof. Mary Ann Price, 744A Mudd; map2293@columbia.edu
- P-Z: Prof. Tulle Hazelrigg, 753A Mudd; tih1@columbia.edu

Biochemistry Advisers:
Biology: Prof. Brent Stockwell, 1208 Northwest Corner Building; 212-854-2948; stockwell@columbia.edu (stockwell@biology.columbia.edu)
Chemistry: Prof. Virginia Cornish, 1209 Northwest Corner Building; 212-854-5209; vc114@columbia.edu

Biophysics Adviser: Prof. Ozgur Sahin, 908 Northwest Corner Building; os2246@columbia.edu

Neuroscience and Behavior Advisers:
Biology: Prof. Stuart Firestein, 1011B Fairchild; sjf24@columbia.edu
Psychology: Prof. Alfredo Spagna, 315 Schermerhorn; as5559@columbia.edu (Students with last names beginning A-L)
Psychology: Prof. Caroline Marvin, 317 Schermerhorn; cbm2118@columbia.edu (Students with last names beginning M-Z)

SUMMER UNDERGRADUATE RESEARCH FELLOWSHIP (SURF) PROGRAM
First-year students, sophomores, and juniors are eligible for the department’s paid internship program (SURF). This program is competitive; the department cannot assure every eligible student a place in any given summer.

Students apply to the program early in the spring term. A faculty committee headed by Dr. Alice Heicklen then matches selected students to appropriate labs. The deadline for SURF applications is at the beginning of the spring semester.

SURF students must submit a report on their work at the end of the summer session and participate in the following year’s annual Undergraduate Research Symposium. Although it does not carry any academic credit, SURF can be used toward the lab requirement for majors and toward graduation with honors. For detailed information on all summer research programs and how to apply, please visit the SURF website.

Current detailed descriptions of the SURF program and the application procedure are available at SURF’s website, https://
www.biology.columbia.edu/programs/surf. For more information on the Amgen Scholarship Program, please visit https://www.biology.columbia.edu/programs/amgen-scholars-program. Applications to all of these programs are through SURF.

DEPARTMENTAL HONORS

Students must apply for departmental honors. Applications are due no later than one day before spring break of their senior year. For details, please visit the departmental website at http://biology.columbia.edu/programs/honors-biological-sciences.

PROFESSORS

Peter Andolfatto
Harmen Bussemaker
Martin Chalfie
Lawrence Chasin
Stuart Firestein
Joachim Frank
Iva Greenwald
Tulle Hazelrigg
Oliver Hobert
John Hunt
Songtao Jia
Daniel Kalderon
Darcy Kelley
Laura Landweber
James Manley
Robert Pollack
Carol Prives
Ronald Prywes
Molly Przeworski
Michael Sheetz

ASSOCIATE PROFESSORS

Lars Dietrich
Ozgur Sahin
Guy Sella

ASSISTANT PROFESSORS

Erin Barnhart
Laura Duvall
Jellert Gaublomme
Marko Jovanovic
Raju Tomer
Maria Tosches

LECTURERS

Claire Elise Hazen
Alice Heicklen
Mary Ann Price
Lili Yamasaki

ADJUNCT FACULTY

Lewis Brown
Ronald Guido
Jay Hammel
Danny Nam Ho
John Loike
Alan Morrison
Guidelines for all Biological Sciences Majors, Concentrators, and Interdepartmental Majors

Returning students should check the departmental website for any last-minute changes and/or additional information. See especially undergraduate updates and list of department courses. All major and concentration requirements are detailed on the website and links provided below.

Exceptions to Requirements

Students must get written permission in advance for any exceptions to the requirements listed below. For the exceptions to be applied toward graduation, the student must notify the biology department in one of the following two ways:

1. The student can file a completed paper planning form, signed by a faculty adviser, in the biology department office at 600 Fairchild;
2. The faculty member approving the exception can send an e-mail explaining the exceptions to mes2314@columbia.edu.

Grade Requirements for the Major

A grade of C- or higher must be earned and revealed on your transcript for any course – including the first – to be counted toward the major or concentration requirements. The grade of P is not acceptable. A course that was taken Pass/D/Fail may be counted if and only if the P is uncovered by the Registrar's deadline.

Courses

Courses with the subject code HPSC or SCNC do not count toward the majors or concentrations.

Major in Biology

General Information

The requirements for the biology major include courses in biology, chemistry, physics, and mathematics.

The required biology courses are one year of introductory biology, two core courses in biology or biochemistry, two 3-point electives in biology or biochemistry, and an appropriate lab experience. See below for details.

The required courses outside the biology department are chemistry through organic (plus labs), one year of college-level physics (plus lab), and the completion of one year of college-level mathematics (usually calculus).

Alternative sequences to the above may be arranged in special circumstances, but only with the permission of the director of undergraduate studies or a departmental adviser obtained in advance; for example, certain courses listed in the Summer Term Bulletin, the School of General Studies Bulletin, and the Barnard College Bulletin may be applied toward the major. In addition, selected courses at the Columbia-Presbyterian Medical Center are open to advanced undergraduates. Credit toward the major for courses not listed in the Columbia College Bulletin must be discussed in advance with the director of undergraduate studies or a departmental adviser. Students are responsible for notifying the department of all exceptions either in writing or by e-mail as explained above.

Alternative programs must be arranged in advance with the director of undergraduate studies. Students planning graduate work in biology should keep in mind that physical chemistry and statistics are important for many graduate programs.

Introductory Courses

The usual one-year introductory biology sequence is BIOL UN2005 INTRO BIO I: BIOCHEM,GEN,MOLEC-BIOL UN2006 INTRO BIO II:CELL BIO,DEV/PHYS, taken in the sophomore year, or EEEB UN2001 Environmental Biology I: Elements to Organisms-BIOL UN2006 INTRO BIO II:CELL BIO,DEV/PHYS, which may be taken in the first year.

Other sequences require permission in advance from the director of undergraduate studies or departmental advisers. Students with a strong background in chemistry or molecular biology may take BIOL UN2005 INTRO BIO I: BIOCHEM,GEN,MOLEC-BIOL UN2006 INTRO BIO II:CELL BIO,DEV/PHYS in their first year; the permission of one of the instructors is required.

Premedical students usually take BIOL UN2005 INTRO BIO I: BIOCHEM,GEN,MOLEC-BIOL UN2006 INTRO BIO II:CELL BIO,DEV/PHYS after a year of general chemistry; premedical students interested in the environmental sciences may take EEEB UN2001 Environmental Biology I: Elements to Organisms followed by BIOL UN2006 INTRO BIO II:CELL BIO,DEV/PHYS.

Students with advanced placement in biology are expected but not required to take EEEB UN2001 Environmental Biology I: Elements to Organisms or BIOL UN2005 INTRO BIO I: BIOCHEM,GEN,MOLEC as their initial
biology course, because BIOL UN2005 INTRO BIO I: BIOCHEM, GEN, MOLEC-BIOL UN2006 INTRO BIO II: CELL BIO, DEV/PHYS is taught at a level of detail and depth not found in most advanced placement courses.

Students who wish to skip BIOL UN2005 INTRO BIO I: BIOCHEM, GEN, MOLEC and start with a higher-level biology course may do so, but they must obtain permission in advance from the director of undergraduate studies. For additional information, see FAQs for first-year students at http://www.columbia.edu/cu/biology/ug/advice/faqs/firstyr.html.

Core Courses
Two out of the following five departmental core courses are required:

- BIOL UN3022 Developmental Biology
- BIOL UN3031 GENETICS
- BIOL UN3041 Cell Biology
- BIOC GU4501 Biochemistry: Structure and Metabolism
- or BIOC UN3300 Biochemistry
- BIOC GU4512 Molecular Biology

Laboratory Courses
A laboratory experience in biology is required. It may be fulfilled by completing any one of the following options:

Option 1:
Select one of the following 5-point laboratory courses:
- BIOL UN3058 Project Laboratory in Microbiology

Option 2:
BIOL UN2501 Contemporary Biology Laboratory
Select an additional 3-point lab such as BIOL UN3040 or a Barnard lab.

Option 3:
Two terms of BIOL UN3500 taken for a letter grade, including the submission of a satisfactory research report at the end of each semester

Option 4:
Completion of all the requirements for one session of the Summer Undergraduate Research Fellowship (SURF). An additional semester of BIOL UN3500 in the same research lab is recommended but not required. Summer lab work under other auspices may not be substituted for the SURF Program.

The laboratory fee ($150) partially covers the cost of nonreturnable items. This fee is charged for all lab courses, including BIOL UN3500 Independent Biological Research.

Upper-Level Elective Courses
Select two additional courses, carrying at least 3 points each, from any of the 3000- or 4000- level lecture courses. BIOL UN3500 Independent Biological Research cannot be used as one of the courses to satisfy the upper-level elective course requirement.

Chemistry
All majors must take chemistry through organic including labs. One of the following three groups of chemistry courses is required:

Option 1:

<table>
<thead>
<tr>
<th>CHEM UN1403</th>
<th>GENERAL CHEMISTRY I-Lectures</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM UN1404</td>
<td>and GENERAL CHEMISTRY II-Lectures</td>
</tr>
<tr>
<td>CHEM UN1500</td>
<td>GENERAL CHEMISTRY LABORATORY</td>
</tr>
<tr>
<td>CHEM UN1501</td>
<td>and GENERAL CHEMISTRY LAB-LECTURE</td>
</tr>
<tr>
<td>CHEM UN2443</td>
<td>Organic Chemistry I (Lecture)</td>
</tr>
<tr>
<td>CHEM UN2444</td>
<td>and ORGANIC CHEMISTRY II-Lectures</td>
</tr>
<tr>
<td>CHEM UN2493</td>
<td>Organic Chemistry Laboratory I (Techniques)</td>
</tr>
<tr>
<td>CHEM UN2494</td>
<td>and ORGANIC CHEM. LAB II SYNTHESIS</td>
</tr>
</tbody>
</table>

Option 2:
For students who qualify for intensive chemistry

<table>
<thead>
<tr>
<th>CHEM UN1604</th>
<th>2ND TERM GEN CHEM (INTENSIVE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM UN1507</td>
<td>Intensive General Chemistry Laboratory</td>
</tr>
<tr>
<td>CHEM UN2444</td>
<td>ORGANIC CHEMISTRY II-Lectures</td>
</tr>
<tr>
<td>CHEM UN2443</td>
<td>and Organic Chemistry I (Lecture)</td>
</tr>
<tr>
<td>CHEM UN2495</td>
<td>Organic Chem. Laboratory I</td>
</tr>
<tr>
<td>CHEM UN2496</td>
<td>and Organic Chem. Laboratory II</td>
</tr>
</tbody>
</table>

Option 3:
For students who qualify for first year organic chemistry

<table>
<thead>
<tr>
<th>CHEM UN1507</th>
<th>Intensive General Chemistry Laboratory</th>
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</thead>
<tbody>
<tr>
<td>CHEM UN2045</td>
<td>INTENSIVE ORGANIC CHEMISTRY</td>
</tr>
<tr>
<td>CHEM UN2046</td>
<td>and INTENSIVE ORG CHEM-FOR 1ST YEAR</td>
</tr>
<tr>
<td>CHEM UN2495</td>
<td>Organic Chem. Laboratory I</td>
</tr>
<tr>
<td>CHEM UN2496</td>
<td>and Organic Chem. Laboratory II</td>
</tr>
<tr>
<td>CHEM UN2545</td>
<td>or CHEM UN2545 Intensive Organic Chemistry Laboratory</td>
</tr>
</tbody>
</table>

Physics
Students must take two terms of physics including the accompanying labs. The usual choices are PHYS UN1201-PHYS UN1202 General Physics II and PHYS UN1291-PHYS UN1292 General Physics Laboratory II. Higher-level physics sequences are also acceptable. The 1400-level sequence is recommended for students who plan to take three terms of physics.
Mathematics
Two semesters of calculus or honors mathematics are required. Students may substitute one semester of statistics for one semester of calculus with an adviser’s permission. For students with AP credit, completion of MATH UN1102 CALCULUS II, MATH UN1201 Calculus III, or MATH UN1207 Honors Mathematics A is sufficient. However, students with AP credit are encouraged to take additional courses in mathematics or statistics at Columbia.

For more details on the biology major requirements, visit http://biology.columbia.edu/pages/biology-major-requirements.

MAJOR IN BIOCHEMISTRY
The required basic courses for the biochemistry major are chemistry through organic, including laboratory, and one year each of physical chemistry, physics, calculus, biology, and biochemistry/molecular biology.

The required additional courses are three lecture courses chosen from mathematics, chemistry, and biology, and two upper-level laboratory courses.

For more details, see the Chemistry section in this Bulletin. For additional information visit the Department of Biological Sciences website: http://biology.columbia.edu/pages/biochemistry-major-requirements.

MAJOR IN BIOPHYSICS
The requirements for the biophysics major are as follows:

One year of introductory biology:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>BIOL UN2005</td>
<td>INTRO BIO I: BIOCHEM,GEN,MOLEC</td>
</tr>
<tr>
<td>- BIOL UN2006</td>
<td>and INTRO BIO II:CELL BIO.DEV/PHYS</td>
</tr>
</tbody>
</table>

Select at least one of the following laboratory courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL UN3050</td>
<td>Project Laboratory In Protein Biochemistry</td>
</tr>
<tr>
<td>BIOL UN3052</td>
<td>PROJECT LAB-MOLECULAR GENETICS</td>
</tr>
<tr>
<td>BIOL UN3058</td>
<td>Project Laboratory in Microbiology</td>
</tr>
<tr>
<td>BIOL UN3500</td>
<td>Independent Biological Research</td>
</tr>
</tbody>
</table>

One course in biochemistry or molecular biology:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCHM GU4501</td>
<td>BIOCHEM I-STRUCTURE/METABOLISM</td>
</tr>
<tr>
<td>or BIOC UN3512</td>
<td>Molecular Biology</td>
</tr>
<tr>
<td>or BIOC UN3300</td>
<td>Biochemistry</td>
</tr>
</tbody>
</table>

Select one of the following options:

Option 1 - Genetics:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL UN3031</td>
<td>GENETICS</td>
</tr>
</tbody>
</table>

Option 2 - Neurobiology:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>BIOL UN3004</td>
<td>Neurobiology I: Cellular and Molecular Neurobiology</td>
</tr>
<tr>
<td>or BIOL UN3005</td>
<td>Neurobiology II: Development &amp; Systems</td>
</tr>
<tr>
<td>BIOL UN3022</td>
<td>Developmental Biology</td>
</tr>
</tbody>
</table>

Select one of the following sequences to be completed at the end of sophomore year:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS UN1401</td>
<td>Introduction To Mechanics and Thermodynamics</td>
</tr>
<tr>
<td>- PHYS UN1402</td>
<td>and INTRO ELEC/MAGNETSM # OPTCS</td>
</tr>
<tr>
<td>- PHYS UN1403</td>
<td>and Introduction to Classical and Quantum Waves</td>
</tr>
<tr>
<td>- PHYS UN1494</td>
<td>and Introduction to Experimental Physics</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS UN1601</td>
<td>Physics, I: Mechanics and Relativity</td>
</tr>
<tr>
<td>- PHYS UN1602</td>
<td>and Physics, II: Thermodynamics, Electricity, and Magnetism</td>
</tr>
<tr>
<td>- PHYS UN2601</td>
<td>and Physics, III: Classical and Quantum Waves</td>
</tr>
<tr>
<td>- PHYS UN2699</td>
<td>and Experiments in Classical and Modern Physics</td>
</tr>
</tbody>
</table>

Select any two physics courses at the 3000-level or above, chosen in consultation with the adviser.

Calculus through MATH UN1202 or MATH UN1208

MATH UN3027      | Ordinary Differential Equations

CHEMISTRY COURSES
One year of college chemistry is required prior to taking Introductory Biology.

BIOLOGY COURSES
One year of introductory biology.

For more details, see the Physics section in this Bulletin or visit the Department of Biological Sciences website: http://biology.columbia.edu/pages/biophysics-major-requirements.

MAJOR IN NEUROSCIENCE AND BEHAVIOR
In addition to one year of college general chemistry, ten courses are required to complete the major in neuroscience and behavior —five in biology and five in psychology.

For more details, see the Psychology section in this Bulletin or visit http://biology.columbia.edu/pages/neuroscience-and-behavior-major-requirements.
BIOL UN2005 - BIOL UN2006
- INTRO BIO I: BIOCHEM, GEN, MOLEC
and INTRO BIO II: CELL, BIO, DEV/PHYS

One year of Neurobiology

BIOL UN3004 - BIOL UN3005
- Neurobiology I: Cellular and Molecular Neurobiology
and Neurobiology II: Development & Systems

One additional 3000 or 4000 level biology lecture course from the following:

BIOL UN3006 - PHYSIOLOGY
BIOL UN3019 - Brain Evolution
BIOL UN3022 - Developmental Biology
BIOL UN3025 - Neurogenetics
BIOL UN3031 - GENETICS
BIOL UN3799 - Molecular Biology of Cancer
BIOL UN3041 - Cell Biology
BIOL UN3073 - Cellular and Molecular Immunology
BIOL UN3193 - Stem Cell Biology and Applications
BIOC UN3300 - Biochemistry
BIOL UN3404 - Seminar on the Global Threat of Antimicrobial Resistance
BIOL GU4034 - Biototechnology (or BIOL UN3404)
BIOL GU4035 - Seminar in Epigenetics
BIOL GU4075 - Biology at Physical Extremes
BIOL GU4080 - ANCIENT AND MODERN RNA WORLDS
BIOL GU4082 - Theoretical Foundations and Applications of Biophysical Methods
BIOL GU4260 - Proteomics Laboratory
BIOL GU4290 - Biological Microscopy
BIOL GU4300 - Drugs and Disease
BIOL GU4305 - Seminar in Biotechnology
BIOC GU4323 - Biophysical Chemistry I
BIOC GU4324 - Biophysical Chemistry II
BCHM GU4501 - BIOCHEM I-STRUCTURE/METABOLISM (or BIOC UN3501)
BIOC GU4512 - Molecular Biology (or BIOC UN3512)
BIOL GU4510 - Genomics of Gene Regulation
BIOL GU4560 - Evolution in the age of genomics

PSYCHOLOGY COURSES

Each of the following courses:

PSYC UN1001 - PSYC UN1021
- The Science of Psychology
of Science: Explorations and Applications

PSYC UN2430 - COGNITIVE NEUROSCIENCE
(Students who have previously taken PSYC UN1010 Mind, Brain and Behavior (no longer offered) may use that course to fulfill this requirement.)
or PSYC UN2450 - Behavioral Neuroscience
or PSYC UN2470 - Fundamentals of Human Neuropsychology

One statistics or research methods course from the following:

PSYC UN1420 - RESEARCH METHODS - HUMAN BEHAVIOR
PSYC UN1450 - RESEARCH METHODS - SOCIAL COGNITION # EMOTION
PSYC UN1455 - RESEARCH METHODS: SOCIAL/PERSONALITY
PSYC UN1490 - RESEARCH METHODS: COGNITION/DECISION MAKING
PSYC UN1610 - Introductory Statistics for Behavioral Scientists
PSYC UN1660 - Advanced Statistical Inference
STAT UN1101 - Introduction to Statistics
STAT UN1201 - Calculus-Based Introduction to Statistics (Note, STAT UN1001 does not count towards the N&B major.)

One additional 2000- or 3000- level psychology lecture course from a list approved by the psychology advisor:

PSYC S2210Q - Cognition: Basic Processes
PSYC UN2215 - Cognition and the Brain
or PSYC S2215D - Cognition and the Brain
PSYC UN2220 - Cognition: Memory and Stress
PSYC W2225 - Attention and Perception
PSYC W2230 - Perception and Sensory Processes
PSYC UN2235 - THINKING AND DECISION MAKING
or PSYC S2235Q - Thinking and Decision Making
PSYC UN2250 - Evolution of Cognition
PSYC UN2280 - Developmental Psychology
PSYC UN2420 - Animal Behavior
PSYC UN2440 - Language and the Brain
PSYC UN2450 - Behavioral Neuroscience
or PSYC S2450Q - Behavioral Neuroscience
PSYC UN2460 - Drugs and Behavior
PSYC UN2470 - Fundamentals of Human Neuropsychology
PSYC UN2480 - The Developing Brain
PSYC UN2481 - Developmental Cognitive Neuroscience
PSYC S2490D - Evolutionary Psychology
PSYC UN2620 - Abnormal Behavior
or PSYC S2620Q - Abnormal Behavior
PSYC UN2690 - Frontiers of Justice
One advanced psychology seminar from a list approved by the psychology advisor:

- PSYC W3265: Auditory Perception (Seminar)
- PSYC UN3270: Computational Approaches to Human Vision (Seminar)
- PSYC UN3280 or PSYC S3280D: Seminar in Infant Development (Seminar)
- PSYC S3285D: The Psychology of Disaster Preparedness
- PSYC UN3290: Self: A Cognitive Exploration (Seminar)
- PSYC GU4202: Theories of Change in Human Development
- PSYC GU4222: The Cognitive Neuroscience of Aging (Seminar)
- PSYC GU4223: Memory and Executive Function Thru the Lifespan
- PSYC GU4224: Consciousness and Cognitive Science
- PSYC GU4225: CONSCIOUSNESS # ATTENTION
- PSYC GU4229: Attention and Perception
- PSYC GU4232: Production and Perception of Language
- PSYC GU4235: Special Topics in Vision (Seminar)
- PSYC GU4236: Machine Intelligence
- PSYC GU4239: Cognitive neuroscience of narrative and film
- PSYC GU4242: Evolution of Language (Seminar)
- PSYC GU4244: Language and Mind
- PSYC GU4250: Evolution of Intelligence, Cognition, and Language (Seminar)
- PSYC GU4265: Auditory Perception
- PSYC GU4270: COGNITIVE PROCESSES
- PSYC G4272: Advanced Seminar in Language Development
- PSYC GU4280: Core Knowledge (Seminar)
- PSYC GU4281: The Psychology of Curiosity
- PSYC GU4282: The Neurobiology and Psychology of Play
- PSYC G4285: Multidisciplinary Approaches to Human Decision Making (Seminar)
- PSYC GU4287: Decision Architecture
- PSYC GU4289: THE GAMES PEOPLE PLAY: PSYCH OF STRAT DEC
- PSYC S3410Q: Seminar in Emotion
- PSYC W3435: Neurobiology of Reproductive Behavior (Seminar)
- PSYC UN3445: The Brain & Memory
- PSYC UN3450: Evolution of Intelligence, Animal Communication, # Language
- PSYC UN3481: Critical Periods in Brain Development and Behavior
- PSYC W3484: Life Span Development: Theory and Methods
- PSYC UN3496 or PSYC S3490Q: Neuroscience and Society
- PSYC W4415: Methods and Issues in Cognitive Neuroscience (Seminar)
- PSYC GU4420: Animal Cognition (Seminar)
- PSYC GU4430: Learning and the Brain (Seminar)
- PSYC GU4435: Non-Mnemonic Functions of Memory Systems
- PSYC GU4440: TOPICS-NEUROBIOLOGY & BEH
- PSYC G4460: Cognitive Neuroscience and the Media (Seminar)
- PSYC GU4470: Psychology & Neuropsychology of Language (Seminar)
- PSYC GU4480: Psychobiology of Infant Development (Seminar)
- PSYC GU4482: Neural Plasticity
- PSYC G4485: Affective Neuroscience (Seminar)
- PSYC GU4486: Developmental and Affective Neuroscience (Seminar)
- PSYC GU4490: Inheritance (Seminar)
- PSYC G4492: Psychobiology of Stress
- PSYC GU4493: Stress and the Brain
- PSYC G4495: Ethics, Genetics, and the Brain
- PSYC GU4496: Behavioral Neuroimmunology
- PSYC GU4498: Behavioral Epigenetics
- PSYC S3610D: The Psychology of Stereotyping & Prejudice
- PSYC UN3615: Children at Risk (Lecture)
- PSYC UN3620: Seminar in Developmental Psychopathology
- PSYC UN3623: Topics in Clinical Psychology
- PSYC UN3624: Adolescent Mental Health: Causes, Correlates, Consequences
- PSYC UN3625: Clinical Neuropsychology (Seminar)
- PSYC UN3655: Field Experimentation Methods for Social Psychology
- PSYC UN3661: Happiness Studies Seminar
- PSYC UN3671: Motivation Science
- PSYC UN3680: Social Cognitive Neuroscience (Seminar)
- PSYC UN3691: Interpersonal Cognition Seminar: Close Relationships, Identity, and Memory
- PSYC UN3693: Stress in an Interpersonal Context
- PSYC GU4612: Frontiers of Justice
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC GU4615</td>
<td>PSYCH OF CULTURE &amp; DIVERS</td>
</tr>
<tr>
<td>PSYC GU4627</td>
<td>Seminar in Anxiety, Obsessive-Compulsive, and Related Disorders</td>
</tr>
<tr>
<td>PSYC GU4630</td>
<td>Advanced Seminar in Current Personality Theory and Research (Seminar)</td>
</tr>
<tr>
<td>PSYC GU4635</td>
<td>The Unconscious Mind (Seminar)</td>
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<tr>
<td>PSYC GU4645</td>
<td>Culture, Motivation, and Prosocial Behavior</td>
</tr>
<tr>
<td>PSYC GU4646</td>
<td>Socio-Ecological Psychology</td>
</tr>
<tr>
<td>PSYC GU4670</td>
<td>Theories in Social and Personality Psychology (Seminar)</td>
</tr>
<tr>
<td>PSYC GU4672</td>
<td>Moral Psychology</td>
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<tr>
<td>PSYC GU4673</td>
<td>Political Psychology</td>
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<tr>
<td>PSYC GU4682</td>
<td>FAQs about Life: Applications of Psychological Research to Everyday Experiences</td>
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<tr>
<td>PSYC GU4685</td>
<td>Social Cognitive Neuroscience (Seminar)</td>
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<tr>
<td>PSYC GU4686</td>
<td>Barriers and Levers for Behavior Change</td>
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<tr>
<td>PSYC GU4690</td>
<td>Social Factors and Psychopathology (Seminar)</td>
</tr>
<tr>
<td>PSYC GU4695</td>
<td>Psychology of Close Relationships (Seminar)</td>
</tr>
<tr>
<td>PSYC GU4880</td>
<td>In Service of Equity: Examining Developmental Science through the Lens of Policy</td>
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</tbody>
</table>

Note: Students wishing to use a seminar course not listed above to meet the P5 seminar requirement must contact their psychology adviser before enrolling to request permission for an exception. Generally speaking, permission for such exceptions is only granted when there is a compelling case related to the student’s research or area of study. Students requesting permission to use a course not on this list must ensure that their substantive coursework in the seminar (generally their final paper) is on a neuroscience-focused topic.

The requirements for the concentration in biology are as follows:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL UN2005</td>
<td>INTRO BIO I: BIOCHEM, GEN, MOLEC</td>
</tr>
<tr>
<td>or EEEB UN2001</td>
<td>Environmental Biology I: Elements to Organisms</td>
</tr>
<tr>
<td>BIOL UN2006</td>
<td>INTRO BIO II: CELL, BIO, DEV/PHYS</td>
</tr>
</tbody>
</table>

Select at least one of the following core courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL UN3022</td>
<td>Developmental Biology</td>
</tr>
<tr>
<td>BIOL UN3031</td>
<td>GENETICS</td>
</tr>
<tr>
<td>BIOL UN3041</td>
<td>Cell Biology</td>
</tr>
<tr>
<td>BIOC GU4501</td>
<td>Biochemistry: Structure and Metabolism</td>
</tr>
<tr>
<td>or BIOC UN3300</td>
<td>Biochemistry</td>
</tr>
<tr>
<td>BIOC GU4512</td>
<td>Molecular Biology</td>
</tr>
</tbody>
</table>

Plus additional biology elective courses (see electives listed under biology major) to reach a total of 22 points in biology courses.

Beginning Fall 2018, no biology lab is required for the concentration. All other requirements remain the same, including enough electives to reach at least 22 points. Either UN2501 or a five-point lab course, but not both, may count towards the 22 point total.

Chemistry through organic including labs; see biology major for options

One year of physics, including laboratory; see biology major for options

One year of college-level mathematics (ordinarily this should be calculus); see biology major for options


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**CONCENTRATION IN BIOLOGY**

Students who wish to concentrate in biology must design their programs in advance with the director of undergraduate studies or a departmental adviser.

The requirement for the concentration is 22 points in biology or biochemistry, with at least five courses chosen from the courses listed in the Biological Sciences section of the Bulletin. Additional courses in physics, chemistry, and mathematics are required as detailed below.

A project laboratory and BIOL UN2501 Contemporary Biology Laboratory may not both be counted toward the 22-point total. See the biology major requirements for additional information.
The collaboration between the faculty of Arts and Sciences and Columbia Business School offers students access to the ideas and expertise of the faculty of a top-ranked professional school recognized for its excellence in graduate business education through a series of elective courses. These courses, designed by Business School faculty specifically for undergraduates, build upon the strong liberal arts education at Columbia. Students learn how finance is directly connected to the fundamental principles of economics; that marketing utilizes concepts from psychology; and how management depends upon principles developed in psychology and sociology.

Students can take advantage of the opportunity to enhance their experience by participating in co-curricular activities, such as Business School faculty lecture series, industry panels, informal mentoring/networking activities with MBA students and alumni, in addition to research opportunities with Business School faculty.

This curricular and co-curricular programming capitalizes on the Business School’s ability to connect academic theory with real-world practice, providing students with the opportunity to develop key leadership skills, an entrepreneurial mindset, and the ability to innovate.

Eligibility:

- To be eligible to earn a Special Concentration in Business Management, students must apply to the program in the spring semester of their sophomore or junior years, and they must be accepted through a process governed by the Columbia Business School. Beginning with the Special Concentration cohort of 2017-2018 (i.e., students accepted via the application process of Spring 2017), the program will accept up to 45 qualified candidates each year. The size of the program may be reviewed from time to time by Columbia College and Columbia Business School and adjusted, if desired by both schools.

- For students who entered Columbia College or General Studies in, or before, Fall 2016: Students who have not been accepted into the Special Concentration program may have the option to “shadow” the Special Concentration in Business Management by taking the required courses if space is available in those courses. Students who “shadow” the program will not be given priority registration in any courses that count toward the Special Concentration. If a student is able to take all of the courses and earns a 3.0 or higher grade-point average in the prerequisite, core, and elective courses, she or he will be allowed to declare retroactively the Special Concentration and have the program noted on their transcript.

### APPLICATION REQUIREMENTS

To apply for the special concentration in business management, students must meet these three requirements:

1. Sophomore or junior standing;
2. Have a cumulative GPA of 3.4 or higher;
3. Have received a B+ or better in at least one, but preferably two, of the following three prerequisite courses, i.e. in statistics, economics, and psychology. Students who completed only one prerequisite at the time of application must be currently enrolled in at least one other; acceptance is conditional on achieving a grade of B+ or higher in the second course.

#### Statistics Prerequisite

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT UN1001</td>
<td>INTRO TO STATISTICAL REASONING</td>
</tr>
<tr>
<td>STAT UN1101</td>
<td>Introduction to Statistics</td>
</tr>
<tr>
<td>STAT UN1201</td>
<td>Calculus-Based Introduction to Statistics</td>
</tr>
<tr>
<td>PSYC UN1610</td>
<td>Introductory Statistics for Behavioral Scientists</td>
</tr>
<tr>
<td>SOCI UN3020</td>
<td>Social Statistics</td>
</tr>
</tbody>
</table>

#### Economics Prerequisite

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON UN1105</td>
<td>Principles of Economics</td>
</tr>
</tbody>
</table>

#### Psychology/Sociology Prerequisite

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC UN1001</td>
<td>The Science of Psychology</td>
</tr>
<tr>
<td>PSYC UN1010</td>
<td>Mind, Brain and Behavior</td>
</tr>
<tr>
<td>SOCI UN1000</td>
<td>THE SOCIAL WORLD</td>
</tr>
</tbody>
</table>

### Application Components

1. Application form
2. Current class schedule, including a brief description of how all concentration requirements will be completed
3. Official transcript
4. Resume

### Benefits for Admitted Students

The following benefits are available to students admitted through the application process:

1. Guaranteed enrollment in popular undergraduate business courses (must reserve in advance through program manager);
2. Access to special guest speaker presentations at the Business School, including business leader or faculty presentations exclusively for admitted students;
3. Formal and informal networking opportunities with Business School students, faculty, and alumni.

**CURRENT FACULTY**

**AFFILIATED FACULTY**

**GUIDELINES FOR ALL BUSINESS MANAGEMENT SPECIAL CONCENTRATORS**

The business management special concentration is not a stand-alone concentration: it is intended to complement the disciplinary specialization and methodological training inherent in a major. In addition to the special concentration requirements, students must complete a major or a full concentration.

Students who matriculated at Columbia in Fall 2012 and beyond must earn a minimum GPA of 3.0 in prerequisite, core, and elective courses. Students who matriculated before Fall 2012 must either adhere to the above requirement or previous requirement of B+ or better in at least two of the prerequisites and a minimum GPA of 3.0 in core and elective classes.

Students who do not meet course prerequisites or who do not receive a passing grade do not receive credit for that course towards the special concentration. All courses must be taken for a letter grade. Only prerequisites may be double counted for other majors or concentrations. The core classes cannot be double counted. Electives may be double counted if a student’s major allows double counting.

For information about this special concentration, including the application process, visit http://www8.gsb.columbia.edu/mendelson.

**SPECIAL CONCENTRATION IN BUSINESS MANAGEMENT**

Please read Guidelines for all Business Management Special Concentrators above.

The requirements for the special concentration in business management are as follows:

**Prerequisites**

Select one of the following Statistics courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT UN1001</td>
<td>INTRO TO STATISTICAL REASONING</td>
</tr>
<tr>
<td>STAT UN1101</td>
<td>Introduction to Statistics</td>
</tr>
<tr>
<td>STAT UN1201</td>
<td>Calculus-Based Introduction to Statistics</td>
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<tr>
<td>PSYC UN1610</td>
<td>Introductory Statistics for Behavioral Scientists</td>
</tr>
<tr>
<td>SOCI UN3020</td>
<td>Social Statistics</td>
</tr>
</tbody>
</table>

Select the following Economics course:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON UN1105</td>
<td>Principles of Economics</td>
</tr>
</tbody>
</table>

Select one of the following Psychology/Sociology courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC UN1001</td>
<td>The Science of Psychology</td>
</tr>
<tr>
<td>PSYC UN1101</td>
<td>Mind, Brain and Behavior</td>
</tr>
<tr>
<td>SOCI UN1000</td>
<td>THE SOCIAL WORLD</td>
</tr>
</tbody>
</table>

**Core**

Select one of the following Financial Core courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON GU4280</td>
<td>CORPORATE FINANCE</td>
</tr>
<tr>
<td>BUSI UN3013</td>
<td>Financial Accounting</td>
</tr>
</tbody>
</table>

Select two of the following Managerial Core courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSI UN3701</td>
<td>STRATEGY FORMULATION</td>
</tr>
<tr>
<td>BUSI UN3021</td>
<td>Marketing Management</td>
</tr>
<tr>
<td>BUSI UN3703</td>
<td>Leadership in Organizations</td>
</tr>
</tbody>
</table>

**Electives**

Select two of the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSI UN3702</td>
<td>Venturing to Change the World</td>
</tr>
<tr>
<td>BUSI UN3704</td>
<td>Making History Through Venturing</td>
</tr>
<tr>
<td>ECON UN2257</td>
<td>Global Economy</td>
</tr>
<tr>
<td>ECON UN3025</td>
<td>Financial Economics</td>
</tr>
<tr>
<td>ECON UN3265</td>
<td>MONEY AND BANKING</td>
</tr>
<tr>
<td>ECON GU4415</td>
<td>Game Theory</td>
</tr>
<tr>
<td>ECON BC2010</td>
<td>The Economics of Gender</td>
</tr>
<tr>
<td>ECON BC3013</td>
<td>Economic History of the United States</td>
</tr>
<tr>
<td>POLS V3615</td>
<td>Globalization and International Politics</td>
</tr>
<tr>
<td>PSYC UN2235</td>
<td>THINKING AND DECISION MAKING</td>
</tr>
<tr>
<td>PSYC UN2630</td>
<td>Social Psychology</td>
</tr>
<tr>
<td>PSYC UN2640</td>
<td>INTRO TO SOCIAL COGNITION</td>
</tr>
<tr>
<td>PSYC UN2650</td>
<td>Introduction to Cultural Psychology</td>
</tr>
<tr>
<td>PSYC BC1136</td>
<td>Social Psychology</td>
</tr>
<tr>
<td>PSYC BC1138</td>
<td>Social Psychology</td>
</tr>
<tr>
<td>PSYC BC2151</td>
<td>Organizational Psychology</td>
</tr>
<tr>
<td>SOCI UN2240</td>
<td>Economy and Society</td>
</tr>
<tr>
<td>SOCI UN3000</td>
<td>Social Theory</td>
</tr>
<tr>
<td>SOCI UN3265</td>
<td>MINORITIES/ETHNIC GP-AMER LIFE</td>
</tr>
<tr>
<td>SOCI UN3490</td>
<td>Mistake, Misconduct, Disaster</td>
</tr>
<tr>
<td>SOCI W3670</td>
<td>Culture, Markets, and Consumption</td>
</tr>
<tr>
<td>SOCI UN3677</td>
<td>The Organization of Diversity</td>
</tr>
<tr>
<td>SOCI S3675Q</td>
<td>Organizing Innovation</td>
</tr>
<tr>
<td>SOCI G4032</td>
<td>Sociology of Labor Markets</td>
</tr>
<tr>
<td>BIOT GU4201</td>
<td>Seminar in Biotechnology Development and Regulation</td>
</tr>
<tr>
<td>HIST BC2101</td>
<td>History of Capitalism</td>
</tr>
<tr>
<td>MATH UN3050</td>
<td>Discrete Time Models in Finance</td>
</tr>
<tr>
<td>SDEV UN2320</td>
<td>Economic and Financial Methods for Sustainable Development</td>
</tr>
<tr>
<td>URBS UN3550</td>
<td>Community Building and Economic Development</td>
</tr>
</tbody>
</table>

NOTE: Students may not receive credit for two or more of PSYC BC1136 Social Psychology, *PSYC BC1138 Social Psychology*, and PSYC UN2630 Social Psychology.
Chemistry, the study of molecules, is a central science interesting for its own sake but also necessary as an intellectual link to the other sciences of biology, physics, and environmental science. Faculty find the various disciplines of chemistry fascinating because they establish intellectual bridges between the macroscopic or human-scale world that we see, smell, and touch, and the microscopic world that affects every aspect of our lives. The study of chemistry begins on the microscopic scale and extends to engage a variety of different macroscopic contexts.

Chemistry is currently making its largest impact on society at the nexus between chemistry and biology and the nexus between chemistry and engineering, particularly where new materials are being developed. A typical chemistry laboratory now has more computers than test tubes and no longer smells of rotten eggs.

The chemistry department majors are designed to help students focus on these new developments and to understand the factors influencing the nature of the discipline. Because the science is constantly changing, courses change as well, and while organic and physical chemistry remain the bedrock courses, they too differ greatly from the same courses 40 years ago. Many consider biochemistry to be a foundation course as well. Although different paths within the chemistry major take different trajectories, there is a core that provides the essential foundation students need regardless of the path they choose. Students should consider majoring in chemistry if they share or develop a fascination with the explanatory power that comes with an advanced understanding of the nature and influence of the microscopic world of molecules.

Students who choose to major in chemistry may elect to continue graduate study in this field and obtain a Ph.D. which is a solid basis for a career in research, either in the industry or in a university. A major in chemistry also provides students with an astonishing range of career choices such as working in the chemical or pharmaceutical industries or in many other businesses where a technical background is highly desirable. Other options include becoming a financial analyst for a technical company, a science writer, a high school chemistry teacher, a patent attorney, an environmental consultant, or a hospital laboratory manager, among others. The choices are both numerous and various as well as intellectually exciting and personally fulfilling.

Advanced Placement

The department grants advanced placement (AP) credit for a score of 4 or 5 or the equivalent. The amount of credit granted is based on the results of the department assessment exam and completion of the requisite course. Students who receive permission to register for CHEM UN1604 2ND TERM GEN CHEM (INTENSIVE) are granted 3 points of credit; students who receive permission to register for CHEM UN2045 INTENSIVE ORGANIC CHEMISTRY-CHEM UN2046 INTENSIVE ORG CHEM-FOR 1ST YEAR are granted 6 points of credit. In either case, credit is granted only upon completion of the course with a grade of C or better. Students must complete a department assessment exam prior to registering for either of these courses.

Programs of Study

The Department of Chemistry offers four distinct academic major programs for undergraduates interested in professional-level training and education in the chemical sciences: chemistry, chemical physics, biochemistry and environmental chemistry. For students interested in a program of less extensive study and coursework, the department offers a concentration in chemistry.

Course Information

The results of the department assessment exam are used to advise students which track to pursue. The Department of Chemistry offers three different tracks. Students who wish to take Track 2 or 3 classes must take the department assessment exam. Students who wish to pursue Track 1 classes do not need to take the assessment exam.

Track Information

In the first year, Track 1 students with one year of high school chemistry take a one-year course in general chemistry, and the one-term laboratory course that accompanies it. In the second year, students study organic chemistry, and take organic chemistry laboratory.

Students who qualify by prior assessment during orientation week can place into the advanced tracks. There are two options. Track 2 students take, in the fall term, a special one-term intensive course in general chemistry in place of the one-year course. In the second year, students study organic chemistry and take organic chemistry laboratory. Track 3 students take a one-year course in organic chemistry for first-year students and the one-term intensive general chemistry laboratory course. In the second year, students enroll in physical chemistry and the organic chemistry laboratory course.

Additional information on the tracks can be found in the Requirements section.
## ADDITIONAL COURSES

First-year students may also elect to take **CHEM UN2408**. This seminar focuses on topics in modern chemistry, and is offered to all students who have taken at least one semester of college chemistry and have an interest in chemical research.

Biochemistry (**BIOC GU4501, BIOC GU4512**) is recommended for students interested in the biomedical sciences.

Physical chemistry (**CHEM UN3079-CHEM UN3080**), a one-year program, requires prior preparation in mathematics and physics. The accompanying laboratory is **CHEM UN3085-CHEM UN3086**.

Also offered are a senior seminar (**CHEM UN3920**); advanced courses in biochemistry, inorganic, organic, and physical chemistry; and an introduction to research (**CHEM UN3098**).

## SAMPLE PROGRAMS

Some typical programs are shown below. Programs are crafted by the student and the Director of Undergraduate Studies and Program Manager to meet individual needs and interests.

### Track 1

#### First Year

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM UN1403</td>
<td>GENERAL CHEMISTRY I-LECTURES</td>
</tr>
<tr>
<td>CHEM UN1404</td>
<td>GENERAL CHEMISTRY II-LECTURES</td>
</tr>
<tr>
<td>CHEM UN1500</td>
<td>GENERAL CHEMISTRY LABORATORY</td>
</tr>
<tr>
<td>CHEM UN2408</td>
<td>First-Year Seminar in Chemical Research</td>
</tr>
</tbody>
</table>

Calculus and physics as required.

#### Second Year

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM UN2443</td>
<td>Organic Chemistry I (Lecture)</td>
</tr>
<tr>
<td>CHEM UN2444</td>
<td>ORGANIC CHEMISTRY II-LECTURES</td>
</tr>
<tr>
<td>CHEM UN2493</td>
<td>Organic Chemistry Laboratory I (Techniques)</td>
</tr>
<tr>
<td>CHEM UN2494</td>
<td>ORGANIC CHEM. LAB II SYNTHESIS</td>
</tr>
</tbody>
</table>

Calculus and physics as required.

#### Third Year

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM UN3079</td>
<td>Physical Chemistry I</td>
</tr>
<tr>
<td>CHEM UN3080</td>
<td>Physical Chemistry II</td>
</tr>
<tr>
<td>BIOC GU4501</td>
<td>Biochemistry: Structure and Metabolism</td>
</tr>
<tr>
<td>CHEM UN3546</td>
<td>Advanced Organic Chemistry Laboratory</td>
</tr>
<tr>
<td>CHEM UN3098</td>
<td>Supervised Independent Research</td>
</tr>
</tbody>
</table>

#### Fourth Year

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM UN3085</td>
<td>Physical and Analytical Chemistry Laboratory I</td>
</tr>
<tr>
<td>CHEM UN3086</td>
<td>Physical and Analytical Chemistry Laboratory II</td>
</tr>
<tr>
<td>CHEM UN3920</td>
<td>Senior Seminar in Chemical Research</td>
</tr>
<tr>
<td>CHEM GU4071</td>
<td>Inorganic Chemistry</td>
</tr>
</tbody>
</table>

Advanced courses (4000-level or higher)

### Track 2

#### First Year

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM UN1507</td>
<td>Intensive General Chemistry Laboratory</td>
</tr>
<tr>
<td>CHEM UN1604</td>
<td>2ND TERM GEN CHEM (INTENSIVE)</td>
</tr>
<tr>
<td>CHEM UN2408</td>
<td>First-Year Seminar in Chemical Research</td>
</tr>
</tbody>
</table>

Calculus and physics as required.

#### Second Year

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM UN2443</td>
<td>Organic Chemistry I (Lecture)</td>
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<tr>
<td>CHEM UN2444</td>
<td>ORGANIC CHEMISTRY II-LECTURES</td>
</tr>
<tr>
<td>CHEM UN2493</td>
<td>Organic Chemistry Laboratory I (Techniques)</td>
</tr>
<tr>
<td>CHEM UN2494</td>
<td>ORGANIC CHEM. LAB II SYNTHESIS</td>
</tr>
</tbody>
</table>

Calculus and physics as required.

#### Third Year

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM UN3079</td>
<td>Physical Chemistry I</td>
</tr>
<tr>
<td>CHEM UN3080</td>
<td>Physical Chemistry II</td>
</tr>
<tr>
<td>BIOC GU4501</td>
<td>Biochemistry: Structure and Metabolism</td>
</tr>
<tr>
<td>CHEM UN3546</td>
<td>Advanced Organic Chemistry Laboratory</td>
</tr>
<tr>
<td>CHEM UN3098</td>
<td>Supervised Independent Research</td>
</tr>
</tbody>
</table>

#### Fourth Year

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM UN3085</td>
<td>Physical and Analytical Chemistry Laboratory I</td>
</tr>
<tr>
<td>CHEM UN3086</td>
<td>Physical and Analytical Chemistry Laboratory II</td>
</tr>
<tr>
<td>CHEM UN3920</td>
<td>Senior Seminar in Chemical Research</td>
</tr>
<tr>
<td>CHEM GU4071</td>
<td>Inorganic Chemistry</td>
</tr>
</tbody>
</table>

Advanced courses (4000- level or higher)

### Track 3

#### First Year

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM UN1507</td>
<td>Intensive General Chemistry Laboratory</td>
</tr>
<tr>
<td>CHEM UN2045</td>
<td>INTENSIVE ORGANIC CHEMISTRY</td>
</tr>
</tbody>
</table>
CHEM UN2046  INTENSVE ORG CHEM-FOR 1ST YEAR
CHEM UN2408  First-Year Seminar in Chemical Research
Calculus and Physics as required.

Second Year
CHEM UN3079  Physical Chemistry I
CHEM UN3080  Physical Chemistry II
CHEM UN2545  Intensive Organic Chemistry Laboratory
CHEM UN3546  Advanced Organic Chemistry Laboratory
Calculus and physics as required.

Third Year
BIOC GU4501  Biochemistry: Structure and Metabolism
CHEM UN3085  Physical and Analytical Chemistry Laboratory I
CHEM UN3086  Physical and Analytical Chemistry Laboratory II
CHEM UN3098  Supervised Independent Research
CHEM GU4071  Inorganic Chemistry

Fourth Year
CHEM UN3920  Senior Seminar in Chemical Research
Advanced courses (4000-level or higher)

Professors
Bruce J. Berne
Virginia W. Cornish
Kenneth B. Eisenthal
Richard A. Friesner
Ruben Gonzalez
Laura Kaufman
James L. Leighton
Ann E. McDermott
Wei Min
Jack R. Norton
Colin Nuckolls
Gerard Parkin
David R. Reichman
Tomislav Rovis
Dalibor Sames
Brent Stockwell
James J. Valentini
Latha Venkataraman
Xiaoyang Zhu

Assistant Professors
Timothy Berkelbach
Milan Delor
Xavier Roy
Neel Shah

Senior Lecturer
Luis Avila
Sarah Hansen
Fay Ng

Lecturers
Robert Beer
John Decatur
Charles E. Doubleday
Ruben Savizky
Talha Siddiqui

Associates
Anna Ghurbanyan
Joseph Ulichny

Guidelines for all Chemistry Majors, Concentrators, and Interdepartmental Majors
Students majoring in chemistry or in one of the interdepartmental majors in chemistry should go to the director of undergraduate studies or the undergraduate program manager in the Department of Chemistry to discuss their program of study. Chemistry majors and interdepartmental majors usually postpone part of the Core Curriculum beyond the sophomore year.

Chemistry Tracks
All students who wish to start with Track 2 or 3 courses must take an assessment during orientation week ahead of fall semester. The results of the assessment are used to advise students which track to pursue. Unless otherwise specified below, all students must complete one of the following tracks:

Track 1
CHEM UN1403  GENERAL CHEMISTRY I-LECTURES
CHEM UN1404  GENERAL CHEMISTRY II-LECTURES
CHEM UN1500  GENERAL CHEMISTRY LABORATORY
CHEM UN2443  Organic Chemistry I (Lecture)
CHEM UN2444  ORGANIC CHEMISTRY II-LECTURES
CHEM UN2493  Organic Chemistry Laboratory I (Techniques)
**Track 2**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM UN1500</td>
<td>GENERAL CHEMISTRY LABORATORY</td>
</tr>
<tr>
<td>or CHEM UN1507</td>
<td>Intensive General Chemistry Laboratory</td>
</tr>
<tr>
<td>CHEM UN1604</td>
<td>2ND TERM GEN CHEM (INTENSIVE)</td>
</tr>
<tr>
<td>CHEM UN2443</td>
<td>Organic Chemistry I (Lecture)</td>
</tr>
<tr>
<td>CHEM UN2444</td>
<td>ORGANIC CHEMISTRY II-LECTURES</td>
</tr>
<tr>
<td>CHEM UN2493</td>
<td>Organic Chemistry Laboratory I (Techniques)</td>
</tr>
<tr>
<td>CHEM UN2494</td>
<td>ORGANIC CHEM. LAB II SYNTHESIS</td>
</tr>
</tbody>
</table>

**Track 3**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM UN1507</td>
<td>Intensive General Chemistry Laboratory</td>
</tr>
<tr>
<td>CHEM UN2045</td>
<td>INTENSVE ORGANIC CHEMISTRY</td>
</tr>
<tr>
<td>CHEM UN2046</td>
<td>INTENSVE ORG CHEM-FOR 1ST YEAR</td>
</tr>
<tr>
<td>CHEM UN2545</td>
<td>Intensive Organic Chemistry Laboratory</td>
</tr>
</tbody>
</table>

**Physics Sequences**

Unless otherwise specified below, all students must complete one of the following sequences:

**Sequence A**

For students with limited background in high school physics:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS UN1401</td>
<td>Introduction To Mechanics and Thermodynamics</td>
</tr>
<tr>
<td>PHYS UN1402</td>
<td>INTRO ELEC/MAGNETSM # OPTCS</td>
</tr>
<tr>
<td>PHYS UN1403</td>
<td>Introduction to Classical and Quantum Waves</td>
</tr>
</tbody>
</table>

For chemistry majors, the following laboratory courses are recommended, NOT required. For chemical physics majors, the following laboratory courses are required:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS UN1494</td>
<td>Introduction to Experimental Physics</td>
</tr>
<tr>
<td>PHYS UN2699</td>
<td>Experiments in Classical and Modern Physics</td>
</tr>
<tr>
<td>PHYS UN3081</td>
<td>Intermediate Laboratory Work</td>
</tr>
</tbody>
</table>

**Sequence B**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS UN1601</td>
<td>Physics, I: Mechanics and Relativity</td>
</tr>
<tr>
<td>PHYS UN1602</td>
<td>Physics, II: Thermodynamics, Electricity, and Magnetism</td>
</tr>
<tr>
<td>PHYS UN2601</td>
<td>Physics, III: Classical and Quantum Waves</td>
</tr>
</tbody>
</table>

For chemistry majors, the following laboratory courses are recommended NOT required. For chemical physics majors, the following laboratory courses are required:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS UN2699</td>
<td>Experiments in Classical and Modern Physics</td>
</tr>
<tr>
<td>PHYS UN3081</td>
<td>Intermediate Laboratory Work</td>
</tr>
</tbody>
</table>

**Sequence C**

For students with advanced preparation in physics and mathematics:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS UN2801</td>
<td>Accelerated Physics I</td>
</tr>
<tr>
<td>PHYS UN2802</td>
<td>and Accelerated Physics II</td>
</tr>
</tbody>
</table>

For chemistry majors, the following laboratory courses are recommended NOT required. For chemical physics majors, the following laboratory courses are required:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS UN2699</td>
<td>Experiments in Classical and Modern Physics</td>
</tr>
<tr>
<td>or PHYS UN3081</td>
<td>Intermediate Laboratory Work</td>
</tr>
</tbody>
</table>

**Major in Chemistry**

Select one of the tracks outlined above in *Guidelines for all Chemistry Majors, Concentrators, and Interdepartmental Majors* and complete the following lectures and labs.

**Chemistry**

Select one of the chemistry tracks outlined above.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM UN2408</td>
<td>First-Year Seminar in Chemical Research (Recommended NOT required)</td>
</tr>
<tr>
<td>CHEM UN3079</td>
<td>Physical Chemistry I</td>
</tr>
<tr>
<td>CHEM UN3080</td>
<td>Physical Chemistry II</td>
</tr>
<tr>
<td>CHEM UN3085</td>
<td>Physical and Analytical Chemistry Laboratory I</td>
</tr>
<tr>
<td>CHEM UN3086</td>
<td>Physical and Analytical Chemistry Laboratory II</td>
</tr>
<tr>
<td>CHEM UN3546</td>
<td>Advanced Organic Chemistry Laboratory</td>
</tr>
<tr>
<td>CHEM UN3920</td>
<td>Senior Seminar in Chemical Research</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM GU4071</td>
<td>Inorganic Chemistry</td>
</tr>
</tbody>
</table>

Select one course from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM UN3098</td>
<td>Supervised Independent Research</td>
</tr>
<tr>
<td>or Chemistry courses numbered CHEM GU4000 or above for 2 credit points or more</td>
<td></td>
</tr>
</tbody>
</table>

**Physics**

Select one of the physics sequences outlined above in the Guidelines section.

**Mathematics**

Select one of the following sequences:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH UN1101</td>
<td>CALCULUS I</td>
</tr>
<tr>
<td>- MATH UN1102</td>
<td>and CALCULUS II</td>
</tr>
<tr>
<td>- MATH UN1201</td>
<td>and Calculus III</td>
</tr>
<tr>
<td>- MATH UN1202</td>
<td>and CALCULUS IV</td>
</tr>
</tbody>
</table>
Two semesters of honors mathematics:
MATH UN1207 Honors Mathematics A
- MATH UN1208 and HONORS MATHEMATICS B

MAJOR IN BIOCHEMISTRY

Select one of the tracks outlined above in Guidelines for all Chemistry Majors, Concentrators, and Interdepartmental Majors and complete the following lectures and labs.

Chemistry

Select one of the chemistry tracks outlined above.
CHEM UN2408 First-Year Seminar in Chemical Research (Recommended NOT required)
CHEM UN3079 Physical Chemistry I
CHEM UN3080 Physical Chemistry II

Biology

BIOL UN1908 First Year Seminar in Biology (Recommended NOT required)
BIOL UN2005 INTRO BIO I: BIOCHEM,GEN,MOLEC
BIOL UN2006 INTRO BIO II:CELL BIO,DEV/PHYS
BIOC GU4501 Biochemistry: Structure and Metabolism
BIOC GU4512 Molecular Biology

Physics

Select one of the following physics sequences:
Sequence A:
PHYS UN1201 and General Physics I
- PHYS UN1202 and General Physics II

Sequence B:
PHYS UN1401 Introduction To Mechanics and Thermodynamics
- PHYS UN1402 and INTRO ELEC/MAGNETSM # OPTCS
- PHYS UN1403 and Introduction to Classical and Quantum Waves (PHYS UN1403 is recommended NOT required)

Sequence C:
PHYS UN1601 Physics, I: Mechanics and Relativity
- PHYS UN1602 and Physics, II: Thermodynamics, Electricity, and Magnetism
- PHYS UN2601 and Physics, III: Classical and Quantum Waves (PHYS UN2601 is recommended but not required)

Sequence D:
PHYS UN2801 Accelerated Physics I
- PHYS UN2802 and Accelerated Physics II

Mathematics

Select one of the following sequences:
Two semesters of calculus:

MATH UN1101
- MATH UN1102 and CALCULUS I
- MATH UN1201 and Calculus III
- MATH UN1202 and CALCULUS IV

Two semesters of honors mathematics:
MATH UN1207 Honors Mathematics A
- MATH UN1208 and HONORS MATHEMATICS B

AP credit and one term of calculus (Calculus II or higher)

Additional Courses

Select two of the following upper level laboratory courses (one should be a Biology lab):
BIOL UN3040 Lab in Molecular Biology
- BIOL UN2501 and Contemporary Biology Laboratory
BIOL UN3050 Project Laboratory In Protein Biochemistry
BIOL UN3052 PROJECT LAB-MOLECULAR GENETICS
BIOL UN3500 Independent Biological Research
CHEM UN3085 Physical and Analytical Chemistry Laboratory I
CHEM UN3086 Physical and Analytical Chemistry Laboratory II
CHEM UN3098 Supervised Independent Research
CHEM UN3546 Advanced Organic Chemistry Laboratory

Select any three courses from the following:
CHEM GU4071 Inorganic Chemistry
CHEM GU4102 Chemistry for the Brain
CHEM GU4103 Organometallic Chemistry
CHEM GU4147 Advanced Organic Chemistry
CHEM GU4312 Chemical Biology
CHEM GU4313 Peptide and Protein Chemistry
BIOC GU4323 Biophysical Chemistry I
BIOC GU4324 Biophysical Chemistry II
MATH UN3027 Ordinary Differential Equations
or MATH UN2030 ORDINARY DIFFERENTIAL EQUATIONS

One additional semester of calculus

One additional semester of honors math:
MATH UN1207 Honors Mathematics A
- MATH UN1208 and HONORS MATHEMATICS B

Any biology course at the 3000/4000 level for 3 or more points. The following are recommended:
BIOL UN3004 Neurobiology I: Cellular and Molecular Neurobiology
or BIOL UN3005 Neurobiology II: Development & Systems
BIOL UN3008 The Cellular Physiology of Disease
BIOL UN3022 Developmental Biology
BIOL UN3034 Biotechnology
BIOL UN3041 Cell Biology
BIOL UN3073 Cellular and Molecular Immunology
MAJOR IN CHEMICAL PHYSICS
Select one of the tracks outlined above in Guidelines for all Chemistry Majors, Concentrators, and Interdepartmental Majors and complete the following lectures and labs.

Chemistry

Select one of the chemistry tracks outlined above.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM UN3079</td>
<td>Physical Chemistry I</td>
</tr>
<tr>
<td>CHEM UN3080</td>
<td>Physical Chemistry II</td>
</tr>
<tr>
<td>CHEM UN3085</td>
<td>Physical and Analytical Chemistry Laboratory I</td>
</tr>
<tr>
<td>CHEM UN3086</td>
<td>Physical and Analytical Chemistry Laboratory II</td>
</tr>
<tr>
<td>CHEM UN3098</td>
<td>Supervised Independent Research</td>
</tr>
<tr>
<td>CHEM GU4221</td>
<td>Quantum Chemistry</td>
</tr>
<tr>
<td>PHYS GU4021</td>
<td>Quantum Mechanics I</td>
</tr>
</tbody>
</table>

Physics

Select one of the physics sequences outlined above in Guidelines for all Chemistry Majors, Concentrators and Interdepartmental Majors. For the chemical physics major, one lab MUST be completed for the sequence chosen.

Complete the following lectures:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS UN3003</td>
<td>Mechanics</td>
</tr>
<tr>
<td>PHYS UN3007</td>
<td>Electricity and Magnetism</td>
</tr>
<tr>
<td>PHYS UN3008</td>
<td>Electromagnetic Waves and Optics</td>
</tr>
</tbody>
</table>

Mathematics

Select one of the following sequences:

- Four semesters of calculus:
  - MATH UN1101 - MATH UN1102 - MATH UN1201 - MATH UN1202
    - CALCULUS I and CALCULUS II and Calculus III and CALCULUS IV

- Two semesters of honors mathematics:
  - MATH UN1207 - MATH UN1208 - MATH UN3027
    - Honors Mathematics A and HONORS MATHEMATICS B and Ordinary Differential Equations

- Two semesters of advanced calculus:
  - MATH UN1202 - MATH UN3027
    - CALCULUS IV and Ordinary Differential Equations

MAJOR IN ENVIRONMENTAL CHEMISTRY

The requirements for this program were modified on February 1, 2016. Students who declared this program before this date should contact the director of undergraduate studies for the department in order to confirm their correct course of study.

Select one of the tracks outlined above in Guidelines for all Chemistry Majors, Concentrators, and Interdepartmental Majors and complete the following lectures and labs.

Chemistry

Select one of the chemistry tracks outlined above. A second semester of Organic Chemistry lecture is recommended NOT required.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM UN3079</td>
<td>Physical Chemistry I</td>
</tr>
<tr>
<td>CHEM GU4071</td>
<td>Inorganic Chemistry</td>
</tr>
</tbody>
</table>

The following courses are recommended NOT required:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM UN2408</td>
<td>First-Year Seminar in Chemical Research</td>
</tr>
<tr>
<td>CHEM UN3920</td>
<td>Senior Seminar in Chemical Research</td>
</tr>
</tbody>
</table>

Earth and Environmental Science

Select two of the following three courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EESC UN2100</td>
<td>Earth's Environmental Systems: The Climate System</td>
</tr>
<tr>
<td>EESC UN2200</td>
<td>EARTH'S ENVIRONMENTAL SYSTEMS: THE SOLID EARTH</td>
</tr>
<tr>
<td>EESC UN2300</td>
<td>Earth's Environmental Systems: The Life System</td>
</tr>
</tbody>
</table>

Additional course required:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EESC UN3101</td>
<td>Geochemistry for a Habitable Planet</td>
</tr>
</tbody>
</table>

Select one of the following labs:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EESC BC3016</td>
<td>Environmental Measurements</td>
</tr>
<tr>
<td>CHEM UN3085</td>
<td>Physical and Analytical Chemistry Laboratory I</td>
</tr>
</tbody>
</table>

Select one option for Independent Research in Environmental Chemistry:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EESC BC3800</td>
<td>Senior Research Seminar</td>
</tr>
<tr>
<td>EESC BC3801</td>
<td>Senior Research Seminar</td>
</tr>
<tr>
<td>CHEM UN3098</td>
<td>Supervised Independent Research (It is strongly recommended to take CHEM UN3920 if taking CHEM UN3098)</td>
</tr>
</tbody>
</table>

Physics

Select one of the following physics sequences:

- Sequence A:
  - PHYS UN1201 - PHYS UN1202
    - General Physics I and General Physics II

- Sequence B:
  - PHYS UN1401 - PHYS UN1402 - PHYS UN1403
    - Introduction To Mechanics and Thermodynamics and INTRO ELEC/MAGNETSM # OPTICS and Introduction to Classical and Quantum Waves (Recommended NOT required)

Sequence C:
PHYS UN1601 - PHYS UN1602 - PHYS UN2601
- PHYS UN1602
- PHYS UN2601
Physics, I: Mechanics and Relativity
and Physics, II: Thermodynamics, Electricity, and Magnetism
and Physics, III: Classical and Quantum Waves (Recommended, not required)
Sequence D:
PHYS UN2801 - PHYS UN2802
Accelerated Physics I and Accelerated Physics II

Mathematics
Two semesters of calculus:
MATH UN1101 CALCULUS I
MATH UN1102 CALCULUS II
MATH UN1201 Calculus III
MATH UN1202 CALCULUS IV

Additional Courses
Select any two of the following:
Chemistry:
CHEM UN3080 Physical Chemistry II
CHEM GU4103 Organometallic Chemistry
CHEM GU4147 Advanced Organic Chemistry
Earth and Environmental Science:
EESC BC3017 Environmental Data Analysis
EESC BC3025 Hydrology
EESC GU4008 Introduction to Atmospheric Science
EESC GU4009 CHEMICAL GEOLOGY
EESC GU4040 CLIM THERMODYN/ENERGY TRANSFER
EESC GU4050 Global Assessment and Monitoring Using Remote Sensing
EESC GU4600 Earth Resources and Sustainable Development
EESC GU4835 Wetlands and Climate Change
EESC GU4885 The Chemistry of Continental Waters
EESC GU4888 Stable Isotope Geochemistry
EESC GU4924 Introduction to Atmospheric Chemistry
EESC GU4925 Principles of Physical Oceanography
EESC GU4926 Principles of Chemical Oceanography
Earth and Environmental Engineering:
EAEE E4001 INDUST ECOLOGY-EARTH RESOURCES
EAEE E4003 AQUATIC CHEMISTRY
Mathematics:
One additional semester of calculus

Concentration in Chemistry
No more than four points of CHEM UN3098 Supervised Independent Research may be counted toward the concentration.
Select one of the three chemistry tracks listed below.

PHY S UN1201 - PHYS UN1202
- PHYS UN1201
- PHYS UN1202
Two semesters of calculus

Chemistry Tracks
Track 1
CHEM UN1403 GENERAL CHEMISTRY I-LECTURES
CHEM UN1404 GENERAL CHEMISTRY II-LECTURES
CHEM UN1500 GENERAL CHEMISTRY LABORATORY
Select 22 points of chemistry at the 2000-level or higher (excluding CHEM UN2408).

Track 2
CHEM UN1500 GENERAL CHEMISTRY LABORATORY
or CHEM UN1507 Intensive General Chemistry Laboratory
CHEM UN1604 2ND TERM GEN CHEM (INTENSIVE)
Select 22 points of chemistry at the 2000-level or higher (excluding CHEM UN2408).

Track 3
CHEM UN1507 Intensive General Chemistry Laboratory
CHEM UN2045 INTENSIVE ORGANIC CHEMISTRY
CHEM UN2046 INTENSIVE ORG CHEM-FOR 1ST YEAR
Select 18 points of chemistry at the 2000-level or higher (excluding CHEM UN2408).
CLASSICS

Departmental Office: 617 Hamilton; 212-854-3902; classics@columbia.edu
http://www.columbia.edu/cu/classics/

Director of Undergraduate Studies (Classics): Prof. Marcus Driever; 212-854-2726; jd2185@columbia.edu

Director of Undergraduate Studies (Modern Greek Studies): Prof. Nikolas Kakkoufa; 212-854-3902; nk2776@columbia.edu

Director of Academic Administration and Finance: Juliana Folch; 212-853-8016; jd2185@columbia.edu

When one visits Rome or Athens, they also visit the many layers of physical, historical, and cultural development that have contributed to the complex evolution of those cities. When one tours the Roman Forum or the Greek Parthenon, they set foot on monuments whose physical impressiveness symbolizes political strength and historical importance; in a very physical way they experience the past. When one studies Latin and Greek language and culture, they embark on a tour of an alternative kind, making their way through texts and other cultural forms—such as paintings, sculptures, and philosophical ideas—that bring them directly into contact with the Greco-Roman past. Literature, philosophy, history, art and architecture, linguistics, papyrology, religion: all (and more) are branches of investigation to which the modern student of classics/classical studies has access through the surviving literary and material evidence.

But when one studies in the original language Virgil’s Aeneid, say, or Plato’s philosophical writings, they find that ancient Greek or Latin literature deals with issues and ideas that are, for us, of central contemporary importance: e.g., How can I be happy? What is the best political constitution for our (or any) state? What responsibilities do I have to the society in which I live? What national significance is served or owed by literature?

The study of Greek and Latin language and culture concentrates in one main area (ancient Greece and Rome) and on many of the questions that are of direct pertinence to the ways in which modern lives are shaped and lived; at the same time, Greco-Roman literature and philosophy, so fundamental to the later development of the Western tradition, boast works of great intrinsic worth and interest. While all Columbia students get an introduction to classical texts in Literature Humanities and Contemporary Civilization, classics/classical studies provides a more advanced study of ancient cultural issues and habits of mind already sampled in the Core.

Study abroad in Greece or Italy offers a variety of educational experiences that are continuous with those of the major, enriching both linguistic expertise and cultural awareness. Students in classics have the opportunity to take part in archaeological digs abroad and, on occasion, to assist faculty in research projects that require, for example, bibliographical collection or the checking of research data.

Many majors pursue graduate study in classics and classical studies. Upon earning their graduate degrees, they often embark on teaching careers in universities, colleges, and high schools. Many graduating majors also enter a number of other professional fields, among them law, banking, accountancy, publishing, and museum-work. Employers tend to find that students in classics are articulate on paper, as well as orally; are organized of mind; and have good skills in general reasoning, an ability developed by the study of Greek and Latin language. In effect, the study of classics opens up a wide array of options, both in education and in the wider world.

The program of the department aims for a comprehensive understanding of classical literature and culture, and the mastery of Greek and Latin on which such understanding depends. Careful study of the language occupies the largest part of the first-year courses and is not omitted in the more advanced courses. Although literature becomes the chief subject only in the advanced courses, important authors like Homer, Plato, and Virgil are studied as literary texts already in the intermediate courses. A wide variety of courses are offered in translation.

Through a joint program with Barnard, the department offers a broad range of subjects. The department annually offers four advanced courses in each language (at the 3000- or 4000-level), the content of which changes each year in order to provide a curricular range and to balance authors and genres over a two-year period.

Opportunities for individual projects of reading and research are available. Students are also permitted to take graduate courses if they are sufficiently prepared. Additionally, they can supplement their studies within the department through work in other departments, such as art history and archaeology, history, philosophy, and the other departments of languages and literature.

It is not necessary to have previously studied either language in order to major in it. A student starting Greek or Latin at Columbia can meet all the requirements of a major within an ordinary undergraduate program.

IN FULFILLMENT OF THE LANGUAGE REQUIREMENT

Students beginning the study of Greek or Latin at Columbia must take four terms of either of the following two-year sequences:

Greek

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>GREK UN1101</td>
<td>Elementary Greek I</td>
<td></td>
</tr>
<tr>
<td>- GREK UN1102</td>
<td></td>
<td>and Elementary Greek II</td>
</tr>
<tr>
<td>GREK UN2101</td>
<td>Intermediate Greek I Attic Prose</td>
<td></td>
</tr>
<tr>
<td>- GREK UN2102</td>
<td></td>
<td>and Intermediate Greek II: Homer</td>
</tr>
</tbody>
</table>
Latin
LATN UN1101 - LATN UN1102
Elementary Latin I and Elementary Latin II

LATN UN2101 - LATN UN2102
Intermediate Latin I and INTERMEDIATE LATIN II

With the permission of the director of undergraduate studies, GREK UN2102 Intermediate Greek II: Homer may be taken before GREK UN2101 Intermediate Greek I Attic Prose.

The intensive elementary courses GREK UN1121 Intensive Elementary Greek and LATN UN1121 Intensive Elementary Latin may be substituted for the two-term UN1101-UN1102 sequence. The intensive intermediate courses GREK S2121Q Intensive Intermediate Greek: Poetry and Prose and LATN S2121Q Intensive Intermediate Latin: Poetry and Prose may be substituted for the two-term UN2101-UN2102 sequence.

LATN UN2101 Intermediate Latin I should be taken before LATN UN2102 INTERMEDIATE LATIN II.

For students with secondary-school training in Greek or Latin, the director of undergraduate studies determines, on the basis of records and test scores, what further work is needed to fulfill the language requirement.

ADVANCED PLACEMENT
The department grants 3 credits for a score of 5 on the Latin AP exam, which also satisfies the foreign language requirement, upon successful completion (with a grade of B or higher) of a Latin class at the 3000-level or higher.

MAJOR PROGRAM
The department offers a major in classics and a major track in classical studies. The major in classics involves the intensive study of both Greek and Latin, as well as their cultural matrix; the track in classical studies offers a more interdisciplinary approach. The major in classics is recommended for students planning to continue the study of classics in graduate school. The department also participates in the interdepartmental ancient studies program and offers a concentration in classics; these are all described below.

The major in classics and the track in classical studies are designed in part to build on the experience of the ancient world that undergraduates have acquired at Columbia in the Core Curriculum (especially in Literature Humanities). The major in classics is structured on the principle of gradual and closely monitored linguistic progress from the elementary (1100-level) to the advanced (3000- and 4000-levels) and ultimately to the literature survey courses (GU4105-GU4106) in Greek and/or Latin.

Those majors intending to embark on graduate study in classics are especially encouraged to undertake, in their senior year, an independent research project (UN3998). This option is designed to allow students to personalize their experience in the major, by conducting advanced study in a specialized area under the guidance of the specializing faculty member of their choice.

UN3998 is required in the classical studies track. Otherwise, students in classical studies are not required to take advanced courses beyond UN3996 The Major Seminar, but are expected to follow a coherent plan of study by taking a sequence of cognate courses in different but related departments (e.g., art history and archaeology, history, etc.).

The director of undergraduate studies is responsible for overseeing the path of study followed by each student in classics or classical studies. Through close interaction with the director of undergraduate studies, as well as with other faculty members where appropriate, each major is strongly encouraged to debate the strengths and weaknesses of his or her own trajectory of study even as the requirements for the major are being completed.

Students should contact the director of undergraduate studies with any questions about the classics majors and course offerings. The director of undergraduate studies can provide students with a worksheet to help in planning their progress toward major requirements.

PROFESSORS
Kathy Eden
Helene P. Foley (Barnard)
Carmela V. Franklin (Chair, AY 21-22)
Stathis Gourgouris
John Ma
Kristina Milnor (Barnard, Chair)
Seth R. Schwartz
Deborah T. Steiner
Karen Van Dyck
Katharina Volk
Gareth D. Williams
Nancy Worman (Barnard)

ASSOCIATE PROFESSORS
Marcus Folch
Joseph Howley
Elizabeth Irwin
Ellen Morris (Barnard)

ASSISTANT PROFESSORS
Alan Ross

SENIOR LECTURER
Elizabeth Scharffenberger

LECTURERS
Dimitrios Antoniou
Nikolas Kakkoufa
Darcy Krasne
MAJOR IN CLASSICS

The major in classics involves a program in both Greek and Latin languages and literatures, and in Greek and Roman civilization. Students generally emphasize the study of one of the languages (the primary language), but significant study of the other (secondary) language is required as well.

The major requires the completion of 11 courses (a minimum of 34 points) and must include the following:

1. In a primary language:
   - Four courses at or above the UN2100-level;
   - The Major Seminar UN3996;
   - Two courses from the following four advanced options: GU4105, GU4106, GU4139, UN3998 (any others may count toward the four upper level requirement).

2. In a secondary language:
   - Two courses at or above the UN2100-level.

3. Two ancient culture courses, including:
   - One course in the culture of the primary language;
   - One course in any aspect of ancient history or culture (HIST, AHIS, PHIL, CLLT, CLCV). All substitutions must be approved by the director of undergraduate studies.

The classical languages follow a standard track of elementary (1100-level) and intermediate (2100-level) levels, followed by 3000- and 4000-level classes that may generally be taken in any order.

Although it is easier to complete the major if at least one classical language is begun no later than the first year, it is possible to begin one classical language in the sophomore year and the other in the junior year and still complete the major.

Those planning to go on to graduate study in classics are urged to take both terms of GU4105-GU4106 if possible, to write a senior research thesis, and to acquire a reading knowledge of German and preferably also of French (Italian is also useful).

To be eligible for departmental honors and prizes, students must take UN3998.

MAJOR TRACK IN CLASSICAL STUDIES

The major track in classical studies requires the completion of 11 courses (a minimum of 35 points) and must include the following:

1. Five courses, at or above the UN1102-level, in either or both Latin and Greek;
2. The Major Seminar UN3996;
3. Four classes in Ancient History, Art, Philosophy, Religion, and Civilization. Note that certain courses may be 6 credits, e.g., ICCS’s City of Rome course, and may count as two courses towards this requirement. Students in doubt about a course’s relevance should confirm it with the director of undergraduate studies as soon as possible;
4. Senior Thesis UN3998, completed on a chosen aspect of Greek or Roman civilization under the direction of a faculty member (3 points).

Summer courses 1221/1221 are counted as four credits for the purposes of major requirements.

MAJOR IN ANCIENT STUDIES

Students interested in a major in ancient studies should see the Ancient Studies section in this Bulletin.

CONCENTRATION IN CLASSICS

Students who declared this program before this date should contact the director of undergraduate studies for the department in order to confirm their correct course of study.

The concentration in classics is designed for those who cannot fit the complete major into their undergraduate schedule, but still wish to take a substantial program in Greek and Latin.

The concentration requires the completion of seven courses (a minimum of 21 points) and must include the following:

1. In a primary language, six courses distributed as follows:
   - Five courses above the 1100-level, three of which must be 3000- or 4000-level;
   - One course from the following three advanced options: GU4105, GU4106, GU4139.

2. One course in Ancient History or Classical Civilization (3 points).

To be eligible for departmental honors and prizes, students must take UN3998.

SPECIAL CONCENTRATION IN HELLENIC STUDIES

The courses in the Hellenic Studies program are designed to develop the student’s proficiency in aspects of Modern Greek culture, language, and history. The minimum credit requirement for the Hellenic Studies Concentration is 21 credits and includes:

1. Modern Greek language and culture courses (Elementary, Intermediate, Advanced, Conversation I & II, Reading in Greek; minimum 8 credits). Students will work with undergraduate advisor to determine their level of the language.
2. Modern Greek Studies interdepartmental courses (CLGM, CSGM, HSGM; minimum 12 credits). The program of study should be planned as early as possible with the Director of Undergraduate Studies. Students meet with the Director of Undergraduate Studies each semester in order to obtain program approval. Opportunities exist for study abroad in Greece, Cyprus and Turkey for the summer or an academic term for credit. Students
work closely with the concentration advisor on the selection of the foreign schools and the transfer of credit.

Students may also wish to write a Senior Thesis which will substitute one Modern Greek Studies interdepartmental seminar. While not required for graduation, the thesis enables a student to be considered for departmental honors. It is advisable to begin planning for the thesis during the student’s junior year. Interested students should identify a potential faculty advisor.
Occasionally, and for a variety of reasons, faculty offer courses outside of the existing structure of Arts and Sciences academic departments. Such courses may be colloquia: team-taught interdisciplinary courses; interdepartmental seminars explicitly offered by two or more academic departments; or undergraduate-specific courses offered by faculty outside of the Arts and Sciences. All of these courses may be counted toward the undergraduate degree, but it is for the faculty of each department or program to determine whether or not they can count toward a major or concentration.
COMPARATIVE LITERATURE AND SOCIETY

Program Office: B-101 Heyman Center, East Campus; 212-854-4541; icls@columbia.edu  
http://icls.columbia.edu

Director: Associate Prof. Anupama Rao, Barnard Hall 2nd Floor, Lefrak 226; 212-854-8547; arao@barnard.edu  
Associate Director: Prof. Brent Hayes Edwards, 609 Philosophy; 212-854-2912; bhe2@columbia.edu  
Director of Undergraduate Studies: Tommaso Manfredini, B-106 Heyman Center, East Campus; tm2538@columbia.edu  
Director of Medical Humanities Major: Assistant Prof. of Medicine Rishi Goyal; B-106 Heyman Center, East Campus; rkg6@cumc.columbia.edu  
Assistant Director: Sarah Monks, B-102 Heyman Center, East Campus; 212-854-8850; sm3373@columbia.edu

Established at Columbia in 1998, the Institute for Comparative Literature and Society (ICLS) promotes a global perspective in the study of literature and its social context. Committed to cross-disciplinary study of literary works, the Institute brings together the rich resources of Columbia in the various literatures of the world; in the social sciences; in art history, architecture, and media; and in the medical humanities.

The major programs at ICLS allow qualified students to study literature, culture, and society with reference to material from several national traditions, or in combination of literary study with comparative study in other disciplines in the humanities and social sciences. Under the guidance of the director of undergraduate studies, students select courses offered by participating departments.

The program is designed for students whose interest and expertise in languages other than English permit them to work comparatively in several national or regional cultures. The course of study differs from that of traditional comparative literature programs, both in its cross-disciplinary nature and in its expanded geographic range, including not just European, but also Asian, Middle Eastern, African, and Latin American cultures.

The program includes course work in the social sciences, and several core courses are jointly taught by faculty from different disciplines. Students thus explore a variety of methodological and disciplinary approaches to cultural and literary artifacts in the broadest sense. The cross-disciplinary range of the program includes visual and media studies; law and the humanities; medicine and the humanities; and studies of space, cities, and architecture. As a major or concentration, this program can be said to flow naturally from Columbia’s Core Curriculum, which combines literature, art, philosophy, and social thought, and consistently attracts some of Columbia’s most ambitious and cosmopolitan students.

Students can choose to complete the major in Comparative Literature and Society (CLS) or the major in Medical Humanities (MedHum). Currently, the MedHum major is not available for the concentration.

Given the wide variety of geographic and disciplinary specializations possible within the majors and concentration, students construct their course sequence in close collaboration with the director of undergraduate studies. All students, however, share the experience of taking the course CPLS UN3900 INTRO TO COMP LIT # SOCIETY in their sophomore year, as well as the required senior seminar in the fall of their last year in the program. The ICLS majors and concentration are designed for students interested in the cross-disciplinary and cross-cultural study of texts, traditions, media, and discourses in an increasingly transnational world.

Students planning to apply for admission to the CLS major, the MedHum major, or the CLS concentration should organize their course of study in order to complete the following prerequisites by the end of the sophomore year:

1. Preparation to undertake advanced work in one foreign language, to be demonstrated by completion of two introduction to literature courses, typically numbered 3333-3350.  
2. Completion of at least four terms of study of a second foreign language or two terms in each of two foreign languages.  
3. Enrollment in CPLS UN3900 INTRO TO COMP LIT # SOCIETY in the spring semester of the sophomore year.

Information about admission requirements and application to the majors or concentration can be found at https://icls.columbia.edu/undergraduate-program/admissions-to-the-majors-or-concentration/. Students are advised to meet with the director of undergraduate studies before submitting the statement of purpose for the required application. Applications are due in early January of the sophomore year.

DEPARTMENTAL HONORS

To be eligible for departmental honors, students must have a minimum grade point average of 3.6 for courses in the major. Departmental honors will be conferred only on students who have submitted a superior senior thesis that clearly demonstrates originality and excellent scholarship. Note that the senior thesis is not required for the major. For information on the honors program, see http://icls.columbia.edu/programs/departamental-honors/.

Executive Committee of ICLS  
Nadia Abu El-Haj (Anthropology, Center for Palestine Studies)  
Bruno Bosteels (Latin American and Iberian Cultures)  
Claudia Breger (Germanic Languages)  
Souleymane Bachir Diagne (French and Romance Philology)
Courses taken to the CPLS major and another program or university taken to satisfy the global core requirement, double counting of fulfill any major requirement. With the exception of courses the Beginner I to Intermediate II stream cannot be counted to be advanced, discussion-based seminars. Language courses in toward the major. Courses fulfilling major requirements must be met these requirements:

1. Foreign language 1: four semesters of language training (or equivalent) and one introductory literature course, typically numbered 3330-3350;
2. (CLS Majors and Concentrations only) Foreign language 2: four semesters of one language or two semesters of two languages;
3. CPLS UN3900 INTRO TO COMP LIT # SOCIETY, usually taken in the spring of the sophomore year;
4. A focus statement, 1-2 pages in length. The focus is a period, theme, problem, movement, etc., that is explored from an interdisciplinary and/or a comparative perspective. Faculty understand that this statement is a work in progress, but that it serves as a useful guide to students' academic pursuits and course selection.

MAJOR IN COMPARATIVE LITERATURE AND SOCIETY

The major in Comparative Literature and Society consists of a minimum of 33 points or 11 courses, distributed as follows. Courses taken to fulfill the application requirements do not count toward the major. Courses fulfilling major requirements must be advanced, discussion-based seminars. Language courses in the Beginner I to Intermediate II stream cannot be counted to fulfill any major requirement. With the exception of courses taken to satisfy the global core requirement, double counting of courses to the CPLS major and another program or university requirement must be approved by the DUS. Requirements for the major and concentration in Comparative Literature and Society were updated in February 2019; please contact the director of undergraduate studies with any questions.

1. CPLS UN3900 INTRO TO COMP LIT # SOCIETY, required for all majors and normally taken in the spring of the sophomore year (3 points)
2. Advanced courses as follows (please note that one course may be used to fulfill two of the advanced course requirements):
   - **Two courses** with a CPLS designator. CLxx courses, i.e. courses cross-listed between ICLS and other departments, may also be counted toward this requirement (6-8 points)
   - **Two seminars** in a humanities or social science discipline other than literature (e.g. Architecture, Anthropology, Art History, Economics, Gender & Sexuality Studies, History, Law, Linguistics, Music, Political Science, Race & Ethnicity Studies, Sociology…). The two courses must be grounded in the same disciplinary approach but don’t have to be offered by the same department or program (6-8 points)

**MAJOR IN COMPARATIVE LITERATURE AND SOCIETY**

Madeleine Dobie (French and Romance Philology) Brent Hayes Edwards (English and Comparative Literature, Jazz) Matthew Engelke (Religion) Robert Gooding-Williams (Philosophy and IRAAS) Stathis Gourgouris (Classics, English and Comparative Literature) Rishi Kumar Goyal (Emergency Medicine) Bernard Harcourt (Columbia Law School) Gil Hochberg (Middle Eastern, South Asian, and African Studies and IRWGS) Seth Kimmel (Latin American and Iberian Cultures) Adam Leeds (Slavic Languages) Lydia H. Liu (East Asian Languages and Cultures) David B. Lurie (East Asian Languages and Cultures) Tommaso Manfredini (DUS at ICLS, French and Romance Philology) Anupama P Rao (History, Barnard) Felicity Scott (Architecture) Oliver Simons (Germanic Languages) Joseph Slaughter (English and Comparative Literature) Gayatri Chakravorty Spivak (University Professor of the Humanities) Dennis Tenen (English and Comparative Literature)
Students should consult frequently with the DUS to ensure that their program of study develops in consonance with the intellectual project described in the focus statement that was presented as part of the admissions process. The faculty understands that this statement is itself a work in progress, but also that it serves as a useful guide to the student’s academic pursuits and course selection.

MAJOR IN MEDICAL HUMANITIES

The major in Medical Humanities requires 33 points (11 courses). Note that language courses taken to fulfill the application requirements 1 above do not count toward the required points for the major. Courses fulfilling major requirements must be advanced, discussion-based seminars. Language courses in the Beginner I to Intermediate II stream cannot be counted to fulfill any major requirement. Students interested in the major are strongly encouraged to fulfill their science requirement with classes in human biology (e.g., Human Species, Genes and Development) or human psychology (e.g., Mind, Brain, and Behavior).

1. CPLS UN3900 INTRO TO COMP LIT # SOCIETY, required for all ICLS majors and normally taken in the spring of the sophomore year.
2. Advanced courses as follows (please note that one course may be used to fulfill two of the advanced course requirements):

   • 1 course with a CPLS or CL- course identifier: 3-4 points

   Students choose from among the wide range of courses sponsored by the Institute for Comparative Literature and Society or cross-listed between ICLS and other departments. These offerings change every semester and are listed on the ICLS website.

   • 1 course with readings in a language other than English: 3-4 points

   Students may either take a course that is taught wholly or partially in a foreign language or a course taught in English for which they have received approval to do most of the reading in a foreign language.

   • 3 courses that form the disciplinary/methodological nexus of the student’s interests: 9-12 points

   Students will develop an individualized course of study at the nexus of health, society and the humanities in discussion with the DUS (Some example of prior constellations include but are not limited to: Literature and Medicine; Narrative Medicine; Medical Anthropology; History of Medicine; Comparative Public Health; Disability studies; Neuroscience; Biopolitics; Bioethics).

   • 2 required core courses in Medical Humanities: 6 points
   • 2 courses in the biological or biochemical sciences: 6-8 points

   Students in the MedHum major should be versed in contemporary and classical debates and knowledge in the biological sciences. Students may take any two biology or biochemistry classes that relate to fundamental concepts in human biology.

3. Senior Seminar:
CPLS UN3991 Senior Seminar in Comparative Literature and Society

4. CPLS UN3995 Senior thesis (optional). (3 points) year-long course

Students sign up for thesis credits as a year-long course (CPLS 3995) in the fall and spring semester of the senior year. Please see our detailed thesis guide on our website. They work with an adviser from the Columbia/Barnard faculty who oversees the project and assigns the final grade. The DUS of ICLS is the second reader for all projects. The thesis must be a minimum of 11,000 and 15,000 words in length, double-spaced and must include footnotes and a bibliography. Translations, creative work and multi-media projects can be submitted with the prior approval of the DUS. These must be accompanied by an introduction that situates the project intellectually. The thesis should be written in English unless a student receives permission from the DUS to write in another language. Note that the completed thesis is submitted before the end of the spring semester, usually by April 15. The thesis is considered as a 3-point course with 1 credit earned in the Fall and 2 credits earned in the Spring.

Students should consult frequently with the DUS to ensure that their program of study develops in consonance with the intellectual project described in the focus statement that was presented as part of the admissions process. The faculty understands that this statement is itself a work in progress, but also that it serves as a useful guide to the student’s academic pursuits and course selection.

CONCENTRATION IN COMPARATIVE LITERATURE AND SOCIETY

The concentration in Comparative Literature and Society consists of a minimum of 27 points or 9 courses, distributed as follows. Please note that courses taken to fulfill the application requirements do not count toward the major. Courses fulfilling major requirements must be advanced, discussion-based seminars. Language courses in the Beginner I to Intermediate II stream cannot be counted to fulfill any major requirement. With the exception of courses taken to satisfy the global core requirement, any double counting of courses to the CPLS major and another program or university requirement must be approved by the DUS. Requirements for the major and
concentration in Comparative Literature and Society were updated in February 2019; please contact the director of undergraduate studies with any questions.

1. **CPLS UN3900 INTRO TO COMP LIT # SOCIETY**, normally taken in the spring of the sophomore year;

2. Advanced courses as follows:
   - Two courses with a CPLS designator. CL-- courses, i.e. courses cross-listed between ICLS and other departments, may also be counted toward this requirement (6-8 points)
   - Two seminars in a humanities or social science discipline other than literature (e.g. Architecture, Anthropology, Art History, Economics, Gender & Sexuality Studies, History, Law, Linguistics, Music, Political Science, Race & Ethnicity Studies, Sociology…). The two courses must be grounded in the same disciplinary approach but don’t have to be offered by the same department or program (6-8 points)
   - Two courses requiring readings in a language other than English (the two courses don’t have to be in the same foreign language) (6-8 points)
   - One course focusing on a specific national or regional literature or culture, chosen from any discipline (3-8 points)
   - Senior Seminar in Comparative Literature and Society (CPLS V3991)

The senior seminar is taken in fall semester of the senior year. Students explore three areas of contemporary reflection in the field of comparative literature and society. Topics change yearly and are aligned with current ICLS research projects. Recent examples include: Bandung Humanism; Global Language Justice; A Safer Online Public Square

   • (Optional) Senior Thesis (CPLS 3995) (3 points) year-long course

Students sign up for thesis credits as a year-long course (CPLS 3995) in the fall and spring semester of the senior year. Please see our detailed thesis guide on our website. They work with an adviser from the Columbia/Barnard faculty who oversees the project and assigns the final grade. The DUS of ICLS is the second reader for all projects. The thesis must be a minimum of 11,000 and 15,000 words in length, double-spaced and must include footnotes and a bibliography. Translations, creative work and multi-media projects can be submitted with the prior approval of the DUS. These must be accompanied by an introduction that situates the project intellectually. The thesis should be written in English unless a student receives permission from the DUS to write in another language. Note that the completed thesis is submitted before the end of the spring semester, usually by April 15. The thesis is considered as a 3-point course with 1 credit earned in the Fall and 2 credits earned in the Spring. It may be counted in lieu of a course taken to meet requirements 2, 3, 4, or 5.
The majors in the Department of Computer Science provide students with the appropriate computer science background necessary for graduate study or a professional career. Computers impact nearly all areas of human endeavor. Therefore, the department also offers courses for students who do not plan a computer science major or concentration. The computer science majors offer maximum flexibility by providing students with a range of options for program specialization. The department offers four majors: computer science; information science; data science; and computer science-mathematics, offered jointly with the Mathematics Department.

**COMPUTER SCIENCE MAJOR**

Students study a common core of fundamental topics, supplemented by a track that identifies specific areas for deeper study. The foundations track prepares students for advanced work in fundamental, theoretical, and mathematical aspects of computing, including analysis of algorithms, scientific computing, and security. The systems track prepares students for immediate employment in the computer industry as well as advanced study in software engineering, operating systems, computer-aided digital design, computer architecture, programming languages, and user interfaces. The intelligent systems track provides specialization for the student interested in natural language processing and systems capable of exhibiting “human-like” intelligence. The applications track is for students interested in the implementation of interactive multimedia content for the Internet and wireless applications. The vision, graphics, interaction, and robotics track exposes students to computer vision, graphics, human-computer interaction, and robotics.

A combination track is available to students who wish to pursue an interdisciplinary course of study combining computer science and another field in the arts, humanities, mathematics, natural sciences, or social sciences. A student planning a combination track should be aware that one additional course is required to complete this option.

**INFORMATION SCIENCE MAJOR**

Information science is an interdisciplinary major designed to provide a student with an understanding of how information is organized, accessed, stored, distributed, and processed in strategic segments of today’s society. Recent years have seen an explosive growth of on-line information, with people of all ages and all walks of life making use of the World Wide Web and other information in digital form.

This major puts students at the forefront of the information revolution, studying how on-line access touches on all disciplines and changing the very way people communicate. Organizations have large stores of in-house information that are crucial to their daily operation. Today’s systems must enable quick access to relevant information, must ensure that confidential information is secure, and must enable new forms of communication among people and their access to information.

The information science major can choose a scientific focus on algorithms and systems for organizing, accessing, and processing information, or an interdisciplinary focus in order to develop an understanding of, and tools for, information modeling and use within an important sector of modern society such as economics or health.

**ADVANCED PLACEMENT**

The department grants 3 points for a score of 4 or 5 on the AP Computer Science exam along with exemption from COMS W1004 Introduction to Computer Science and Programming in Java. However, we still recommend that you take COMS W1004 or W1007 even if you have credits from the CS AP exam. COMS W1007 Honors Introduction to Computer Science is recommended if you scored 5 on the AP exam, and COMS W1004 is recommended if you scored 4.

**PRE-INTRODUCTORY COURSES**

COMS W1004 is the first course in the Computer Science major curriculum, and it does not require any previous computing experience. Before taking COMS W1004, however, students have an option to start with one of the pre-introductory courses: ENGI E1006 or COMS W1002.

ENGI E1006 Introduction to Computing for Engineers and Applied Scientist is a general introduction to computing for STEM students. ENGI E1006 is in fact a required course for all engineering students. COMS W1002 Computing In Context is a course primarily intended for humanities majors, but it also serves as a pre-introductory course for CS majors. ENGI E1006 and COMS W1002 do not count towards Computer Science major.

**LABORATORY FACILITIES**

The department has well-equipped lab areas for research in computer graphics, computer-aided digital design, computer vision, databases and digital libraries, data mining and knowledge discovery, distributed systems, mobile and wearable computing, natural language processing, networking, operating systems, programming systems, robotics, user interfaces, and real-time multimedia.

Research labs contain several large Linux and Solaris clusters; Puma 500 and IBM robotic arms; a UTAH-MIT dexterous hand; an Adept-1 robot; three mobile research robots; a real-time
defocus range sensor; interactive 3-D graphics workstations with 3-D position and orientation trackers; prototype wearable computers, wall-sized stereo projection systems; see-through head-mounted displays; a networking testbed with three Cisco 7500 backbone routers, traffic generators; an IDS testbed with secured LAN, Cisco routers, EMC storage, and Linux servers; and a simulation testbed with several Sun servers and Cisco Catalyst routers. The department uses a SIP IP phone system. The protocol was developed in the department.

The department's computers are connected via a switched 1Gb/s Ethernet network, which has direct connectivity to the campus OC-3 Internet and internet 2 gateways. The campus has 802.11b/g wireless LAN coverage.

The research facility is supported by a full-time staff of professional system administrators and programmers.

**PROFESSORS**

Alfred V. Aho  
Peter K. Allen  
Peter Bellhumeur  
Steven M. Bellovin  
David Blei  
Luca Carloni  
Michael J. Collins  
Steven K. Feiner  
Luis Gravano  
Julia Hirschberg  
Gail E. Kaiser  
John R. Kender  
Kathleen R. McKeown  
Vishal Misra  
Shree K. Nayar  
Jason Nieh  
Steven M. Nowick  
Christos Papadimitriou  
Kenneth A. Ross  
Henning G. Schulzrinne  
Rocco A. Servedio  
Salvatore J. Stolfo  
Jeannette Wing  
Mihalis Yannakakis  
Daniel S. Rubenstein  
Simha Sethumadhavan  
Junfeng Yang  
Changxi Zheng  
Lydia Chilton  
Ronghui Gu  
Suman Jana  
Baishakhi Ray  
Carl Vondrick  
Omri Weinstein  
Eugene Wu  
Paul Blaer  
Adam Cannon  
Jae Woo Lee  
Daniel Bauer  
Tony Dear  
Anfas Salleb-Aouissi  
Nakul Verma  
Shih-Fu Chang  
Clifford Stein  
Matei Ciocarlie  
Edward G. Coffman Jr. (emeritus)  
Eleni Drinea  
Jonathan Gross (emeritus)  
Andreas Mueller  
Steven H. Unger (emeritus)  
Vladimir Vapnik  
Yechiam Yemini (emeritus)  
Moti Yung  
Smaranda Muresan*  
Allison Breton Bishop  
Giuseppe DiGuglielmo  
Paolo Mantovani  
Hiroshi Sasaki  
Eran Tromer  
Donald F. Ferguson

**ASSOCIATE PROFESSORS**

Alexandr Andoni  
Augustin Chaintreau  
Xi Chen  
Stephen A. Edwards  
Yaniv Erlich  
Roxana Geambasu  
Eitan Grinspun  
Daniel Hsu  
Tony Jebara  
Martha Allen Kim  
Tal Malkin  
Itsik Pe'er  
Lydia Chilton  
Ronghui Gu  
Suman Jana  
Baishakhi Ray  
Carl Vondrick  
Omri Weinstein  
Eugene Wu  
Paul Blaer  
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Jonathan Gross (emeritus)  
Andreas Mueller  
Steven H. Unger (emeritus)  
Vladimir Vapnik  
Yechiam Yemini (emeritus)  
Moti Yung  
Smaranda Muresan*  
Allison Breton Bishop  
Giuseppe DiGuglielmo  
Paolo Mantovani  
Hiroshi Sasaki  
Eran Tromer  
Donald F. Ferguson

**Senior Lecturer in Discipline**

Paul Blaer  
Adam Cannon  
Jae Woo Lee

**Lecturer in Discipline**

Daniel Bauer  
Tony Dear  
Anfas Salleb-Aouissi  
Nakul Verma

**Associated Faculty Joint**

Shih-Fu Chang  
Clifford Stein

**Associated Faculty**

Matei Ciocarlie  
Edward G. Coffman Jr. (emeritus)  
Eleni Drinea  
Jonathan Gross (emeritus)  
Andreas Mueller  
Steven H. Unger (emeritus)  
Vladimir Vapnik  
Yechiam Yemini (emeritus)  
Moti Yung  
Smaranda Muresan*  
Allison Breton Bishop  
Giuseppe DiGuglielmo  
Paolo Mantovani  
Hiroshi Sasaki  
Eran Tromer  
Donald F. Ferguson

**Senior Research Scientists**

Moti Yung  
Smaranda Muresan*  
Allison Breton Bishop  
Giuseppe DiGuglielmo  
Paolo Mantovani  
Hiroshi Sasaki  
Eran Tromer  
Donald F. Ferguson

**Research Scientists**

Smaranda Muresan*  
Allison Breton Bishop  
Giuseppe DiGuglielmo  
Paolo Mantovani  
Hiroshi Sasaki  
Eran Tromer  
Donald F. Ferguson

**Associated Research Scientists**

Allison Breton Bishop  
Giuseppe DiGuglielmo  
Paolo Mantovani  
Hiroshi Sasaki  
Eran Tromer  
Donald F. Ferguson

**Professor of Practice**

Donald F. Ferguson
**GUIDELINES FOR ALL COMPUTER SCIENCE MAJORS AND CONCENTRATORS**

**Courses**

Students may receive credit for only one of the following two courses:

- COMS W1004 Introduction to Computer Science and Programming in Java
- COMS W1005 Introduction to Computer Science and Programming in MATLAB.

Students may receive credit for only one of the following three courses:

- COMS W3134 Data Structures in Java
- COMS W3136 Data Structures with C/C++
- COMS W3137 Honors Data Structures and Algorithms

However, COMS W1005 and COMS W3136 cannot be counted towards the Computer Science major, minor, and concentration.

**Transfer Credit**

As a rule, no more than 12 transfer credits are accepted toward the major.

**Grading**

A maximum of one course worth no more than 4 points passed with a grade of D may be counted toward the major or concentration.

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**MAJOR IN COMPUTER SCIENCE**

Please read Guidelines for all Computer Science Majors and Concentrators above.

All majors should confer with their program adviser each term to plan their programs of study. Students considering a major in computer science are encouraged to talk to a program adviser during their first or second year. A typical program of study is as follows:

**Program of Study**

Computer Science Core (22-26 points). Adjustments were made to the course lists below in March 2022.

For students who declare in Spring 2014 and beyond:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGI E1006</td>
<td>INTRO TO COMP FOR ENG/APP SCI (recommended but not required)</td>
</tr>
</tbody>
</table>

**First Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS W1004</td>
<td>Introduction to Computer Science and Programming in Java</td>
</tr>
</tbody>
</table>

**Sophomore Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS W1007</td>
<td>Honors Introduction to Computer Science</td>
</tr>
<tr>
<td>COMS W3137</td>
<td>Honors Data Structures and Algorithms</td>
</tr>
<tr>
<td>COMS W3157</td>
<td>Advanced Programming</td>
</tr>
<tr>
<td>COMS W3203</td>
<td>DISCRETE MATHEMATICS</td>
</tr>
</tbody>
</table>

**Junior and Senior Year**

Select the remaining required core courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS W3261</td>
<td>Computer Science Theory</td>
</tr>
<tr>
<td>CSEE W3827</td>
<td>Fundamentals of Computer Systems</td>
</tr>
</tbody>
</table>

Select one of the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS W3251</td>
<td>COMPUTATIONAL LINEAR ALGEBRA (recommended)</td>
</tr>
<tr>
<td>MATH UN2010</td>
<td>LINEAR ALGEBRA</td>
</tr>
<tr>
<td>MATH UN2020</td>
<td>Honors Linear Algebra</td>
</tr>
<tr>
<td>APMA E2101</td>
<td>INTRO TO APPLIED MATHEMATICS</td>
</tr>
<tr>
<td>APMA E3101</td>
<td>APPLIED MATH I: LINEAR ALGEBRA</td>
</tr>
<tr>
<td>STAT GU4001</td>
<td>INTRODUCTION TO PROBABILITY AND STATISTICS</td>
</tr>
</tbody>
</table>

For students who declared prior to Spring 2014:

**First Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS W1004</td>
<td>Introduction to Computer Science and Programming in Java</td>
</tr>
</tbody>
</table>

**Sophomore Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS W1007</td>
<td>Honors Introduction to Computer Science</td>
</tr>
<tr>
<td>COMS W3137</td>
<td>Honors Data Structures and Algorithms</td>
</tr>
<tr>
<td>COMS W3157</td>
<td>Advanced Programming</td>
</tr>
<tr>
<td>COMS W3203</td>
<td>DISCRETE MATHEMATICS</td>
</tr>
</tbody>
</table>

**Junior and Senior Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS W3261</td>
<td>Computer Science Theory</td>
</tr>
<tr>
<td>CSEE W3827</td>
<td>Fundamentals of Computer Systems</td>
</tr>
</tbody>
</table>

In addition to the CS Core (22-26 points), all CS majors must complete the Calculus Requirement (3 points) and a Track Requirement (15 or 18 points). The CS major therefore requires 40-47 points total.

**Mathematics (3 points)**

Calculus II or Calculus III.

Note that Calculus III does NOT depend on Calculus II. You can take either Calculus II or III, but we recommend Calculus III, which covers topics that are a bit more relevant for upper-level Computer Science courses.

If you have received equivalent credits for Calculus I & II already (through a 4 or 5 on the AP Calculus exam for example), you are not required to take any more Calculus courses. But we
recommend taking one more semester of Calculus, either Math UN1201 Calculus III or APAM E2000 Multivariate Calculus for Engineers and Scientists. APAM E2000 covers relevant topics from Calculus III and IV.

**Track Requirement (15 or 18 points)**

Students must select one of the following six upper-level tracks. Each track, except the combination track, requires five courses consisting of required, elective breadth, and elective track courses. The combination track requires a selection of six advanced courses: three 3000- or 4000-level computer science courses and three 3000- or 4000-level courses from another field. The elective breadth requirement in each track can be fulfilled with any 3-point computer science 3000-level or higher course that is not a computer science core course or a technical elective course in that track. In addition to the breadth elective, the track requirements are as follows:

**Foundations Track (15 points)**

For students interested in algorithms, computational complexity, and other areas of theoretical Computer Science.

Note: Students who declared their Computer Science major prior to Fall 2016 may also count COMS 4241, COMS 4205, COMS 4281, COMS 4444, COMS 4771, and COMS 4772 as track elective courses.

**Required Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSOR W4231</td>
<td>Analysis of Algorithms I</td>
</tr>
<tr>
<td>COMS W4236</td>
<td>INTRO-COMPUTATIONAL COMPLEXITY</td>
</tr>
</tbody>
</table>

**Track Electives**

Select 2 from:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH UN3020</td>
<td>Number Theory and Cryptography</td>
</tr>
<tr>
<td>MATH UN3025</td>
<td>Making, Breaking Codes</td>
</tr>
<tr>
<td>COMS W4203</td>
<td>Graph Theory</td>
</tr>
<tr>
<td>MATH GU4032</td>
<td>Fourier Analysis</td>
</tr>
<tr>
<td>MATH GU4041</td>
<td>INTRO MODERN ALGEBRA I</td>
</tr>
<tr>
<td>MATH GU4042</td>
<td>INTRO MODERN ALGEBRA II</td>
</tr>
<tr>
<td>MATH GU4061</td>
<td>INTRO MODERN ANALYSIS I</td>
</tr>
<tr>
<td>MATH GU4155</td>
<td>Probability Theory</td>
</tr>
<tr>
<td>COMS W4252</td>
<td>Introduction to Computational Learning</td>
</tr>
<tr>
<td>COMS W4261</td>
<td>INTRO TO CRYPTOGRAPHY</td>
</tr>
<tr>
<td>APMA E4300</td>
<td>COMPUT MATH:INTRO-NUMERCL METH</td>
</tr>
<tr>
<td>IJOR E4407</td>
<td>GAME THEOR MODELS OF OPERATION</td>
</tr>
<tr>
<td>CSPH G4802</td>
<td>Math Logic II: Incompleteness</td>
</tr>
<tr>
<td>COMS E6232</td>
<td>ANALYSIS OF ALGORITHMS II</td>
</tr>
<tr>
<td>MATH G6238</td>
<td>Enumerative Combinatorics</td>
</tr>
<tr>
<td>COMS E6253</td>
<td>ADV TPCS-COMPUT LEARNING THRY</td>
</tr>
<tr>
<td>COMS E6261</td>
<td>ADVANCED CRYPTOGRAPHY</td>
</tr>
<tr>
<td>EEOR E6616</td>
<td>CONVEX CRYPTOGRAPHY</td>
</tr>
</tbody>
</table>

**Software Systems Track (15 points)**

For students interested in networks, programming languages, operating systems, software engineering, databases, security, and distributed systems.

**Required Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS W4115</td>
<td>Programming Languages and Translators</td>
</tr>
<tr>
<td>COMS W4118</td>
<td>Operating Systems I</td>
</tr>
<tr>
<td>CSEE W4119</td>
<td>Course CSEE W4119 Not Found</td>
</tr>
</tbody>
</table>

**Track Electives**

Select 1 from:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any COMS W41xx course</td>
<td></td>
</tr>
<tr>
<td>Any COMS W48xx course</td>
<td></td>
</tr>
</tbody>
</table>

**Adviser Approved:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS W3902</td>
<td>Undergraduate Thesis</td>
</tr>
<tr>
<td>COMS W3998</td>
<td>Undergraduate Projects in Computer Science</td>
</tr>
<tr>
<td>COMS W4901</td>
<td>Projects in Computer Science</td>
</tr>
<tr>
<td>COMS W4995</td>
<td>Special topics in computer science, I</td>
</tr>
<tr>
<td>COMS E6998</td>
<td>Topics in Computer Science</td>
</tr>
</tbody>
</table>

**One Breadth Course**

Any 3-point COMS 3000- or 4000-level course except those courses in the CS core or in the required or elective courses for this track.

**One Breadth Course**

Any 3-point COMS 3000- or 4000-level course except those courses in the CS core or in the required or elective courses for this track.
Intelligent Systems Track (15 points)
For students interested in machine learning, robotics, and systems capable of exhibiting “human-like” intelligence.

Required Courses
Select two of the following courses:
- COMS W4701  Artificial Intelligence
- COMS W4705  Natural Language Processing
- COMS W4706  Spoken Language Processing
- COMS W4731  Computer Vision I: First Principles
- COMS W4733  Computational Aspects of Robotics
- COMS W4771  Machine Learning

Track Electives
Select 2 from:
- COMS W4252  Introduction to Computational Learning Theory
- Any COMS W47xx course
- Any COMS E67XX course

Adviser Approved:
- COMS W3902  Undergraduate Thesis
- COMS W3998  Undergraduate Projects in Computer Science
- COMS W4901  Projects in Computer Science
- COMS W4995  Special topics in computer science, I
- COMS E6998  Topics in Computer Science

One Breadth Course
Any 3-point COMS 3000- or 4000-level course except those courses in the CS core or in the required or elective courses for this track

Applications Track (15 points). Adjustments were made to the course lists below in March 2022.
For students interested in the implementation of interactive multimedia applications for the internet and wireless networks.

Required Courses
- COMS W4111  INTRODUCTION TO DATABASES
- COMS W4170  User Interface Design

Track Electives
Select 2 from:
- Any COMS W41xx course
- Any COMS W47xx course

Adviser Approved:
- COMS W3902  Undergraduate Thesis
- COMS W3998  Undergraduate Projects in Computer Science
- COMS W4901  Projects in Computer Science
- COMS W4995  Special topics in computer science, I
- Any COMS E69XX course

One Breadth Course
Any 3-point COMS 3000- or 4000-level course except those courses in the CS core or in the required or elective courses for this track

Vision, Graphics, Interaction, and Robotics Track (15 points). Adjustments were made to the course lists below in March 2022.
For students in the vision, interaction, graphics, and robotics track. It focuses on visual information with topics in vision, graphics, human-computer interaction, robotics, modeling, and learning. Students learn about fundamental ways in which visual information is captured, manipulated, and experienced.

Required Courses
Select two of the following courses:
- COMS W4160  Computer Graphics
- COMS W4167  Computer Animation
- COMS W4731  Computer Vision I: First Principles

Track Electives
Select 2 from:
- COMS W4162  Advanced Computer Graphics
- COMS W4732  Computer Vision II: Learning
- COMS W4170  User Interface Design
- COMS W4172  3D User Interfaces and Augmented Reality
- COMS W4701  Artificial Intelligence
- COMS W4733  Computational Aspects of Robotics
- COMS W4735  Visual Interfaces to Computers
- COMS W4771  Machine Learning

Adviser Approved:
- COMS W3902  Undergraduate Thesis
- COMS W3998  Undergraduate Projects in Computer Science
- COMS W4901  Projects in Computer Science
- COMS W4995  Special topics in computer science, I
- Any COMS E69XX course

One Breadth Course
Any 3-point COMS 3000- or 4000-level course except those courses in the CS core or in the required or elective courses for this track

Combination Track (18 points)
For students who wish to combine computer science with another discipline in the arts, humanities, social or natural sciences. A coherent selection of six upper-level courses is required: three from computer science and three from another discipline.

The courses should be planned with and approved by the student’s CS faculty advisor by the first semester of the junior year. The six courses are typically 4000-level elective courses that would count towards the individual majors. Moreover, the six courses should have a common theme. The combination

Any 3-point COMS 3000- or 4000-level course except those courses in the CS core or in the required or elective courses for this track
track is not intended for those students who pursue double majors.

**MAJOR IN COMPUTER SCIENCE—MATHEMATICS**

For a description of the joint major in computer science—mathematics, see the *Mathematics* section in this bulletin.

**MAJOR IN INFORMATION SCIENCE**

Please read *Guidelines for all Computer Science Majors and Concentrators* above.

The major in information science requires a minimum of 33 points including a core requirement of five courses. Adjustments were made to the course lists below in March 2022.

The elective courses must be chosen with a faculty adviser to focus on the modeling and use of information within the context of a disciplinary theme. After discussing potential selections students prepare a proposal of study that must be approved by the faculty adviser. In all cases the six courses must be at the 3000-level or above with at least three courses chosen from computer science. Following are some example programs. For more examples or templates for the program proposal, see a faculty adviser.

Note: In most cases additional courses will be necessary as prerequisites in order to take some of the elective courses. This will depend on the student's proposed program of study.

**Core Requirement**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS W1001</td>
<td>Introduction to Information Science</td>
</tr>
<tr>
<td>or COMS W1002</td>
<td>Computing in Context</td>
</tr>
<tr>
<td>COMS W1004</td>
<td>Introduction to Computer Science and Programming in Java</td>
</tr>
<tr>
<td>COMS W3107</td>
<td>Clean Object-Oriented Design</td>
</tr>
<tr>
<td>COMS W3134</td>
<td>Data Structures in Java</td>
</tr>
<tr>
<td>STAT GU4001</td>
<td>INTRODUCTION TO PROBABILITY AND STATISTICS</td>
</tr>
</tbody>
</table>

Following are some suggested programs of instruction:

**Information Science and Contemporary Society**

Students may focus on how humans use technology and how technology has changed society.

The requirements include:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS W4111</td>
<td>INTRODUCTION TO DATABASES</td>
</tr>
<tr>
<td>COMS W4170</td>
<td>User Interface Design</td>
</tr>
<tr>
<td>COMS W4701</td>
<td>Artificial Intelligence</td>
</tr>
<tr>
<td>COMS W4771</td>
<td>Machine Learning</td>
</tr>
<tr>
<td>ECON UN3412</td>
<td>Introduction To Econometrics</td>
</tr>
<tr>
<td>ECON UN3025</td>
<td>Financial Economics</td>
</tr>
<tr>
<td>ECON UN3265</td>
<td>MONEY AND BANKING</td>
</tr>
</tbody>
</table>

**Information Science and the Economy**

Students may focus on understanding information modeling together with existing and emerging needs in economics and finance as well as algorithms and systems to address those needs.

The requirements include:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS W4111</td>
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<tr>
<td>COMS W4771</td>
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<td>Financial Economics</td>
</tr>
<tr>
<td>ECON UN3265</td>
<td>MONEY AND BANKING</td>
</tr>
</tbody>
</table>

**Information Science and Health Sciences**

Students may focus on understanding information modeling together with existing and emerging needs in health sciences, as well as algorithms and systems to address those needs.

The requirements include:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS W4111</td>
<td>INTRODUCTION TO DATABASES</td>
</tr>
<tr>
<td>COMS W4170</td>
<td>User Interface Design</td>
</tr>
<tr>
<td>COMS W4701</td>
<td>Artificial Intelligence</td>
</tr>
<tr>
<td>BINF G4001</td>
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</tr>
<tr>
<td>BIOL W4037</td>
<td>Bioinformatics of Gene Expression</td>
</tr>
<tr>
<td>ECBM E3060/E4060</td>
<td>INTRO-GENOMIC INFO SCI # TECH</td>
</tr>
</tbody>
</table>

**MAJOR IN DATA SCIENCE**

Please read *Guidelines for all Computer Science Majors and Concentrators* above.

In response to the ever growing importance of "big data" in scientific and policy endeavors, the last few years have seen an explosive growth in theory, methods, and applications at the interface between computer science and statistics. The statistics and computer science departments have responded with a joint-major that emphasizes the interface between the disciplines.

**Prerequisites (15 points)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH UN1101</td>
<td>CALCULUS I</td>
</tr>
<tr>
<td>MATH UN1102</td>
<td>CALCULUS II</td>
</tr>
<tr>
<td>MATH UN1201</td>
<td>Calculus III</td>
</tr>
<tr>
<td>MATH UN2010</td>
<td>LINEAR ALGEBRA</td>
</tr>
</tbody>
</table>

This introductory Statistics course:
STAT UN1201 Calculus-Based Introduction to Statistics

Statistics (12 points)
- STAT GU4203 PROBABILITY THEORY
- STAT GU4204 Statistical Inference
- STAT GU4205 Linear Regression Models
- STAT GU4241 Statistical Machine Learning
  or COMS W4771 Machine Learning

Computer Science (12 points)
Select one of the following courses:
- COMS W1004 Introduction to Computer Science and Programming in Java
- COMS W1005 Introduction to Computer Science and Programming in MATLAB
  or COMS W1007 Honors Introduction to Computer Science
- ENGI E1006 INTRO TO COMP FOR ENG/APP SCI
Select one of the following courses:
- COMS W3134 Data Structures in Java
- COMS W3136 Data Structures with C/C++
- COMS W3137 Honors Data Structures and Algorithms

Two required courses:
- COMS W3203 DISCRETE MATHEMATICS
- CSOR W4231 Analysis of Algorithms I

Electives (15 points)
Select two of the following courses:
- STAT UN3106 Applied Data Mining
- STAT GU4206 Statistical Computing and Introduction to Data Science
- STAT GU4224 BAYESIAN STATISTICS
- STAT GU4243 APPLIED DATA SCIENCE
- STAT Q4242 Advanced Machine Learning
Select three of the following courses:
- COMS W3261 Computer Science Theory
- COMS W4111 INTRODUCTION TO DATABASES
- COMS W4130 Principles and Practice of Parallel Programming
- COMS W4236 INTRO-COMPUTATIONAL COMPLEXITY
- COMS W4252 Introduction to Computational Learning Theory
- Any COMS W47xx course EXCEPT W4771

For students who declare in Spring 2014 and beyond:
The concentration in computer science requires a minimum of 22-24 points, as follows:

- COMS W1004 Introduction to Computer Science and Programming in Java
  or COMS W1007 Honors Introduction to Computer Science
- COMS W3134 Data Structures in Java
  or COMS W3137 Honors Data Structures and Algorithms
- COMS W3157 Advanced Programming
- COMS W3203 DISCRETE MATHEMATICS
- COMS W3261 Computer Science Theory
- CSEE W3827 Fundamentals of Computer Systems (or any 3-point 4000-level computer science course)
Select one of the following courses:
- COMS W3251 COMPUTATIONAL LINEAR ALGEBRA (recommended)
- MATH UN2010 LINEAR ALGEBRA
- MATH V2020 Honors Linear Algebra
- APMA E2101 INTRO TO APPLIED MATHEMATICS
- APMA E3101 APPLIED MATH I: LINEAR ALGEBRA
- STAT GU4001 INTRODUCTION TO PROBABILITY AND STATISTICS
- SIEO W3600 INTRO PROBABILITY/STATISTICS

For students who declared prior to Spring 2014:
The concentration requires a minimum of 23 points, as follows:

- COMS W1004 Introduction to Computer Science and Programming in Java
- COMS W1007 Honors Introduction to Computer Science
- COMS W3137 Honors Data Structures and Algorithms
- COMS W3157 Advanced Programming
- COMS W3261 Computer Science Theory
- CSEE W3827 Fundamentals of Computer Systems (or any 3-point 4000-level computer science course)

**Concentration in Computer Science**

Please read Guidelines for all Computer Science Majors and Concentrators above. Adjustments were made to the course lists below in March 2022.
CREATIVE WRITING

Undergraduate Creative Writing Program Office: 609 Kent; 212-854-3774
http://arts.columbia.edu/writing/undergraduate

Director of Undergraduate Studies: Prof. Heidi Julavits, 609 Kent; 212-854-3774; hj26@columbia.edu
(ace4132@columbia.edu)

Undergraduate Executive Committee:

Prof. Anelise Chen, 609 Kent; 212-854-3774; ace4132@columbia.edu
Prof. Heidi Julavits, Fiction, 609 Kent; 212-854-3774; hj26@columbia.edu
Prof. Dorothea Lasky, Poetry, 609 Kent; 212-854-3774;.dsl2121@columbia.edu

• Undergraduate Advisory Committee:
  Prof. Anelise Chen, 609 Kent; 212-854-3774; ace4132@columbia.edu
  Prof. Timothy Donnelly, 415 Dodge; 212-854-4391; td28@columbia.edu
  Prof. Margo Jefferson, Nonfiction, 609 Kent; 212-854-3774; mlj4@columbia.edu
  Prof. Heidi Julavits, Fiction, 609 Kent; 212-854-3774; hj26@columbia.edu
  Prof. Dorothea Lasky, Poetry, 609 Kent; 212-854-3774;.dsl2121@columbia.edu
  Prof. Sam Lipsyte, Fiction, 609 Kent; 212-854-4391; sam.lipsyte@columbia.edu
  Prof. Deborah Paredez, Poetry, 609 Kent, dp2783@columbia.edu
  Prof. Alan Ziegler, Fiction, 415 Dodge; 212-854-4391; az8@columbia.edu

The Creative Writing Program in The School of the Arts combines intensive writing workshops with seminars that study literature from a writer’s perspective. Students develop and hone their literary technique in workshops. The seminars (which explore literary technique and history) broaden their sense of possibility by exposing them to various ways that language has been used to make art. Related courses are drawn from departments such as English, comparative literature and society, philosophy, history, and anthropology, among others.

Students consult with faculty advisers to determine the related courses that best inform their creative work. For details on the major, see the Creative Writing website: http://arts.columbia.edu/writing/undergraduate.

PROFESSORS

Margo L. Jefferson
Phillip Lopate
Benjamin Marcus
Alan Ziegler

ASSOCIATE PROFESSORS

Susan Bernofsky
Timothy Donnelly
Heidi Julavits
Dorothea Lasky
Victor LaValle
Sam Lipsyte
Deborah Paredez

ASSISTANT PROFESSORS

Anelise Chen
Shane McCrae
Ben Metcalf
Lynn Xu

ADJUNCT PROFESSORS

Alex Abramovich
Halle Butler
Frances Cha
Bonnie Chau
Jon Cotner
Alex Dimitrov
Joseph Fasano
Elizabeth Greenwood
Crystal Hana Kim
Amanda Lee Koe
Joss Lake
Hilary Leichter
Daniel Magariel
Patricia Marx
Mallika Marx
Mark Rozzo
Mayukh Sen
Sumeja Tulin
John Vincler
David Wallace
Madeleine Watts
Christopher Wolfe
James Yeh
Samantha Zigelboim

GRADUATE FACULTY FELLOWS

Edison Angelbello
Melanie Broder
Melissa Connelly
Elias Diakolios
Flora Field
Rona Figueroa
Patrick Ford-Matz
Sylvia Gindick
Laura Green
Al Jacobs

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Kimberly Liu
Odelia Lu
Cameron Menchel
Abhigna Mooraka
Kameron Morton
Galina Nemirovsky
Mariam Rahmani
Laina Richards
Nicole Saldarriaga
Darby Smith
Rafaela Yoneshigue Bassili

MAJOR IN CREATIVE WRITING

The major in creative writing requires a minimum of 36 points: five workshops, four seminars, and three related courses.

Workshop Curriculum (15 points)

Students in the workshops produce original works of fiction, poetry, or nonfiction, and submit them to their classmates and instructor for a close critical analysis. Workshop critiques (which include detailed written reports and thorough line-edits) assess the mechanics and merits of the writing pieces. Individual instructor conferences distill the critiques into a direct plan of action to improve the work. Student writers develop by practicing the craft under the diligent critical attention of their peers and instructor, which guides them toward new levels of creative endeavor.

Creative writing majors select 15 points within the division in the following courses. One workshop must be in a genre other than the primary focus. For instance, a fiction writer might take four fiction workshops and one poetry workshop.

Beginning Workshop
Designed for students who have little or no previous experience writing literary texts in a particular genre.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>WRIT UN1100</td>
<td>Beginning Fiction Workshop</td>
</tr>
<tr>
<td>WRIT UN1200</td>
<td>Beginning Nonfiction Workshop</td>
</tr>
<tr>
<td>WRIT UN1300</td>
<td>Beginning Poetry Workshop</td>
</tr>
</tbody>
</table>

Intermediate Workshop
Permission required. Admission by writing sample. Enrollment limited to 15. Course may be repeated in fulfillment of the major.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>WRIT UN2100</td>
<td>Intermediate Fiction Workshop</td>
</tr>
<tr>
<td>WRIT UN2200</td>
<td>Intermediate Nonfiction Workshop</td>
</tr>
<tr>
<td>WRIT UN2300</td>
<td>Intermediate Poetry Workshop</td>
</tr>
</tbody>
</table>

Advanced Workshop
Permission required. Admission by writing sample. Enrollment limited to 15. Course may be repeated in fulfillment of the major.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>WRIT UN3100</td>
<td>Advanced Fiction Workshop</td>
</tr>
<tr>
<td>WRIT UN3200</td>
<td>Advanced Nonfiction Workshop</td>
</tr>
<tr>
<td>WRIT UN3300</td>
<td>Advanced Poetry Workshop</td>
</tr>
</tbody>
</table>

Senior Creative Writing Workshop

Seniors who are creative writing majors are given priority. Enrollment limited to 12, by instructor’s permission. The senior workshop offers students the opportunity to work exclusively with classmates who are at the same high level of accomplishment in the major. This course is only offered by graduate faculty professors.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>WRIT UN3101</td>
<td>Senior Fiction Workshop</td>
</tr>
<tr>
<td>WRIT UN3201</td>
<td>Senior Nonfiction Workshop</td>
</tr>
<tr>
<td>WRIT UN3301</td>
<td>Senior Poetry Workshop</td>
</tr>
</tbody>
</table>

Seminar Curriculum (12 points)

The creative writing seminars form the intellectual ballast of our program. Our seminars offer a close examination of literary techniques such as plot, point of view, tone, and voice. They seek to inform and inspire students by exposing them to a wide variety of approaches in their chosen genre. Our curriculum, via these seminars, actively responds not only to historical literary concerns, but to contemporary ones as well. Extensive readings are required, along with short critical papers and/or creative exercises. By closely analyzing diverse works of literature and participating in roundtable discussions, writers build the resources necessary to produce their own accomplished creative work.

Creative writing majors select 12 points within the division. Any 4 seminars will fulfill the requirement, no matter the student’s chosen genre concentration. Below is a sampling of our seminars. The list of seminars currently being offered can be found in the “Courses” section.

These seminars offer close examination of literary techniques such as plot, point of view, tone, suspense, and narrative voice. Extensive readings are required, along with creative exercises.

FICTION

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>WRIT UN3121</td>
<td>Fiction Seminar: How To Build A Person</td>
</tr>
<tr>
<td>WRIT UN3117</td>
<td>Fiction Seminar: The Here &amp; Now</td>
</tr>
<tr>
<td>WRIT UN3122</td>
<td>First Novels: How They Work</td>
</tr>
<tr>
<td>WRIT UN3120</td>
<td>Fiction Seminar: The Craft Of Writing Dialogue</td>
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NONFICTION

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>WRIT UN3213</td>
<td>Nonfiction Seminar: The Literary Reporter</td>
</tr>
<tr>
<td>WRIT UN3215</td>
<td>WRITING THE VISUAL</td>
</tr>
<tr>
<td>WRIT UN3216</td>
<td>Nonfiction Seminar: Truths &amp; Facts</td>
</tr>
<tr>
<td>WRIT UN3217</td>
<td>Nonfiction Seminar: Science And Sensibility</td>
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</table>

POETRY

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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>WRIT UN2311</td>
<td>Poetry Seminar: Traditions in Poetry</td>
</tr>
<tr>
<td>WRIT UN3313</td>
<td>Poetry Seminar: The Crisis of the I</td>
</tr>
<tr>
<td>WRIT UN3314</td>
<td>Poetry Seminar: 21st Century American Poetry and Its Concerns</td>
</tr>
<tr>
<td>WRIT GU4310</td>
<td>Poetry Seminar - Witness, Record, Document: Poetry &amp; Testimony</td>
</tr>
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</table>
CROSS GENRE

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>WRIT GU4011</td>
<td>Cross Genre Seminar: Imagining Berlin</td>
</tr>
<tr>
<td>WRIT GU4012</td>
<td>Cross Genre Seminar: Diva Voice, Diva Style, Diva Lyrics</td>
</tr>
<tr>
<td>WRIT UN3016</td>
<td>Cross Genre Seminar: Walking</td>
</tr>
<tr>
<td>WRIT UN3013</td>
<td>Cross-Genre Seminar: Process Writing &amp; Writing Process</td>
</tr>
</tbody>
</table>

Related Courses (9 points)

Drawn from various departments, these courses provide concentrated intellectual and creative stimulation, as well as exposure to ideas that enrich students' artistic instincts. Courses may be different for each student writer. Students should consult with faculty advisers to determine the related courses that best inform their creative work.
THE DEPARTMENT OF DANCE

Mission

The Barnard College Department of Dance, located in a world dance capital, offers an interdisciplinary program that integrates the study of dance within a liberal arts setting of intellectual and creative exploration. The major builds upon studio courses, the Department’s productions at Miller Theater, New York Live Arts, and other venues, as well as a rich array of dance studies courses, allowing students’ creative work to develop in dialogue with critical inquiry into the history, culture, theory and forms of western and non-western performance, typically enhanced by study in other disciplines. Students work with accomplished artists whose work enriches contemporary American dance; they also study with outstanding research scholars.

Making, thinking about, and writing about art are an essential part of the liberal arts education. For this reason, the Department of Dance offers technique courses for students of all levels of expertise, while opening its other courses to majors and non-majors alike, who may also audition for its productions. The Department partners with cultural institutions in New York City to connect students with the professional world.

Student Learning Outcomes for the Major and Concentration

Students graduating with a major in Dance should be able to attain the following outcomes:

• Apply critical thinking, reading, and writing skills to dance-related texts and choreography.
• Develop the knowledge and research skills to explore the dance past in writing, orally, and in performance.
• Present interpretations of dance-related texts orally, in writing, and in performance.
• Apply library, archival, and internet research skills to dance scholarship and choreography.
• Demonstrate improved efficiency and expressivity in dance technique.
• Demonstrate growing technical understanding and fluency in dance technique.
• Create original dances, dance/theater works or dance-based, mixed media works.
• Collaborate with an artist in the creation of original dance works.
• Participate in the creative process through the creation and interpretation of choreography.

• Apply interdisciplinary research methods to dance scholarship and choreography.
• Apply historical research methods to dance scholarship and choreography.
• Demonstrate conceptual and methodological approaches for studying world dance forms through research and writing.
• Demonstrate the ability to understand cultural and historical texts in relation to dance forms.
• Apply anatomical knowledge to movement and movement concepts.
• Evaluate the theoretical and artistic work of peers.
• Communicate with an audience in oral presentations and dance performance.
• Understand and interpret the language and form of an artist’s choreography.
• Solve technical problems in dance movement.
• Apply musical knowledge to movement and choreography.
• Design choreographic movement and structures.

Dance Technique Courses

Level I courses, except for global and somatic courses, have no prerequisite and students receive a Pass/Fail grade. All other courses must be taken for a letter grade and require a placement audition (held at the first meeting of classes) or the permission of the instructor. These courses may be taken to fulfill the physical education requirement.

Ballet

Technique of classical ballet emphasizing proper alignment and graduated study of its vocabulary. Artistry of articulation, phrasing, dynamics, and nuance in the broad range of classical materials are addressed at each level.

Modern

The study of contemporary dance based on the work of the 20th and 21st century innovators. Aesthetic principles of modern dance will be taught with increased technical demands required at each successive level.

Global and Somatic Forms

The study of dance forms including classical Spanish, Jazz, Tap, West African, Afro-Cuban, and Indian.

Professor: Paul A. Scolieri (Chair & Director of Undergraduate Studies)
Professor of Professional Practice: Colleen Thomas-Young
Associate Professor of Professional Practice: Marjorie Folkman
Associate Professor of Professional Practice: Gabri Christa
Assistant Professor: Seth Williams
Senior Associate: Katie Glasner

Adjunct Faculty: Cynthia Anderson, Jennifer Archibald, Rebecca Bliss, Siobhan Burke, Maguette Camara, Antonio

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Carmena, Uttara Coorlawala, Allison Easter, Caroline Fermin, Chisa Hidaka, Katiti King, Melinda Marquez, Jodi Melnick, Vincent McCloskey, Carol Teitelbaum, Caitlin Trainor, Ashley Tuttle

Technical Director and Lighting Designer: Tricia Toliver
Music Director: Robert Boston
Senior Administrative Assistant: Diane Roe

MAJOR IN DANCE
Majors must complete eleven academic courses (six required, five elective) and a minimum of eight 1-point technique courses (minimum 42 credits). All majors write a senior thesis as part of their coursework.

The required courses for the major in dance are distributed as follows:

Dance History
The following two courses in Dance History must be completed before the fall of the senior year:
- DNCE BC2565 World Dance History 3
- DNCE BC3001 HISTORY OF THEATRICAL DANCING 3

Movement Science
Select one or more of the following:
- DNCE BC2501 BIOMECHANICS FOR THE DANCER 3
- DNCE BC2562 Movement Analysis 3

Composition
One course in Composition must be completed before the fall of the senior year.
- DNCE BC2564 Dance Composition: Content 3
- DNCE BC3565 Composition: Collaboration and the Creative Process 3
- DNCE BC3566 Composition: Site Specific and Experimental Methods 3
- DNCE BC2563 Dance Composition: Form 3

Senior Work
Seniors planning to write a combined thesis must request approval from both departments and notify the Registrar. All majors must complete two semesters of senior work. The following course, which culminates in a 25-30-page written thesis and an oral presentation to the Department at the end of the semester, is required of all seniors:
- DNCE BC3591 Senior Seminar in Dance 4

In addition, all majors must take one of the following two courses, depending on whether the senior requirement is completed with a creative project or a two-semester written thesis:
- DNCE BC3592 Senior Project: Research for Dance 4
- DNCE BC3593 Senior Project: Repertory for Dance 3

Students who are double majors may request permission to write a two-semester combined thesis.

Electives
Five additional 3- or 4-point courses, chosen in consultation with the major advisor, are required. Electives may be chosen from among the departmental offerings listed above or below, including additional coursework in Composition, Movement Science, and/or Senior Work beyond the major requirement.

<table>
<thead>
<tr>
<th>History/Criticism:</th>
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</thead>
<tbody>
<tr>
<td>DNCE BC2570 Dance in New York City</td>
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<tr>
<td>DNCE BC2575 Choreography for the American Musical</td>
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<tr>
<td>DNCE BC2580 Tap as an American Art Form</td>
</tr>
<tr>
<td>DNCE BC3000 From Page to Stage: Interactions of Literature and Choreography</td>
</tr>
<tr>
<td>DNCE BC3200 Dance in Film</td>
</tr>
<tr>
<td>DNCE BC3567 Dance of India</td>
</tr>
<tr>
<td>DNCE BC3570 Latin American and Caribbean Dance: Identities in Motion</td>
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<tr>
<td>DNCE BC3575 George Balanchine and the Reinvention of Modern Ballet</td>
</tr>
<tr>
<td>DNCE BC3576 DANCE CRITICISM</td>
</tr>
<tr>
<td>DNCE BC3577 Performing the Political: Embodying Change in American Performance</td>
</tr>
<tr>
<td>DNCE BC3578 Traditions of African-American Dance</td>
</tr>
<tr>
<td>DNCE BC3580 History of Social Dancing: Dance Crazes from the Waltz to Flash Mobs</td>
</tr>
<tr>
<td>DNCE BC3583 Gender and Historical Memory in American Dance of the 1930's to the Early 1960's</td>
</tr>
<tr>
<td>DNCE BC3980 Performing the Political: Embodying Change in American Performance</td>
</tr>
<tr>
<td>DNCE BC3981 Inventing American Modern Dance: Ruth St. Denis and Ted Shawn</td>
</tr>
<tr>
<td>DNCE BC3982 Diaghilev's Ballets Russes and Its World</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Studio/Performance:</th>
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<tbody>
<tr>
<td>DNCE BC2555 Ensemble Dance Repertory (Modern Dance)</td>
</tr>
<tr>
<td>DNCE BC2556 Ensemble Dance Repertory: Ballet</td>
</tr>
<tr>
<td>DNCE BC2557 Evolution of Spanish Dance Style</td>
</tr>
<tr>
<td>DNCE BC2558 Tap Ensemble</td>
</tr>
<tr>
<td>DNCE BC2567 Music for Dance</td>
</tr>
<tr>
<td>DNCE BC3571 Solo Repertory: Performance Styles</td>
</tr>
<tr>
<td>DNCE BC3601 - DNCE BC3604 Rehearsal and Performance in Dance and Rehearsal and Performance in Dance</td>
</tr>
</tbody>
</table>

Overview of Major Requirements (11 total, plus 8 technique courses)
- 1 Movement Science
- 1 Composition
• 2 History
• 1 Senior Seminar
• 1 Senior Project (Research in Dance or Repertory for Dance)
• 5 Electives
• 8 Technique Courses

Senior Work
All dance majors must complete two semesters of senior work. DNCE BC3591 Senior Seminar in Dance given in the fall semesters, requires a 25-30 page written thesis and an oral presentation to the Department at the end of the semester. The second semester is usually a performance project for which the student registers in DNCE BC3593 Senior Project: Repertory for Dance. Students may also choose to do a two-semester thesis, registering in DNCE BC3592 Senior Project: Research for Dance. Students who are double majors may request permission to do a two-semester combined thesis.

Overview of Major Requirements (11 total, plus 8 technique classes)
• 1 Movement Science
• 1 Composition
• 1 History
• 1 Writing
• 1 Senior Seminar
• 1 Senior Project (Research in Dance or Repertory for Dance)
• 5 Electives
• 8 Technique Classes

CONCENTRATION IN DANCE
The concentration in dance is identical to the major except that only two electives are required.

For the major requirements, please see above.

Overview of Concentration Requirements (8 total, plus 8 technique classes)
• 1 Movement Science
• 1 Composition
• 2 History
• 1 Senior Seminar
• 1 Senior Project (Research in Dance or Repertory for Dance)
• 2 Electives
• 8 Technique Classes

SCHOOL OF ENGINEERING AND APPLIED SCIENCES
MINOR IN DANCE
The SEAS Dance Minor consists of five 3-point courses. Please note that no performance/choreography courses below count toward the non-tech requirement for SEAS students:

1.-2. Two of the following history/criticism courses:
DNCE BC2565 World Dance History
DNCE BC2570 Dance in New York City
DNCE BC3001 HISTORY OF THEATRICAL DANCING
DNCE BC3570 Latin American and Caribbean Dance: Identities in Motion
DNCE BC3574 Inventing the Contemporary: Dance Since the 1960s
DNCE BC3576 DANCE CRITICISM
DNCE BC3577 Performing the Political: Embodying Change in American Performance
DNCE BC3580 History of Social Dancing: Dance Crazes from the Waltz to Flash Mobs

3.-4. Two of the following performance/choreography courses:
DNCE BC2555 Ensemble Dance Repertory (Modern Dance)
DNCE BC2556 Ensemble Dance Repertory: Ballet
DNCE BC3571 Solo Repertory: Performance Styles

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Drama and Theatre Arts

507 Milbank Hall
212-854-2080
212-280-8764 (fax)
Department Administrator: Coretta Grant
Faculty Department Assistant: Valerie Coates

The Barnard and Columbia undergraduate theatre program engages the disciplines of drama, theatre, and performance studies as a distinctive mode of intellectual and artistic inquiry. Majors take foundational coursework in the literary, cultural, and embodied traditions of western and nonwestern performance as well as in the practices of acting, directing, design, and playwriting. All majors then specialize in a specific area and undertake advanced thesis work, leading either to a formal essay of original research, or to an artistic project (in acting, design, directing, dramaturgy, playwriting, or solo performance) that combines the practices of research and artistic creation.

While Barnard and Columbia students fulfill the overall graduation requirements of their respective institutions, major requirements for the Barnard Major in Theatre/Columbia Major in Drama and Theatre Arts are identical, and the majority of required coursework is offered through the Barnard College Department of Theatre. Barnard and Columbia students receive their degrees from their respective colleges of Columbia University.

The Department’s season of productions in the Minor Latham Playhouse and the Glicker-Milstein Black Box Theatre is a crucible of investigation: the place where professional directors and designers collaborate with undergraduates, using a wide range of classic and contemporary plays and performance practices to shape insights unique to theatrical inquiry today. Whether it’s Shakespeare or Soyinka or Caryl Churchill, or the directing, solo performance, and playwriting theses in the Senior Thesis Festival, Department of Theatre productions are both a learning process and a scene of encounter, where perceptions are shaped for the attention and creative response of a larger public.

Students interested in majoring in Theatre should consider taking three or four of the required classes in their first two years of study: Western Theatre Traditions: Classic to Romantic, Western Theatre Traditions: Modern and/or a course fulfilling the “world theatre” requirement offered in the Department of Theatre, and at least one class in acting, design, directing, or playwriting (preferably in the area you might choose as areas of specialization). Students thinking about a research focus might consider an additional dramatic literature, theatre studies, or performance studies class early in their studies; students thinking about an acting or design focus, for example, might consider additional classes in those areas in the second or third year of study.

Student Learning Objectives

Upon completion of the major, successful students will be able to attain the following objectives:

- Assess critically the artistic ambitions of contemporary theatrical performance, and of literary, critical and theoretical issues involved in the interpretation of dramatic literature and theatrical performance;
- Create with proficiency in at least one area of creative work in the field: critical/research writing, acting, directing, design, playwriting, and dramaturgy.

Areas of Concentration

Drama and Theatre Studies Student Learning Objectives

Students successfully completing drama and theatre studies coursework, or concentrating in drama and theatre studies, should be able to attain the following objectives:

1. Write clearly about dramatic literature, and about performance, including where applicable film performance;
2. Synthesize and evaluate contemporary criticism and research scholarship in writing;
3. Know specific authors, movements, periods, styles, and ideological structures in the history of drama, theatre, and performance (i.e., Shakespeare, American drama, Performative Cultures of the Third Reich, Black Theatre);
4. Use critical, theoretical, and historical concepts in the analysis of drama and performance.

Acting Student Learning Objectives

Students successfully completing a concentration in acting should be able to attain the following objectives:

1. Analyze dramatic texts and apply the analysis to developing a performable role/character;
2. Synthesize external elements with external elements (social mores, environment, historical context, status relationship to others) and internal elements (center of gravity, personal rhythm, speed, tempo) toward the expression of a character’s physicality and emotionality;
3. Recognize and apply the fundamental concepts of character development: objectives, obstacles, actions, given circumstances;
4. Develop vocal, physical and emotional awareness and imagination, and to explore techniques available to aid the actor in applying these elements in a conscious way during rehearsal and performance.

Design Student Learning Objectives

Students successfully completing a concentration in design should be able to attain the following objectives:
1. Analyze dramatic texts and translate that analysis into documents used in the production process (breakdowns, plots, etc.);
2. Collect images and texts that provide insight into the developing design idea, and accurately communicate historical and stylistic choices;
3. Demonstrate fluency with the craft of a design field – e.g. sketching, model making, drafting, sound and lighting plots, and associated software;
4. Perform collaboratively, adapting and informing their designs with ideas generated through conversation with colleagues, classmates, and advisors.

**Directing Student Learning Objectives**

Students successfully completing a concentration in directing should be able to attain the following objectives:

1. Recognize the different demands of different configurations of stage space;
2. Apply compositional tools;
3. Define production style and its influence on performance choices;
4. Communicate effectively with actors;
5. Analyze the historical, social, and aesthetic elements of a dramatic text as the basis for a directorial conception.

**Dramaturgy Student Learning Objectives**

Students successfully completing a concentration in dramaturgy should be able to attain the following objectives:

1. Apply important critical and theoretical concepts to the analysis of dramatic writing and theatrical performance;
2. Synthesize and evaluate contemporary research scholarship and apply it to a specific production, including biographical, historical, and interpretive information;
3. Write clearly and effectively about the goals of a production, its critical contexts and purposes;
4. Communicate the critical stakes of a performance to a director and cast; to be able to work with a director in fashioning those stakes;
5. Edit dramatic scripts for production.

**Playwriting Student Learning Objectives**

Students successfully completing a concentration in playwriting should be able to attain the following objectives:

1. Create an individual theatrical voice in writing;
2. Construct dramatic and theatrical events onstage;
3. Communicate supportive critique to fellow writers;
4. Interpret plot and story, and to employ language and spectacle creatively;
5. Recognize dramatic structures, and be able to shape and hold an audience’s attention.

**Stage and Production Management Student Learning Objectives**

Students successfully completing a concentration in stage and production management should be able to attain the following objectives:

1. Read and analyze a performance text from stage and production management perspectives;
2. Communicate with and coordinate the needs of all members of the production effectively;
3. Organize and manage the rehearsal process;
4. Develop and update the production budget

**Faculty:**

**Chair:** W.B. Worthen (Alice Brady Pels Professor in the Arts, Co-Director of Undergraduate Studies, Drama and Theatre Arts)

**Assistant Professor:** Paige Johnson

**Associate Professor:** Hana Worthen

**Professor of Professional Practice, Theatre, School of the Arts:** Steven Chaikelson

**Associate Professors of Professional Practice:** Sandra Goldmark, Alice Reagan

**Lecturers:** Gisela Cardenas, Shayoni Mitra

**Adjunct Lecturers:** Mana Allen, Daniel Baker, Andy Bragen, Kyle deCamp, Crystal Finn, Sharon Fogarty, Shannon Sindelar, Wendy Waterman

**Affiliated Faculty:**

Associate Professor: Maja Horn (Spanish and Latin American Cultures)

Senior Lecturers: Pam Cobrin (English, Director, Writing Program), Patricia Denison (English, Co-Director of Undergraduate Studies, Drama and Theatre Arts)

**Other officers of the University offering courses listed below:**

Professors: Austin E. Quigley, Jean Howard, Rebecca Kastleman, Julie Stone Peters

**Department Administrator:** Coretta Grant

**Technical Director:** Greg Winkler

**Production Manager:** Michael Banta

**Costume Shop Manager:** Kara Feely

**Faculty Department Assistant:** Valerie Coates

**Requirements for the Major**

Download the Theatre major self-audit form
A minimum of 36 credits is required to fulfill the requirements for the major. Students intending to major in Theatre should consult with the Department Chair in their sophomore year or earlier to plan a program; this consultation is required for Barnard students and strongly recommended for Columbia students. Twelve courses and one senior thesis (in Performance or in Research) are required as follows:

**Dramatic Literature and Theatre History**

World theatre and performance histories:

Both required:

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<tr>
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<tbody>
<tr>
<td>THTR UN3150</td>
<td>Western Theatre Traditions: Classic to Romantic</td>
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<td>THTR UN3151</td>
<td>WESTRN THTR TRAD: MODERN</td>
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Select one of the following:

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<th>Credits</th>
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<td>THTR UN3154</td>
<td>Theatre Traditions in a Global Context</td>
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<tr>
<td>THTR UN3155</td>
<td>TRADITIONAL INDIAN PERFORMANCE</td>
<td></td>
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<tr>
<td>THTR UN3156</td>
<td>MODERN ASIAN PERFORMANCE</td>
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</table>

Select one course in Drama, Theatre, and Performance Theory:

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<th>Course Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>THTR UN3140</td>
<td>Performing Women</td>
</tr>
<tr>
<td>THTR UN3160</td>
<td>Queer Performance</td>
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<tr>
<td>THTR UN3165</td>
<td>THEORIES OF PERFORMANCE STUDIES</td>
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<tr>
<td>THTR UN3166</td>
<td>Drama, Theatre, and Theory</td>
</tr>
<tr>
<td>ENTA UN3701</td>
<td>Drama, Theatre, Theory</td>
</tr>
</tbody>
</table>

Select one course in Shakespeare, may be taken in Theatre or English departments.

Select Two courses in dramatic literature, theatre studies, and/ or performance studies, taken in the Theatre Department or in another department with advisor’s approval. One course must be a seminar.

**Theatre Practice**

Select one course each in 3 of the following 4 areas:

**Acting**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>THTR UN3004</td>
<td>ACTING I</td>
</tr>
<tr>
<td>THTR UN3005</td>
<td>ACTING II</td>
</tr>
</tbody>
</table>

**Design**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>THTR UN3401</td>
<td>Sound Design</td>
</tr>
<tr>
<td>THTR UN3402</td>
<td>COSTUME DESIGN</td>
</tr>
<tr>
<td>THTR UN3403</td>
<td>LIGHTING DESIGN</td>
</tr>
<tr>
<td>THTR UN3404</td>
<td>SCENE DESIGN</td>
</tr>
<tr>
<td>THTR UN3405</td>
<td>PROBLEMS IN DESIGN</td>
</tr>
<tr>
<td>THTR UN 3203</td>
<td>Collaboration may be counted if not counted toward Directing</td>
</tr>
</tbody>
</table>

**Directing**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>THTR UN3200</td>
<td>DIRECTING I</td>
</tr>
<tr>
<td>THTR UN3201</td>
<td>DIRECTING II</td>
</tr>
</tbody>
</table>

**Playwriting**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>THTR UN3300</td>
<td>Playwriting Workshop</td>
</tr>
<tr>
<td>THTR UN3301</td>
<td>PLAYWRITING LAB</td>
</tr>
</tbody>
</table>

**Concentration**

All majors must take an additional TWO courses in the field of the Senior Thesis. *See below.

**Senior Thesis**

All students must take either THTR UN3997 or THTR UN3998:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>THTR UN3997</td>
<td>SENIOR THESIS IN PERFORMANCE (Acting, Design, Directing, Dramaturgy, Playwriting, Solo Performance)</td>
</tr>
<tr>
<td>THTR UN3998</td>
<td>SENIOR THESIS IN RESEARCH</td>
</tr>
</tbody>
</table>

* Prior to completing the Senior Thesis: Performance, majors must take an additional two courses in the field of the thesis (acting, design, dramaturgy, directing, playwriting, solo performance). Courses in acting, design, and directing are offered through the Department of Theatre. Courses in playwriting are offered through the Department of Theatre and the Department of English; a student who takes one of the playwriting classes above as part of the Theatre Practice requirement may take a playwriting course in English as one of the two additional playwriting courses required for the thesis. For theses in directing, students must take a dramaturgy course prior to the thesis year. For theses in dramaturgy, students take two additional courses in dramatic literature, theatre studies, or performance studies research; these courses may be drawn from courses in dramatic literature, theatre studies, and global performance traditions offered in the Theatre department, or from dramatic literature courses offered in other departments with the adviser’s approval. Dramaturgy thesis students may substitute one course in playwriting for one of the two additional courses. Students pursuing a solo performance thesis are required to have taken the Solo Performance course prior to the thesis semester (spring), among the three required courses in acting.

**Production Crew**

Theatre majors planning on completing a Senior Thesis in Performance (acting, design, directing, dramaturgy, playwriting, solo performance) are required to complete a run crew assignment.
and a crew head assignment prior to their final semester; to be in the strongest position for the thesis, ideally these assignments are completed during the junior year. Please see the section on Production Crew for more information.

**Studio Courses**

Please note that for Barnard students there is a limit on studio courses. Theatre majors may take 24 studio points in Theatre and an additional six in another discipline for a total of 30 studio points. Theatre Department studio courses are:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>THTR UN2420</td>
<td>Technical Production</td>
<td>3</td>
</tr>
<tr>
<td>THTR UN3004</td>
<td>ACTING I</td>
<td>3</td>
</tr>
<tr>
<td>THTR UN3005</td>
<td>ACTING II</td>
<td>3</td>
</tr>
<tr>
<td>THTR UN3006</td>
<td>ADVANCED ACTING</td>
<td>3</td>
</tr>
</tbody>
</table>

**Graduate Courses**

Only under special circumstances, and with the permission of the instructor, can undergraduates take graduate classes.
The undergraduate major in Earth and environmental sciences provides an understanding of the natural functioning of our planet and considers the consequences of human interactions with it. Our program for majors aims to convey an understanding of how the complex Earth system works at a level that encourages students to think creatively about the Earth system processes and how to address multidisciplinary environmental problems. The breadth of material covered provides an excellent background for those planning to enter the professions of law, business, diplomacy, public policy, teaching, journalism, etc. At the same time, the program provides sufficient depth so that our graduates are prepared for graduate school in one of the Earth sciences. The program can be adjusted to accommodate students with particular career goals in mind.

The department’s close affiliations with the Lamont-Doherty Earth Observatory, the American Museum of Natural History (AMNH), NASA’s Goddard Institute for Space Studies (GISS), the Earth Institute at Columbia (EI), and several departments within the Fu Foundation School of Engineering and Applied Sciences afford opportunities for student participation in a wide variety of current research programs. Summer employment, research, and additional educational opportunities are available at Lamont and GISS. The department encourages majors to become involved in a research project by their junior year.

All majors and concentrators, when planning their programs of study, should regularly consult the directors of undergraduate studies and make themselves aware of the requirements for their particular program.

**PROGRAMS OF STUDY**

**Environmental Science Major**

The environmental science major curriculum provides an introduction to a variety of fields of study relevant to the environment. Environmental science majors are required to take three semesters of introductory courses and to develop a grounding in basic physics, chemistry, biology, and mathematics. Here, students may select courses depending on their interest. With this introduction to the Earth’s environment and equipped with a knowledge of the basic sciences, students are prepared to choose a set of upper-level courses in consultation with an undergraduate adviser. All environmental science majors are required to complete a research project, providing a practical application of mastered course work. This research culminates in a senior thesis. The research and the thesis are usually done at Lamont-Doherty Earth Observatory with guidance from a faculty member or a research scientist. However, other options are also possible.

Environmental science majors have an option to complete the special concentration in environmental biology for environmental science majors.

**Earth Science Major**

The major in Earth science follows a similar rationale but is designed to allow students to pursue particular fields of the Earth sciences in greater depth. Compared with the environmental science major, one fewer introductory course is required, while one additional advanced course should be part of the plan of study. The Earth science major also offers the possibility of in-depth field experience through a six- to eight-week geology summer field course, arrangements for which are made through another university. The research and senior thesis capstone requirements are the same as for the environmental science major. The geology summer field course may be used as an alternative means of fulfilling the capstone requirement in the Earth science major.

**Concentrations**

The program for concentrators serves students who want more exposure to Earth and environmental science than is provided by introductory-level courses. The program aims to provide concentrators with experience in data analysis and a thorough introduction to the Earth's systems.

The concentrations in environmental science and in Earth science are designed to give students an understanding of how the Earth works and an introduction to the methods used to
investigate Earth processes, including their capabilities and limitations. Concentrators often join the social professions (e.g., business, law, medicine, etc.) and take with them a strong scientific background. They take the same introductory courses as the majors, but fewer basic science and upper-level courses are required.

In addition to the environmental science and Earth science concentrations, the department sponsors a special concentration which must be done in conjunction with the environmental biology major. Students should be aware that they must complete the environmental biology major in order to receive credit for the special concentration. There is also a special concentration in environmental biology for environmental science majors sponsored by the Department of Ecology, Evolution, and Environmental Biology.

DEPARTMENTAL HONORS
The Department of Earth and Environmental Science awards departmental honors to the major or majors in Earth science or environmental science judged to have the best overall academic record. The award is accorded to no more than 10% of the graduating class, or one student in the case of a class smaller than 10. A grade point average of at least 3.6 in the major and a senior thesis or equivalent research of high quality are required. Students who wish to be considered should contact the director of undergraduate studies early in their senior year.

PROFESSORS
Nicholas Christie-Blick
Joel E. Cohen
Peter B. de Menocal
Hugh Ducklow
Sonya Dyhrman
Peter Eisenberger
Göran Ekström
Arlene M. Fiore
Steven L. Goldstein
Arnold L. Gordon
Kevin L. Griffin
Alex Halliday
Sidney R. Hemming (Chair)
Bärbel Hönsch
Peter B. Kelemen
Galen McKinley
Jerry F. McManus (Associate Chair)
William H. Menke
John C. Mutter
Meredith Nettles
Paul E. Olsen
Terry A. Plank
Lorenzo M. Polvani
G. Michael Purdy
Peter Schlosser
Christopher H. Scholz
Adam H. Sobel

Sean C. Solomon
Marc Spiegelman
Martin Stute (Barnard)
Maria Tolstoy
Renata Wentzczovich

ASSOCIATE PROFESSORS
Ryan Abernathey
Kerry Key
Heather Savage

ASSISTANT PROFESSORS
Jacqueline Austermann
Roisin Commane
Jonathan Kingslake
Yves Moussallam

ADJUNCT PROFESSORS
Robert F. Anderson
W. Roger Buck IV
Denton Ebel
John J. Flynn
James Gaherty
Lisa M. Goddard
Arthur Lerner-Lam
Alberto Malinverno
Douglas G. Martinson
Ronald L. Miller
Mark A. Norell
Dorothy M. Peteet
Maureen Raymo
Andrew Robertson
Joerg M. Schaefer
Christopher Small
Minfang Ting
Felix Waldhauser
Spahr C. Webb
Gisela Winckler

ADJUNCT ASSOCIATE PROFESSORS
Alessandra Giannini
Andrew Juhl

LECTURERS
Pietro Ceccato
Cornelia Class
Andreas Turnherr
Kevin Uno
Christopher Zappa

ASSOCIATES
Erin Coughlin
Brian Kahn
MAJOR IN EARTH SCIENCE

Please read Guidelines for all Earth and Environmental Sciences Majors, Concentrators, and Special Concentrators above.

The major in Earth science requires a minimum of 45.5 points, distributed as follows:

Foundation Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>EESC UN2100</td>
<td>Earth’s Environmental Systems: The Climate System</td>
</tr>
<tr>
<td>EESC UN2200</td>
<td>Earth’s Environmental Systems: The Solid Earth</td>
</tr>
</tbody>
</table>

Students who wish to take both EESC UN2100 Earth’s Environmental Systems: The Climate System and EESC UN2300 Earth’s Environmental Systems: The Life System can include one of these under breadth and related fields below.

Supporting Mathematics and Science Courses

One semester of Calculus at the level of Calculus I or higher (3 credits)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH UN1101</td>
<td>CALCULUS I</td>
</tr>
</tbody>
</table>

Select one of the following three-course sequences:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM UN1403</td>
<td>GENERAL CHEMISTRY I-LECTURES</td>
</tr>
<tr>
<td>- CHEM UN1404</td>
<td>and GENERAL CHEMISTRY II-LECTURES</td>
</tr>
<tr>
<td>- PHYS UN1201</td>
<td>and General Physics I</td>
</tr>
<tr>
<td>CHEM UN1403</td>
<td>GENERAL CHEMISTRY I-LECTURES</td>
</tr>
<tr>
<td>- PHYS UN1201</td>
<td>and General Physics I</td>
</tr>
<tr>
<td>- PHYS UN1202</td>
<td>and General Physics II</td>
</tr>
</tbody>
</table>

Capstone Experience

Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>EESC BC3800</td>
<td>Senior Research Seminar</td>
</tr>
<tr>
<td>- EESC UN3901</td>
<td>and Environmental Science Senior Seminar</td>
</tr>
<tr>
<td>EESC BC3801</td>
<td>Senior Research Seminar</td>
</tr>
<tr>
<td>- EESC UN3901</td>
<td>and Environmental Science Senior Seminar</td>
</tr>
</tbody>
</table>

A six to eight week summer geology field course

Breadth and Related Fields Requirement

A minimum of 6 points (two courses) chosen with the major adviser are required.

Breadth and related field courses are science courses relevant for an Earth science major that do not require an Earth science background. Several such courses are offered at the 2000-, 3000- and 4000-level in the department and at Barnard. Examples include:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>EESC UN2100</td>
<td>Earth’s Environmental Systems: The Climate System</td>
</tr>
</tbody>
</table>
EESC UN2300 Earth's Environmental Systems: The Life System
EESC UN3010 Field Geology
EESC BC3017 Environmental Data Analysis
EESC GU4050 Global Assessment and Monitoring Using Remote Sensing
EESC GU4600 Earth Resources and Sustainable Development
EESC GU4917 Earth/Human Interactions
EAEE E2002 ALTERNATIVE ENERGY RESOURCES

Also included among breadth and related fields courses are science, mathematics, statistics, and engineering courses offered by other departments that count toward fulfilling degree requirements in those departments.

**Depth Requirement**

A minimum of 12 points (four courses) chosen with the major adviser to provide depth in the field of Earth science.

These courses build on the foundation and supporting courses listed above and provide a coherent focus in some area of Earth science. Students should include at least one of the following in their course of study:

EESC UN3101 Geochemistry for a Habitable Planet
or EESC UN3201 Solid Earth Dynamics

Areas of focus include one of the courses listed above and three or more additional courses. Students are not required to specialize in a focus area, but examples are given below for those who choose to do so.

**Geological Science**

EESC GU4090 Introduction to Geochronology and Thermochronology
EESC GU4113 INTRODUCTION TO MINERALOGY I
EESC GU4223 SEDIMENTARY GEOLOGY
EESC GU4230 Crustal Deformation
EESC GU4701 Introduction to Igneous Petrology
EESC GU4887 Isotope Geology I
EESC GU4947 PLATE TECTONICS

It is strongly recommended that students focusing in geological science take the summer geology field course as their capstone experience.

**Geochemistry**

EESC UN3015 The Earth's Carbon Cycle
EESC BC3016 Environmental Measurements
EESC BC3200 Ecotoxicology
EESC GU4090 Introduction to Geochronology and Thermochronology
EESC GU4113 INTRODUCTION TO MINERALOGY I
EESC GU4701 Introduction to Igneous Petrology
EESC GU4885 The Chemistry of Continental Waters
EESC GU4887 Isotope Geology I
EESC GU4926 Principles of Chemical Oceanography

It is recommended that students focusing in geochemistry take CHEM UN1403-CHEM UN1404 General Chemistry I and II, and PHYS UN1201 General Physics I as their supporting science sequence.

**Atmosphere and Ocean Science**

EESC GU4008 Introduction to Atmospheric Science
EESC GU4920 Paleoclimatology
EESC GU4924 Introduction to Atmospheric Chemistry
EESC GU4925 Principles of Physical Oceanography
EESC GU4926 Principles of Chemical Oceanography

It is recommended that students focusing on atmosphere and ocean science also take a course in fluid dynamics and a course in differential equations.

**Solid Earth Geophysics**

EESC GU4230 Crustal Deformation
EESC GU4300 The Earth's Deep Interior
EESC GU4937 Cenozoic Paleoclimatology
EESC GU4947 PLATE TECTONICS
EESC GU4949 Introduction to Seismology

It is recommended that students focusing in solid Earth geophysics take PHYS UN1201-PHYS UN1202 General Physics I and II, and CHEM UN1403 General Chemistry I as their supporting science sequence and also take MATH UN1201 Calculus II.

**Climate**

EESC UN3015 The Earth's Carbon Cycle
EESC BC3025 Hydrology
EESC GU4008 Introduction to Atmospheric Science
EESC GU4330 Introduction to Terrestrial Paleoclimate
EESC GU4835 Wetlands and Climate Change
EESC GU4920 Paleoclimatology
EESC GU4924 Introduction to Atmospheric Chemistry
EESC GU4925 Principles of Physical Oceanography
EESC GU4937 Cenozoic Paleoclimatology

**Paleontology**

EESC GU4223 SEDIMENTARY GEOLOGY
EESC GU4550 Plant Ecophysiology
EESC GU4920 Paleoclimatology
EESC GU4924 Introduction to Atmospheric Chemistry
EESC GU4937 Cenozoic Paleoclimatology
It is recommended that students focusing in paleontology take EESC UN2300 Earth's Environmental Systems: The Life System, as one of their foundation courses.

**MAJOR IN ENVIRONMENTAL SCIENCE**

Please read Guidelines for all Earth and Environmental Sciences Majors, Concentrators, and Special Concentrators above.

The major in environmental science requires a minimum of 47 points, distributed as follows:

**Foundation Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EESC UN2100</td>
<td>Earth's Environmental Systems: The Climate System</td>
</tr>
<tr>
<td>EESC UN2200</td>
<td>Earth's Environmental Systems: The Solid Earth</td>
</tr>
<tr>
<td>EESC UN2300</td>
<td>Earth's Environmental Systems: The Life System</td>
</tr>
</tbody>
</table>

**Supporting Mathematics and Science Courses**

One semester of Calculus at the level of Calculus I or higher (3 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH UN1101</td>
<td>Calculus I</td>
</tr>
</tbody>
</table>

Select one of the following three-course sequences:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM UN1403 - CHEM UN1404 - PHYS UN1201</td>
<td>General Chemistry I-Lectures and General Chemistry II-Lectures and General Physics I</td>
</tr>
<tr>
<td>CHEM UN1403 - PHYS UN1201 - PHYS UN1202</td>
<td>General Chemistry I-Lectures and General Physics I and General Physics II</td>
</tr>
<tr>
<td>CHEM UN1403 - EEBB UN2001 - PHYS UN1201</td>
<td>General Chemistry I-Lectures and Environmental Biology I: Elements to Organisms and General Physics I</td>
</tr>
</tbody>
</table>

**Capstone Experience**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EESC BC3800 or EESC BC3801</td>
<td>Senior Research Seminar</td>
</tr>
<tr>
<td>EESC UN3901</td>
<td>Environmental Science Senior Seminar</td>
</tr>
</tbody>
</table>

**Breadth and Related Fields Requirement**

A minimum of 6 points (two courses) chosen with the major adviser are required.

Breadth and related field courses are science courses relevant for an environmental science major that do not require an environmental science background. Several such courses are offered at the 2000-, 3000- and 4000-level in the department and at Barnard. Examples include:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EESC BC3017</td>
<td>Environmental Data Analysis</td>
</tr>
<tr>
<td>EESC GU4050</td>
<td>Global Assessment and Monitoring Using Remote Sensing</td>
</tr>
<tr>
<td>EESC GU4600</td>
<td>Earth Resources and Sustainable Development</td>
</tr>
<tr>
<td>EESC GU4917</td>
<td>Earth/Human Interactions</td>
</tr>
<tr>
<td>EESC UN3010</td>
<td>Field Geology</td>
</tr>
</tbody>
</table>

Also included among breadth and related fields courses are science, mathematics, statistics, and engineering courses offered by other departments that count toward fulfilling degree requirements in those departments.

**Depth Requirement**

A minimum of 9 points (three courses) chosen with the major adviser to provide depth in the field of environmental science.

These courses build on the foundation and supporting courses listed above and provide a coherent focus in some area of environmental science. Students should include at least one of the following in their course of study:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EESC UN3101</td>
<td>Geochemistry for a Habitable Planet</td>
</tr>
<tr>
<td>or EESC UN3201</td>
<td>Solid Earth Dynamics</td>
</tr>
</tbody>
</table>

Areas of focus include one of the courses listed above and two or more additional courses. Students are not required to specialize in a focus area, but examples are given below for those who choose to do so.

**Environmental Geology**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EESC GU4076</td>
<td>Geologic Mapping</td>
</tr>
<tr>
<td>EESC GU4880</td>
<td>Paleobiology and Earth System History</td>
</tr>
<tr>
<td>EAEE E3221</td>
<td>Course EAEE E3221 Not Found</td>
</tr>
</tbody>
</table>

It is recommended that students focusing in environmental geology also take EESC W4050 Remote Sensing.

**Environmental Geochemistry**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EESC UN3015</td>
<td>The Earth's Carbon Cycle</td>
</tr>
<tr>
<td>EESC GU4885</td>
<td>The Chemistry of Continental Waters</td>
</tr>
<tr>
<td>EESC GU4887</td>
<td>Isotope Geology I</td>
</tr>
<tr>
<td>EESC GU4924</td>
<td>Introduction to Atmospheric Chemistry</td>
</tr>
<tr>
<td>EESC GU4888</td>
<td>Stable Isotope Geochemistry</td>
</tr>
<tr>
<td>EESC GU4926</td>
<td>Principles of Chemical Oceanography</td>
</tr>
</tbody>
</table>

**Hydrology**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EESC GU4076</td>
<td>Geologic Mapping</td>
</tr>
<tr>
<td>EESC GU4835</td>
<td>Wetlands and Climate Change</td>
</tr>
<tr>
<td>EESC GU4885</td>
<td>The Chemistry of Continental Waters</td>
</tr>
<tr>
<td>EESC BC3025</td>
<td>Hydrology</td>
</tr>
</tbody>
</table>
### CONCENTRATION IN EARTH SCIENCE

Please read Guidelines for all Earth and Environmental Sciences Majors, Concentrators, and Special Concentrators above.

The concentration in Earth science requires a minimum of 25 points, distributed as follows:

#### Foundation Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EESC UN2100</td>
<td>Earth's Environmental Systems: The Climate System</td>
</tr>
<tr>
<td>or EESC UN2300</td>
<td>Earth's Environmental Systems: The Life System</td>
</tr>
<tr>
<td>EESC UN2200</td>
<td>EARTH'S ENVIRONMENTAL SYSTEMS: THE SOLID EARTH</td>
</tr>
</tbody>
</table>

#### Supporting Mathematics and Science Courses

Two science or mathematics courses (6-7 points) selected from among those listed for the Earth science major above.

#### Depth and Breadth and Related Fields Requirements

A minimum of 10 points (typically three courses) is required as follows:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EESC UN3101</td>
<td>Geochemistry for a Habitable Planet</td>
</tr>
<tr>
<td>or EESC UN3201</td>
<td>Solid Earth Dynamics</td>
</tr>
</tbody>
</table>

One additional course selected from those listed under either Depth Requirement or Breadth and Related Fields Requirement for the Earth science major above.

The third course selected from those listed under either Depth Requirement or Breadth and Related Fields Requirement for the Earth science major above.

### CONCENTRATION IN ENVIRONMENTAL SCIENCE

Please read Guidelines for all Earth and Environmental Sciences Majors, Concentrators, and Special Concentrators above.

The concentration in environmental science requires a minimum of 25.5 points, distributed as follows:

#### Foundation Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EESC UN2100</td>
<td>Earth's Environmental Systems: The Climate System</td>
</tr>
<tr>
<td>EESC UN2200</td>
<td>EARTH'S ENVIRONMENTAL SYSTEMS: THE SOLID EARTH</td>
</tr>
<tr>
<td>EESC UN2300</td>
<td>Earth's Environmental Systems: The Life System</td>
</tr>
</tbody>
</table>

#### Supporting Mathematics and Science Courses

Two science or mathematics courses (6-7 points) selected from among those listed for the environmental science major above.

#### Depth and Breadth and Related Fields Requirements

A minimum of 6 points (two courses) is required as follows:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EESC UN3101</td>
<td>Geochemistry for a Habitable Planet</td>
</tr>
<tr>
<td>or EESC UN3201</td>
<td>Solid Earth Dynamics</td>
</tr>
</tbody>
</table>

One additional course selected from those listed under either Depth Requirement or Breadth and Related Fields Requirement for the environmental science major above.

### SPECIAL CONCENTRATION IN ENVIRONMENTAL SCIENCE FOR MAJORS IN ENVIRONMENTAL BIOLOGY

Please read Guidelines for all Earth and Environmental Sciences Majors, Concentrators, and Special Concentrators above.

The Department of Earth and Environmental Sciences sponsors a special concentration which must be done in conjunction with the environmental biology major. Students should be aware that they must complete the environmental biology major in order to receive credit for the special concentration.

The special concentration in environmental science requires a minimum of 31.5 points, distributed as follows:

#### Introductory Environmental Science (13.5 points)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EESC UN2100</td>
<td>Earth's Environmental Systems: The Climate System</td>
</tr>
<tr>
<td>EESC UN2200</td>
<td>EARTH'S ENVIRONMENTAL SYSTEMS: THE SOLID EARTH</td>
</tr>
</tbody>
</table>
Earth and Environmental Sciences

Introductory Science (6 points)

Two courses in chemistry, physics, mathematics, or environmental biology from the supporting mathematics and science list for the environmental science major above.

Advanced Environmental Science (12 points)

Four courses at the 3000-level or above chosen from those recommended for the environmental science major above.

Advanced courses used to fulfill requirements in the environmental biology major cannot count toward requirements for the special concentration.

SPECIAL CONCENTRATION IN ENVIRONMENTAL BIOLOGY FOR MAJORS IN ENVIRONMENTAL SCIENCE

Please read Guidelines for all Earth and Environmental Sciences Majors, Concentrators, and Special Concentrators above.

The Department of Ecology, Evolution, and Environmental Biology sponsors a special concentration which must be done in conjunction with the environmental science major. Students should be aware that they must complete the environmental science major in order to receive credit for the special concentration.

The special concentration in environmental biology requires a minimum of 39 points, distributed as follows:

Introductory Environmental Biology and Environmental Science (17 points)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EEEB UN2001</td>
<td>Environmental Biology I: Elements to Organisms</td>
</tr>
<tr>
<td>EESC UN2100</td>
<td>Earth’s Environmental Systems: The Climate System</td>
</tr>
<tr>
<td>EESC UN2200</td>
<td>EARTH’S ENVIRONMENTAL SYSTEMS: THE SOLID EARTH</td>
</tr>
<tr>
<td>EEEB UN2002</td>
<td>Environmental Biology II: Organisms to the Biosphere</td>
</tr>
</tbody>
</table>

Introductory Science (13 points)

Select one of the following chemistry sequences:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM UN1403 - CHEM UN1404</td>
<td>GENERAL CHEMISTRY I-LECTURES and GENERAL CHEMISTRY II-LECTURES</td>
</tr>
<tr>
<td>CHEM UN1604 - CHEM UN2507</td>
<td>2ND TERM GEN CHEM (INTENSIVE) and Intensive General Chemistry Laboratory</td>
</tr>
</tbody>
</table>

One term of statistics such as the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT UN1101</td>
<td>Introduction to Statistics</td>
</tr>
<tr>
<td>STAT UN1201</td>
<td>Calculus-Based Introduction to Statistics</td>
</tr>
<tr>
<td>BIOL BC2286</td>
<td>Statistics and Research Design</td>
</tr>
<tr>
<td>EEEB UN3005</td>
<td>Introduction to Statistics for Ecology and Evolutionary Biology</td>
</tr>
<tr>
<td>EEEB UN3087</td>
<td>Conservation Biology</td>
</tr>
</tbody>
</table>

Advanced Environmental Biology (9 points)

Three additional advanced EEEB courses (3000-level and above), each chosen from a different curricular area (evolution/genetics, ecology/behavior/conservation, anatomy/physiology/diversity, biology laboratory courses).

Advanced courses used to fulfill requirements in the environmental science major cannot count toward requirements for the special concentration.

Sustainable Development

Students interested in sustainable development should refer to the Sustainable Development section in this Bulletin.
East Asian Languages and Cultures

Departmental Office: 407 Kent; 212-854-5027
ealac.columbia.edu/

Director of Undergraduate Studies: Prof. Jungwon Kim, 402 Kent; jk3638@columbia.edu

The program in East Asian studies offers a wide range of courses in a variety of disciplines, as well as training in the Chinese, Japanese, Korean, and Tibetan languages. The program is designed to provide a coherent curriculum for undergraduates wishing to major in East Asian studies, with disciplinary specialization in anthropology, art history, economics, history, literature, philosophy, political science, sociology, or religion. The department also offers a series of introductory and thematic courses especially designed for students seeking to acquire some knowledge of East Asia as part of their broader undergraduate experience.

Admission to Language Courses

All students wishing to enter the language program at another point besides the first term of the first level must pass a language placement test before registering. The language placement exams are held during the change of program period, the week before classes begin.

Students who have been absent from the campus for one term or more must take a placement test before enrolling in a language course beyond the first term of the first level.

Students who wish to place out of the Columbia College Foreign Language Requirement for a language taught in the department of East Asian Languages and Cultures must consult with the director of the relevant language program. The names of the directors, and additional information about East Asian language programs, can be accessed via the department website at http://ealac.columbia.edu/program/language-programs/.

Language Laboratory

An additional hour of study in the language laboratory is required in first-year Japanese (JPNS UN101 and JPNS UN1102).

JPNS UN1101 First-Year Japanese I
- JPNS UN1102 and First-Year Japanese II

Students taking these courses must attend all assigned language laboratory sessions. Grades for written and oral work in the language laboratory and for additional work in oral drill sessions count as 10% of the final grade in the course. Assignments of laboratory hours are made during the first session of the regular classes.

Course Numbering

The following are general guidelines to the numbering of department courses open to undergraduates. Students with questions about the nature of a course should consult with the instructor or the director of undergraduate studies.

- 1000-level: Introductory-level undergraduate courses and first-year language courses
- 2000-level: Intermediate-level undergraduate courses and second-year language courses
- 3000-level: Advanced-level undergraduate courses and third-year language courses
- 4000-level: Advanced courses geared toward undergraduate students available to graduate students or geared toward both undergraduate and graduate students, fourth-year and above language courses

Study Abroad

East Asian Studies majors or concentrators who opt to spend the spring semester of their junior year abroad should contact the director of undergraduate studies for information about course selection in the sophomore year.

Students planning to study abroad their junior year must take the required disciplinary and senior thesis-related courses in the spring of their sophomore year. Please contact the director of undergraduate studies for more details.

Through the Columbia University Center for Undergraduate Global Engagement (UGE), there are a few study abroad options available to students:

The Kyoto Consortium for Japanese Studies

The Kyoto Consortium offers Columbia students the opportunity to study in Japan with a program that offers intensive instruction in the Japanese language and courses that explore a wide range of topics in Japanese studies. The program is designed to strengthen your Japanese skills through intensive language training, cultural immersion, and regular interactions with the local community and/or your host family.

Academic Year/Semester Study

https://global.undergrad.columbia.edu/program/kcjs-semester

Students should have the equivalent of two semesters (fall departure) or three semesters (spring departure) of college-level Japanese completed by the time of their departure. The program is most appropriate for the junior year, but other arrangements are considered.

Summer Study

Modern Japanese track: https://global.undergrad.columbia.edu/program/kcjs-summer-modern-japanese
This program is open to students in good academic standing who have completed at least one year of college-level Japanese or the equivalent. Recent graduates may also apply.

Classical Japanese track: https://global.undergrad.columbia.edu/program/kcjs-summer-classical-japanese

This program is open to students in good academic standing who have completed three years of college-level Japanese or the equivalent.

Columbia Summer in Beijing: Chinese Language Program
https://global.undergrad.columbia.edu/program/columbia-summer-beijing

The Columbia Summer in Beijing: Chinese Language program offers Columbia students of all language levels (beginner to advanced) the opportunity to study in Beijing and complete one academic year of Chinese in nine weeks through intensive courses, language exchange, drill sessions, and cultural activities.

Columbia Summer in Shanghai: Business Chinese
https://global.undergrad.columbia.edu/program/columbia-summer-business-chinese

The Columbia Summer in Shanghai: Business Chinese program offers Columbia students the opportunity to learn Business Chinese through an intensive course in which students can learn the cultural behaviors, jargon, and linguistic styles used in a professional environment as well as develop their resume and interview skills for multinational businesses. Students should have the equivalent of four semesters of college-level Chinese completed before their departure.

For further information about all of the East Asian programs offered through the Columbia University Center for Undergraduate Global Engagement (UGE), please contact Robin Leephaibul (rl2705@columbia.edu).

GRADING
Courses in which the grade of D or P has been received do not count toward the major or concentration requirements.

All language courses must be taken for a letter grade, without exception. Students may not take language courses for either R-Credit or Pass/Fail.

DEPARTMENTAL HONORS
Departmental honors are conferred only on East Asian Studies majors who have earned a grade point average of at least 3.6 for courses in the major, have pursued a rigorous and ambitious program of study, and have submitted senior theses of superior quality, clearly demonstrating originality and excellent scholarship. Qualified seniors are nominated by their thesis advisers. Normally no more than 10% of graduating majors receive departmental honors in a given academic year. Concentrators are not eligible for departmental honors.

PROFESSORS
Bernard Faure
Carol Gluck (History)
Robert Hymes
Theodore Hughes
Dorothy Ko (Barnard History)
Eugenia Lean
Feng Li
Lening Liu
Lydia Liu
D. Max Moerman (Barnard)
Wei Shang (Chair)
Haruo Shirane (Vice Chair)
Tomi Suzuki
Gray Tuttle
Madeleine Zelin

ASSOCIATE PROFESSORS
Michael Como (Religion)
David Lurie
Lien-Hang Nguyen (History)
Gregory Pflugfelder

ASSISTANT PROFESSORS
Nicholas Barlett (Barnard)
Jungwon Kim
Seong Uk Kim
Paul Kreitman
John Phan
Ying Qian
Takuya Tsunoda
Zhaohua Yang (Religion)

AFFILIATED FACULTY
Robert Harrist (Art History)
Lauran Hartley (C.V. Starr East Asian Library)
Matthew McKelway (Art History)
Jonathan Reynolds (Art History, Barnard)

SENIOR LECTURERS
Shigeru Eguchi
Yuan-Yuan Meng
Fumiko Nazikian
Miharu Nittono
Zhongqi Shi
Joowon Suh
Zhirong Wang
Ling Yan
LECTURERS
Eunice Chung
Lingjun Hu
Tianqi Jiang
Ji-Young Jung
Beom Lee
Yike Li
Kyoko Loetscher
Sonam Tsering Ngulphu
Chung Nguyen
Keiko Okamoto
Tao Peng
Shaoyan Qi
Naoko Sourial
Chikako Takahashi
Naofumi Tatsumi
Sonam Tsering
Hailong Wang
Chen Wu
Jia Xu
Hyunkyu Yi

ADJUNCT FACULTY
Yongjun Choi
Leta Hong Fincher
Hey-Ryoun Hong
Jiyeon Kim
Yun Kim
Mayumi Nishida
Vinh Nguyen
Andrew Plaks
Morris Rossabi
Seunghyo Ryu
Shuichiro Takeda

ON LEAVE (FALL 2021)
Lydia Liu
Paul Kreitman
Nick Bartlett (Barnard)
Gray Tuttle
John Phan
Feng Li

ON LEAVE (SPRING 2022)
Dorothy Ko
D. Max Moerman (Barnard)
Nick Bartlett (Barnard)
Takuya Tsunoda
Paul Kreitman
John Phan
Feng Li

MAJOR IN EAST ASIAN STUDIES
The requirements for this program were modified in the Spring 2017 semester. Students who declared an EAS major before this semester have the option of following the old or the new requirements. If you have any questions, please contact the Director of Undergraduate Studies.

Prerequisite
Students must meet the following prerequisite prior to declaring the East Asian Studies major: two years of Chinese, Japanese, Korean, Tibetan, Vietnamese, or the proficiency equivalent (to be demonstrated by placement examination).

Language Requirement
Third-year Chinese, Japanese, Korean, Tibetan, or Vietnamese (completion of the UN3005-UN3006 level in Chinese, Japanese, or Korean; TIBT UN3611-UN3612 level in Tibetan; VIET UN3101-UN3102), or the proficiency equivalent (to be demonstrated by placement examination). Students of Chinese may also complete UN3003-UN3004 to meet the third-year requirement.

One of the following sequences (in the target language):

| CHNS UN3003 | THIRD YEAR CHINESE I |
| CHNS UN3004 | and THIRD YEAR CHINESE II |

Or, for heritage students:

| CHNS UN3005 | THIRD YEAR CHINESE W |
| CHNS UN3006 | and Third-Year Chinese II (W) |

| JPNS UN3005 | Third-Year Japanese I |
| JPNS UN3006 | and Third-Year Japanese II |

| KORN UN3005 | Third-Year Korean I |
| KORN UN3006 | and Third-Year Korean II |

| TIBT UN3611 | Third Year Modern Colloquial Tibetan I |
| TIBT UN3612 | and Third Year Modern Colloquial Tibetan II |

| VIET UN3101 | Third Year Vietnamese I |

Students who test out of three years or more of a language must take an additional year of that language or another East Asian language at Columbia in order to satisfy the language requirement.

Introductory Courses
Students are required to take:

| AHUM UN1400 | Colloquium on Major Texts: East Asia |

Students must also select two of the following:

| ASCE UN1359 | Introduction to East Asian Civilizations: China |
| ASCE UN1361 | INTRO EAST ASIAN CIV: JPN |
| ASCE UN1363 | Introduction to East Asian Civilizations: Korea |
| ASCE UN1365 | Introduction to East Asian Civilizations: Tibet |
| ASCE UN1367 | Introduction to East Asian Civilizations: Vietnam |
First-year students and sophomores, prior to declaring an East Asian studies major, are strongly urged to take one or more of the introductory courses.

**Methodology Course**

All majors must take EAAS UN3990 Approaches to East Asian Studies the fall of their junior year. **Please note that this course is only offered in the fall semester.**

**Elective Courses**

Students must take four elective courses in East Asian studies, to be chosen in consultation with the DUS. Two of these courses must be EALAC or AMEC courses. Courses in a second East Asian language (one year minimum) or a classical East Asian language (one semester minimum) may be used to fulfill one elective course.

Please note that the following courses CANNOT be counted as an elective course. These courses can only be used to fulfill the EALAC language requirement:

- Business Chinese I/II
- Advanced Business Chinese I/II
- Media Chinese I/II
- Legal Chinese
- Japanese Pop Culture I/II

However, the following courses are NOT categorized as language courses and CAN count as an elective course:

- History of the Chinese Language
- Acquisition of Chinese as a Second Language

**Senior Thesis Program**

East Asian Studies majors who wish to write a senior thesis apply to the EALAC Senior Thesis Program at the end of their junior year. Students must have a minimum grade point average of 3.6 in courses taken in the major at the time of the application. Students interested in applying to the Senior Thesis Program should submit the EALAC Senior Thesis Program Application (see Undergraduate Planning Sheets and Forms). The deadline for submitting applications is usually in late April or early May. Please contact the Academic Coordinator for more information about the application process.

All potential thesis writers are required to enroll in the Senior Thesis Research Workshop (EAAS UN3999) in the fall of the senior year. Students who perform satisfactorily in this workshop, successfully complete a thesis proposal, and find a faculty adviser will then write the Senior Thesis itself in the spring semester under the direction of the adviser and a graduate student tutor (EAAS UN3901).

The senior thesis typically consists of about 30-35 pages of text (double-spaced, normal typeface and margins) and 5-8 pages of references. Under no circumstances should a thesis exceed a total of 50 pages (including references), without the special permission of the faculty adviser.

Successful completion of the thesis by the April 1 deadline in the spring semester will be necessary but not sufficient for a student to receive departmental honors. Normally no more than 10% of graduating majors receive departmental honors in a given academic year; as such, not all thesis writers will receive honors.

**CONCENTRATION IN EAST ASIAN STUDIES**

**Prerequisite**

Students must meet the following prerequisite prior to declaring the East Asian Studies concentration: two years of Chinese, Japanese, Korean, Tibetan, Vietnamese, or the proficiency equivalent (to be demonstrated by placement examination).

**Language Requirement**

Third-year Chinese, Japanese, Korean, Tibetan, or Vietnamese (completion of the UN3005-UN3006 level in Chinese, Japanese, or Korean; TIBT UN3611-UN3612 level in Tibetan; VIET UN3101-UN3102, or the proficiency equivalent (to be demonstrated by placement examination). Students of Chinese may also complete UN3003-UN3004 to meet the third-year requirement.

One of the following sequences (in the target language):

| CHNS UN3003 | THIRD YEAR CHINESE I |
| CHNS UN3004 | and THIRD YEAR CHINESE II |
| JPN UN3005 | Third-Year Japanese I |
| JPN UN3006 | and Third-Year Japanese II |
| KORN UN3005 | Third-Year Korean I |
| KORN UN3006 | and Third-Year Korean II |
| TIBT UN3611 | Third Year Modern Colloquial Tibetan I |
| TIBT UN3612 | and Third Year Modern Colloquial Tibetan II |
| VIET UN3101 | Third Year Vietnamese I |

Students who test out of a third-year level East Asian language must take either an additional year of the same language, one year of a classical East Asian language, one year of an additional East Asian language, or two electives.

**Introductory Courses**

| AHUM UN1400 | Colloquium on Major Texts: East Asia |
| Select one of the following: | |
| ASCE UN1359 | Introduction to East Asian Civilizations: China |
| ASCE UN1361 | INTRO EAST ASIAN CIV: JPN |
ASCE UN1363 Introduction to East Asian Civilizations: Korea
ASCE UN1365 Introduction to East Asian Civilizations: Tibet
ASCE UN1367 Introduction to East Asian Civilizations: Vietnam

Electives

Students must take two courses in East Asian Studies at Columbia or Barnard at the 3000- or 4000-level, subject to approval by the DUS. Courses in a second East Asian language (one year minimum) or a classical East Asian language (one semester minimum) may be used to fulfill one elective course.

Please note that the following courses CANNOT be counted as an elective course. These courses can only be used to fulfill the EALAC language requirement:

- Business Chinese I/II
- Advanced Business Chinese I/II
- Media Chinese I/II
- Legal Chinese
- Japanese Pop Culture I/II

However, the following courses are NOT categorized as language courses and CAN count as an elective course:

- History of the Chinese Language
- Acquisition of Chinese as a Second Language

Senior Thesis Program

Concentrators are not eligible for the Senior Thesis Program or for departmental honors.
ECOLOGY, EVOLUTION, AND ENVIRONMENTAL BIOLOGY

Departmental Office: Schermerhorn Extension, 10th floor; 212-854-9987
http://e3b.columbia.edu/

Director of Undergraduate Studies: Dr. Matthew Palmer, 1010 Schermerhorn; 212-854-4767; mp2434@columbia.edu

Evolutionary Biology of the Human Species Adviser: Dr. Jill Shapiro, 1011 Schermerhorn Extension; 212-854-5819; jss19@columbia.edu

Director, Administration and Finance: Kyle Bukhari, 1014B Schermerhorn Extension; 212-854-8665; kb2337@columbia.edu (lg2019@columbia.edu)

The Department of Ecology, Evolution & Environmental Biology (E3B) at Columbia University was established in 2001. Although we are a relatively new department, we have grown rapidly in the past decade. We now have an internationally diverse student body and a broad network of supporters at Columbia and throughout New York City. Our affiliated faculty members come from departments at Columbia as well as from the American Museum of Natural History, the New York Botanical Garden, the Wildlife Conservation Society, and the EcoHealth Alliance. Together, we provide an unparalleled breadth and depth of research opportunities for our students.

In creating E3B, Columbia University recognized that the fields of ecology, evolutionary biology, and environmental biology constitute a distinct subdivision of the biological sciences with its own set of intellectual foci, theoretical foundations, scales of analysis, and methodologies.

E3B's mission is to educate a new generation of scientists and practitioners in the theory and methods of ecology, evolution, and environmental biology. Our educational programs emphasize a multi-disciplinary perspective to understand life on Earth from the level of organisms to global processes that sustain humanity and all life.

To achieve this multi-disciplinary perspective, the department maintains close ties to over 70 faculty members beyond its central core. Thus, many faculty members who teach, advise, and train students in research are based in other departments on the Columbia campus or at the partner institutions. Through this collaboration, the department is able to tap into a broad array of scientific and intellectual resources in the greater New York City area. The academic staff covers the areas of plant and animal systematics; evolutionary and population genetics; ecosystem science; demography and population biology; behavioral and community ecology; and related fields of epidemiology, ethnobiology, public health, and environmental policy. Harnessing the expertise of this diverse faculty and the institutions of which they are a part, E3B covers a vast area of inquiry into the evolutionary, genetic, and ecological relationships among all living things.

FACILITIES AND COLLABORATIVE INSTITUTIONS

The Department of Ecology, Evolution, and Environmental Biology (E3B)

In addition to the off-campus facilities detailed below, the Columbia community offers academic excellence in a range of natural and social science disciplines that are directly related to biodiversity conservation including: evolution, systematics, genetics, behavioral ecology, public health, business, economics, political science, anthropology, and public and international policy. These disciplines are embodied in world-class departments, schools, and facilities at Columbia. The divisions that bring their resources to bear on issues most relevant to E3B’s mission are: the Lamont-Doherty Earth Observatory, the School of International and Public Affairs, the Goddard Institute for Space Studies, the International Research Institute for Climate Predication, the Black Rock Forest Reserve in New York State, the Rosenthal Center for Alternative/Complementary Medicine, the Division of Environmental Health Sciences at the School of Public Health, and the Center for International Earth Science Information Network (CIESIN).

Several of these units of the University are networked through the Earth Institute at Columbia, a division of the University that acts as an intramural network of environmental programs and supplies logistical support for constituent programs, through planning, research, seminars, and conferences. All of the above schools, centers, and institutes contribute to finding solutions for the world’s environmental challenges.

The Earth Institute Center for Environmental Sustainability (EICES)

The Earth Institute Center for Environmental Sustainability (EICES), formerly known as the Center for Environmental Research and Conservation (CERC), is actively involved in protecting biodiversity and ecosystems. The Earth Institute Center for Environmental Sustainability is dedicated to the development of a rich, robust, and vibrant world within which we can secure a sustainable future. Through a diverse array of strategic partners in science, education, and outreach, the center builds unique programs that promote human well-being through the preservation, restoration, and management of biodiversity, and the services our ecosystems provide.

The Center for Environmental Research and Conservation (CERC), a leading provider of cutting-edge environmental research, education, and training, since its inception in 1994, has grown into two institutions—an Earth institute center and a Secretariat for a major environmental consortium. The center’s new name is the Earth Institute Center for Environmental Sustainability (EICES, pronounced “i-sees”). EICES also
continues, however, as the Secretariat for the Consortium for Environmental Research and Conservation, continuing 15 years of collaborations between the Earth Institute, the American Museum of Natural History, the New York Botanical Garden, The Wildlife Conservation Society, and EcoHealth Alliance on biodiversity conservation.

American Museum of Natural History

The American Museum of Natural History is one of the world’s preeminent scientific, educational, and cultural institutions. Since its founding in 1869, the Museum has advanced its global mission to discover, interpret, and disseminate information about human cultures, the natural world, and the universe through a wide-reaching program of scientific research, education, and exhibitions. The institution comprises 45 permanent exhibition halls, state-of-the-art research laboratories, one of the largest natural history libraries in the Western Hemisphere, and a permanent collection of 32 million specimens and cultural artifacts. With a scientific staff of more than 200, the Museum supports research divisions in anthropology, paleontology, invertebrate and vertebrate zoology, and the physical sciences. The Museum’s scientific staff pursues a broad agenda of advanced scientific research, investigating the origins and evolution of life on Earth, the world’s myriad species, the rich variety of human culture, and the complex processes that have formed and continue to shape planet Earth and the universe beyond.

The Museum’s Center for Biodiversity and Conservation (CBC) was created in June 1993 to advance the use of scientific data to mitigate threats to biodiversity. CBC programs integrate research, education, and outreach so that people, a key force in the rapid loss of biodiversity, will become participants in its conservation. The CBC works with partners throughout the world to build professional and institutional capacities for biodiversity conservation and heightens public understanding and stewardship of biodiversity. CBC projects are under way in the Bahamas, Bolivia, Madagascar, Mexico, Vietnam, and the Metropolitan New York region.

The Museum’s scientific facilities include: two molecular systematics laboratories equipped with modern high-throughput technology; the interdepartmental laboratories, which include a state-of-the-art imaging facility that provides analytical microscopy, energy dispersive spectrometry, science visualization, and image analysis to support the Museum’s scientific activities; a powerful parallel-computing facility, including a cluster of the world’s fastest computers, positioned to make significant contributions to bioinformatics; and a frozen tissue facility with the capacity to store one million DNA samples.

New York Botanical Garden

The New York Botanical Garden (NYBG), with its 7 million specimen herbarium, the largest in the Western Hemisphere, and its LuEsther T. Mertz Library, the largest botanical and horticultural reference collection on a single site in the Americas, comprises one of the very best locations in the world to study plant science. NYBG’s systematic botanists discover, decipher, and describe the world’s plant and fungal diversity; and its economic botanists study the varied links between plants and people. The Enid A. Haupt Conservatory, the largest Victorian glasshouse in the United States, features some 6,000 species in a newly installed “Plants of the World” exhibit. The new International Plant Science Center stores the Garden collection under state-of-the-art environmental conditions and has nine study rooms for visiting scholars. All specimens are available for on-site study or loan.

In recent years, NYBG has endeavored to grow and expand its research efforts, supporting international field projects in some two dozen different countries, ranging from Brazil to Indonesia. In 1994, AMNH and NYBG established the Lewis and Dorothy Cullman Program for Molecular Systematics Studies to promote the use of molecular techniques in phylogenetic studies of plant groups. This program offers many opportunities for research in conservation genetics. NYBG operates both the Institute for Economic Botany (IEB) and the Institute of Systematic Botany (ISB). The ISB builds on the Garden’s long tradition of intensive and distinguished research in systematic botany—the study of the kinds and diversity of plants and their relationships—to develop the knowledge and means for responding effectively to the biodiversity crisis.

The Garden has also established a molecular and anatomical laboratory program, which includes light and electron microscopes, and has made enormous advances in digitizing its collection. There is currently a searchable on-line library catalog and specimen database collection with some half million unique records. Field sites around the world provide numerous opportunities for work in important ecosystems of unique biodiversity.

Wildlife Conservation Society

The Wildlife Conservation Society (WCS), founded in 1895 as the New York Zoological Society, works to save wildlife and wild lands throughout the world. In addition to supporting the nation’s largest system of zoological facilities—the Bronx Zoo; the New York Aquarium; the Wildlife Centers in Central Park, Prospect Park, and Flushing Meadow Park; and the Wildlife Survival Center on St. Catherine’s Island, Georgia—WCS maintains a commitment to field-based conservation science. With 60 staff scientists and more than 100 research fellows, WCS has the largest professional field staff of any U.S.-based international conservation organization. Currently, WCS conducts nearly 300 field projects throughout the Americas, Asia, and Africa. The field program is supported by a staff of conservation scientists based in New York who also conduct their own research.

WCS’s field-based programs complement the organization’s expertise in veterinary medicine, captive breeding, animal care, genetics, and landscape ecology, most of which are based at the Bronx Zoo headquarters. WCS’s Conservation Genetics
program places an emphasis on a rigorous, logical foundation for the scientific paradigms used in conservation biology and is linked to a joint Conservation Genetics program with the American Museum of Natural History. The Wildlife Health Sciences division is responsible for the health care of more than 17,000 wild animals in the five New York parks and wildlife centers. The departments of Clinical Care, Pathology, Nutrition, and Field Veterinary Programs provide the highest quality of care to wildlife.

**EcoHealth Alliance**

EcoHealth Alliance is an international organization of scientists dedicated to the conservation of biodiversity. For more than 40 years, EcoHealth Alliance has focused its efforts on conservation. Today, they are known for innovative research on the intricate relationships between wildlife, ecosystems, and human health.

EcoHealth Alliance's work spans the U.S. and more than 20 countries in Central and South America, the Caribbean, Africa, and Asia to research ways for people and wildlife to share bioscapes for their mutual survival. Their strength is built on innovations in research, education, and training and accessibility to international conservation partners.

Internationally, EHA programs support conservationists in over a dozen countries at the local level to save endangered species and their habitats, and to protect delicate ecosystems for the benefit of wildlife and humans.

**ACADEMIC PROGRAMS**

The Department of Ecology, Evolution, and Environmental Biology runs two undergraduate majors/concentrations. The primary major is in environmental biology and the second is evolutionary biology of the human species. The foci and requirements vary substantially and are intended for students with different academic interests.

The environmental biology major emphasizes those areas of biology and other disciplines essential for students who intend to pursue careers in the conservation of Earth’s living resources. It is designed to prepare students for graduate study in ecology and evolutionary biology, conservation biology, environmental policy and related areas, or for direct entry into conservation-related or science teaching careers.

Interdisciplinary knowledge is paramount to solving environmental biology issues, and a wide breadth of courses is thus essential, as is exposure to current work. Conservation internships are available through partner institutions and serve as research experience leading to the development of the required senior thesis.

Declaration of the environmental biology major must be approved by the director of undergraduate studies and filed in the departmental office located on the 10th floor of Schermerhorn Extension.

The major in evolutionary biology of the human species provides students with a foundation in the interrelated spheres of behavior, ecology, genetics, evolution, morphology, patterns of growth, adaptation, and forensics. Using the framework of evolution and with attention to the interplay between biology and culture, research in these areas is applied to our own species and to our closest relatives to understand who we are and where we came from. This integrated biological study is also known as biological anthropology. As an interdisciplinary major, students are also encouraged to draw on courses in related fields including biology, anthropology, geology, and psychology as part of their studies.

**PROFESSORS**

Steve Cohen (International and Public Affairs)
Marina Cords (also Anthropology)
Ruth DeFries
Kevin Griffin (also Earth and Environmental Sciences)
Paul Hertz (Barnard)
Ralph Holloway (Anthropology)
Darcy Kelley (Biological Sciences)
Don Melnick (also Anthropology and Biological Sciences)
Brian Morton (Barnard)
Shahid Naeem
Paul Olsen (Earth and Environmental Sciences)
Robert Pollack (Biological Sciences)
Maria Uriarte
Paige West

**ASSOCIATE PROFESSORS**

Hilary Callahan (Barnard)
Maria Diuk-Wasser
Duncan Menge
Dustin Rubenstein
Duncan Menge

**ASSISTANT PROFESSORS**

Andres Bendesky
Deren Eaton

**LECTURERS**

Sara Kross
Matthew Palmer
Jill Shapiro

**ADJUNCT FACULTY/RESEARCH SCIENTISTS**

Columbia University

Simon Anthony (CUMC)
Hilary Callahan (Barnard Biology)
Steven Cohen (SIPA)
Steven Davis
Adela Gondek (SIPA)
Major in Environmental Biology

The major in environmental biology requires 50 points, distributed as follows:

Lower Division Courses

Two terms of introductory or environmental biology such as the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EEEB UN2001</td>
<td>Environmental Biology I: Elements to Organisms</td>
</tr>
<tr>
<td>- EEEB UN2002</td>
<td>Environmental Biology II: Organisms to the Biosphere</td>
</tr>
</tbody>
</table>

Two terms of environmental science such as the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EESC UN2100</td>
<td>Earth's Environmental Systems: The Climate System</td>
</tr>
<tr>
<td>EESC UN2200</td>
<td>EARTH'S ENVIRONMENTAL SYSTEMS: THE SOLID EARTH</td>
</tr>
</tbody>
</table>

Two terms of chemistry such as the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM UN1403</td>
<td>GENERAL CHEMISTRY I-LECTURES</td>
</tr>
<tr>
<td>- CHEM UN1404</td>
<td>and GENERAL CHEMISTRY II-LECTURES</td>
</tr>
</tbody>
</table>

One term of physics such as the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS UN1201</td>
<td>General Physics I</td>
</tr>
</tbody>
</table>

One term of statistics such as the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EEEB UN3005</td>
<td>Introduction to Statistics for Ecology and Evolutionary Biology</td>
</tr>
<tr>
<td>BIOL BC2286</td>
<td>Statistics and Research Design</td>
</tr>
<tr>
<td>STAT UN1101</td>
<td>Introduction to Statistics</td>
</tr>
<tr>
<td>STAT UN1201</td>
<td>Calculus-Based Introduction to Statistics</td>
</tr>
</tbody>
</table>

One term of calculus such as the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH UN1101</td>
<td>CALCULUS I</td>
</tr>
<tr>
<td>MATH UN1102</td>
<td>CALCULUS II</td>
</tr>
<tr>
<td>MATH UN1201</td>
<td>Calculus III</td>
</tr>
<tr>
<td>MATH UN1202</td>
<td>CALCULUS IV</td>
</tr>
</tbody>
</table>

Upper Division Courses

Students must complete five advanced elective courses (generally 3000-level or above) satisfying the following distribution. At least one of these courses must include a laboratory component. For more information and a list of appropriate courses, contact the director of undergraduate studies.

1. Ecology, behavior, or conservation biology;
2. Evolution or genetics;
3. Morphology, physiology, or diversity;
4. Policy or economics;
5. One additional course from the preceding four groups.

Students must also complete a senior thesis, which involves completing a research internship (generally in the summer...
before the senior year) and completing at least one semester of the thesis research seminar, EEEB UN3991-EEEB UN3992 Senior Seminar. Enrollment in both semesters of the seminar, starting in the spring of the junior year, is recommended.

Students planning on continuing into graduate studies in environmental biology or related fields are encouraged to take organic chemistry and genetics.

**ECOLOGY AND EVOLUTION TRACK WITHIN THE ENVIRONMENTAL BIOLOGY MAJOR**

The ecology and evolution track within the environmental biology major requires 50 points, distributed as follows:

**Lower Division Courses**

Two terms of introductory or environmental biology such as the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EEEB UN2001</td>
<td>Environmental Biology I: Elements to Organisms and Environmental Biology II: Organisms to the Biosphere</td>
</tr>
</tbody>
</table>

Two terms of chemistry such as the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM UN1403</td>
<td>GENERAL CHEMISTRY I-LECTURES</td>
</tr>
<tr>
<td>CHEM UN1404</td>
<td>GENERAL CHEMISTRY II-LECTURES</td>
</tr>
</tbody>
</table>

Chemistry laboratory such as the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM UN1500</td>
<td>GENERAL CHEMISTRY LABORATORY</td>
</tr>
</tbody>
</table>

Two terms of physics such as the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS UN1201</td>
<td>General Physics I</td>
</tr>
<tr>
<td>PHYS UN1202</td>
<td>General Physics II</td>
</tr>
</tbody>
</table>

One term of statistics such as the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EEEB UN3005</td>
<td>Introduction to Statistics for Ecology and Evolutionary Biology</td>
</tr>
<tr>
<td>BIOL BC2286</td>
<td>Statistics and Research Design</td>
</tr>
<tr>
<td>STAT UN1101</td>
<td>Introduction to Statistics</td>
</tr>
<tr>
<td>STAT UN1201</td>
<td>Calculus-Based Introduction to Statistics</td>
</tr>
</tbody>
</table>

Two terms of calculus, or one term of calculus and second advanced course in math or statistics such as the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH UN1101</td>
<td>CALCULUS I</td>
</tr>
<tr>
<td>MATH UN1102</td>
<td>CALCULUS II</td>
</tr>
<tr>
<td>MATH UN1201</td>
<td>Calculus III</td>
</tr>
<tr>
<td>MATH UN1202</td>
<td>CALCULUS IV</td>
</tr>
</tbody>
</table>

**Upper Division Courses**

Students must complete five advanced elective courses (generally 3000-level or above) satisfying the following distribution. At least one of these courses must include a laboratory component. For more information and a list of appropriate courses, contact the director of undergraduate studies.

1. Three courses in ecology, evolution, conservation biology, or behavior;
2. One course in genetics. BIOL UN3031 GENETICS or BIOL BC2100 Molecular and Mendelian Genetics is recommended;
3. One course in morphology, physiology, or diversity.

Students must also complete a senior thesis, which involves completing a research internship (generally in the summer before the senior year) and completing at least one semester of the thesis research seminar, EEEB UN3991-EEEB UN3992 Senior Seminar. Enrollment in both semesters of the seminar, starting in the spring of the junior year, is recommended.

Students planning on continuing into graduate studies in ecology or evolutionary biology are encouraged to take organic chemistry.

**MAJOR IN EVOLUTIONARY BIOLOGY OF THE HUMAN SPECIES**

The major in evolutionary biology of the human species requires 36 points, distributed as described below.

Students must take a minimum of 20 points from approved biological anthropology courses. The additional courses may be taken in other departments with adviser approval. These include up to 6 points of introductory biology/chemistry or calculus (in any combination). Please speak with the major adviser about the extended list of courses from related areas including Biology, Psychology, Archaeology, Anthropology, Earth and Environmental Science, and Statistics that count toward this program.

For example, students interested in focusing on paleoanthropology would complement the requirements with additional courses in human evolution and morphology, evolutionary biology and theory, archaeology, genetics, and statistics. Those interested in primate behavior would supplement the requirements with classes in behavioral biology, ecology, and statistics.

**Required Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EEEB UN1010</td>
<td>Human Origins and Evolution</td>
</tr>
<tr>
<td>EEEB UN1011</td>
<td>Behavioral Biology of the Living Primates</td>
</tr>
</tbody>
</table>
**Alternate options may be possible for all courses other than EEEB UN1010 Human Origins and Evolution and EEEB UN1011 Behavioral Biology of the Living Primates. These will be considered on an individual basis in consultation with the major/concentration adviser.

Conservation Course
EEEB UN3240 Challenges and Strategies of Primate Conservation (This is the recommended conservation course but this requirement can be fulfilled with other classes such as Conservation Biology, Zoo Conservation, Ecology, Behavior and Conservation of Mammals, SEE-U in Jordan or Brazil, or other relevant offerings.)

Theoretical Foundation from Archaeology
Select one course of the following: Nearly all archaeology courses (save for Rise of Civilization) can fulfill this requirement. Check with the advisor.

Archaeology
ANTH UN1007 The Origins of Human Society
ANTH UN2028 Think Like an Archaeologist: Introduction to Method & Theory
ANTH UN3064 Death and the Body
ANTH UN3823 Archaeology Engaged: The Past in the Public Eye

Breadth Requirement
Select a minimum of one course from each of the three sections (may overlap seminar requirement for majors):

Genetics/Human Variation
BIOL BC2100 Molecular and Mendelian Genetics
BIOL UN3031 GENETICS
BIOL GU4560 Evolution in the age of genomics
ANTH UN3970 Biological Basis of Human Variation
EEEB GU4340 HUMAN ADAPTATION
EEEB GU4700 Race: The Tangled History of a Biological Concept

Primate Behavioral Biology and Ecology
EEEB UN3940 Current Controversies in Primate Behavior and Ecology
BIOL BC2272 Ecology
BIOL BC2280 Animal Behavior
PSYC UN2420 Animal Behavior
PSYC BC1119 Systems and Behavioral Neuroscience
PSYC UN2450 Behavioral Neuroscience
PSYC BC3372 Comparative Cognition

PSYC UN3450 Evolution of Intelligence, Animal Communication, # Language
PSYC UN3460 Evolution of Behavior (Seminar)
PSYC UN3470 Brain Evolution: Becoming Human (Seminar)
EEEB GU4010 The Evolutionary Basis of Human Behavior
EEEB GU4134 Behavioral Ecology
EEEB GU4201 Ecology, Behavior, and Conservation of Mammals (can count for either breadth requirement or conservation requirement, but not both)

Human Evolution/Morphology
EEEB UN3208 Explorations in Primate Anatomy
EEEB UN3215 Forensic Osteology
EEEB UN3220 The Evolution of Human Growth and Development
ANTH GU4147 Human Skeletal Biology I
ANTH GU4148 The Human Skeletal Biology II
EEEB UN3204 Dynamics of Human Evolution
EEEB UN3910 THE NEANDERTALS
ANTH GU4002 Controversial Topics in Human Evolution
ANTH GU4200 FOSSIL EVIDENCE FOR HUMAN EVOL
BIOL BC2278 Evolution
BIOL UN3208 Introduction to Evolutionary Biology
EEEB UN3030 The Biology, Systematics, and Evolutionary History of the 'Apes'
BIOL BC2262 Vertebrate Biology
BIOL UN3006 PHYSIOLOGY
BIOL BC3360 Physiology
EEEB GU4200 Introduction to Mammalogy

Seminar
Selection at least one of the following seminars. May also count toward the breadth requirement.

EEEB UN3204 Dynamics of Human Evolution
EEEB UN3910 THE NEANDERTALS
EEEB UN3940 Current Controversies in Primate Behavior and Ecology
ANTH UN3970 Biological Basis of Human Variation
EEEB UN3993 - EEEB UN3994 EBHS Senior Seminar and EBHS SENIOR THESIS SEMINAR
EEEB GU4321 Human Nature: DNA, Race & Identity
ANTH GU4002 Controversial Topics in Human Evolution (Fulfills the seminar requirement for the major)
Additional courses in the student’s area of focus to complete the required 36 points overall including a minimum of 20 points of approved biological anthropology courses.

Students intending to pursue graduate study in this field should broaden their foundation by taking an introductory biology course (optimally either EEEB UN2001 Environmental Biology I: Elements to Organisms or EEEB UN2002 Environmental Biology II: Organisms to the Biosphere) or an advanced evolution course, a genetics course, and a statistics course. We recommend that those interested in either biological anthropology or bioarchaeology take a foundation cultural anthropology course such as ANTH UN1002 The Interpretation of Culture, ANTH UN2004 INTRO TO SOC # CULTURAL THEORY, ANTH UN2005 THE ETHNOGRAPHIC IMAGINATION, or ANTH UN3040 Anthropological Theory I. Students interested in forensic anthropology should take chemistry in lieu of biology (though the latter is recommended as a foundation course for all students). The adviser makes additional recommendations dependent on the student’s area of focus.

Approved Biological Anthropology Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EEEB UN1010</td>
<td>Human Origins and Evolution</td>
</tr>
<tr>
<td>EEEB UN3204</td>
<td>Dynamics of Human Evolution</td>
</tr>
<tr>
<td>EEEB UN3208</td>
<td>Explorations in Primate Anatomy</td>
</tr>
<tr>
<td>EEEB UN3215</td>
<td>Forensic Osteology</td>
</tr>
<tr>
<td>EEEB UN3220</td>
<td>The Evolution of Human Growth and Development</td>
</tr>
<tr>
<td>EEEB UN3910</td>
<td>THE NEANDERTALS</td>
</tr>
<tr>
<td>ANTH GU4147</td>
<td>Human Skeletal Biology I</td>
</tr>
<tr>
<td>ANTH GU4148</td>
<td>and The Human Skeletal Biology II</td>
</tr>
<tr>
<td>ANTH GU4200</td>
<td>FOSSIL EVIDENCE FOR HUMAN EVOL taught intermittently</td>
</tr>
</tbody>
</table>

Primate Behavioral Ecology and Evolution

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EEEB UN1011</td>
<td>Behavioral Biology of the Living Primates</td>
</tr>
<tr>
<td>EEEB UN3030</td>
<td>The Biology, Systematics, and Evolutionary History of the 'Apes'</td>
</tr>
<tr>
<td>EEEB UN3940</td>
<td>Current Controversies in Primate Behavior and Ecology</td>
</tr>
<tr>
<td>EEEB GU4010</td>
<td>The Evolutionary Basis of Human Behavior</td>
</tr>
</tbody>
</table>

Human Variation

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH UN3970</td>
<td>Biological Basis of Human Variation</td>
</tr>
<tr>
<td>EEEB GU4340</td>
<td>HUMAN ADAPTATION</td>
</tr>
<tr>
<td>EEEB GU4700</td>
<td>Race: The Tangled History of a Biological Concept</td>
</tr>
</tbody>
</table>

Additional Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EEEB UN3240</td>
<td>Challenges and Strategies of Primate Conservation</td>
</tr>
</tbody>
</table>

EEEB UN3993 - EEEB UN3994 EBHS Senior Seminar and EBHS SENIOR THESIS SEMINAR

Concentration in Environmental Biology

The concentration in environmental biology differs from the major in omitting calculus and physics from the lower division, requiring three advanced electives rather than five, and omitting the senior seminar with thesis project. It requires 36 points, distributed as follows:

Lower Division Courses

Two terms of introductory or environmental biology such as the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EEEB UN2001</td>
<td>Environmental Biology I: Elements to Organisms</td>
</tr>
<tr>
<td>EEEB UN2002</td>
<td>and Environmental Biology II: Organisms to the Biosphere (or equivalents)</td>
</tr>
</tbody>
</table>

Two terms of environmental science such as the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EESC UN2100</td>
<td>Earth's Environmental Systems: The Climate System</td>
</tr>
<tr>
<td>EESC UN2200</td>
<td>EARTH'S ENVIRONMENTAL SYSTEMS: THE SOLID EARTH</td>
</tr>
</tbody>
</table>

Two terms of chemistry such as the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM UN1403</td>
<td>GENERAL CHEMISTRY I-LECTURES</td>
</tr>
<tr>
<td>CHEM UN1404</td>
<td>and GENERAL CHEMISTRY II-LECTURES</td>
</tr>
</tbody>
</table>

One term of statistics. Select one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EEEB UN3005</td>
<td>Introduction to Statistics</td>
</tr>
<tr>
<td>BIOL BC2286</td>
<td>Statistics and Research Design</td>
</tr>
<tr>
<td>STAT UN1101</td>
<td>Introduction to Statistics</td>
</tr>
<tr>
<td>STAT UN1201</td>
<td>Calculus-Based Introduction to Statistics</td>
</tr>
</tbody>
</table>

Upper Division Courses

EEEB UN3087 Conservation Biology

Two other 3000- or 4000-level courses from the advanced environmental biology courses listed for the major.

Concentration in Evolutionary Biology of the Human Species

The concentration in evolutionary biology of the human species requires 20 points including the required introductory courses EEEB UN1010 Human Origins and Evolution, EEEB UN1011 Behavioral Biology of the Living Primates, an approved conservation course (optimally Primate Conservation), and three courses for the breadth distribution requirements as
described for the major. Students must take a minimum of 15 points from approved biological anthropology courses as described for the major (the two introductory classes count toward that total). The additional courses may be taken in other departments with adviser approval.

Concentrators do not have to complete the theoretical foundation course from archaeology or a seminar.

---

**SPECIAL CONCENTRATION IN ENVIRONMENTAL SCIENCE FOR ENVIRONMENTAL BIOLOGY MAJORS**

The Department of Earth and Environmental Sciences sponsors a special concentration which must be done in conjunction with the environmental biology major. Students should be aware that they must complete the environmental biology major in order to receive credit for the special concentration.

The special concentration in environmental science requires a minimum of 31.5 points, distributed as follows:

**Introductory Environmental Science (13.5 points)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EESC UN2100</td>
<td>Earth's Environmental Systems: The Climate System</td>
</tr>
<tr>
<td>EESC UN2200</td>
<td>EARTH'S ENVIRONMENTAL SYSTEMS: THE SOLID EARTH</td>
</tr>
<tr>
<td>EESC UN2300</td>
<td>Earth's Environmental Systems: The Life System (equivalent to EEEB UN2002)</td>
</tr>
</tbody>
</table>

**Introductory Science (6 points)**

Two courses in chemistry, physics, mathematics, or environmental biology from the supporting mathematics and science list for the environmental science major.

**Advanced Environmental Science (12 points)**

Select four of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EESC UN3015</td>
<td>The Earth's Carbon Cycle</td>
</tr>
<tr>
<td>EESC BC3017</td>
<td>Environmental Data Analysis</td>
</tr>
<tr>
<td>EESC BC3025</td>
<td>Hydrology</td>
</tr>
<tr>
<td>EESC GU4008</td>
<td>Introduction to Atmospheric Science</td>
</tr>
<tr>
<td>EESC GU4050</td>
<td>Global Assessment and Monitoring Using Remote Sensing</td>
</tr>
<tr>
<td>EESC GU4223</td>
<td>SEDIMENTARY GEOLOGY</td>
</tr>
<tr>
<td>EESC GU4550</td>
<td>Plant Ecophysiology</td>
</tr>
<tr>
<td>EESC GU4835</td>
<td>Wetlands and Climate Change</td>
</tr>
<tr>
<td>EESC GU4885</td>
<td>The Chemistry of Continental Waters</td>
</tr>
<tr>
<td>EESC GU4917</td>
<td>Earth/Human Interactions</td>
</tr>
<tr>
<td>EESC GU4926</td>
<td>Principles of Chemical Oceanography</td>
</tr>
</tbody>
</table>

Advanced courses used to fulfill requirements in the environmental biology major cannot count toward requirements for the special concentration.

---

**SPECIAL CONCENTRATION IN ENVIRONMENTAL BIOLOGY FOR ENVIRONMENTAL SCIENCE MAJORS**

The Department of Ecology, Evolution, and Environmental Biology sponsors a special concentration which must be done in conjunction with the environmental science major. Students should be aware that they must complete the environmental science major in order to receive credit for the special concentration.

The special concentration in environmental biology requires a minimum of 39 points, distributed as follows:

**Introductory Environmental Biology and Environmental Science (17 points)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EEEB UN2001</td>
<td>Environmental Biology I: Elements to Organisms</td>
</tr>
<tr>
<td>EEEB UN2002</td>
<td>Environmental Biology II: Organisms to the Biosphere (equivalent to EESC UN2300)</td>
</tr>
<tr>
<td>EESC UN2100</td>
<td>Earth's Environmental Systems: The Climate System</td>
</tr>
<tr>
<td>EESC UN2200</td>
<td>EARTH'S ENVIRONMENTAL SYSTEMS: THE SOLID EARTH</td>
</tr>
</tbody>
</table>

**Introductory Science (13 points)**

Select one of the following chemistry sequences:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM UN1403-1404</td>
<td>GENERAL CHEMISTRY I-LECTURES and GENERAL CHEMISTRY II-LECTURES</td>
</tr>
<tr>
<td>CHEM UN1604-2507</td>
<td>2ND TERM GEN CHEM (INTENSIVE) and Intensive General Chemistry Laboratory</td>
</tr>
<tr>
<td>EEEB UN3005</td>
<td>Introduction to Statistics for Ecology and Evolutionary Biology</td>
</tr>
<tr>
<td>BIOL BC2286</td>
<td>Statistics and Research Design</td>
</tr>
<tr>
<td>STAT UN1101</td>
<td>Introduction to Statistics</td>
</tr>
<tr>
<td>STAT UN1201</td>
<td>Calculus-Based Introduction to Statistics</td>
</tr>
<tr>
<td>EEEB UN3087</td>
<td>Conservation Biology</td>
</tr>
</tbody>
</table>
Advanced Environmental Biology (9 points)

Three additional advanced environmental biology courses (3000-level and above), each chosen from a different curricular area (evolution/genetics, ecology/behavior/conervation, anatomy/physiology/diversity, biology laboratory courses).
ECONOMICS

Departmental Office: 1022 International Affairs Building; 212-854-3680
http://www.columbia.edu/cu/economics/

Director of Undergraduate Studies: Dr. Susan Elmes, 1006 International Affairs Building; 212-854-9124; se5@columbia.edu

Director of Departmental Honors Program: Dr. Susan Elmes, 1006 International Affairs Building; 212-854-9124; se5@columbia.edu

Economics is the study of the ways in which society allocates its scarce resources among alternative uses and the consequences of these decisions. The areas of inquiry deal with a varied range of topics such as international trade, domestic and international financial systems, labor market analysis, and the study of less developed economies. Broadly speaking, the goal of an economics major is to train students to think analytically about social issues and, as such, provide a solid foundation for not only further study and careers in economics, but also for careers in law, public service, business, and related fields.

The Economics Department offers a general economics major in addition to five interdisciplinary majors structured to suit the interests and professional goals of a heterogeneous student body. All of these programs have different specific requirements but share the common structure of core theoretical courses that provide the foundation for higher-level elective courses culminating in a senior seminar. Students are urged to carefully look through the details of each of these programs and to contact an appropriate departmental adviser to discuss their particular interests.

ADVANCED PLACEMENT

Tests must be taken in both microeconomics and macroeconomics, with a score of 5 on one test and at least a 4 on the other. Provided that this is achieved, the department grants 4 credits for a score of 4 and 5 on the AP Economics exam along with exemption from ECON UN1105 Principles of Economics.

ADVISING

The Department of Economics offers a variety of advising resources to provide prospective and current undergraduate majors and concentrators with the information and support needed to successfully navigate through the program. These resources are described below.

Frequently Asked Questions

Please see: http://econ.columbia.edu/frequently-asked-questions-

As a first step, students are encouraged to visit the department’s FAQ page, which provides comprehensive information and answers to the most frequently asked questions about the departmental majors and requirements. This page also includes a section that answers specific questions of first-years, sophomores, and non-majors.

Graduate Student Advisers

For answers to the most common questions that students have about the majors, the department has graduate student advisers, who are available by e-mail at econ-advising@columbia.edu, or during weekly office hours to meet with students.

Students should direct all questions and concerns about their major to the graduate student advisers either in person or via e-mail. The graduate student advisers can discuss major requirements, scheduling, and major course selection, as well as review student checklists and discuss progress in the major. Occasionally, graduate student advisers may refer a student to someone else in the department (such as the director of undergraduate studies) or in the student’s school for additional advising.

Contact information and office hours for the graduate student advisers are posted on the Advisers page of the departmental website in the week prior to the beginning of the semester. Students considering one of the interdepartmental majors should speak to both a graduate student adviser from the Economics Department and the adviser from the other department early in the sophomore year.

Faculty Advisers

Faculty advisers are available to discuss students’ academic and career goals, both in terms of the undergraduate career and post-graduate degrees and research. Students wishing to discuss these types of substantive topics may request a faculty adviser by completing the form available on the Advisers page of the departmental website and depositing it in the mailbox of the director of undergraduate studies in the department's main office, 1022 International Affairs Building.

The department does its best to match students with faculty members that share similar academic interests. While faculty advisers do not discuss major requirements—that is the role of the graduate student advisers—they do provide guidance in course selection as it relates to meeting a student’s intellectual goals and interests, as well as advise on career and research options. It is recommended that students who plan on attending a Ph.D. program in economics or are interested in pursuing economics research after graduation request a faculty adviser.

ON-LINE INFORMATION

Students can access useful information on-line, including: a comprehensive FAQ page; requirement changes to the major and concentration; sample programs and checklists; faculty office hours, contact information and fields of specialization; adviser information; teaching assistant information; research assistant
opportunities; list of tutors; and Columbia-Barnard Economics Society information.

DEPARTMENTAL HONORS
Economics majors and economics joint majors who wish to be considered for departmental honors in economics must:

1. Have at least a 3.7 GPA in their major courses;
2. Take ECON GU4999 Senior Honors Thesis (a one-year course);
3. Receive at least a grade of A- in ECON GU4999 Senior Honors Thesis.

Students must consult and obtain the approval of the departmental undergraduate director in order to be admitted to the workshop. Please note that ECON GU4999 Senior Honors Thesis may be taken to fulfill the seminar requirement for the economics major and all economics joint majors. Students who wish to write a senior thesis (ECON GU4999 Senior Honors Thesis) must have completed the core major requirements. Normally no more than 10% of graduating majors receive departmental honors in a given academic year. Please see the Honors Prizes page on the department's website for more information.

UNDERGRADUATE PRIZES
All prize recipients are announced at the end of the spring semester each academic year.

Sanford S. Parker Prize
Established in 1980, this prize is awarded annually to a Columbia College graduating student who majored or concentrated in economics and plans on continuing his or her studies in an economics Ph.D. program within the two years following his or her graduation.

Romine Prize
Established in 1997, this prize is awarded annually to two students (Columbia College or General Studies) majoring in economics: one for the best honors thesis paper, and the other for the best economics seminar paper.

Parker Prize for Summer Research
The department provides financial support for five Columbia College underclassmen who take unpaid summer internships that focus on research.

PROFESSORS
Douglas Almond (also School of International and Public Affairs)
Jushan Bai
Jagdish N. Bhagwati
Sandra Black
Patrick Bolton (also Business School)
Alessandra Casella (also Political Science Department)

Yeon-Koo Che
Pierre-André Chiappori
Graciela Chichilnisky
Richard Clarida (also School of International and Public Affairs)
Donald Davis
Pratit Dutta
Harrison Hong
R. Glenn Hubbard (also Business School)
Nevin Kartik
Wojciech Kopczuk (also School of International and Public Affairs)
Sokbae (Simon) Lee
W. Bentley McLeod (also School of International and Public Affairs)
Suresh Naidu (also School of International and Public Affairs)
Serena Ng
Brendan O’Flaherty
Edmund S. Phelps
Andrea Prat (also Business School)
Jeffrey Sachs (also Earth Institute)
Xavier Sala-i-Martin
Bernard Salanié
José A. Scheinkman
Stephanie Schmitt-Grohé
Joseph Stiglitz (also Business School)
Martin Uribe
Miguel Urquiola (Chair) (also School of International and Public Affairs)
Eric Verhoogen (also School of International and Public Affairs)
David Weinstein
Michael Woodford

ASSOCIATE PROFESSORS
Mark Dean
Lena Edlund
Jennifer La’O
Qingmin Liu

ASSISTANT PROFESSORS
Hassan Afrouzi
Michael Best
Andres Drenik
Matthieu Gomez
Emilien Gouin-Bonenfant
Reka Juhasz
Elliot Lipnowski
Jose Luis Montiel Olea
Evan Sadler
Jack Willis

LECTURERS
Irasema Alonso
Tri Vi Dang
Ceyhan Elgin
Susan Elmes
Seyhan Erden
Tamrat Gashaw
Sunil Gulati
Ronald Miller
Wouter Vergote

ADJUNCT FACULTY
Claudia Halbac
Neal Masia
Caterina Musatti
Waseem Noor
Ingmar Nyman

ON LEAVE
Profs. Almond, Clarida, Gomez, Juhasz, La’O, Wills (2020-2021)
Profs. Bhagwati, Lee, Phelps, Sadler, Woodford (Fall 2020)
Profs. Casella, Dean, Edlund, Kartik, Montiel Olea, Ng (Spring 2021)

GUIDELINES FOR ALL ECONOMICS MAJORS, CONCENTRATORS, AND INTERDEPARTMENTAL MAJORS

Checklists and Requirement
Checklists and Requirement information are available on the Department website.

Course List

Economics Core Courses
All of the core courses must be completed no later than the spring semester of the student’s junior year and must be taken at Columbia. Students who take any core course during the fall semester of their senior year must obtain written permission from the department’s director of undergraduate studies. Unless otherwise specified below, all students must complete the following core courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON UN1105</td>
<td>Principles of Economics</td>
<td>None</td>
</tr>
<tr>
<td>ECON UN3211</td>
<td>Intermediate Microeconomics</td>
<td>ECON UN1105 Principles of Economics</td>
</tr>
<tr>
<td>ECON UN3213</td>
<td>Intermediate Macroeconomics</td>
<td>MATH UN1101 Calculus III or UN1205</td>
</tr>
<tr>
<td>ECON UN3412</td>
<td>Introduction To Econometrics</td>
<td>ECON UN1105 Principles of Economics</td>
</tr>
</tbody>
</table>

Prerequisites
Course prerequisites are strictly enforced. Prerequisites must be taken before the course, not after or concurrently.

Economics courses taken before the completion of any of its prerequisites, even with instructor approval, are not counted toward the major, concentration, or interdepartmental majors. Exemptions from a prerequisite requirement may only be made, in writing, by the department’s director of undergraduate studies. Credits from a course taken prior to the completion of its prerequisites are not counted towards the major requirements. As a consequence, students are required to complete additional, specific courses in economics at the direction of the director of undergraduate studies.

The prerequisites for required courses are as follows:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON UN1105</td>
<td>Principles of Economics</td>
<td>None</td>
</tr>
<tr>
<td>MATH UN1101</td>
<td>CALCULUS I</td>
<td></td>
</tr>
<tr>
<td>STAT UN1201</td>
<td>Calculus-Based Introduction to Statistics</td>
<td>ECON UN1105 Principles of Economics</td>
</tr>
<tr>
<td>MATH UN1101</td>
<td>CALCULUS I</td>
<td></td>
</tr>
<tr>
<td>ECON UN3211</td>
<td>Intermediate Microeconomics</td>
<td>ECON UN1105 Principles of Economics</td>
</tr>
<tr>
<td>MATH UN1201</td>
<td>Calculus III or UN1205</td>
<td></td>
</tr>
<tr>
<td>ECON UN3213</td>
<td>Intermediate Macroeconomics</td>
<td>ECON UN1105 Principles of Economics</td>
</tr>
<tr>
<td>MATH UN1101</td>
<td>CALCULUS I</td>
<td></td>
</tr>
<tr>
<td>STAT UN1201</td>
<td>Calculus-Based Introduction to Statistics</td>
<td>MATH UN1201 Calculus III or UN1205</td>
</tr>
<tr>
<td>ECON UN3412</td>
<td>Introduction To Econometrics</td>
<td>MATH UN1201 Calculus III or UN1205</td>
</tr>
<tr>
<td>ECON GU2000-level electives</td>
<td></td>
<td>MATH UN1201 Calculus III or UN1205</td>
</tr>
<tr>
<td>ECON GU4211</td>
<td>Advanced Microeconomics</td>
<td>ECON UN3211 Intermediate Microeconomics</td>
</tr>
<tr>
<td>ECON GU4412</td>
<td>Advanced Econometrics</td>
<td>ECON UN3211 Intermediate Microeconomics</td>
</tr>
<tr>
<td>ECON GU4413</td>
<td>Econometrics of Time Series and Forecasting</td>
<td>ECON UN3211 Intermediate Microeconomics</td>
</tr>
</tbody>
</table>

Corequisites:
MATH UN2500 ANALYSIS AND OPTIMIZATION or GU4061
MATH UN2010 LINEAR ALGEBRA

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ECON UN3025 Financial Economics  
ECON GU4020 Economics of Uncertainty and Information  
ECON GU4230 Economics of New York City  
ECON GU4260 Market Design  
ECON GU4280 CORPORATE FINANCE  
ECON GU4370 Political Economy  
ECON GU4700 Financial Crises  
ECON GU4710 FINANCE AND THE REAL ECONOMY  
ECON GU4850 Cognitive Mechanisms and Economic Behavior  
ECON UN3211 Intermediate Microeconomics  
ECON UN3213 Intermediate Macroeconomics  
STAT UN1201 Calculus-Based Introduction to Statistics  
ECON GU4860 Behavioral Finance  
All other ECON 3000- and 4000-level electives  
ECON UN3901 Economics of Education  
ECON UN3952 Seminar in Macroeconomics and Formation of Expectations  
ECON UN3981 Applied Econometrics  
ECON GU4911 MICROECONOMICS SEMINAR  
ECON GU4913 MACROECONOMICS SEMINAR  
ECON GU4918 Seminar In Econometrics  
ECPS GU4921 Seminar In Political Economy  
ECON UN3211 Intermediate Microeconomics  
ECON UN3213 Intermediate Macroeconomics  
ECON UN3412 Introduction To Econometrics  
ECPH GU4950 Economics and Philosophy Seminar  
ECON UN3121 Intermediate Microeconomics  
ECON GU4911 MICROECONOMICS SEMINAR  
ECON GU4913 MACROECONOMICS SEMINAR  
ECON GU4918 Seminar In Econometrics  
ECPS GU4921 Seminar In Political Economy  
ECON UN3211 Intermediate Microeconomics  
ECON UN3213 Intermediate Macroeconomics  
ECON UN3412 Introduction To Econometrics  
Barnard electives  
See Barnard bulletin  

It is **strongly recommended** that students take ECON UN3412 Introduction To Econometrics in the semester immediately following the completion of the statistics course.

**Grading**

No course with a grade of D or lower, including calculus and statistics courses, can count toward the major, concentration, or interdepartmental majors. Economics core courses with a grade of D or F must be retaken and completed with a grade of C- or better.

Students who receive a grade of D or F in a core course are permitted to take a higher-level elective course that has that core course as a prerequisite, so long as it is taken concurrently with the retaking of that core course. For example, if a student fails ECON UN3211 Intermediate Microeconomics, the student must retake it and, in the same semester, may enroll in an elective course for which it is a prerequisite, provided that all other prerequisites for the elective have been completed. The same rule applies to the required math and statistics courses. For example, if a student fails MATH UN1201 Calculus III, the student may retake calculus III concurrently with Intermediate Microeconomics. Students who must retake any core economics or math course may not retake it concurrently with a senior seminar; the economics core courses ECON UN3211 Intermediate Microeconomics, ECON UN3213 Intermediate Macroeconomics, and ECON UN3412 Introduction To Econometrics must be successfully completed before a student may enroll in a seminar.

A grade of W is not equivalent to a grade of D or F; it does not qualify a student to retake the course concurrently with a higher level course that lists the course as a prerequisite. Students who receive a grade of W in a core course must complete the course with a grade of C- or better before taking a course that lists it as a prerequisite.

Only ECON UN1105 Principles of Economics may be taken for a grade of Pass/D/Fail, and the student must receive a grade of P to it to count towards the requirements for the major, concentration, or interdepartmental majors.

**Economics Electives**

Only those courses identified in the Economics Department listings in this Bulletin may be taken for elective credit. All 3000-level or higher electives offered by the Economics Department have ECON UN3211 Intermediate Microeconomics and ECON UN3213 Intermediate Macroeconomics as prerequisites. However, some electives
have additional prerequisites and students should ensure that all prerequisites have been completed (see the table of prerequisites printed above). **Seminars do not count as electives.**

**Seminars**
Seminars can be taken only after all of the required core courses in economics have been successfully completed. Students may not take or re-take ECON UN3211 Intermediate Microeconomics, ECON UN3213 Intermediate Macroeconomics, or ECON UN3412 Introduction To Econometrics concurrently with any senior seminar. **Seminars do not count as electives.** Each seminar is limited to sixteen students, with priority given to seniors. For ECPS GU4921 Seminar In Political Economy and ECPH GU4950 Economics and Philosophy Seminar, priority is given to economics–political science and economics-philosophy majors, respectively.

For seminar registration details, read the information posted on the department’s Senior Seminar Registration page: [http://econ.columbia.edu/senior-seminars-registration](http://econ.columbia.edu/senior-seminars-registration).

**Mathematics**
Students must consult with the Mathematics Department for the appropriate placement in the calculus sequence. Students must complete one of the following sequences:

Select one of the following sequences:

<table>
<thead>
<tr>
<th>MATH UN1101</th>
<th>CALCULUS I and Calculus III</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH UN1201</td>
<td>CALCULUS I and Accelerated Multivariable Calculus</td>
</tr>
<tr>
<td>MATH UN1205</td>
<td>Honors Mathematics A and HONORS MATHEMATICS B</td>
</tr>
<tr>
<td>MATH UN1207</td>
<td>ECON GU4235 Historical Foundations of Modern Economics: Adam Smith to J M Keynes</td>
</tr>
<tr>
<td>MATH UN1208</td>
<td>ECON GU4400 Labor Economics</td>
</tr>
</tbody>
</table>

In addition:

1. Students who receive a grade of D or F in MATH UN1201 Calculus III or MATH UN1205 must retake the course, but may enroll in ECON UN3211 Intermediate Microeconomics.
2. Students who receive a grade of D or F in MATH UN1207 Honors Mathematics A may either retake the course, or take MATH UN1201 Calculus III or MATH UN1205, and enroll in ECON UN3211 Intermediate Microeconomics concurrently.

**Statistics**
Unless otherwise specified below, all students must take STAT UN1201 Calculus-Based Introduction to Statistics, or a higher level course, such as STAT GU4204 Statistical Inference, or STAT GU4001.

**Barnard Courses**
A limited number of Barnard economics electives may count toward the major, concentration, and interdepartmental majors. Students should pay careful attention to the limit of Barnard electives indicated in their program requirements. Please see the Transfer Credit section below for information on the number of Barnard electives that may be taken to fulfill major requirements. In addition, students may receive credit for the major, concentration, and interdepartmental majors only for those Barnard economics courses listed in this Bulletin. However, students may not receive credit for two courses whose content overlaps. Barnard and Columbia economics electives with overlapping content include but are not limited to:

<table>
<thead>
<tr>
<th>ECON BC3029</th>
<th>Empirical Development Economics and Economic Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON BC3038</td>
<td>International Money and Finance and International Macroeconomics</td>
</tr>
<tr>
<td>ECON BC3019</td>
<td>Labor Economics and Labor Economics</td>
</tr>
<tr>
<td>ECON BC3047</td>
<td>International Trade and International Trade</td>
</tr>
<tr>
<td>ECON BC3039</td>
<td>Environmental and Natural Resource Economics and Economics of the Environment</td>
</tr>
<tr>
<td>ECON GU4235</td>
<td>Theoretical Foundations of Political Economy and HISTORICAL FOUNDATIONS OF MODERN ECONOMICS: Adam Smith to J M Keynes</td>
</tr>
<tr>
<td>ECON GU4400</td>
<td>Labor Economics</td>
</tr>
</tbody>
</table>

Students should always first consult with econ-advising to confirm that the Barnard elective they wish to take does not overlap with a Columbia elective that they have already taken or plan to take. Students may not take the Barnard core economics, math, statistics, or seminar courses for credit towards the completion of major requirements.

**School of Professional Studies Courses**
The Department of Economics does not accept any of the courses offered through the School of Professional Studies for credit towards the economics major, concentration, or interdepartmental majors with the exception of the courses offered by the Economics Department during the summer session at Columbia.

**Other Department and School Courses**
Please note that with the exception of the above Barnard courses and the specific courses listed below for the financial economics major, no other courses offered through the different departments and schools at Columbia count toward the economics majors or concentration.

**Transfer Credits**
Students are required to take a minimum number of courses in the Columbia Economics Department. For all majors and
interdepartmental majors, students must complete a minimum of five lecture courses in the Columbia department. Students may fulfill their remaining requirements for economics lecture courses through AP (or IB or GCE) credits, Barnard electives, transfer courses, and study abroad courses (the latter two are subject to the approval of the Economics Department). The following table summarizes the new rules:

<table>
<thead>
<tr>
<th>Program</th>
<th>Number of required economics lecture courses</th>
<th>Minimum number which must be taken in the department</th>
<th>Maximum number of outside allowed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economics major</td>
<td>9</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Financial economics</td>
<td>8</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Economics-mathematics</td>
<td>7</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Economics-political science</td>
<td>7</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Economics-statistics</td>
<td>7</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Economics-philosophy</td>
<td>7</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Economics concentration</td>
<td>7</td>
<td>4</td>
<td>3</td>
</tr>
</tbody>
</table>

1. **Lecture courses** do not include seminars, which must be taken in the Columbia Economics Department. The lecture course counts are counts of economics courses only and do not include math, statistics, or courses in other departments;

2. At least two of the three 3000-level economics core courses must be taken in the department and no corresponding Barnard courses are accepted. ECON UN3025 Financial Economics and ECON UN3265 MONEY AND BANKING are counted as departmental courses regardless of the instructor;

3. **Outside courses** include AP (or IB or GCE) credits, transfer credits, Barnard 2000- and 3000-level elective courses and transfer credits from other universities. In the case where two or more courses taken outside of Columbia are used as the equivalent of ECON UN1105 Principles of Economics, those courses are counted as one transfer course.

**Approval of transfer credits** to fulfill economics requirements must be obtained in writing from the Department of Economics (see the departmental website or speak with your advising dean for information regarding applications for transfer credit). Approval is granted only for courses that are considered to be comparable to those offered at Columbia.

**Summer courses** taken at other institutions must be approved in writing by the department's transfer credit adviser before the course is taken. The department does not accept transfer credits for any 3000 level core courses taken during a summer session outside of Columbia University. Summer courses taken from the department of economics at Columbia University do not need approval.

**Guidelines and instructions** on how to request transfer credit approval can be found in the Transfer Credit Information page of the departmental website.

### Major in Economics

Please read Guidelines for all for Economics Majors, Concentrators, and Interdepartmental Majors (p. 255) above.

The economics major requires a minimum of 35 points in economics, 6 points in mathematics, and 3 points in statistics, for a total of at least 44 points as follows:

**Economics Core Courses**

All economics core courses

**Mathematics**

Select a mathematics sequence

**Statistics**

Select a statistics course

**Economics Electives**

Select at least five electives, of which no more than one may be taken at the 2000-level (including Barnard courses)

**Economics Seminar**

Select one economics seminar course

### Concentration in Economics

Please read Guidelines for all for Economics Majors, Concentrators, and Interdepartmental Majors (p. 255) above.

The economics concentration requires a minimum of 25 points in economics, 6 points in mathematics, and 3 points in statistics, for a total of at least 34 points as follows:

**Economics Core Courses**

All economics core courses

**Mathematics**

Select a mathematics sequence

**Statistics**

Select a statistics course

**Economics Electives**

Select at least three electives, of which no more than one may be taken at the 2000-level (including Barnard courses)

### Major in Financial Economics

Please read Guidelines for all for Economics Majors, Concentrators, and Interdepartmental Majors (p. 255) above.

The Department of Economics offers the major in financial economics, which provides an academic framework to explore
the role of financial markets and intermediaries in the allocation (and misallocation) of capital. Among the topics studied in financial economics are financial markets, banks and other financial intermediaries, asset valuation, portfolio allocation, regulation and corporate governance.

The financial economics major requires 26 points in economics, 6 points in mathematics, 3 points in statistics, 3 points in business, and 12 points from a list of selected courses for a total minimum of 50 points as follows:

**Economics Core Courses**
All economics core courses

**Finance Core Courses**
- ECON UN3025  
  Financial Economics  
- ECON GU4280  
  CORPORATE FINANCE  
- BUSI UN3013  
  Financial Accounting

*NOTE: The department considers BUSI UN3013 and IEOR E2261 as overlapping courses. Students who take both courses shall be credited with one course only. Financial economics majors who are also in the Business Management concentration program (CNBUMG) must take an additional elective from either the financial economics prescribed elective list (below) or from the CNBUMG prescribed list.

**Mathematics**
Select a mathematics sequence

**Statistics**
Select a statistics course

**Electives**
Select four of the following, of which two must be from the Columbia or Barnard economics departments, or equivalent economics transfer credits:
- ECON BC3014  
  Entrepreneurship  
- ECON BC3017  
  Economics of Business Organization  
- ECON UN3265  
  MONEY AND BANKING  
- ECON UN3952  
  Seminar in Macroeconomics and Formation of Expectations  
- ECON GU4020  
  Economics of Uncertainty and Information  
- ECON GU4213  
  Advanced Macroeconomics  
- ECON GU4251  
  Industrial Organization  
- ECON GU4260  
  Market Design  
- ECON GU4412  
  Advanced Econometrics  
- ECON GU4415  
  Game Theory  
- ECON GU4465  
  Public Economics  
- ECON GU4500  
  International Trade  
- ECON GU4505 or ECON BC3038  
  International Macroeconomics  
- ECON G4526  
  Transition Reforms, Globalization and Financial Crisis  
- ECON GU4700  
  Financial Crises  
- ECON GU4710  
  FINANCE AND THE REAL ECONOMY  
- ECON GU4840  
  BEHAVIORAL ECONOMICS  
- ECON GU4850  
  Cognitive Mechanisms and Economic Behavior  
- ECON GU4860  
  Behavioral Finance  
- BIOT GU4180  
  Entrepreneurship in Biotechnology  
- BUSI UN3021  
  Marketing Management  
- BUSI UN3701  
  STRATEGY FORMULATION  
- BUSI UN3702  
  Venturing to Change the World  
- BUSI UN3703  
  Leadership in Organizations  
- BUSI UN3704  
  Making History Through Venturing  
- COMS W1002  
  COMPUTING IN CONTEXT  
- HIST W2904  
  History of Finance  
- IEOR E3106  
  STOCHASTIC SYSTEMS AND APPLICATIONS  
- IEOR E4700  
  INTRO TO FINANCIAL ENGINEERING  
- MATH UN3050  
  Discrete Time Models in Finance  
- POLS UN3630  
  Politics of International Economic Relations  
- STAT W3201  
  Math Finance in Continuous Time  
- STAT GU4261  
  Statistical Methods in Finance  
- STAT GU4207  
  Elementary Stochastic Processes  
- STAT GU4262  
  Stochastic Processes for Finance

**Seminar**
The seminar must be chosen from a list of seminars eligible for the financial economics major. The department indicates which seminars are eligible for the major on the Senior Seminars page of the departmental website. Students must have completed at least one of ECON UN3025 or ECON GU4280 prior to taking their senior seminar.

* Students must complete the finance core no later than fall of their senior year.

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**MAJOR IN ECONOMICS-MATHEMATICS**

Please read Guidelines for all for Economics Majors, Concentrators, and Interdepartmental Majors (p. 255) above.

The major in economics and mathematics provides students with a grounding in economic theory comparable to that provided by the general economics major and exposes students to rigorous and extensive training in mathematics. The program is recommended for any student planning to do graduate work in economics.

The Department of Economics has graduate student advisers with whom students may consult on economics requirements. The Department of Mathematics has an assigned adviser with whom students may consult on mathematics requirements. The economics adviser can only advise on economics requirements; the mathematics adviser can only advise on mathematics requirements.
The economics-mathematics major requires a total of 52 or 56 points (depending on mathematics sequence): 29 points in economics and 23-27 points in mathematics and statistics as follows:

**Economics Core Courses**
- All economics core courses

**Economics Electives**
- Select three electives at the 3000-level or above

**Mathematics**
- Select one of the following sequences:
  - MATH UN1101 - MATH UN1102 - MATH UN1201 - MATH UN2010: CALCULUS I and CALCULUS II and Calculus and LINEAR ALGEBRA
  - MATH UN1101 - MATH UN1102 - MATH UN1205 - MATH UN2010: CALCULUS I and CALCULUS II and Accelerated Multivariable Calculus and LINEAR ALGEBRA
  - MATH UN1207 - MATH UN1208: Honors Mathematics A and HONORS MATHEMATICS B

Note: Students who take MATH UN1205 may not receive credit for both MATH UN1201 and MATH UN1202.

Analysis requirement:
- MATH UN2500: ANALYSIS AND OPTIMIZATION

Select three of the following:
- MATH UN1202: CALCULUS IV
- MATH UN2030: ORDINARY DIFFERENTIAL EQUATIONS

Any mathematics course at the 3000-level or above

Note: Students who take MATH UN1205 will not receive credit for MATH UN1202.

**Statistics**
- Select a statistics course

**Economics Seminar**
- Select an economics seminar

**NOTE:**
1. Students who fulfill the statistics requirement with STAT GU4203 and STAT GU4204, may count STAT GU4203 or STAT GU4204 as one of the three required mathematics electives.
2. Students who choose the one year sequence (STAT GU4203/STAT GU4204), must complete the year long sequence prior to taking ECON UN3412. Students receive elective credit for the probability course.

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**MAJOR IN ECONOMICS-PHILOSOPHY**

Please read Guidelines for all for Economics Majors, Concentrators, and Interdepartmental Majors (p. 255) above.

Economics-philosophy is an interdisciplinary major that introduces students to basic methodologies of economics and philosophy and stresses areas of particular concern to both, e.g. rationality and decision making, justice and efficiency, freedom and collective choice, logic of empirical theories and testing. Many issues are dealt with historically. Classic texts of Plato, Kant, Mill, Marx, and Smith are reviewed.

The Department of Economics has graduate student advisers with whom students may consult on economics requirements. The Department of Philosophy has an assigned adviser with whom students may consult on philosophy requirements. The economics adviser can only advise on economics requirements; the philosophy adviser can only advise on philosophy requirements.

The economics-philosophy major requires a total minimum of 54 points: 25 points in economics, 16 points in philosophy, 6 points in mathematics, 3 points in statistics, and 4 points in the interdisciplinary seminar as follows:

**Economics Core Courses**
- ECON UN1105: Principles of Economics
- ECON UN3211: Intermediate Microeconomics
- ECON UN3213: Intermediate Macroeconomics
- ECON UN3412: Introduction To Econometrics

**Mathematics**
- Select a mathematics sequence

**Statistics**
- Select a statistics course

**Economics Electives**
- Three Electives are required; two must be selected from the below list, and the remaining elective may be any economics elective at the 3000-level or above.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON GU4020</td>
<td>Economics of Uncertainty and Information</td>
</tr>
<tr>
<td>ECON GU4211</td>
<td>Advanced Microeconomics</td>
</tr>
<tr>
<td>ECON GU4213</td>
<td>Advanced Macroeconomics</td>
</tr>
<tr>
<td>ECON GU4228</td>
<td>Urban Economics</td>
</tr>
<tr>
<td>ECON GU4230</td>
<td>Economics of New York City</td>
</tr>
<tr>
<td>ECON GU4235</td>
<td>HISTORICAL FOUNDATIONS OF MODERN ECONOMICS: Adam Smith to J M Keynes</td>
</tr>
<tr>
<td>ECON GU4260</td>
<td>Market Design</td>
</tr>
<tr>
<td>ECON GU4301</td>
<td>ECONOMIC GROWTH # DEVELOPMNT I</td>
</tr>
<tr>
<td>ECON GU4321</td>
<td>Economic Development</td>
</tr>
<tr>
<td>or ECON BC3029</td>
<td>Empirical Development Economics</td>
</tr>
<tr>
<td>ECON GU4370</td>
<td>Political Economy</td>
</tr>
<tr>
<td>ECON GU4400</td>
<td>Labor Economics</td>
</tr>
</tbody>
</table>
Students who declared before Spring 2014: The requirements for this program were modified in 2014. Students who declared this program before Spring 2014 should contact the director of undergraduate studies for the department in order to confirm their options for major requirements.

**MAJOR IN ECONOMICS–POLITICAL SCIENCE**

Please read Guidelines for all for Economics Majors, Concentrators, and Interdepartmental Majors (p. 255) above.

Political economy is an interdisciplinary major that introduces students to the methodologies of economics and political science and stresses areas of particular concern to both. This program is particularly beneficial to students planning to do graduate work in schools of public policy and international affairs.

The Department of Economics has graduate student advisers with whom students may consult on economics requirements. The Department of Political Science has an assigned adviser with whom students may consult on political science requirements. The economics adviser can only advise on economics requirements; the political science adviser can only advise on political science requirements.

The economics–political science major requires a total of 59 points: 22 points in economics, 17 points in political science, 6 points in mathematics, 6 points in statistical methods, 4 points in a political science seminar, and 4 points in the interdisciplinary seminar as follows.

The political science courses are grouped into four areas, i.e. subfields: (1) American Politics, (2) Comparative Politics, (3) International Relations, and (4) Political Theory. For the political science part of the major, students are required to select one area as a major subfield and one as a minor subfield. The corresponding introductory courses in both subfields must be taken, plus two electives in the major subfield, and one in the minor subfield.

**Economics Core Courses**
- ECON UN1105 Principles of Economics
- ECON UN3211 Intermediate Microeconomics
- ECON UN3213 Intermediate Macroeconomics
- ECON GU4370 Political Economy

**Mathematics**
Select a mathematics sequence

**Statistical Methods**
- Select one of the following:
  - ECON UN3412 Introduction To Econometrics
  - POLS GU4712 PRINC OF QUANT POL RESEARCH 2

**Economics Electives**
Select two electives (6 points) at the 3000-level or above

**Political Science Courses**
Students must choose a Primary Subfield and a Secondary Subfield to study. The subfields are as follows: American Politics (AP), Comparative Politics (CP), International Relations (IR), and Political Theory (PT).

Primary Subfield: Minimum three courses, one of which must be the subfield’s introductory course.

Secondary Subfield: Minimum two courses, one of which must be the subfield’s introductory course.

**Seminars**
Students must take the following two seminars:
- ECPS GU4921 Seminar In Political Economy and a Political Science Department seminar, in the student's Primary Subfield. Please select one of the following: *
  - POLS UN3911 or POLS UN3912 Seminar in Political Theory
  - POLS UN3921 AMERICAN POLITICS SEMINAR
  - POLS UN3922 AMERICAN POLITICS SEMINAR
  - POLS UN3951 COMPARATIVE POLITICS SEMINAR
  - POLS UN3952 Seminar in Comparative Politics
  - POLS UN3961 INTERNATIONAL POLITICS SEMINAR
  - POLS UN3962 INTERNATIONAL POLITICS SEMINAR
• Students who wish to count toward the political science seminar requirement a course that is not in the above list of approved seminars must obtain permission from the political science Director of Undergraduate studies. Barnard colloquia can count for seminar credit only with the written permission of the Director of Undergraduate Studies. Note that admission to Barnard colloquia is by application to the Barnard political science department only.

**MAJOR IN ECONOMICS-STATISTICS**

Please read Guidelines for all for Economics Majors, Concentrators, and Interdepartmental Majors (p. 255) above.

The major in economics-statistics provides students with a grounding in economic theory comparable to that provided by the general economics major, but also exposes students to a significantly more rigorous and extensive statistics training than is provided by the general major. This program is recommended for students with strong quantitative skills and for those contemplating graduate studies in economics.

The Department of Economics has graduate student advisers with whom students may consult on economics requirements. The Department of Statistics has an assigned adviser with whom students may consult on statistics requirements. The economics adviser can only advise on economics requirements; the statistics adviser can only advise on statistics requirements.

The economics-statistics major requires a total of 59 points: 29 in economics, 15 points in statistics, 12 points in mathematics, 3 points in computer science as follows:

<table>
<thead>
<tr>
<th>Economics Core Courses</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>All economics core courses</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Economics Electives</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Select three electives at the 3000-level or above</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Mathematics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Select one of the following sequences:</td>
<td></td>
</tr>
<tr>
<td>MATH UN1101 - MATH UN1102 - MATH UN1201 - MATH UN2010</td>
<td>CALCULUS I and CALCULUS II and Calculus III and LINEAR ALGEBRA</td>
</tr>
<tr>
<td>MATH UN1101 - MATH UN1102 - MATH UN1205 - MATH UN2010</td>
<td>CALCULUS I and CALCULUS II and Accelerated Multivariable Calculus and LINEAR ALGEBRA</td>
</tr>
<tr>
<td>MATH UN1207 - MATH UN1208</td>
<td>Honors Mathematics A and HONORS MATHEMATICS B</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Statistics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT UN1201</td>
<td>Calculus-Based Introduction to Statistics</td>
</tr>
<tr>
<td>STAT GU4203</td>
<td>PROBABILITY THEORY</td>
</tr>
<tr>
<td>STAT GU4204</td>
<td>Statistical Inference</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Computer Science</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>One elective in statistics from among courses numbered STAT GU 4206 through GU 4266.</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Computer Science</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Select one of the following:</td>
<td></td>
</tr>
<tr>
<td>COMS W1004</td>
<td>Introduction to Computer Science and Programming in Java</td>
</tr>
<tr>
<td>COMS W1005</td>
<td>Introduction to Computer Science and Programming in MATLAB</td>
</tr>
<tr>
<td>COMS W1007</td>
<td>Honors Introduction to Computer Science</td>
</tr>
<tr>
<td>ENGI E1006</td>
<td>INTRO TO COMP FOR ENG/APP SCI</td>
</tr>
<tr>
<td>STAT UN2102</td>
<td>Applied Statistical Computing</td>
</tr>
<tr>
<td>ECON GU4918</td>
<td>Seminar In Econometrics</td>
</tr>
</tbody>
</table>

**Students who declared before Spring 2014:** The requirements for this program were modified in 2014. Students who declared this program before Spring 2014 should contact the director of undergraduate studies for the department in order to confirm their options for major requirements.
EDUCATION

Please note that the Educational Studies major is currently being offered to Barnard College students only.

335-336 Milbank Hall
212-854-7072
education@barnard.edu

Program Director/Chair: Professor Thea Abu El-Haj
Department Assistant:

The Barnard Education Program is committed to strengthening public education and addressing issues of equity and social justice, particularly in urban schools. We offer three tracks in Education: Educational Studies, Urban Teaching-Elementary/Childhood Education, and Urban Teaching-Secondary/Adolescent Education. In these tracks, students develop a critical lens for looking at the issues facing public schooling and consider ways to promote fair and inclusive policies and practices for all children in our public system. The program is open to all undergraduates at Columbia (BC, SEAS, GS, CC) who are interested in becoming certified teachers, working with young people in human service agencies, or preparing for careers related to education.

Educational Studies Major: This major is an interdisciplinary program for students who wish to understand, critically analyze, and conduct research on the role of education in society. Students who pursue the major in Educational Studies learn to evaluate educational policy, practice, and research through a critical, equity-oriented lens. Our graduates are prepared to act creatively for peace, justice, and sustainability in a range of local and global educational contexts.

Currently, the major in Education Studies is open to Barnard College students only.

Education Studies Minor/Special Concentration: This track prepares students to pursue graduate studies or positions in public policy, sociology, history, youth studies, philosophy, psychology, and other areas where K-12 education is frequently a focus of coursework and scholarship. Students learn to think deeply and knowledgeably about the manner in which schools socialize as well as educate citizens, and examine how the interests of different stakeholders are privileged or neglected. The courses are linked by a focus on educational inequality and youth studies. This track does not lead to certification.

All three tracks are minors (BC) or special concentrations (CC, GS, SEAS) and are intended to complement a major’s disciplinary specialization and methodological training. In addition to the requirements of the minor/special concentration, students must complete a major.

Urban Teaching Minors/Special Concentrations: Our goal is to prepare students to become skilled and reflective teachers who can effectively respond to the learning needs of diverse learners, and create supportive and intellectually stimulating classroom communities. Students learn to create innovative curriculum; gain experience observing, tutoring, and teaching a diverse range of children and young people; develop confidence in their role as teachers who can promote fair and inclusive school practices; and graduate with certification to teach in New York. (Note: we are part of an interstate agreement for reciprocal certification with many other states.)

This program is registered by the New York State Department of Education and accredited by the Association for Advancing Quality in Educator Preparation (AAQEP). These tracks prepare students to obtain a teaching position as a certified teacher upon graduation and/or to pursue graduate studies in education, public policy, sociology, youth studies, and other related fields.

Student Learning Outcomes

1. Knowledge of Self: Students investigate how educational experiences in and out of school affect their vision for teaching and learning, use that knowledge to reflect upon and critique their practice, and set goals for continuing growth as equitable, multicultural educators.

2. Knowledge of Students: Students understand the importance of getting to know the children and youth in their classrooms; develop specific strategies that aid in understanding students’ needs, capacities, interests, funds of knowledge, and social identities; and construct learning experiences that are responsive and relevant to their students.

3. Knowledge of Content: Students develop knowledge and skills to critique the social, political, cultural, and historical forces that construct traditional content knowledge and design academic content that is dynamic, inquiry-based, and encompasses multiple literacies, and cultural perspectives.


5. Knowledge of Context: Students investigate the complex ways in which social, political, cultural, and historical forces shape school contexts, including students’ opportunities in schools, teacher empowerment, effective leadership, roles of parents and the community, and patterns of similarity and difference across schools.

The Education Program is accredited by Teacher Education Accreditation Council (TEAC) to recommend students who complete the program for Initial Certification in either Childhood Education (Grades 1-6) or Adolescent Education (Grades 7-12). Graduates of the program are also eligible for membership in the Interstate Certification Agreement, a reciprocal certification among forty-one states. We provide ongoing support to those who teach in the New York City area through our New Teacher Network.
To apply to the Urban Teaching tracks, please visit our [website](#). Students are encouraged to apply for admission by March of the sophomore year but no later than the first Tuesday in September of the junior year. Those who plan to study abroad during junior year should apply by the spring of the freshman year, but no later than the first Tuesday in September of the sophomore year and take the Inclusive Approaches and Multicultural Pedagogy courses in the fall and spring of sophomore year. Admission criteria include good academic standing; evidence of commitment to the field of education; interest in issues of social justice issues as they affect education, particularly in urban schools; and capacity for growth as an intellectually resourceful and reflective teacher. Enrollment is limited.

**Professors**
Thea Abu El-Haj (Program Director/Chair)
Maria Rivera Maulucci

**Senior Lecturer and Certification Officer**
Lisa Edstrom

**Term Assistant Professors**
Erika Kitzmiller
Chandler Miranda
Natalia Ortiz
Rachel Throop

**Education Advisory Committee**
Peter Balsam, Professor of Psychology and Samuel R. Milbank Chair
Lesley Sharp, Barbara Chamberlain & Helen Chamberlain Josefsberg Professor of Anthropology
Herbert Sloan, Professor Emeritus of History
Kathryn Yatrakis, Professor of Urban Studies and Former Dean of Academic Affairs (Columbia College)

Please note that the Educational Studies major is currently being offered to Barnard College students only.

**Requirements for the Educational Studies Major**
To complete the Major (BC) in Educational Studies, students must complete a minimum of 40 points of course work, listed below. Please note that the Educational Studies major is currently being offered to Barnard College students only.

The Education Studies track requires a minimum of eleven courses:

**Requirement A - Foundational Coursework**
EDUC BC1510   EDUCAational Foundations
URBS UN3310   Race, Space, and Urban Schools

**Requirement B - Pedagogical Elective**
Select one of the following:
EDUC BC3050   Science in the City

EDUC BC3052   Math and the City
EDUC BC3055   Arts and Humanities in the City: Critical Literacy and Digital Storytelling
EDUC BC3058   Science in the City II: Preparing Future Scientists Now
SOCI UN3974   Sociology of Schools, Teaching and Learning

**Requirement C - Concentration Courses**
Select 6 of the following: At least 2 courses must be EDUC courses. Course selection to be determined with adviser.
EDUC BC3032   INVESTIGATING THE PURPOSES AND AIMS OF EDUCATION POLICY
EDUC BC3042   Gender, Sexuality, and Schooling
EDUC BC3045   Complicating Class: Education and the Limits of Equity
EDUC BC3040   MIGRATION, GLOBALIZATION, AND EDUCATION
EDUC BC3250   EDUCATION IN A POLARIZED AND UNEQUAL SOCIETY
EDUC BC3044   Education and Social Change in Comparative Global Contexts
EDUC BC3034   Families, Communities, and Schools
EDUC BC3030   Critical Pedagogies
PHIL UN2100   Philosophy of Education
SOCI UN3225   Sociology of Education
ECON BC3012   Economics of Education
PSYC BC2134   Educational Psychology
CSER UN3928   Colonization/Decolonization
HRTS UN3001   Introduction to Human Rights

**Other Courses**
You may count other electives not listed here toward the Concentration Courses requirement. These courses must be reviewed with your adviser before enrollment.

**Requirement D - Senior Capstone**
EDUC BC3088   Course EDUC BC3088 Not Found
EDUC BC3089   Senior Research Seminar: Inquiry

**Requirements for the Urban Teaching Minors/Special Concentrations**

**Elementary/Childhood Education (To Teach Grades 1-6)**
This program leads to New York State Initial Certification in Childhood Education (Grades 1-6). In addition to the liberal arts major, students must complete a total of 32-34 credits as follows:

**Requirement A - Educational Foundations**
For students who have already taken EDUC BC3032, PHIL UN2100, SOCI UN3225, or ECON BC3012 to fulfill Requirement A prior to Fall 2018 do not need to enroll in EDUC BC1510 to fulfill the requirement.

EDUC BC3052   Math and the City
EDUC BC3055   Arts and Humanities in the City: Critical Literacy and Digital Storytelling
EDUC BC3058   Science in the City II: Preparing Future Scientists Now
SOCI UN3974   Sociology of Schools, Teaching and Learning

**Requirement C - Concentration Courses**
Select 6 of the following: At least 2 courses must be EDUC courses. Course selection to be determined with adviser.
EDUC BC3032   INVESTIGATING THE PURPOSES AND AIMS OF EDUCATION POLICY
EDUC BC3042   Gender, Sexuality, and Schooling
EDUC BC3045   Complicating Class: Education and the Limits of Equity
EDUC BC3040   MIGRATION, GLOBALIZATION, AND EDUCATION
EDUC BC3250   EDUCATION IN A POLARIZED AND UNEQUAL SOCIETY
EDUC BC3044   Education and Social Change in Comparative Global Contexts
EDUC BC3034   Families, Communities, and Schools
EDUC BC3030   Critical Pedagogies
PHIL UN2100   Philosophy of Education
SOCI UN3225   Sociology of Education
ECON BC3012   Economics of Education
PSYC BC2134   Educational Psychology
CSER UN3928   Colonization/Decolonization
HRTS UN3001   Introduction to Human Rights

**Other Courses**
You may count other electives not listed here toward the Concentration Courses requirement. These courses must be reviewed with your adviser before enrollment.

**Requirement D - Senior Capstone**
EDUC BC3088   Course EDUC BC3088 Not Found
EDUC BC3089   Senior Research Seminar: Inquiry
EDUC BC1510  EDUCATIONAL FOUNDATIONS  4

**Requirement B - Psychology**
Select one of the following:  3-4.5

- PSYC BC1115  Cognitive Psychology
- PSYC BC1129  Developmental Psychology
- PSYC BC2134  Educational Psychology
- PSYC UN1420  RESEARCH METHODS - HUMAN BEHAVIOR *

**Requirement C - Pedagogical Elective**
Select one of the following:

- EDUC BC3050  Science in the City
- EDUC BC3052  Math and the City
- EDUC BC3055  Arts and Humanities in the City: Critical Literacy and Digital Storytelling
- EDUC BC3058  Science in the City II: Preparing Future Scientists Now

**Requirement D - Pedagogical Core**

- EDUC BC3025  Inclusive Approaches to Teaching Literacy: Theory and Practice  4
- EDUC BC3053  Multicultural Elementary Pedagogy  4
- EDUC BC3063  Elementary Student Teaching in Urban Schools  6
- EDUC BC3064  Critical Inquiry in Urban Teaching  4
- EDUC BC3061  Performance Assessment of Teaching  3

**Requirement E - Liberal Arts and Sciences**
Visit [https://education.barnard.edu/UrbanTeaching/LiberalArtsandSciencesRequirements](https://education.barnard.edu/UrbanTeaching/LiberalArtsandSciencesRequirements) for more information.

**Requirement F - Clinical Experiences**
Visit [https://education.barnard.edu/UrbanTeaching/ClinicalExperiences](https://education.barnard.edu/UrbanTeaching/ClinicalExperiences) for more information.

* Courses offered at Columbia

Note: Senior year student teaching may conflict with other opportunities at Barnard (e.g., PSYC BC3465 Field Work # Research Seminar: Toddler Center, PSYC BC3466 FIELD WORK # RESEARCH SEMINAR: TODDLER CENTER). Students with these interests should arrange their schedules accordingly.

**Secondary/Adolescent Education (To Teach Grades 7-12)**

This program leads to the New York State Initial Certification in Adolescent Education (Grades 7-12) in the fields of English, Foreign and Ancient Languages, Mathematics, the Sciences, and Social Studies. Students must complete a total of 32-34 credits from the following course of study:

**Requirement A - Educational Foundations**  For students who have already taken EDUC BC3032, PHIL UN2100, SOCI UN3225, or ECON BC3012 to fulfill Requirement A prior to Fall 2018 do not need to enroll in EDUC BC1510 to fulfill the requirement.

- EDUC BC1510  EDUCATIONAL FOUNDATIONS  4

**Requirement B - Psychology**
Select one of the following:  3-4.5

- PSYC BC1107  Psychology of Learning
- PSYC BC1115  Cognitive Psychology
- PSYC BC1129  Developmental Psychology
- PSYC BC2134  Educational Psychology
- PSYC BC3382  Adolescent Psychology
- PSYC UN1420  RESEARCH METHODS - HUMAN BEHAVIOR *

**Requirement C - Pedagogical Elective**
Select one of the following:

- EDUC BC3050  Science in the City
- EDUC BC3052  Math and the City
- EDUC BC3055  Arts and Humanities in the City: Critical Literacy and Digital Storytelling
- EDUC BC3058  Science in the City II: Preparing Future Scientists Now

**Requirement D - Pedagogical Core**

- EDUC BC3025  Inclusive Approaches to Teaching Literacy: Theory and Practice  4
- EDUC BC3054  Multicultural Secondary Pedagogy  4
- EDUC BC3065  Secondary Student Teaching in Urban Schools  6
- EDUC BC3064  Critical Inquiry in Urban Teaching  4
- EDUC BC3061  Performance Assessment of Teaching  3

**Requirement E - Liberal Arts and Sciences**
Visit [https://education.barnard.edu/UrbanTeaching/LiberalArtsandSciencesRequirements](https://education.barnard.edu/UrbanTeaching/LiberalArtsandSciencesRequirements) for more information.

**Requirement F - Clinical Experiences**
Visit [https://education.barnard.edu/UrbanTeaching/ClinicalExperiences](https://education.barnard.edu/UrbanTeaching/ClinicalExperiences) for more information.

**Additional Urban Teaching Certification Requirements: Adolescent/Secondary**

Students seeking certification in Adolescent Education must also complete 36 credits in the content area for which they seek certification. Typically, students major in the subject area for which they are seeking certification. Students must earn a grade of C or better for each course taken in the content core.

**English:**
A total of 36 credits of English.

**Foreign Languages:**
A total of 36 credits in French, German, Greek, Italian, Latin, or Spanish.

**Mathematics:**
A total of 36 credits of Mathematics.

**Science:**
A total of 36 credits in sciences including a minimum of 18 credits of collegiate-level study in the science or each of the sciences for which certification is sought: Biology, Chemistry, Physics, or Earth Science. Please note that psychology does not count as a science for NYS Teacher Certification.

Social Studies:
A total of 36 credits, including 6 credits of American History; 6 credits of European or World History; 3 credits of non-Western study; and any other distribution to make 36 credits, chosen from credits in History, Political Science, Anthropology, Sociology, and Economics.

Certification Requirements
The Urban Teaching program is accredited by AAQEP and approved by the New York State Education Department to recommend students who complete the program for Initial Certification in either Childhood Education (grades 1-6) or Adolescent Education (grades 7-12). New York State has reciprocity with most other states, allowing graduates of the program the ability to apply for certification in another state through our membership in the Interstate Certification Agreement.

Certification is based on demonstrated competency in both academic and field settings. Students are required to complete a minimum of 360 hours of educational based clinical experiences. 260+ hours must be supervised field based experiences. Students must pass the New York State Teacher Certification Examinations and the edTPA performance assessment. Also required are workshops in Child Abuse Identification; School Violence Intervention and Prevention; and the Dignity for All Students Act (DASA), offered at Teachers College.

Requirements for the Education Studies Minor/Special Concentration
To complete the Minor (BC) or Special Concentration (CC/GS) in Education Studies, students must complete 21-24 points of course work, listed below.

The Education Studies track requires a minimum of six courses:

**Requirement A - Educational Foundations**
EDUC BC1510  EDUCATIONAL FOUNDATIONS  4

**Requirement B - Educational Electives**
Select three of the following: One Educational Elective course must be an EDUC course.
EDUC BC3030  Critical Pedagogies
EDUC BC3032  INVESTIGATING THE PURPOSES AND AIMS OF EDUCATION POLICY

Requirements for the Urban Teaching Specialization
Urban Studies majors who wish to pursue certification should apply to the Education Program by the spring of their freshman year. We encourage students to plan carefully if they wish to pursue this option.

Urban Studies majors who have selected Urban Teaching as their area of specialization within the major should complete the following:

**Requirement A - Educational Foundations**
EDUC BC1510  EDUCATIONAL FOUNDATIONS  4

* Courses offered at Columbia

** Certification Requirements **
Please note that some applied science courses will not be accepted.
**Requirement B - Psychology**
Select one of the following:

- PSYC BC1107  Psychology of Learning
- PSYC BC1115  Cognitive Psychology
- PSYC BC1129  Developmental Psychology
- PSYC BC2134  Educational Psychology
- PSYC BC3382  Adolescent Psychology
- PSYC UN1420  RESEARCH METHODS - HUMAN BEHAVIOR *

**Requirement C - Field Studies**
Select one of the following:

- EDUC BC3050  Science in the City
- EDUC BC3052  Math and the City
- EDUC BC3055  Arts and Humanities in the City: Critical Literacy and Digital Storytelling
- EDUC BC3058  Science in the City II: Preparing Future Scientists Now
- SOCI UN3974  Sociology of Schools, Teaching and Learning

**Requirement D - Pedagogical Core**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC BC3025</td>
<td>Inclusive Approaches to Teaching Literacy: Theory and Practice</td>
</tr>
<tr>
<td>EDUC BC3053</td>
<td>Multicultural Elementary Pedagogy</td>
</tr>
<tr>
<td>or EDUC BC3054</td>
<td>Multicultural Secondary Pedagogy</td>
</tr>
</tbody>
</table>

* Courses offered at Columbia

**Requirements for the Urban Education Specialization**

Urban Studies majors who have selected Urban Education as their area of specialization within the major should complete the following:

**Requirement A - Educational Foundations**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC BC1510</td>
<td>EDUCATIONAL FOUNDATIONS</td>
<td>4</td>
</tr>
</tbody>
</table>

**Requirement B - Educational Electives**
Select two of the following:

- EDUC BC3030  Critical Pedagogies
- EDUC BC3032  INVESTIGATING THE PURPOSES AND AIMS OF EDUCATION POLICY
- EDUC BC3034  Families, Communities, and Schools
- EDUC BC3040  MIGRATION, GLOBALIZATION, AND EDUCATION
- EDUC BC3042  Gender, Sexuality, and Schooling
- EDUC BC3044  Education and Social Change in Comparative Global Contexts
- EDUC BC3045  Complicating Class: Education and the Limits of Equity

---

**Courses offered at Columbia**

**EDUC BC3250**  EDUCATION IN A POLARIZED AND UNEQUAL SOCIETY

**URBS UN3310**  Race, Space, and Urban Schools

**PHIL UN2100**  Philosophy of Education

**SOCI UN3225**  Sociology of Education

**ECON BC3012**  Economics of Education

**Requirement C - Field Studies**
Select one of the following:

- EDUC BC3050  Science in the City
- EDUC BC3052  Math and the City
- EDUC BC3055  Arts and Humanities in the City: Critical Literacy and Digital Storytelling
- EDUC BC3058  Science in the City II: Preparing Future Scientists Now
- SOCI UN3974  Sociology of Schools, Teaching and Learning *

**Requirement D - Capstone**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC BC3051</td>
<td>Seminar in Urban Education</td>
<td>4</td>
</tr>
</tbody>
</table>

* Courses offered at Columbia

**EDUC BC3030 Critical Pedagogies** can count towards the Education Electives or the Pedagogical Elective requirement in Spring 2021 only.
ENGLISH AND COMPARATIVE LITERATURE

Departmental Office: 602 Philosophy; 212-854-3215
http://www.english.columbia.edu

Director of Undergraduate Studies: Prof. Molly Murray, 406 Philosophy; 212-854-4016; mpm7@columbia.edu

Departmental Adviser:
Prof. Molly Murray, 406 Philosophy; mpm7@columbia.edu

The program in English fosters the ability to read critically and imaginatively, to appreciate the power of language to shape thought and represent the world, and to be sensitive to the ways in which literature is created and achieves its effects. It has several points of departure, grounding the teaching of critical reading in focused attention to the most significant works of English literature, in the study of the historical and social conditions surrounding literary production and reception, and in theoretical reflection on the process of writing and reading and the nature of the literary work.

The courses the department offers draw on a broad range of methodologies and theoretical approaches, from the formalist to the political to the psychoanalytical (to mention just a few). Ranging from the medieval period to the 21st century, the department teaches major authors alongside popular culture, traditional literary genres alongside verbal forms that cut across media, and canonical British literature alongside postcolonial, global, and trans-Atlantic literatures.

At once recognizing traditional values in the discipline and reflecting its changing shape, the major points to three organizing principles for the study of literature—history, genre, and geography. Requiring students not only to take a wide variety of courses but also to arrange their thinking about literature on these very different grids, the major gives them broad exposure to the study of the past, an understanding of the range of forms that can shape literary meaning, and an encounter with the various geographical landscapes against which literature in English has been produced.

ADVISING

Students are not assigned specific advisers, but rather each year the faculty members serving on the department’s Committee on Undergraduate Education (CUE) are designated undergraduate advisers (see above). Upon declaring a major or concentration in English, students should meet with the director of undergraduate studies or a delegated faculty adviser to discuss the program, especially to ensure that students understand the requirements.

Students must fill out a Major Requirements Worksheet early in the semester preceding graduation. The worksheet must be reviewed by an adviser and submitted to 602 Philosophy before the registration period for the final semester. The worksheet is available in the English Department or on-line at http://english.columbia.edu/undergraduate/major-requirements. It is this worksheet—not the Degree Audit Report (DAR)—that determines eligibility for graduation as an English major or concentrator.

COURSE INFORMATION

Lectures

Generally, lectures are addressed to a broad audience and do not assume previous course work in the area, unless prerequisites are noted in the description. The size of some lectures is limited. Senior majors have preference unless otherwise noted, followed by junior majors, followed by senior and junior non-majors. Students are responsible for checking for any special registration procedures on-line at http://english.columbia.edu/courses.

Seminars

The department regards seminars as opportunities for students to do advanced undergraduate work in fields in which they have already had some related course experience. With the exception of some CLEN classes (in which, as comparative courses, much material is read in translation), students’ admission to a seminar presupposes their having taken ENGL UN3001 Literary Texts, Critical Methods. During the three weeks preceding the registration period, students should check http://english.columbia.edu/courses for application instructions for individual seminars. Applications to seminars are usually due by the end of the week preceding registration. Students should always assume that the instructor’s permission is necessary; those who register without having secured the instructor’s permission are not guaranteed admission.

DEPARTMENTAL HONORS

Writing a senior essay is a precondition, though not a guarantee, for the possible granting of departmental honors. After essays are submitted, faculty sponsors deliver a written report on the essay to the department’s Committee on Undergraduate Education (CUE), with a grade for the independent study and, if merited, a recommendation for honors. CUE considers all the essays, including sponsor recommendations, reviews students’ fall semester grades, and determines which students are to receive departmental honors. Normally no more than 10% of graduating majors receive departmental honors in a given academic year.

THE DEGREE AUDIT REPORTING SYSTEM (DARS)

The DAR is a useful tool for students to monitor their progress toward degree requirements, but it is not an official document for the major or concentration, nor should it replace consultation with departmental advisers. The department’s director of undergraduate studies is the final authority on whether requirements for the major have been met. Furthermore, the
DAR may be inaccurate or incomplete for any number of reasons—for example, courses taken elsewhere and approved for credit do not show up on the DAR report as fulfilling a specific requirement.

**Online Information**

Other departmental information—faculty office hours, registration instructions, late changes, etc.—is available on the departmental website.

**Professors**

James Eli Adams  
Rachel Adams  
Branka Arsic  
Christopher Baswell (Barnard)  
Sarah Cole  
Julie Crawford  
Nicholas Dames  
Jenny Davidson  
Andrew Delbanco  
Kathy Eden  
Brent Edwards  
Stathis Gourgouris  
Farah Jasmine Griffin  
Jack Halberstam  
Saidiya Hartman  
Marianne Hirsch  
Jean E. Howard  
Sharon Marcus  
Edward Mendelson  
Frances Negrón-Muntaner  
Robert O’Meally  
Julie Peters  
Ross Posnock  
Austin E. Quigley  
Bruce Robbins  
James Shapiro  
Gayatri Chakravorty Spivak (University Professor)  
Alan Stewart  
Colm Toibin  
Gauri Viswanathan  
William Worthen (Barnard)  
David M. Yerkes

**Associate Professors**

Denise Cruz  
Patricia Dailey  
T. Austin Graham  
Erik Gray  
Matt Hart  
Eleanor Johnson  
Molly Murray  
Joseph Slaughter  
Dennis Tenen  
Jennifer Wenzel

**Assistant Professors**

Joseph Alvarez  
Lauren Robertson  
Dustin Stewart  
Hannah Weaver

**Lecturers**

Paul Grimstad  
Sue Mendelsohn  
Aaron Ritzenberg  
Maura Speigel  
Nicole B. Wallack

**Guidelines for all English and Comparative Literature Majors and Concentrators**

**Declaring a Major in English**

Upon declaring a major in English, students should meet with either the director of undergraduate studies or a departmental adviser to discuss the program. Students declaring a major should obtain a Major Requirements Worksheet from 602 Philosophy or on-line, which outlines the requirements.

Additional information, including events and deadlines of particular relevance to undergraduates, is provided at http://english.columbia.edu/undergraduate, the department’s undergraduate homepage. The sidebar on this page provides links to pages with details about undergraduate advising, major and concentration requirements, course options and restrictions, registration procedures, the senior essay, and writing prizes, as well as links to downloadable worksheets for the major and concentration and to course distribution requirement lists, past and present. For detailed information about registration procedures, students should consult http://english.columbia.edu/courses, which explains the requirements and enables students to monitor their own progress.

Newly declared majors should contact the undergraduate assistant in 602 Philosophy Hall and request that their names be added to the department’s electronic mailing list for English majors and concentrators. Because important information now routinely is disseminated through e-mail, it is crucial that students be on this list.

**Literary Texts, Critical Methods**

The introductory course ENGL UN3001 Literary Texts, Critical Methods, together with its companion seminar, ENGL UN3011 Literary Texts, Critical Methods seminar, is required for the English major and concentration. It should be taken by the end of the sophomore year. Fulfillment of this requirement is a factor in admission to seminars and to some lectures. This once-a-week faculty lecture, accompanied by a seminar led by an advanced graduate student in the department, is intended to introduce students to the study of literature. Students read works from the three major literary modes (lyric, drama, and
narrative), drawn from premodern to contemporary literature, and learn interpretative techniques required by these various modes or genres. This course does not fulfill any distribution requirements.

**Senior Essay**

The senior essay program is an opportunity for students to explore in depth some literary topic of special interest to them, involving extensive background reading and resulting in an essay (8,000–15,000 words) that constitutes a substantial and original critical or scholarly argument. Students submit proposals in September of their senior year, with acceptance contingent upon the quality of the proposal and the student’s record in the major. Students who are accepted are assigned a faculty sponsor to supervise the project, from its development during the fall semester to its completion in the spring. It is for the spring semester, not the fall, that students officially register for the course, designated as ENGL UN3999 Senior Essay. Senior essays are due in early April.

**Course Options and Restrictions**

1. No course at the 1000-level may be counted toward the major.

2. Speech courses may not be counted toward the major.

3. Two writing courses or two upper-level literature courses taught in a foreign language, or one of each, may count toward the major, though neither type of course fulfills any distribution requirement. Writing courses that may be applied toward the major include those offered through Columbia’s undergraduate Creative Writing Program and through Barnard College.

4. Comparative literature courses sponsored by the department (designated as CLEN) may count toward the major. Those sponsored by other departments (e.g. CLFR - Comp Lit French, CPLS - Comp Lit and Society) are not counted toward the major without permission of the director of undergraduate studies. Literature courses taught in English in language departments do not count toward the major.

5. No more than two courses taken during the summer session may be counted toward the major.

6. Courses offered through the Barnard English Department may count toward the major or concentration. Before taking Barnard courses, students should verify with the director of undergraduate studies whether and how such courses may count toward the major.

7. For courses taken abroad or at other American institutions to count toward the major, students must obtain approval of the director of undergraduate studies.

8. To register for more than 42 points (including advanced standing credit) in English and comparative literature, a student majoring in English must obtain permission of the director of undergraduate studies.

9. No more than five courses taken elsewhere may be applied to the major, four to the concentration.

10. One independent study (for at least 3 points) may count toward the major but cannot satisfy any distribution requirements; likewise, the Senior Essay may count toward the major but fulfills no requirements. Students may not count both an Independent Study and the Senior Essay toward the major.

11. Courses assigned a grade of D may not be counted toward the major.

12. Only the first course taken to count toward the major can be taken Pass/D/Fail.

**MAJOR IN ENGLISH**

Please read Guidelines for all English and Comparative Literature Majors and Concentrators above.

Ten departmental courses (for a minimum of 30 points) and, in the process, fulfillment of the following requirements. See course information above for details on fulfilling the distribution requirements.

1. ENGL UN3001 Literary Texts, Critical Methods and ENGL UN3011 Literary Texts, Critical Methods seminar

2. Period distribution: Three courses primarily dealing with periods before 1800, only one of which may be a course in Shakespeare

3. Genre distribution: One course in each of the following three generic categories:
   - Poetry
   - Prose fiction/narrative
   - Drama/film/new media

4. Geography distribution: One course in each of the following three geographical categories:
   - British
   - American
   - Comparative/global (comparative literature, postcolonial, global English, trans-Atlantic, diaspora)

Course Distribution Lists are available in the department and on-line at [http://english.columbia.edu/course-distribution-lists](http://english.columbia.edu/course-distribution-lists) to help students determine which courses fulfill which requirements. A single course can satisfy more than one distribution requirement. For example, a Shakespeare lecture satisfies three requirements at once: not only does it count as one of the three required pre-1800 courses it also, at the same time, fulfills both a genre and a geography distribution requirement (drama and British, respectively). Courses not on the distribution list may count toward the major requirements only with the permission of the director of undergraduate studies. Two writing
courses or upper-level literature courses taught in a foreign language, or one of each, may count toward the ten required courses.

**CONCENTRATION IN ENGLISH**

Please read *Guidelines for all English and Comparative Literature Majors and Concentrators* above.

Eight departmental courses and, in the process, fulfillment of the following requirements. See course information above for details on fulfilling the distribution requirements.

1. ENGL UN3001 Literary Texts, Critical Methods and ENGL UN3011 Literary Texts, Critical Methods seminar

2. **Period distribution:** Two courses dealing with periods before 1800, only one of which may be a course in Shakespeare

3. **Genre distribution:** Two courses, each chosen from a different genre category (see above)

4. **Geography distribution:** Two courses, each chosen from a different geography category (see above)

See the Course Distribution Lists, available in the department or on-line at http://english.columbia.edu/course-distribution-lists, to determine which courses fulfill which requirements. All of the restrictions outlined for the English major also apply for the concentration in English.

**COMPARATIVE LITERATURE PROGRAM**

Students who wish to major in comparative literature should consult the *Comparative Literature and Society* section of this Bulletin.
ETHNICITY AND RACE STUDIES

Center for the Study of Ethnicity and Race: 420 Hamilton; 212-854-0510

Program Co-Directors: Professors Mae Ngai (mn53@columbia.edu) and ( Karl Jacoby kj2305@columbia.edu - ON LEAVE FOR AY21/22) | 425 Hamilton |

Director of Undergraduate Studies: Prof. Deborah Paredez. 425 Hamilton | 212-854-2564 | Office Hours Online  Appointment Scheduling | d.paredez@columbia.edu

Associate Director: Josephine Caputo |424 Hamilton Hall | 212-854-0510 | jc2768@columbia.edu

Founded in 1999, the Center for the Study of Ethnicity and Race (CSER) is an interdisciplinary intellectual space whose mission is to advance the most innovative teaching, research, and public discussion about race and ethnicity. To promote its mission, the Center organizes conferences, seminars, exhibits, film screenings, and lectures that bring together faculty, undergraduates, and graduate students with diverse interests and backgrounds. Moreover, CSER partners with departments, centers, and institutes at Columbia, as well as with colleagues and organizations on and off campus, in order to reach new audiences and facilitate an exchange of knowledge.

PROGRAMS OF STUDY

Ethnicity and Race Studies major and concentration encompass a variety of fields and interdisciplinary approaches to the critical study of ethnicity and race. What makes CSER unique is its attention to the comparative study of racial and ethnic categories in the production of social identities, power relations, and forms of knowledge in a multiplicity of contexts including the arts, social sciences, natural sciences, and humanities. In addition to the major, CSER also offers a concentration in ethnicity and race studies.

In both the major and concentration, students have the opportunity to select from the following areas of specialization:

- Asian American studies
- Comparative ethnic studies
- Latino/a studies
- Native American/Indigenous studies
- Individualized courses of study

Faculty and students find this field exciting and important because it opens up new ways of thinking about two fundamental aspects of human social existence: race and ethnicity. Although various traditional disciplines such as history, sociology, anthropology, and literature, among others, offer valuable knowledge on race and ethnicity, ethnicity and race studies provides a flexible interdisciplinary and comparative space to bring the insights of various conceptual frameworks and disciplines together in critical dialogue.

Overall, this program introduces students to the study of ethnicity and race, and the deep implications of the subject matter for thinking about human bodies, identity, culture, social hierarchy, and the formation of political communities. The major encourages students to consider the repercussions of racial and ethnic identifications to local and global politics, and how race and ethnicity relates to gender, sexuality, and social class, among other forms of hierarchical difference.

Students majoring in ethnicity and race studies may focus their work on specific groups, such as Asian Americans, Latino/a, or Native Americans/Indigenous; or a comparative study of how race and ethnicity are formed and how conceptions of race and ethnicity transform and change over time and place. Students also have the option of designing an individualized course of study, which may encompass a wide variety of themes. Among the most studied are those involving the relationship between race, ethnicity and law; health; human rights; urban spaces; cultural production; visual culture; and the environment.

Due to its rigorous curriculum, which trains students in theory, history, and a wide range of modes of inquiry, the major enables students to follow multiple directions after graduation. According to our internal surveys, nearly half of CSER students continue to Ph.D. programs in history, anthropology, and ethnic studies, among other areas. A second significant number of students continue on to professions most notably related to law, public policy, medicine, human rights, community organizing, journalism, and the environment.

STUDY ABROAD

Students are encouraged to participate in study abroad programs, as they represent an exciting opportunity to learn new languages and live in countries that are germane to their areas of study. In addition, traveling abroad can enrich every student's intellectual experience by providing an opportunity to learn about other perspectives on ethnicity and race.

In summer 2017 CSER, together with Columbia's Office of Global Programs (OGP) launched a pilot summer program in Mexico City in collaboration with the Centro de Investigación y Docencia Económicas--CIDE, a leading institution of higher education with a focus in the social sciences. The program consists of an intensive 5-week CSER core course, "Colonization-Decolonization," visits to various historical colonial sites and a field trip to Oaxaca. Professors Claudio Lomnitz and Manan Ahmed jointly taught the class. Eleven Columbia students participated in this exchange. For more information about the CSER 2018 Global Program in Mexico, please contact cser@columbia.edu

In the past, students have also participated in study abroad programs in Australia, Dominican Republic, Mexico, and South Africa. To ensure that study abroad complements the major
and integrates effectively with the requirements of the major, students are encouraged to consult with CSER's undergraduate adviser as early in their academic program as possible. The director of undergraduate studies can advise students on what may be exciting programs for their areas.

**DEPARTMENTAL HONORS**

CSER majors may choose to write and/or produce an honors project. The senior thesis gives undergraduate majors the opportunity to engage in rigorous, independent, and original research on a specific topic of their choosing. If a monograph, the honors thesis is expected to be 35-50 pages in length. Honors projects can also take other forms, such as video or websites. These projects also require a written component, but of a shorter length than the traditional thesis. During their senior year, honors students perform research as part of CSER UN3990 Senior Project Seminar. Senior projects are due in early April. The Honors Thesis is an excellent option for any student interested in pursuing a Master's degree or Ph.D. Students should consult with their director of undergraduate studies no later than the beginning of the first term of their senior year if they wish to be considered for departmental honors. Students who are awarded departmental honors are notified by their department in mid-May.

In order to qualify for departmental honors, students must satisfy all the requirements for the major, maintain a GPA of at least 3.6 in the major, and complete a high quality honors project. In addition, each student is expected to meet periodically with his or her supervising project adviser and preceptor. Although the senior thesis is a prerequisite for consideration for departmental honors, all Ethnicity and Race studies majors are strongly encouraged to consider undertaking thesis work even if they do not wish to be considered for departmental honors.

**CORE FACULTY AND EXECUTIVE COMMITTEE**

Sayantani DasGupta (CSER, Professional Studies)
Jennifer Lee (Sociology)
Catherine Fennel (Anthropology)
Karl Jacoby CSER Co-Director (History) - ON LEAVE AY21-22
Claudio Lomnitz (Anthropology)
Frances Negrón-Muntaner (English and Comparative Literature) -ON LEAVE FALL 2021
Mae Ngai CSER Co-Director (History)
Ana Maria Ochoa (Ethnomusicology)
Deborah Paredez (CSER and Professional Practice)
Audra Simpson (Anthropology)
Mariana Souto-Manning (TC Professor of Education)
Kevin Fellezs (Ethnomusicology and IRAAS)

**ASSOCIATE PROFESSOR, DEPARTMENT OF ENGLISH AND COMPARATIVE LITERATURE**

Carlos Alonso
Morrison A. & Alma Schapiro Professor in the Humanities, Department of Spanish and Portuguese
View Profile

Vanessa Agard-Jones
Assistant Professor, Department of Anthropology
View Profile

Christina Duffy-Ponsa
Associate Professor of Law, Columbia Law School
View Profile

Nadia Abu El-Haj
Professor of Anthropology

Kevin Fellezs
Assistant Professor, Music Department/Institute for Research in African American Studies
View Profile

Kaiama L. Glover
Associate Professor, French Department /African Studies Program, Barnard College
View Profile

Steven Gregory
Associate Professor of Anthropology and African-American Studies, Department of Anthropology and Institute for Research in African-American Studies
View Profile

Frank Guridy
Associate Professor of History
View Profile

Kim Hall
Professor, Department of English, Barnard College
View Profile

Jill Hill
Assistant Professor of Psychology and Education, Department of Counseling & Clinical Psychology, Teachers College
View Profile

Marianne Hirsch
Professor, Department of English and Comparative Literature
View Profile

Jean Howard
George Delacorte Professor in the Humanities, Department of English and Comparative Literature
View Profile

Theodore Hughes
Professor of Korean Studies

**AFFILIATED FACULTY**

Rachel Adams
The requirements for this program were modified on March 2022. Students who declared this program before this date should contact the director of undergraduate studies for the department in order to confirm their correct course of study.

The major in ethnicity and race studies consists of a minimum of 27 points. All majors are required to take three core courses as listed below:

**Core Courses**

<table>
<thead>
<tr>
<th></th>
<th>Points</th>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td>CSER UN1010 Introduction to Comparative Ethnic Studies (or)</td>
</tr>
<tr>
<td>2.</td>
<td>CSER UN3928 Colonization/Decolonization</td>
</tr>
<tr>
<td>OR</td>
<td>CSER UN3942 Race and Racisms</td>
</tr>
<tr>
<td>3.</td>
<td>CSER UN3919 Modes of Inquiry</td>
</tr>
</tbody>
</table>

**Specialization**

All majors will select one of the areas of specialization listed below from which to complete their remaining coursework:

- Asian American studies
- Comparative ethnic studies
- Latino/a studies
- Native American/Indigenous studies
- Individualized courses of study

Majors who elect NOT to follow the Honors track must complete at least five CSER elective courses, in consultation with their major adviser, within their area of specialization. At least one of these electives must be a writing-intensive seminar (3000 or above level courses must be chosen within the department). Majors who elect to follow the Honors track must complete at least four CSER elective courses, in consultation with their major adviser, within their area of specialization.

**Honors**

In lieu of a fifth elective, Honors majors are required to enroll in the following course in the spring semester of their senior year, during which they are required to write a thesis:

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<th>Points</th>
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<tbody>
<tr>
<td>CSER UN3990 Senior Project Seminar</td>
<td>4</td>
</tr>
</tbody>
</table>

Honors majors are required to present their senior essays at the annual undergraduate symposium in April. Students may fulfill this option in one of the following two ways:

1. By matriculating in the Senior Thesis course and writing the thesis under the supervision of the course faculty.
2. By taking an additional 4-point seminar where a major paper is required and further developing the paper into a thesis length work (minimum of 30 pages) under the supervision of a CSER faculty member.

**Language Courses**

- One of the following is highly recommended, although not required for the major:
  - One course beyond the intermediate-level in language pertinent to the student’s focus
  - An introductory course in a language other than that used to fulfill the degree requirements, but that is pertinent to the student’s focus
  - A linguistics or other course that critically engages language

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**MAJOR IN ETHNICITY AND RACE STUDIES**

The requirements for this program were modified on March 2022. Students who declared this program before this date should contact the director of undergraduate studies for the department in order to confirm their correct course of study.
- An outside language and study abroad programs that include an emphasis on language acquisition

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**CONCENTRATION IN ETHNICITY AND RACE STUDIES**

*The requirements for this program were modified on March 2022. Students who declared this program before this date should contact the director of undergraduate studies for the department in order to confirm their correct course of study.*

The concentration in ethnicity and race studies requires a minimum of 19 points. Students take two core courses (may choose between CSER UN1010 and CSER UN1040) and four elective courses, one of which must be a seminar:

<table>
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<th>Points</th>
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**Core Courses**
The concentration in ethnicity and race studies requires a minimum of 19 points. All students who choose a concentration are required to take two core course as listed below:

1. CSER UN1010 Introduction to Comparative Ethnic Studies (or) 4
2. CSER UN3928 Colonization/Decolonization 4
   OR
2. CSER UN3942 Race and Racisms 4

**Specialization**
Students must complete at least four courses, in consultation with their major adviser, in one of the following areas of specialization. At least one of the elective courses must be a seminar.

- Asian American studies
- Comparative ethnic studies
- Latino/a studies
- Native American/Indigenous studies
- Individualized courses of study
Film and Media Studies

Departmental Office: 513 Dodge; 212-854-2815
http://arts.columbia.edu/film

Director of Undergraduate Studies: Prof. Robert King, Tuesday 9-12, Dodge 601C or http://columbiauniversity.zoom.us/j/2037291445

The major in film studies is scholarly, international in scope, and writing-intensive. Students choose to major in film if they want to learn more about the art form, from technology to cultural significance; want to work in the film industry; or are interested in a major that combines arts and humanities.

Students usually declare the major toward the end of the second year by meeting with the departmental adviser; together, they create a program of twelve required courses within the major, often supplemented by courses outside the department. In the lecture classes and seminars, there tends to be a mixed population of undergraduate majors and graduate film students.

Students have the opportunity to gain additional experience by taking advantage of internship opportunities with film companies, working on graduate student films, and participating in the Columbia Undergraduate Film Productions (CUFP), an active, student-run organization that provides film-making experience to Columbia undergraduate producers and directors. In addition to careers in screenwriting, directing, and producing, alumni have gone on to work in film distribution, publicity, archives, and festivals, and to attend graduate school to become teachers and scholars.

The trajectory of the major is from introductory-level courses (three are required), to intermediate and advanced-level courses (two are required, plus seven electives). While film studies majors take workshops in screenwriting and film-making, the course of study is rooted in film history, theory, and culture.

The prerequisite for all classes is Introduction to Film and Media Studies (FILM UN1000) offered each term at Columbia as well as at Barnard, and open to first-year students. Subsequently, majors take a combination of history survey courses; workshops ("Labs"); and advanced classes in theory, genre study, national cinemas, auteur study, and screenwriting.

The educational goal is to provide film majors with a solid grounding in the history and theory of film; its relation to other forms of art; and its synthesis of visual storytelling, technology, economics, and sociopolitical context, as well as the means to begin writing a script and making a short film.

Students who wish to graduate with honors must take the Senior Seminar in Film Studies (FILM UN3900), writing a thesis that reflects mastery of cinematic criticism. The essay is submitted after the winter break. Students decide upon the topic with the professor and develop the essay during the fall semester.

Since film courses tend to be popular, it is imperative that students attend the first class. Registration priority is usually given to film majors and seniors.

Departmental Honors

In order to qualify for departmental honors, students must have a GPA of 3.75 in the major and distinction in their overall achievements in film study. Students who take FILM UN3900 Senior Seminar in Film Studies automatically enter consideration for honors; however, the class is not a requirement for honors.

Faculty

Vito Adriaensens
Nico Baumbach
Loren-Paul Caplin
Jane Gaines
Racquel Gates
Ronald Gregg
Annette Insdorf
Caryn James
Robert King
Richard Peña
James Schamus
Edward Turk

Major in Film Studies

The major in film studies requires a minimum of 36 points distributed as follows:

Introductory Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FILM UN1000</td>
<td>Introduction to Film and Media Studies</td>
</tr>
<tr>
<td>FILM GU4000</td>
<td>Film and Media Theory</td>
</tr>
</tbody>
</table>

History Courses

Select two of the following courses, one of which must either be FILM UN2010 or FILM UN2020:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FILM UN2010</td>
<td>Cinema History 1: Beginning-1930</td>
</tr>
<tr>
<td>FILM UN2020</td>
<td>Cinema History 2: 1930-60</td>
</tr>
<tr>
<td>FILM UN2030</td>
<td>Cinema History 3: 1960-90</td>
</tr>
<tr>
<td>FILM UN2040</td>
<td>Cinema History 4: after 1990</td>
</tr>
</tbody>
</table>

Laboratories

Select one of the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FILM UN2410</td>
<td>LAB IN WRITING FILM CRITICISM</td>
</tr>
<tr>
<td>FILM UN2510</td>
<td>Laboratory in Fiction Filmmaking</td>
</tr>
<tr>
<td>FILM UN2420</td>
<td>Laboratory in Screenwriting</td>
</tr>
<tr>
<td>FILM UN2520</td>
<td>Laboratory In Nonfiction Filmmaking</td>
</tr>
</tbody>
</table>

Electives

Select seven of the following electives, one of which must be an international course:
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FILM UN1010</td>
<td>Genre Study</td>
</tr>
<tr>
<td>FILM UN2310</td>
<td>The Documentary Tradition</td>
</tr>
<tr>
<td>FILM UN2190</td>
<td>TOPICS IN AMERICAN CINEMA</td>
</tr>
<tr>
<td>FILM UN3020</td>
<td>Interdisciplinary Studies</td>
</tr>
<tr>
<td>FILM UN3900</td>
<td>Senior Seminar in Film Studies</td>
</tr>
<tr>
<td>FILM UN3910</td>
<td>Senior Seminar in Filmmaking</td>
</tr>
<tr>
<td>FILM UN3920</td>
<td>Senior Seminar in Screenwriting</td>
</tr>
<tr>
<td>FILM UN3925</td>
<td>Narrative Strategies in Screenwriting</td>
</tr>
<tr>
<td>FILM UN3930</td>
<td>The Actor's Art: Jeanne Moreau</td>
</tr>
<tr>
<td>FILM UN3950</td>
<td>Seminar in Media: Seriality</td>
</tr>
<tr>
<td>FILM UN3010</td>
<td>AUTEUR STUDY</td>
</tr>
<tr>
<td>FILM UN2290</td>
<td>Topics in World Cinema: Arab and Africa</td>
</tr>
<tr>
<td>FILM GU4310</td>
<td>Experimental Film and Media</td>
</tr>
<tr>
<td>FILM GU4320</td>
<td>New Directions in Film and Philosophy</td>
</tr>
<tr>
<td>FILM GU4910</td>
<td>Seeing Narrative</td>
</tr>
</tbody>
</table>
French and Romance Philology

Departmental Office: 515 Philosophy; 212-854-2500 or 212-854-3208
http://www.columbia.edu/cu/french/

Director of Undergraduate Studies: Prof. Eliza Zingesser, 504 Philosophy; 212-854-3905; ez2135@columbia.edu

Director of the Language Program: Dr. Pascale Hubert-Leibler, 519 Philosophy; 212-854-4819; ph2028@columbia.edu

Director of Academic Administration and Finance: Isabelle Chagnon, 515 Philosophy; 212-854-7978; ic7@columbia.edu

The Department of French and Romance Philology offers a major and concentration in French and Francophone studies. Both the major and concentration provide students with an overview of French and Francophone literature, culture, and history from the Middle Ages to the present.

Major in French and Francophone Studies

The major in French and Francophone studies provides an interdisciplinary framework for the study of the history, literature, and culture of France and parts of the world in which French is an important medium of culture. Students explore the history and contemporary applications of concepts such as citizenship, national unity, secularism, and human rights, and explore central issues including universalism/relativism, tradition/modernity, and religion/state as they have developed in France and its colonies/former colonies since the 18th century.

Students take a series of required courses that includes:

- FREN UN3405 ADVANCED GRAMMAR AND COMPOSITION;
- FREN UN3409 INTRO TO FRENCH AND FRANCOPHONE HISTORY;
- FREN UN3410 INTRO TO FRENCH AND FRANCOPHONE LITERATURE;
- FREN UN3995 SENIOR SEMINAR.

Students also take advanced electives (at the 3000 or 4000 level) on French and francophone literature, culture, and history. A senior thesis is optional but encouraged.

In Fulfillment of the Language Requirement

Students beginning the study of French at Columbia must take four terms of the following two-year sequence:

Entering students are placed, or exempted, on the basis of their College Board Achievement or Advanced Placement scores, or their scores on the placement test administered by the Center for Student Advising, 403 Lerner. An SAT score of 780 or a score of 5 on the AP exam satisfies the language requirement. Students with a score of 4 on the AP exam will be placed in Intermediate II, but may attempt to place out by requesting to take an oral exam administered by the Director of the Language Program.

Please note: The Barnard course, FREN BC1204 Intermediate II does not fulfill the undergraduate language requirement.

Language Proficiency Courses

Elementary and intermediate French courses help students develop an active command of the language. In FREN UN1101 Elementary French I and FREN UN1102 Elementary French II, the communicative approach is the main instructional method. In addition to practicing all four language skills—listening, speaking, reading, and writing—students are introduced to the cultural features of diverse French-speaking communities.

In intermediate courses FREN UN2101 INTERMEDIATE FRENCH I and FREN UN2102 Intermediate Course II, students develop linguistic competence through the study of short stories, films, novels, and plays. After completing the four-semester language sequence, students can discuss and write in fairly proficient French on complex topics.

At the third-year level, attention is focused on more sophisticated use of language, in grammar and composition courses, and on literary, historical, and philosophical questions.

Conversation Courses

Students looking for intensive French oral practice may take some of the 2-point conversation courses offered at intermediate and advanced levels. Conversation courses generally may not be counted toward the major or concentration.

Advanced Placement

- AP score of 4 automatically places a student in French Intermediate II, thereby granting them the equivalency of the first 3 courses of the elementary-intermediate sequence.
- AP score of 5 or DELF: The department grants 3 credits for a score of 5 on the AP French Language exam, or for the completion of DELF ( Diplôme d’Etudes en Langue Française). Students are awarded this credit only after they take a 3000-level French course (taught in French, for at least 3 points) and obtain a grade of B or above in that course.
- DALF C1 level or IB HL score of 6 or 7: The department grants 3 credits for the C1 level of DALF (Diplôme Approfondi de Langue Française), or for a score of 6 or 7 on the International Baccalaureate (IB) Higher Level (HL) exam. Students have no obligation to take higher-level French courses in order to receive these 3 credits, but
restrictions apply on the use of these credits toward the French major.

**LANGUAGE LABORATORY AND ON-LINE MATERIALS**

Language laboratories located in the International Affairs Building provide opportunities for intensive practice in French pronunciation and aural comprehension. French courses typically make extensive use of on-line interactive materials that students can access from their own computers.

**MAISON FRANÇAISE**

Students interested in French should acquaint themselves with the Maison Française, which houses a reading room of French newspapers, periodicals, books, and videos, and sponsors lectures/discussions and any distinguished French visitors to New York City. With its weekly French film series as well as book club, café-conversation. Another opportunity to practice French, discover new aspects of Francophone culture, and learn about internships and professional opportunities is the French Cultural Society. For information about the FCS, contact Dr. Laurence Marie. and other events, the Maison Française offers an excellent opportunity for students to perfect their language skills and enhance their knowledge of French and Francophone culture.

**STUDY ABROAD**

Because a direct experience of contemporary French society is an important essential part of the program, majors and concentrators are strongly encouraged to spend either a semester or a year at Reid Hall-Columbia University in Paris, or at another French or Francophone university. During their time abroad, students take courses credited toward the major and, in some cases, also toward other majors (e.g. history, art history, political science) and the global core.

For information on study abroad, visit the OGP website at [www.ogp.columbia.edu](http://www.ogp.columbia.edu), call 212-854-2559, or e-mail studyabroad@columbia.edu. For a list of approved study abroad programs, visit [http://www.ogp.columbia.edu/index.cfm?FuseAction=Programs.ListAll](http://www.ogp.columbia.edu/index.cfm?FuseAction=Programs.ListAll).

**SUMMER STUDY IN PARIS**

Study abroad opportunities at Reid Hall are also available during the summer. These include language and culture courses, global core electives and a combined course that meets both Columbia’s ArtHum and MusicHum requirements.

For information about study abroad, visit [https://global.undergrad.columbia.edu/studyabroad](https://global.undergrad.columbia.edu/studyabroad).

**GRADING**

Students who wish to use toward the major or concentration a course in which a grade of D has been received must consult with the director of undergraduate studies.

**DEPARTMENTAL HONORS**

Majors who wish to be considered for departmental honors should consult with the director of undergraduate studies. To be eligible for departmental honors, students must have a grade point average of at least 3.7 in major courses and have completed an approved senior thesis under the guidance of a faculty member at Columbia or Reid Hall. Normally no more than 10% of graduating majors receive departmental honors in a given academic year.

**UNDERGRADUATE PRIZES**

The Department of French and Romance Philology awards the following prizes to students enrolled in courses in the department:

1. Prize for Excellence in French Studies: awarded to a highly promising student in an intermediate or advanced French course;
2. Senior French Prize: awarded to an outstanding graduating major.

**Professors**

- Madeleine Dobie
- Antoine Compagnon
- Souleymane Bachir Diagne
- Pierre Force
- Elisabeth Ladenson
- Camille Robcis
- Emmanuelle Saada
- Joanna Stalnaker

**Associate Professors**

- Peter Connor (Barnard)
- Eliza Zingesser

**Assistant Professors**

- Thomas Dodman
- Aubrey Gabel

**Visiting Professors**

- Etienne Balibar
Senior Lecturers
- Heidi Holst-Knudsen
- Pascale Hubert-Leibler
- Sophie Queuniet

Lecturers
- Alexandra Borer
- Pascale Crépon
- Samuel Skippon
- Eric Matheis

**MAJOR IN FRENCH AND FRANCOPHONE STUDIES**

The requirements for this program were modified on December 18, 2021. Students who declared this program before this date should contact the Director of Undergraduate Studies for the department in order to confirm their correct course of study.

The program of study should be planned before the end of the sophomore year with the director of undergraduate studies.

The major in French requires a minimum of 30 points beyond completion of the language requirement (FREN UN2102 Intermediate Course II) (or advanced placement), distributed as follows:

- **FREN UN3405** THIRD-YEAR GRAMMAR # COMP
- **FREN UN3409** INTRO TO FRENCH # FRANCOPHONE HISTORY
- **FREN UN3410** Intro French # Francophone Literature
- **FREN UN3995** Senior Seminar

Select one upper level course (3000 or 4000 level) on literature before 1800

The remaining 5 courses (15 points) are to be chosen from 3000 or 4000 level courses in French Literature, Culture, or History

Two of the following advanced Language classes can be counted as an elective: French for diplomats, FREN UN324X, Advanced Translation Workshop

Note the following:

- **FREN BC3006** Composition and Conversation is not applicable to either the French major or the concentration. Other Barnard French courses may be taken with the approval of the Director of undergraduate studies;

- Heritage speakers are exempted from **FREN UN3405 ADVANCED GRAMMAR # COMP**, but must replace the course by taking an advanced elective.

The following Columbia French courses are not applicable to the French major or concentration:

- FREN UN1101 Elementary French I
- FREN UN1102 Elementary French II
- FREN UN1105 Accelerated Elementary French
- FREN UN2101 INTERMEDIATE FRENCH I
- FREN UN2102 Intermediate Course II
- FREN UN2106 RAPID READING AND TRANSLATION
- FREN UN2121 INTERMED CONVERSATION FRENCH I
- FREN UN2122 INTERMED CONVERSATION FRENCH II
- FREN UN3131 Third-Year Conversation I
- FREN UN3132 THIRD-YEAR CONVERSATION FR II
- FREN UN2105 ACCELERATED INTERMEDIATE FRENCH I and II

**CONCENTRATION IN FRENCH AND FRANCOPHONE STUDIES**

The concentration in French requires a minimum of 24 points beyond completion of the language requirement (FREN UN2102 Intermediate Course II), distributed as follows:

- **FREN UN3405** THIRD-YEAR GRAMMAR # COMP
- **FREN UN3409** INTRO TO FRENCH # FRANCOPHONE HISTORY
- **FREN UN3410** Intro French # Francophone Literature
- **FREN UN3995** Senior Seminar

The remaining four courses (12 points) are to be chosen from 3000- or 4000- level offerings in French literature, culture, or history.

One of the following advanced language classes can be counted as an elective: French for Diplomats; French Culture, Language and Society through ... (324.); Advanced Translation Workshop.
**Germanic Languages**

**Departmental Office:** 415 Hamilton; 212-854-3202  
https://germanic.columbia.edu/

**Director of Undergraduate Studies:** Prof. Dorothea von Muecke, 410 Hamilton; 212-854-1891; dev1@columbia.edu

**Language Instruction:** Jutta Schmiers-Heller, 403A Hamilton; 212-854-4824; js2331@columbia.edu

The Department of Germanic Languages and Literatures is considered one of the very best in the country. Many of the faculty specialize in the study of German literature and culture from 1700 to the present. German majors acquire proficiency in examining literary, philosophical, and historical texts in the original, as well as critical understanding of modern German culture and society. Particular attention is given to German-speaking traditions within larger European and global contexts. Courses taught in translation build on Columbia’s Core Curriculum, thereby allowing students to enroll in upper-level seminars before completing the language requirement.

All classes are taught as part of a living culture. Students have ample opportunities to study abroad, to work with visiting scholars, and to take part in the cultural programs at Deutsches Haus. In addition, the department encourages internships with German firms, museums, and government offices. This hands-on experience immerses students in both language and culture, preparing them for graduate study and professional careers.

Upon graduation, German majors compete successfully for Fulbright or DAAD scholarships for research in Germany or Austria beyond the B.A. degree. Our graduating seniors are highly qualified to pursue graduate studies in the humanities and social sciences, as well as professional careers. Former majors and concentrators have gone on to careers in teaching, law, journalism, banking and consulting, international affairs, and communications.

German literature and culture courses are taught as seminars integrating philosophical and social questions. Topics include romanticism, revolution, and national identity; German intellectual history; minority literatures; Weimar cinema; German-Jewish culture and modernity; the Holocaust and memory; and the history and culture of Berlin. Classes are small, with enrollment ranging from 5 to 15 students.

The department regularly offers courses in German literature and culture in English for students who do not study the German language. The department also participates in Columbia’s excellent program in comparative literature and society.

**Advanced Placement**

The department grants 3 credits for a score of 5 on the AP German Language exam, which satisfies the foreign language requirement. Credit is awarded upon successful completion of a 3000-level (or higher) course with a grade of B or higher. This course must be for at least 3 points of credit and be taught in German. Courses taught in English may not be used for language AP credit. The department grants 0 credits for a score of 4 on the AP German Language exam, but the foreign language requirement is satisfied.

**The Yiddish Studies Program**

The Yiddish Studies Program at Columbia University, the global leader in Yiddish scholarship and teaching, focuses on the experiences and cultural efflorescence of Ashkenazic Jewry over a thousand years and five continents. It is a perfect exemplar of Columbia’s interests in global and transnational study, weaving together language, literature, and culture in a way that echoes the best of Columbia’s justly famed humanities programs.

The program in Yiddish studies offers both the undergraduate Major and Concentration, in addition to graduate studies leading to the Ph.D. In both the undergraduate and graduate program, emphasis is placed not merely on acquiring linguistic proficiency and textual study, but also viewing Yiddish literature in a larger cultural and interdisciplinary context. The graduate program, the only degree-granting Yiddish Studies Program in the United States, is considered one of the world’s most important, with its graduates holding many of the major university positions in the field.

Students of Yiddish have ample opportunities to enhance their studies through a number of fellowships. The Naomi Fellowship, a fully-subsidized Yiddish Study Abroad program allows students to explore Yiddish culture and history in Israel and Poland. The Irene Kronhill Pletka YIVO Fellowship enables students to expand on their archival research skills in New York. Upon graduation, our majors compete successfully for Fulbright and other prestigious scholarships, and are highly qualified to pursue careers in humanities, social sciences, as well as artistic and professional careers.

Students work with faculty in Germanic languages, Jewish studies, history, and Slavic studies to broaden their understanding of the literature, language, and culture of Eastern European Jewry. The Yiddish Studies Program is also closely affiliated with the Institute for Israel and Jewish Studies, which offers diverse programming and other fellowship opportunities. Classes are small, and instruction is individualized and carefully directed to ensure that students gain both a thorough general grounding and are able to pursue their own particular interests in a wide-spanning field. The program also offers classes taught in translation for students who do not study Yiddish. The Yiddish programming, such as lectures, monthly conversation hours, Meet a Yiddish Celebrity series, as well as the activities of the Yiddish Club of Columbia’s Barnard/Hillel allows students to explore Yiddish culture outside the classroom.
THE GERMAN LANGUAGE PLACEMENT EXAM

The German Language Placement exam is offered periodically to those students who already speak the language, in order to determine their proficiency level (A, B or C). For more information, and for the latest exam dates, please click here.

THE GERMAN LANGUAGE PROGRAM

First- and second-year German language courses emphasize spoken and written communication, and provide a basic introduction to German culture. Goals include mastery of the structure of the language and enough cultural understanding to interact comfortably with native speakers.

After successfully completing the elementary German sequence, GERM UN1101 ELEMENTARY GERMAN I-GERM UN1102 ELEMENTARY GERMAN II, students are able to provide information about themselves, their interests, and daily activities. They can participate in simple conversations, read edited texts, and understand the main ideas of authentic texts. By the end of GERM UN1102 ELEMENTARY GERMAN II, students are able to write descriptions, comparisons, and creative stories, and to discuss general information about the German-speaking countries.

The intermediate German sequence, GERM UN2101 INTERMEDIATE GERMAN I-GERM UN2102 Intermediate German II, increases the emphasis on reading and written communication skills, expands grammatical mastery, and focuses on German culture and literary texts. Students read short stories, a German drama, and increasingly complex texts. Regular exposure to video, recordings, the World Wide Web, and art exhibits heightens the cultural dimensions of the third and fourth semesters. Students create portfolios comprised of written and spoken work.

Upon completion of the second-year sequence, students are prepared to enter advanced courses in German language, culture, and literature at Columbia and/or at the Berlin Consortium for German Studies in Berlin. Advanced-level courses focus on more sophisticated use of the language structure and composition (GERM UN3001 ADVANCED GERMAN I-GERM UN3002 Advanced German II: Vienna); on specific cultural areas; and on literary, historical, and philosophical areas in literature-oriented courses (GERM UN3333 Introduction To German Literature [In German]).

IN FULFILLMENT OF THE LANGUAGE REQUIREMENT IN GERMAN

Students beginning the study of German at Columbia must take four terms of the following two-year sequence:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>GERM UN1101</td>
<td>ELEMENTARY GERMAN I</td>
</tr>
<tr>
<td>GERM UN1102</td>
<td>ELEMENTARY GERMAN II</td>
</tr>
</tbody>
</table>

GERM UN2101 INTERMEDIATE GERMAN I
GERM UN2102 Intermediate German II

Entering students are placed, or exempted, on the basis of their College Board Achievement or Advanced Placement scores, or their scores on the placement test administered by the departmental language director. Students who need to take GERM UN1101 ELEMENTARY GERMAN I-GERM UN1102 ELEMENTARY GERMAN II may take GERM UN1125 Accelerated Elementary German I & II as preparation for GERM UN2101 INTERMEDIATE GERMAN I.

UNIVERSITY STUDY IN BERLIN

The Berlin Consortium for German Studies provides students with a study abroad program, administered by Columbia, which includes students from the other consortium member schools (Princeton, Yale, University of Pennsylvania, Johns Hopkins, and the University of Chicago). Under the guidance of a senior faculty member, the program offers a home stay with a German family, intensive language instruction, and study in regular German university courses at the Freie Universität Berlin.

For additional information on the Berlin Consortium, see the Study Abroad—Sponsored Programs section in this Bulletin, visit the Center for Undergraduate Global Engagement, or consult the program’s office in 606 Kent Hall; 212-854-2559; berlin@columbia.edu.

DEUTSCHES HAUS

Deutsches Haus, 420 West 116th Street, provides a center for German cultural activities on the Columbia campus. It sponsors lectures, film series, and informal gatherings that enrich the academic programs of the department. Frequent events throughout the fall and spring terms offer students opportunities to practice their language skills.

GRADING

Courses in which a grade of D has been received do not count toward the major or concentration requirements.

DEPARTMENTAL HONORS

Normally no more than 10% of graduating majors receive departmental honors in a given academic year. For the requirements for departmental honors, see the director of undergraduate studies.

PROFESSORS

Mark Anderson (on leave, Fall 2021)
Stefan Andriopoulos (Chair)
Claudia Breger (on leave, Fall 2021)
Jeremy Dauber
Andreas Huyssen (emeritus)
Harro Müller (emeritus)
Dorothea von Mücke
Annie Pfeifer  
Oliver Simons  

**SENIOR LECTURERS**  
Wijnie de Groot (Dutch)  
Jutta Schmiers-Heller (German)  

**LECTURERS**  
Agnieska Legutko (Yiddish)  
Silja Weber (German)  

**MAJOR IN GERMAN LITERATURE AND CULTURAL HISTORY**

The goal of the major is to provide students with reasonable proficiency in reading a variety of literary, philosophical, and historical texts in the original and, through this training, to facilitate a critical understanding of modern German-speaking cultures and societies. Students should plan their program of study with the director of undergraduate studies as early as possible. Competence in a second foreign language is strongly recommended, especially for those students planning to attend graduate school.

The major in German literature and cultural history requires a minimum of 30 points, distributed as follows:

- **GERM UN3001** ADVANCED GERMAN I (can be waived and replaced by another 3000 level class upon consultation with the DUS)
- **GERM UN3333** Introduction To German Literature [In German]
- Select two of the following survey courses in German literature and culture (at least one of these must focus on pre–20th-century cultural history):
  - **GERM UN3442** Survey of 18th Century German Lit: Enlightenment, Sturm und Drang [In German]
  - **GERM UN3443** Romanticism, Revolution, Realism [In German]
  - **GERM UN3444** SURVEY OF GERMAN LIT:20C (GER)
  - **GERM UN3445** German Literature After 1945 [In German]
- One course in German intellectual history
  - **GERM UN3991** SENIOR SEMINAR
- The remaining courses to be chosen from the 3000- or 4000-level offerings in German and Comparative Literature—German in consultation with the Director of Undergraduate Studies.

**Senior Thesis**

A senior thesis is not required for the major. Students interested in a senior thesis or research project may do so through independent study with a faculty member over one or two semesters.

**MAJOR IN YIDDISH STUDIES**

The program is designed as a combination of language and content courses. First- and second-year Yiddish language courses emphasize spoken and written communication, and provide a basic introduction to Eastern European Jewish culture. Goals include mastery of the structure of the language and enough cultural understanding to interact comfortably with native speakers.

After second-year Yiddish language courses are completed, students should feel sufficiently comfortable to begin to work with Yiddish literature in the original. Upper-level undergraduate/graduate courses are designed to accommodate students with a range of Yiddish language experience, and intensive language summer study abroad, such as the Naomi Prawer Kadar International Yiddish Summer Program (the Yiddish Studies program at Columbia offers the fully-subsidized Naomi Fellowship for students of Yiddish), or other academic summer programs, is also encouraged for improvement in language acquisition and comprehension.

The goal is to provide students with reasonable proficiency in reading a variety of literary, philosophical, and historical texts in the original and, through this training, to provide them with a critical understanding of Yiddish-speaking culture and society.

The second pillar of the Yiddish program is an intimate exposure to the literature and culture of the Yiddish-speaking Jewry. That exposure is achieved through several courses in Yiddish literature, which, although they may cover a variety of subjects or proceed from a number of methodological and disciplinary orientations, share a rigorous commitment to analyzing and experiencing that literature within an overarching historical and cultural framework.

These courses in Yiddish literature, culture and Jewish history will provide students with a solid interdisciplinary foundation in Yiddish studies. Inevitably and necessary, these courses, whether taught in Yiddish, English, or in a combination of the Yiddish text and English language instruction – cover the sweep of Yiddish literary history from the early modern period to today.

Students should plan their program of study with the director of undergraduate studies as early as possible. There is a prerequisite of two years of Yiddish, or equivalent to be demonstrated through testing.

The Major in Yiddish Studies requires a minimum of 30 points, distributed as follows:

1. **Two courses of advanced language study** (6 points); **YIDD UN3101, YIDD UN3102**
2. **Three courses in Yiddish literature** (9 points); e.g. YIDD UN3500, YIDD GU4420
3. **At least one course related to a senior thesis** (3 points);
4. **Four related courses, at least one of which is in medieval or modern Jewish history** (12 points); e.g. HIST UN4604, YIDD GU4113.

A senior thesis is required for the Major in Yiddish Studies. Students interested in a senior thesis or research project may do so through independent study with a faculty member over one or two semesters. Students must conduct original research, some of which must take place in the Yiddish language, and are required to submit a culminating paper, of no less than 35 pages.

Elective courses: Elective courses can be taken at Columbia as well as at affiliated institutions such as the Jewish Theological Seminary, Barnard College, New York University, etc. Columbia’s arrangements with the joint degree appointing program at JTS, i.e. JTS and GS Joint program with List College, offers students exposure to a wide variety of courses on Yiddish and Yiddish-related topics taught by experts in the field of Yiddish and comparative Jewish literature such as Profs. David Roskies and Barbara Mann.

Thanks to the consortial arrangements with other universities in the New York area (Barnard, NYU, Yale, Penn, etc.) students both in Columbia College and General Studies, can take courses at these institutions for degree credit, which allows for student exposure to experts in twentieth-century Soviet Yiddish literature, Yiddish women’s writing, Yiddish literature in Israel, and much more (Profs. Gennady Estraikh, Kathryn Hellerstein, and Hannan Hever). These arrangements allow students to have, if they so choose, an even broader intellectual experience than the already broad interdisciplinary opportunities available to them via the courses offered by the faculty on the Interdisciplinary Committee on Yiddish at Columbia.

Language courses need to be taken at Columbia.

Honors options: Departmental Honors in Yiddish Studies can be granted to a total of 10% of the students graduating with the Major in Yiddish Studies in a given year across both Columbia College and General Studies.

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**CONCENTRATION IN YIDDISH STUDIES**

The concentration in Yiddish studies requires a minimum of 21 points, distributed as follows:

1. **Two courses of advanced language study** (6 points); YIDD UN3101, YIDD UN3102
2. **Two courses in Yiddish literature** (6 points); e.g. YIDD UN3500, YIDD GU4420
3. **Three related courses, at least one of which is in medieval or modern Jewish history** (9 points); e.g. HIST UN4604, YIDD GU4113.

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**SPECIAL CONCENTRATION IN GERMAN FOR COLUMBIA COLLEGE AND SCHOOL OF GENERAL STUDIES STUDENTS IN STEM FIELDS**

The special concentration in German requires a minimum of 15 points.

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**CONCENTRATION IN GERMAN LITERATURE AND CULTURAL HISTORY**

The concentration in German literature and cultural history requires a minimum of 21 points in German courses.

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The History curriculum covers most areas of the world and most periods of history. It encourages students to develop historical understanding in the widest sense of the word: a thorough empirical grasp along with the kind of analytical skills that come with a genuinely historical sensibility. This is done through two types of courses: lectures and seminars. Lectures range from broad surveys of the history of a place or period to more thematically oriented courses. Seminars offer students the opportunity to work more closely with historical sources in smaller groups and to do more sophisticated written work. Because history courses usually have no prerequisites, there are no preordained sequences to follow. It is advisable, however, that students take a relevant lecture course in preparation for a seminar. Majors wishing to follow a more intensive program are advised to enroll in a historiography course and to undertake a senior thesis project. Historically, majors have pursued careers in a very wide range of areas including medicine, law, mass media, Wall Street, and academia.

Advanced Placement

Students may receive 3 credits toward the overall degree requirements for a score of 5 on the AP European History exam or the AP United States History exam. No points count toward or fulfill any requirements of the history major or concentration.

Advising

During their junior and senior years, majors and concentrators are advised by the faculty members of the Undergraduate Education Committee (UNDED). UNDED advisers also review and sign Plan of Study (POS) forms for majors and concentrators at least once per year. POS forms track students’ progress toward completing all major and concentration requirements. New history majors and concentrators may see any member of UNDED. For the most up-to-date information on UNDED members, please see the undergraduate advising page on the departmental website.

Majors and concentrators can also receive pure academic interest advising (non-requirement advising) from any faculty member and affiliated faculty member of the department.

First-years and sophomores considering a history major or concentration can seek advising from UNDED or any other faculty member.

For questions about requirements, courses, or the general program, majors and concentrators can also contact the undergraduate administrator.

Departmental Honors

To be eligible for departmental honors, the student must have a GPA of at least 3.6 in courses for the major, an ambitious curriculum, and an outstanding senior thesis. Honors are awarded on the basis of a truly outstanding senior thesis. Normally no more than 10% of graduating majors receive departmental honors in a given academic year.

Course Numbering

Courses are numbered by type:

UN 1xxx - Introductory Survey Lectures
UN 2xxx - Undergraduate Lectures
UN 3xxx - Undergraduate Seminars
GU 4xxx - Joint Undergraduate/Graduate Seminars

and field (with some exceptions):

x000-x059: Ancient
x060-x099: Medieval
x100-x199: Early modern Europe
x200-x299: East Central Europe
x300-x399: Modern Western Europe
x400-x599: United States
x600-x659: Jewish
x660-x699: Latin America
x700-x759: Middle East
x760-x799: Africa
x800-x859: South Asia
x860-x899: East Asia
x900-x999: Research, historiography, and transnational

Seminars

Seminars are integral to the undergraduate major in history. In these courses, students develop research and writing skills under the close supervision of a faculty member. Enrollment is normally limited to approximately 15 students. In order to maintain the small size of the courses, admission to most seminars is by instructor's permission or application.

In conjunction with the Barnard History Department and other departments in the University (particularly East Asian Languages and Cultures), the History Department offers about 25 seminars each semester that majors may use to meet their seminar requirements. While there are sufficient seminars offered to meet the needs of majors seeking to fulfill the two-seminar requirement, given the enrollment limits, students may not always be able to enroll in a particular seminar. Students should discuss with UNDED their various options for completing the seminar requirement.

The History Department has developed an on-line application system for some seminars. The department regularly provides declared majors and concentrators with information on upcoming application periods, which typically occur midway
through the preceding semester. Students majoring in other fields, or students who have not yet declared a major, must inform themselves of the application procedures and deadlines by checking the undergraduate seminar page of the departmental website.

**PROFESSORS**

Elazar Barkan (SIPA)
Volker Berghahn (*emeritus*)
Richard Billows
Elizabeth Blackmar
Casey Blake
Christopher Brown
Richard Bulliet (*emeritus*)
Euan Cameron (UTS)
Elishева Carlebach
Mark Carnes (Barnard)
Zeynep Çelik
George Chauncey
John Coatsworth (Provost)
Matthew Connelly
Victoria de Grazia
Andrew Delbanco (English and Comparative Literature)
Mamadou Diouf (Middle Eastern, South Asian, and African Studies)
Alan Dye (Barnard)
Catherine Evtuhov
Barbara Fields
Eric Foner (*emeritus*)
Pierre Force (French and Romantic Philology)
Carol Gluck
Martha Howell (*emerita*)
Robert Hymes (East Asian Language and Cultures)
Kenneth Jackson (*emeritus*)
Karl Jacoby
Richard John (Journalism)
Matthew Jones
Ira Katznelson (Political Science)
Joel Kaye (Barnard)
Alice Kessler-Harris (*emerita*)
Rashid Khalidi
Dorothy Ko (Barnard)
Adam Kosto
William Leach (*emeritus*)
Eugenia Y. Lean (East Asian Languages and Cultures)
Feng Li (East Asian Languages and Cultures)
Mark Lilla (Religion)
Claudio Lomnitz (Anthropology)
John Ma (Classics)
Gregory Mann
Mark Mazower
Stephanie McCurry
Jose Moya (Barnard)
Celia Naylor (Barnard)
Mae Ngai
Susan Pedersen
Pablo Piccato
Rosalind Rosenberg (Barnard)
David Rosner (Mailman School of Public Health)
David Rothman (Physicians and Surgeons)
Emmanuelle Saada (French and Romance Philology)
Simon Schama (University Professor)
Seth Schwartz
Herbert Sloan (Barnard, *emeritus*)
Pamela Smith
Robert Somerville (*emeritus*)
Michael Stanislawski
Anders Stephanson
Lisa Tiersten (Barnard)
Adam Tooze
Deborah Valenze (Barnard)
Michael Witgen
Marc Van de Mieroop
David Weiman (Barnard College)
Carl Wennerlund (Barnard College)
Richard Wortman (*emeritus*)
Madeleine Zelin (East Asian Languages and Cultures)

**ASSOCIATE PROFESSORS**

Manan Ahmed
Gergely Baics (Barnard)
Lisbeth Kim Brandt (East Asian Languages and Cultures)
Paul Chamberlin
Amy Chazkel
Charly Coleman
Marwa Elshakry
Ansley Erickson (Teachers College)
Abosde George (Barnard)
Frank Guridy
Hilary Hallett
Rebecca Kobrin
Natasha Lightfoot
David Lurie (East Asian Languages and Cultures)
Malgorzata Mazurek
Nara Milanch (Barnard)
Lien-Hang Nguyen
Gregory Pflugfelder (East Asian Languages and Cultures)
Caterina Pizzigoni
Anupama Rao (Barnard)
Camille Robcis
Samuel Roberts
Sarah Haley
Neslihan Senocak
Kavita Sivaramakrishnan (Mailman School of Public Health)
Rhiannon Stephens
Gray Tuttle (East Asian Languages and Cultures)
Carl Wennerlund (Barnard)
**ASSISTANT PROFESSORS**

Merlin Chowkwanyun (Mailman School of Public Health)
Hannah Farber
Gulnar Kendirbai (visiting)
Paul Kreitman (East Asian Languages and Cultures)
Andrew Lipman (Barnard)
A. Tung #en
Alma Steingart
Sailakshmi Ramgopal
James Stafford

**LECTURERS IN DISCIPLINE**

Victoria Phillips

**ON LEAVE**

**Fall 2021:** Blake, Brown, Diouf (MESAAS), George (BC), Guridy, Jacoby, Lipman (BC), Ma (Classics), Mann, Moya (BC), Pedersen, Rao (BC), Robcis, Roberts, Saada (French), Senocak, Stephanson, Van De Mieroop,

**Spring 2022:** Blake, Brown, Carlebach, Diouf (MESAAS), Evtuhov, George (BC), Gluck, Khalidi, Kobrin, Ma (Classics), Mann, Moya (BC), Pedersen, Robcis, Roberts, Saada (French), Senocak, Sivaramakrishnan (Mailman), Van De Mieroop

**GUIDELINES FOR ALL HISTORY MAJORS AND CONCENTRATORS**

For detailed information about the history major or concentration, as well as the policies and procedures of the department, please refer to the *History at Columbia Undergraduate Handbook*, available for download on the departmental website.

**MAJOR IN HISTORY**

Students must complete a minimum of nine courses in the department, of which four or more must be in an area of specialization chosen by the student and approved by a member of UNDED. Students must also fulfill a breadth requirement by taking three courses outside of their specialization. Two of the courses taken in the major must be seminars (including one seminar in the chosen specialization).

The requirements of the undergraduate program encourage students to do two things:

1. Develop a deeper knowledge of the history of a particular time and/or place. Students are required to complete a specialization by taking a number of courses in a single field of history of their own choosing. The field should be defined, in consultation with a member of UNDED, according to geographical, chronological, and/or thematic criteria. For example, a student might choose to specialize in 20th C. U.S. History, Medieval European History, Ancient Greek and Roman History, or Modern East Asian History. The specialization does not appear on the student's transcript, but provides an organizing principle for the program the student assembles in consultation with UNDED.

2. Gain a sense of the full scope of history as a discipline by taking a broad range of courses. Students must fulfill a breadth requirement by taking courses outside their own specialization -- at least one course removed in time and two removed in space.

   a. Time: majors and concentrators must take at least one course removed in time from their specialization:

      - Students specializing in the modern period must take at least one course in the pre-modern period; students specializing in the pre-modern period must take at least one course in the modern period.

      - If the course proposed is in the same regional field as a student’s specialization, special care must be taken to ensure that it is as far removed as possible: please consult with UNDED to make sure a given course counts for the chronological breadth requirement.

   b. Space: majors must take at least two additional courses in regional fields not their own:

      - These two "removed in space" courses must also cover two different regions.

      - For example, students specializing in some part of Europe must take two courses in Africa, East or South Asia, Latin America/Caribbean, Middle East, and/or the U.S.

      - Some courses cover multiple geographic regions. If a course includes one of the regions within a student’s specialization, that course cannot count towards the breadth requirement unless it is specifically approved by the Director of Undergraduate Studies. For example, if a student is specializing in 20th C. U.S. history and takes the class *World War II in Global Perspective*, the class is too close to the specialization and may not count as a regional breadth course.

All courses in the Barnard History Department as well as select courses in East Asian Languages and Cultures; Middle Eastern, South Asian, and African Studies; and other departments count toward the major. Eligible inter-departmental courses may include:

- African Civilizations (AFCV UN1020) (when taught by Professor Gregory Mann, Professor Rhiannon Stephens, or PhD students in the Columbia University Department of History; the course does NOT count for History when taught by anyone else)

- Primary Texts of Latin American Civilization (LACV UN1020) (when taught by Professor Pablo Piccato, Professor Caterina Pizzigoni, or PhD students in the Columbia University Department of History; the course does NOT count for History when taught by anyone else)
• Introduction to East Asian Civilizations: China (ASCE UN1359), INTRO EAST ASIAN CIV: JPN (ASCE UN1361), Introduction to East Asian Civilizations: Korea (ASCE UN1363) or other ASCE UN1xxx courses (when taught by Professors Charles Armstrong, Carol Gluck, Robert Hymes, Dorothy Ko, Eugenia Lean, Feng Li, David Lurie, Jungwon Kim, Paul Kreitman, Gregory Pflugfelder, Gray Tuttle, or Madeleine Zelin, and NOT when they are taught by anyone else)
• Please see the Courses section on the departmental website to see which of these might count in a given semester. Any courses not listed or linked on the departmental website, however historical in approach or content, do not count toward the history major or concentration, except with explicit written approval of the UNDED chair.
• If you suspect a History course has escaped being listed at the above link and want to confirm whether or not it counts for History students, please contact the Undergraduate Administrator.

Thematic Specializations
Suitably focused thematic and cross-regional specializations are permitted and the breadth requirements for students interested in these topics are set in consultation with a member of UNDED. Classes are offered in fields including, but not limited to:

• Ancient history
• Medieval history
• Early modern European history
• Modern European history
• United States history
• Latin American and Caribbean history
• Middle Eastern history
• East Asian history
• South Asian history

Additionally, classes are offered in thematic and cross-regional fields which include, but are not limited to:

• Intellectual history
• Jewish history
• Women's history
• International history
• History of science

These fields are only examples. Students should work with a member of UNDED to craft a suitably focused specialization on the theme or field that interests them.

Thesis Requirements
Majors may elect to write a senior thesis, though this is not a graduation requirement. Only senior thesis writers are eligible to be considered for departmental honors. The senior thesis option is not available to concentrators.

The yearlong HIST UN3838-HIST UN3839 Senior Thesis Seminar carries 8 points, 4 of which typically count as a seminar in the specialization. For the most up-to-date information on the field designations for history courses, please see the Courses section of the departmental website.

CONCENTRATION IN HISTORY
Effective February 2018, students must complete a minimum of six courses in history. At least three of the six courses must be in an area of specialization, one far removed in time, and one on a geographic region far removed in space. There is no seminar requirement for the concentration.
HISTORY AND PHILOSOPHY OF SCIENCE

The University offers a number of courses in the history and philosophy of science, although it does not, at this time, offer a major or concentration to undergraduates in Columbia College or General Studies. The course listings bring together a variety of courses from different disciplines, which should be of interest to anyone wishing to pursue work in the history and philosophy of science. The list is not intended to be all inclusive; students interested in the history and philosophy of science should speak to members of the committee.

INTERDEPARTMENTAL COMMITTEE ON HISTORY AND PHILOSOPHY OF SCIENCE

David Albert
Philosophy
706 Philosophy; 212-854-3519

Walter Bock (emeritus)
Biology
1106 Schermerhorn; 212-854-4487

Marwa Elshakry
History
512 Fayerweather; 212-851-5914

Karl Jacoby
History
424 Hamilton; 212-854-3248

Richard John
History
201E Pulitzer; 212-854-0547

Matthew Jones
History
514 Fayerweather; 212-854-2421

Joel Kaye
History
422B Lehman; 212-854-4350

Philip Kitcher
Philosophy
717 Philosophy; 212-854-4884

Eugenia Lean
History
925 International Affairs Building; 212-854-1742

Christia Mercer
Philosophy
707 Philosophy; 212-854-3190

Alondra Nelson
Sociology
607 Knox; 212-851-7081

Samuel Roberts
History/Sociomedical Sciences
322 Fayerweather; 212-854-2430

David Rosner
History/Sociomedical Sciences
420 Fayerweather; 212-854-4272

David Rothman
History/Sociomedical Sciences
622 West 168th Street; 212-305-4096

George Saliba (emeritus)
Middle Eastern, South Asian, and African Studies
312 Knox; 212-854-4166

Pamela Smith
History
605 Fayerweather; 212-854-7662
**Human Rights**

**Program Office:** Institute for the Study of Human Rights; 475 Riverside Drive (Interchurch Center), 3rd floor; 646-745-8577; uhrp@columbia.edu

**Departmental Website:** [http://humanrightscolumbia.org/education/undergraduate](http://humanrightscolumbia.org/education/undergraduate)

**Director of Undergraduate Studies:** Prof. Andrew Nathan, 931 International Affairs Building; 212-854-6909. Office hours: TBC.

Human rights are central to contemporary understandings of justice and equality and have crucial bearing on the ability to assess and respond to emerging technological, economic, social, cultural, and political issues.

The Undergraduate Human Rights Program at the Institute for the Study of Human Rights engages students in this dynamic and evolving field and enhances their knowledge, skills, and commitment to human rights. The program offers a major and a concentration in human rights, provides students the opportunity to deepen their knowledge and explore their interests in human rights outside the classroom, and works to strengthen and support the undergraduate human rights community on campus. More information on academic and extracurricular events, opportunities, and resources for undergraduate human rights students is available on the program’s website. For an advising appointment, please e-mail humanrightsed@columbia.edu.

**Departmental Honors**

To be eligible for departmental honors, a student must satisfy all the requirements for the major, maintain a 3.6 GPA in the major, maintain an overall GPA of 3.6, and complete a thesis of sufficiently high quality to merit honors. A thesis is required for all students who wish to be considered for honors, but does not guarantee honors. Students who graduate in October, February, or May of a given academic year are eligible for honors consideration in May. Normally no more than 10% of graduating majors receive departmental honors in a given academic year.

Students interested in writing a thesis for honors consideration complete a two semester course sequence during their final year of study. In the fall, students take HRTS UN3994 Human Rights Senior Seminar: Research Methods, which introduces students to various research methods and guides them through the proposal development process. In the spring, students take HRTS UN3996 Human Rights Thesis Seminar. This course will consist of group sessions, where students will present their work and participate in discussions, as well as individual meetings with their thesis supervisor, who is also the course instructor.

Students are encouraged to write a thesis, but they should not do so solely to be eligible for honors consideration. Rather, students should consider enrolling in the thesis seminar in order to demonstrate their capacity to produce a work of original research and develop more specialized knowledge of a human rights issue.

**Guidelines for All Human Rights Majors, Concentrators, and Special Concentrators**

Student should also consult the general academic policies of their school.

**Planning Forms**

Major and concentration planning forms are available on the ISHR undergraduate program website. Prior to each semester, students should submit an online course advising form. Students may also e-mail uhrp@columbia.edu to set up an advising appointment.

**Grades**

No course with a grade of D or lower is credited towards the major or concentration.

One course, with the exception of the three core courses required for the major, can be taken for Pass/D/Fail. The student must receive a grade of P for the course to count towards the requirements of the major. All other courses must be taken for a letter grade.

All seminar courses must be taken for a letter grade.

**Transfer Credit/Study Abroad Credit**

Human rights majors may transfer a maximum of three courses from other institutions. Human rights concentrators may transfer a maximum of two courses from other institutions. This includes study abroad credit. No more than one Advanced Placement course can be counted for the major or concentration. The application of transferred courses to the major or concentration must be approved by the Director of Undergraduate Studies or the undergraduate adviser.

Students wishing to count transfer courses toward the major or concentration should email uhrp@columbia.edu with their Transfer Credit Report, the syllabi of the courses they want to count toward departmental requirements, and a statement of how they want to apply the transfer credits to the requirements.

**Double-Counting**

Students may double count major or concentration courses toward the fulfillment of degree requirements in accordance with the academic policies of their school.

Normally, courses for one program of study (i.e. major, concentration, special concentration, etc.) may not be used to satisfy the course requirements for another program of study.
Students should consult the academic policies of their school for specific information.

MAJOR IN HUMAN RIGHTS
The major in human rights requires 10 courses for a minimum of 31 points as follows. One of the distributional or specialization courses must be a seminar.

Core Courses
- HRTS UN3001 Introduction to Human Rights
- HRTS UN3190 INTL HUMAN RIGHTS LAW
- HRTS UN3995 Human Rights Senior Seminar

Distributional Requirement *
Students take one course in three of these four categories (three courses), for a minimum of 9 credit points.

- Politics and history
- Culture and representation
- Political theory and philosophy
- Social and economic processes

Specialization Requirement **
Students fulfill the specialization requirement by focusing on a particular discipline, taking four courses for a minimum of 12 credit points offered by a single department or institute.

* Please see the ISHR undergraduate course list for the current list of courses that fulfill the distributional requirement of the major.

** The goal of the specialization requirement is to equip students with the tools of a specific discipline. Students should inform the human rights program of their intended specialization before taking courses to fulfill this requirement. As a general rule, fields of study listed as academic programs on the bulletin are approved for the specialization requirement if a free-standing major is offered. Courses approved for that major are generally approved for the human rights specialization. However, language acquisition and studio courses may not be taken to fulfill the specialization requirement. Students are encouraged to take any core and/or methodology courses required by a program when fulfilling their specialization requirement. Students are also encouraged to take courses within their chosen specialization that focus on human rights issues, but the specialization requirement can be fulfilled by taking any four courses within the same discipline. For example, if a student's specialization is Political Science, he or she can fulfill the specialization requirement by taking any four POLS courses.

CONCENTRATION IN HUMAN RIGHTS
The concentration in human rights requires 8 courses for a minimum of 24 points as follows:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRTS UN3001</td>
<td>Introduction to Human Rights</td>
</tr>
<tr>
<td></td>
<td>Seven additional human rights courses, one of which must be a seminar.</td>
</tr>
</tbody>
</table>

Please see the ISHR undergraduate course list for the current list of courses that fulfill the concentration requirements.
ITALIAN

Departmental Office: 502 Hamilton; 212-854-2308
http://italian.columbia.edu/

Director of Undergraduate Studies: Asst. Prof. Konstantina Zanou, 513 Hamilton; 212-853-8205; kz2269@columbia.edu
(pmt2114@columbia.edu)

A major in Italian offers students the opportunity to study Italian literature and culture in an intimate, seminar setting with the close supervision of the department’s faculty. In addition, the prerequisite and corequisite sequence of language courses is designed to give students a command of written and spoken Italian.

Majors must complete 30 points and concentrators must complete 24 points. All majors and concentrators are required to take two semesters of Advanced Italian (ITAL UN3335 Advanced Italian-ITAL UN3336 Advanced Italian II: Italian Language & Culture, ITAL UN3337 Advanced Italian Through Cinema, ITAL UN3338 Italiana. Introduction to Italian Culture, the High, the Low, and the In-between, ITAL UN3645 Grand Tour in Italy, or ITAL UN3232 Senza frontiere. Lingua e cultura italiane dall’Ottocento ad oggi tra emigrazione ...) as well as one of the following two sequences:

• Introduction to Italian Literature I and II
  (ITAL UN3333-ITAL UN3334) provides an overview of major authors and works in the Italian literary tradition from the Middle Ages to the present;  
• Italian Cultural Studies I and II
  (ITAL GU4502-ITAL GU4503) is an interdisciplinary investigation into Italian culture and society from national unification in 1860 to the present.

In consultation with the director of undergraduate studies, majors select six additional courses (concentrators select four additional courses) from the department’s 3000- or 4000-level offerings or from other humanities and social science departments with a focus on Italian culture. Students who have taken courses in Italian Literature, Italian History, and/or Italian Culture while abroad should consult with the Director of Undergraduate Studies to determine if the courses may be applicable to the major.

Highly motivated students have the opportunity to pursue a senior thesis under the guidance of a faculty adviser in an area of Italian literature or culture of their choosing. The senior thesis tutorial, ITAL UN3993 Senior Thesis/Tutorial, will count for 3 points.

Departmental courses taught entirely in English do not have linguistic prerequisites and students from other departments who have interests related to Italian culture are especially welcome to enroll.

Italian language instruction employs a communicative approach that integrates speaking, reading, writing, and listening. Courses make use of materials that help students to learn languages not just as abstract systems of grammar and vocabulary but as living cultures with specific content. Across the levels from elementary to advanced, a wide range of literary, cultural and multimedia materials, including books, film, and opera, supplement the primary course text.

The sequence in elementary and intermediate Italian enables students to fulfill the College’s foreign language requirement and thoroughly prepares them for advanced study of language and for literature courses taught in Italian. Specialized language courses allow students to develop their conversational skills.

For highly motivated students, the department offers intensive elementary and intensive intermediate Italian, both of which cover a full year of instruction in one semester. Courses in advanced Italian, although part of the requirements for a major or a concentration in Italian, are open to any qualified student whose main goal is to improve and perfect their competence in the language.

Outside the classroom, the Department of Italian organizes a weekly Caffè e conversazione where students at all levels can converse with fellow students and faculty members over Italian espresso and cookies. Students can also attend the Serata al cinema, Italian film viewings scheduled in the evening throughout the academic year, in which faculty and graduate students introduce each film and then conclude with a question and answer session. In addition, the student-run Società Italiana ( culasocieta@gmail.com ) organizes events such as pasta-making workshops, movie nights, and costume parties.

ADVANCED PLACEMENT

The department grants 3 credits for a score of 5 on the AP Italian Language exam, which satisfies the foreign language requirement. Credit is awarded upon successful completion of a 3000-level (or higher) course with a grade of B or higher. This course must be for at least 3 points of credit and be taught in Italian. Courses taught in English may not be used for language AP credit. The department grants 0 credits for a score of 4 on the AP Italian Language exam, but the foreign language requirement is satisfied.

CASA ITALIANA

A wide range of cultural programs are sponsored by the Italian Academy for Advanced Studies in America, located in Casa Italiana. These programs, which include the activities of the Columbia Seminar on Modern Italian Studies and the Italian Academy Film Festival, enrich the learning experience of the student and offer opportunities to meet distinguished Italian and Italian-American visitors to the University. The Paterno book collection is housed in Butler Library and contains valuable resources on Italian literature and culture.
For inquiries into the department and its undergraduate and graduate degrees offered, please contact 212-854-2308 or italian@columbia.edu.

**LANGUAGE RESOURCE CENTER**

The Language Resource Center (LRC) provides resources for intensive practice in pronunciation, diction, and aural comprehension of some twenty-five modern languages. LRC exercises are closely coordinated with the classroom’s work. Coordinated tape programs and on-line audio are available and mandatory for students registered in elementary and intermediate Italian language courses. Taped exercises in pronunciation and intonation, as well as tapes of selected literary works, are also available to all students in Italian courses.

**ELECTRONIC CLASSROOMS**

Language instruction courses meet at least once a week in a multimedia-equipped electronic classroom in order to facilitate exposure to Italian arts such as music, opera, and film, and for other pedagogical uses.

**DEPARTMENTAL HONORS**

Majors in Italian literature or Italian cultural studies who wish to be considered for departmental honors in Italian must: (1) have at least a 3.6 GPA in their courses for the major; and (2) complete a senior thesis or tutorial and receive a grade of at least A- within the context of the course ITAL UN3993 Senior Thesis/Tutorial. Normally no more than one graduating senior receives departmental honors in a given academic year.

**PROFESSORS**

Teodolinda Barolini (on leave AY ‘22)
Jo Ann Cavallo, Chair (on leave AY ‘22)
Elizabeth Leake

**ASSOCIATE PROFESSOR**

Nelson Moe (Barnard)
Pier Mattia Tommasino (on leave Fall ‘21)

**ASSISTANT PROFESSOR**

Konstantina Zanou (on leave Spring ‘22)

**SENIOR LECTURERS**

Felice Italo Beneduce
Federica Franz
Maria Luisa Gozzi
Patrizia Palumbo
Carol Rounds (Hungarian)
Alessandra Saggin
Barbara Spinelli

**GUIDELINES FOR ALL ITALIAN MAJORS AND CONCENTRATORS**

The courses in the Department of Italian are designed to develop the student’s proficiency in all the language skills and to present the literary and cultural traditions of Italy. The program of study is to be planned as early as possible with the director of undergraduate studies. Students are advised to meet with the director of undergraduate studies each semester in order to obtain program approval.

For students with no knowledge of Italian, the required language course sequence is:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
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</thead>
<tbody>
<tr>
<td>ITAL UN1101</td>
<td>Elementary Italian I</td>
</tr>
<tr>
<td>- ITAL UN1102</td>
<td>and Elementary Italian II</td>
</tr>
<tr>
<td>ITAL UN2101</td>
<td>INTERMEDIATE ITALIAN I</td>
</tr>
<tr>
<td>- ITAL UN2102</td>
<td>and INTERMEDIATE ITALIAN II</td>
</tr>
</tbody>
</table>

For students planning to enroll in Intensive Italian courses, a minimum of three semesters of Italian language instruction is required, such as:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITAL UN1121</td>
<td>Intensive Elementary Italian</td>
</tr>
<tr>
<td>- ITAL UN2101</td>
<td>and INTERMEDIATE ITALIAN I</td>
</tr>
<tr>
<td>- ITAL UN2102</td>
<td>and INTERMEDIATE ITALIAN II</td>
</tr>
<tr>
<td>ITAL UN1101</td>
<td>Elementary Italian I</td>
</tr>
<tr>
<td>- ITAL UN1102</td>
<td>and Elementary Italian II</td>
</tr>
<tr>
<td>- ITAL UN2121</td>
<td>and INTENSIVE INTERMEDIATE ITALIAN</td>
</tr>
<tr>
<td>ITAL UN1121</td>
<td>Intensive Elementary Italian</td>
</tr>
<tr>
<td>- ITAL UN2121</td>
<td>and INTENSIVE INTERMEDIATE ITALIAN</td>
</tr>
</tbody>
</table>

And one of the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITAL UN3335</td>
<td>Advanced Italian</td>
</tr>
<tr>
<td>ITAL UN3336</td>
<td>Advanced Italian II: Italian Language &amp; Culture</td>
</tr>
<tr>
<td>ITAL UN3337</td>
<td>Advanced Italian Through Cinema</td>
</tr>
<tr>
<td>ITAL UN3338</td>
<td>Italiana. Introduction to Italian Culture, the High, the Low, and the In-between</td>
</tr>
<tr>
<td>ITAL UN3339</td>
<td>Learning Italian in Class and Online: A Telecollaboration with Italy.</td>
</tr>
<tr>
<td>ITAL UN3341</td>
<td>Art Itineraries: Italian through Art</td>
</tr>
<tr>
<td>ITAL UN3232</td>
<td>Senza frontiere. Lingua e cultura italiane dall’Ottocento ad oggi tra emigrazione ...</td>
</tr>
<tr>
<td>ITAL UN3645</td>
<td>Grand Tour in Italy</td>
</tr>
</tbody>
</table>

Italian language proficiency equivalent to the elementary and intermediate sequence may be demonstrated by the departmental placement test, offered before the start of every semester; with a score of 4 or 5 on the Advanced Placement Examination; or with a score of 780 or higher on the SAT II Subject Test in Italian.
As noted above, courses given entirely in English do not have linguistic prerequisites; students planning a major in Italian may enroll in such courses before completing the language prerequisite for the major or concentration.

**MAJOR IN ITALIAN**

Please read *Guidelines for all Italian Majors and Concentrators* above.

**Requirements**

The major in Italian literature requires a minimum of 30 points in Italian courses numbered above the intermediate level, i.e., above ITAL UN2121, to include the following:

**Two semesters of Advanced Italian**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITAL UN3335</td>
<td>Advanced Italian and Advanced Italian II: Italian Language &amp; Culture</td>
</tr>
<tr>
<td>or ITAL UN3337</td>
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</tr>
<tr>
<td>or ITAL UN3645</td>
<td>Grand Tour in Italy</td>
</tr>
</tbody>
</table>

**Two semesters of Italian Literature**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITAL UN3333</td>
<td>INTRO TO ITALIAN LITERATURE I and INTRO TO ITALIAN LITERATURE II</td>
</tr>
<tr>
<td>- OR -</td>
<td></td>
</tr>
</tbody>
</table>

**Two Semesters of Italian Culture**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITAL GU4502</td>
<td>Italian Cultural Studies I: From Unification to World War I and Italian Cultural Studies II: From World War I to the Present</td>
</tr>
<tr>
<td>- OR -</td>
<td></td>
</tr>
</tbody>
</table>

**Additional Courses**

Select at least two other courses from the department's GU4000-level courses.

In consultation with the director of undergraduate studies, the remaining courses may be selected from the department's 3000- or 4000-level offerings or from other humanities and social science departments with a focus on Italian literature or culture.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITAL UN3993</td>
<td>Senior Thesis/Tutorial (or another course in Italian literature or culture)</td>
</tr>
</tbody>
</table>

Native speakers and students with superior proficiency (as demonstrated by a departmental exam) may replace the Advanced Italian sequence with six points of Italian literature courses of their choice.

---

**Period Distribution**

At least two courses that cover material before 1700 and two courses that cover material after 1700.

---

**CONCENTRATION IN ITALIAN**

Please read *Guidelines for all Italian Majors and Concentrators* above.

**Requirements**

The concentration in Italian literature requires a minimum of 24 points in Italian courses numbered above the intermediate level, i.e., above ITAL UN2121, to include the following:

**Two semesters of Advanced Italian**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITAL UN3335</td>
<td>Advanced Italian and Advanced Italian II: Italian Language &amp; Culture</td>
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<td>or ITAL UN3337</td>
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</tr>
<tr>
<td>or ITAL UN3645</td>
<td>Grand Tour in Italy</td>
</tr>
</tbody>
</table>

**Two semesters of Italian Literature**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITAL UN3333</td>
<td>INTRO TO ITALIAN LITERATURE I and INTRO TO ITALIAN LITERATURE II</td>
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<tr>
<td>- OR -</td>
<td></td>
</tr>
</tbody>
</table>

**Two Semesters of Italian Culture**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITAL GU4502</td>
<td>Italian Cultural Studies I: From Unification to World War I and Italian Cultural Studies II: From World War I to the Present</td>
</tr>
<tr>
<td>- OR -</td>
<td></td>
</tr>
</tbody>
</table>

**Additional Courses**

Select at least two other courses from the department's GU4000-level courses.

In consultation with the director of undergraduate studies, the remaining courses may be selected from the department's 3000- or 4000-level offerings or from other humanities and social science departments with a focus on Italian literature or culture.

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<tr>
<th>Course Code</th>
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</thead>
<tbody>
<tr>
<td>ITAL UN3993</td>
<td>Senior Thesis/Tutorial (or another course in Italian literature or culture)</td>
</tr>
</tbody>
</table>

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JAZZ STUDIES

The Center for Jazz Studies: Prentis Hall, 4th floor (632 W. 125th Street); 212-851-9270
http://www.columbia.edu/cu/cjs

Jazz at Columbia:

Director: Prof. Robert G. O'Meally, 611 Philosophy; 212-851-9270; rgo1@columbia.edu

Director of Jazz Performance: Prof. Ole Mathisen, 621 Dodge Hall; 212-854-3825; om2141@columbia.edu (cjw5@columbia.edu)

Program Administrator: Yulanda Mckenzie, 602 Philosophy; 212-851-9270; ym189@columbia.edu

The special concentration in jazz studies is an interdisciplinary liberal arts course of study that uses jazz music—and the jazz culture from which the music emanated—as a prism through which to study jazz culture during what might be termed the long jazz century, the Sprawling 20’s. The curriculum in this new field guides students in developing a firm grounding in the traditions and aesthetic motives of jazz music, viewed through the perspectives of music history and ethnomusicology as well as literary theory and cultural studies.

The program also explores in depth the development of jazz-oriented art works in the music’s sister arts—literature, dance, painting, photography, and film. While a U.S. focus is highly appropriate, considering the many ways in which jazz is a definitive music of this nation, students also explore jazz’s geographical history beyond these shorelines, including complex, ongoing interactions with Africa, the Caribbean, Europe, and Asia.

The special concentration in jazz studies is designed for music majors as well as for those majoring in other fields. The main difference between music majors and non-music majors is that while music majors take advanced courses in arranging, composition, and transcription, non-music majors are required to take an introduction to music fundamentals.

While there are some fields where the fit with jazz studies is very obvious—music, American studies, African-American studies, English, comparative literature, and history—special concentrators can major in any field whatsoever. Is there a jazz or improvisatory philosophy? What might be its relation to studies of aesthetics or American pragmatism? And what are jazz’s implications for the student of law? How does one protect the intellectual property rights of an improvised jazz solo? What about business? What economic and political forces have shaped jazz? Who buys jazz? What is its audience? What is a jazz painting? A jazz novel? What is jazz poetry? What is jazz dance? What is a jazz film? What are the sources and meanings of art? What work does the music do for the whole community?

Along with problems of musical history, form, and definition, our special courses explore jazz as a culture. Students not only study individual jazz artists but also explore the immeasurably variegated worlds through which such artists moved, and which they helped to shape. As cultural historians-in-training—focused on questions of nationality, race, sexuality, gender, economics, and politics—students explore the extraordinarily complicated terrains of the New Orleans of Bunk Johnson, for example, or the Baltimore of Billie Holiday (born in Philadelphia, reared in Baltimore). They explore such artists’ other geographical travels. What did their images, including mistaken conceptions of who they were, tell us about the cultures that mythologized them?

How did these jazz musicians influence not only musicians but other artists of their era and milieu: the poets and novelists, painters and sculptors, photographers and filmmakers, dancers and choreographers who regularly heard them play and often shared with them a sense of common project?

One thinks of Tito Puente, working with singers and dancers at the Palladium; Jackson Pollack dancing to the music as he spun drips of paints on canvasses placed on the studio floor; Langston Hughes writing detailed instructions to the musicians he hoped would accompany performance of his poetry; Romare Bearden’s beautifully turned stage and costume designs for Alvin Ailey and Dianne McIntyre, whose improvisatory jazz dance workshop was called Sound in Motion; the drummer Jo Jones in an interview naming as key influences a series of tap dancers he admired; Stanley Crouch, stirring in his high-powered essays in a room where jazz drums stand at the center, the old dream-kit inspiration; Ralph Ellison, who kept in touch with his beginnings as a musician in Oklahoma City through hour-long conversations with his childhood friend, the singer Jimmy Rushing; Toni Morrison reading her magical prose to improvisations by Max Roach and the dancer Bill T. Jones; and the pianist Jason Moran playing at the Studio Museum in Harlem, where he introduced his group as including Beauford Delany, whose paintings hung on the wall near the bandstand—vigorously all and recall across the art forms.

Perhaps above all, the special concentration in jazz studies is designed to prepare students to be well-prepared and flexible improvisers in a universe of change and possibility.

INTERDEPARTMENTAL COMMITTEE ON JAZZ STUDIES
Ann Douglas (English and Comparative Literature)
Brent Hayes Edwards (English and Comparative Literature)
Kevin A. Fellezs (Music and African American and African Diaspora Studies)
Aaron Fox (Music)
Farah Jasmine Griffin (English and Comparative Literature)
George Lewis (Music)
Robert G. O’Meally (English and Comparative Literature)  
Christopher Washburne (Music)

**ADJUNCT LECTURERS IN JAZZ PERFORMANCE**

Paul Bollenbeck  
Christine Correa  
Krin Gabbard  
David Gibson  
Brad Jones  
Victor Lin  
Ole Mathisen  
Tony Moreno  
Ugonna Okegwa  
Adriano Santos  
Don Sickler  
Leo Traversa  
Ben Waltzer

**GUIDELINES FOR ALL JAZZ STUDIES SPECIAL CONCENTRATORS**

Students interested in a special concentration in jazz studies should speak with the director no later than the fall semester of the sophomore year.

In addition to the requirements of the special concentration, students must complete a major or a full concentration. Students interested in declaring a special concentration in jazz studies will be assigned an adviser. The program of study is to be planned with the adviser as early as possible.

**SPECIAL CONCENTRATION IN JAZZ STUDIES**

Please read *Guidelines for all Jazz Studies Special Concentrators* above.

The special concentration in jazz studies requires a total of seven courses (22 points minimum), distributed as follows:

**Requirements for Non-Music Majors/Concentrators**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL GU4612</td>
<td>JAZZ AND AMERICAN CULTURE</td>
</tr>
<tr>
<td>MUSI UN2016</td>
<td>Jazz</td>
</tr>
<tr>
<td>MUSI UN1002</td>
<td>FUNDAMENTALS OF MUSIC</td>
</tr>
<tr>
<td></td>
<td>Three interdisciplinary courses as approved by the director</td>
</tr>
<tr>
<td></td>
<td>A senior independent study project</td>
</tr>
</tbody>
</table>

**Requirements for Music Majors/Concentrators**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL GU4612</td>
<td>JAZZ AND AMERICAN CULTURE</td>
</tr>
<tr>
<td>MUSI GU4505</td>
<td>Jazz Arranging and Composition</td>
</tr>
<tr>
<td>MUSI GU4500</td>
<td>Jazz Transcription and Analysis</td>
</tr>
<tr>
<td>MPP UN1541</td>
<td>Columbia University Jazz Ensemble</td>
</tr>
<tr>
<td>Private music lessons (strongly recommended but not required)</td>
<td></td>
</tr>
<tr>
<td>Three interdisciplinary courses as approved by the director</td>
<td></td>
</tr>
<tr>
<td>A senior independent study project</td>
<td></td>
</tr>
</tbody>
</table>
The academic discipline of Jewish studies is an interdisciplinary field centered on the analysis and investigation of Jewish history, religion, language, and literature. The discipline ranges from the study of Jews and Judaism in antiquity to the present day. It explores Judaism not only as a religion, but as a civilization and culture.

A special concentration in Jewish studies is available for undergraduates and allows students to draw upon classes in a wide range of departments across the University, including History; Sociology; Middle Eastern, South Asian, and African Studies; Germanic Languages and Literature; and Religion. The requirements for the special concentration are designed to provide students with the interdisciplinary knowledge necessary to study Jewish civilization both broadly and deeply.

The roots of Judaism lie deeper than one region, gender, language, or culture; and by studying the interconnectedness of these areas, the depth of understanding across a range of spheres and disciplines greatly increases. The special concentration in Jewish studies enhances the current scholarly programs, adding to current Jewish studies courses' vitality as students come to each course with a deeper understanding and background based on their complementary coursework.

Students wishing to complete a special concentration in Jewish studies work with a program adviser to decide upon course selection and sequencing. The program office provides and keeps on record a planning form to track the fulfillment of requirements for the special concentration.

**AFFILIATED FACULTY**

Beth Berkowitz (Religion, Barnard)
Clemence Boulouque (Religion)
Elisheva Carlebach (History)
Yinon Cohen (Sociology)
Jeremy Dauber (Germanic Languages)
Rebecca Kobrin (History)
Agnieszka Legutko (Germanic Languages)
Seth Schwartz (History)
Michael Stanislawski (History)

**SPECIAL CONCENTRATION IN JEWISH STUDIES**

In addition to the requirements of the special concentration, students must complete a major or a full concentration.

For a special concentration in Jewish studies, students are required to complete a minimum of 21 points. Please note:

- At least one course must be taken from each of three of the focus areas listed below.
- Credits for language courses may constitute at most 10 points, and one year of Hebrew or Yiddish language is strongly recommended.
- A minimum of 18 points must be taken at Columbia or as part of an approved study abroad program (unless equivalent courses are not offered at Columbia, as determined by the faculty adviser).

The focus areas and courses listed below are examples and do not include all the potential courses which may count. Additionally, as new courses are introduced, new focus areas may develop. Some courses may fall under multiple headings. Determination of a course's focus area is at the discretion of the faculty adviser.

**Focus Areas**

**Bible and Rabbinics/Ancient Judaism**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>RELI V3512</td>
<td>The Bible and Its Interpreters</td>
</tr>
<tr>
<td>RELI GU4637</td>
<td>Talmudic Narrative</td>
</tr>
<tr>
<td>RELI W4520</td>
<td>Patriarchal and Rabbinic Authority in Antiquity</td>
</tr>
<tr>
<td>RELI V3501</td>
<td>Introduction To the Hebrew Bible</td>
</tr>
<tr>
<td>RELI V3508</td>
<td>Origins of Judaism</td>
</tr>
<tr>
<td>RELI V3561</td>
<td>Classics to Judaism: Ethics of the Fathers</td>
</tr>
<tr>
<td>RELI V2510</td>
<td>Jews and Judaism in Antiquity</td>
</tr>
</tbody>
</table>

**Medieval Judaism**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>HIST UN2657</td>
<td>Medieval Jewish Cultures</td>
</tr>
<tr>
<td>HIST W3616</td>
<td>Jews and Christians in the Medieval World</td>
</tr>
<tr>
<td>RELI W4510</td>
<td>The Thought of Maimonides</td>
</tr>
<tr>
<td>RELI V3870</td>
<td>Inquisitions, New Christians, and Empire</td>
</tr>
<tr>
<td>RELI GU4515</td>
<td>Reincarnation and Technology</td>
</tr>
<tr>
<td>HIST UN3180</td>
<td>Conversion in Historical Perspective</td>
</tr>
</tbody>
</table>

**Modern Judaism**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>HIST W3630</td>
<td>American Jewish History</td>
</tr>
<tr>
<td>RELI V3571</td>
<td>Judaism, Jewishness, and Modernity</td>
</tr>
<tr>
<td>MDES UN3542</td>
<td>Introduction to Israeli Literature</td>
</tr>
</tbody>
</table>

**Israeli Society**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDES UN3541</td>
<td>Zionism: A Cultural Perspective</td>
</tr>
<tr>
<td>MDES UN3542</td>
<td>Introduction to Israeli Literature</td>
</tr>
</tbody>
</table>

**Gender and Judaism**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST W3640</td>
<td>Jewish Women and Family, 1000-1800</td>
</tr>
</tbody>
</table>
| RELI V3570  | Women and Judaism: Folklore or Religion?
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>RELI W4504</td>
<td>Reading the Patriarchal and Matriarchal Stories in Genesis</td>
</tr>
<tr>
<td>MUSI G4125</td>
<td>Jewish Music: Uniqueness and Diversity</td>
</tr>
<tr>
<td>RELI V3585</td>
<td>The Sephardic Experience</td>
</tr>
<tr>
<td>RELI W4503</td>
<td>Readings from the Sephardic Diaspora</td>
</tr>
<tr>
<td>RELI UN2306</td>
<td>Intro to Judaism</td>
</tr>
<tr>
<td>RELI W4511</td>
<td>Jewish Ethics</td>
</tr>
<tr>
<td>HIST UN2657</td>
<td>Medieval Jewish Cultures</td>
</tr>
<tr>
<td>HIST UN3645</td>
<td>Spinoza to Sabbatai: Jews in Early Modern Europe</td>
</tr>
<tr>
<td>CLYD UN3500</td>
<td>READINGS IN JEWISH LITERATURE: American Jewish Literature: A survey</td>
</tr>
<tr>
<td>YIDD UN3800</td>
<td>Readings in Yiddish Literature: The Family Singer [In English]</td>
</tr>
<tr>
<td>RELI V3561</td>
<td>Classics fo Judaism: Ethics of the Fathers</td>
</tr>
</tbody>
</table>


**LANGUAGE RESOURCE CENTER**

**Office:** 353 International Affairs Building; 212-854-9224  
http://www.lrc.columbia.edu/

**Director:** Dr. Stéphane Charitos, 353 International Affairs Building; 212-854-6341; s758@columbia.edu

**Associate Director:** Piero di Porzio, 353 International Affairs Building; 212-854-3326; pdp@columbia.edu

**Hours of Operation:** Monday-Friday, 9 a.m.–5 p.m.

The Language Resource Center supports students throughout the course of their language study at Columbia. The LRC provides flexible physical and virtual spaces for language learning, facilitates access to resources, and connects students to language-related opportunities at Columbia and beyond. The LRC is also home to the Shared Course Initiative, which uses specialized distance classrooms for sharing several languages between Columbia, Cornell, and Yale universities. For more information on language learning at Columbia, visit lrc.columbia.edu.
LATIN AMERICAN AND CARIBBEAN STUDIES

The Institute of Latin American Studies: 8th Floor, International Affairs Building; 212-854-4643
http://ilas.columbia.edu

Program Director: Prof. M. Victoria Murillo, 832 International Affairs Building; mm2140@columbia.edu

Senior Manager of Business & Student Affairs: Eliza Kwon-Ahn, 827 International Affairs Building; ek2159@columbia.edu

The major in Latin American and Caribbean Studies stresses knowledge of a dynamic, historically deep and extensive region, but it also focuses on social, political, and cultural phenomena that transcend physical boundaries. The major thus reflects multidisciplinary dialogues that are transnational yet remain anchored in the common historical experience of Latin American societies. Thanks to the broad range of courses on Latin America offered in different departments of instruction and centers at Columbia, the major provides a multidisciplinary training on politics, history, culture, economy and society.

The Institute of Latin American Studies coordinates the major and offers access to research support, study abroad options, and linkages and credits toward the M.A. program in Latin American and Caribbean studies.

AFFILIATED FACULTY

Amy Chazkel (History)
Alan Dye (Economics, Barnard)
Frank Guridy (History)
Ana Paula Huback (Latin American and Iberian Studies)
Ana Paulina Lee (Latin American and Iberian Studies)
Natasha Lightfoot (History)
Claudio Lomnitz (Anthropology)
Nara Milanich (History, Barnard)
Eduardo Moncada (Political Science, Barnard)
Jose Moya (History, Barnard)
M. Victoria Murillo (Political Science)
Frances Negron-Muntaner (Comparative Literature)
Joao Nemi Neto (jn2395@columbia.edu) (Latin American and Iberian Studies)
Ana Maria Ochoa (Music)
Pablo Piccato (History)
Caterina Pizzigoni (History)
Michael T. Taussig (Anthropology)

GUIDELINES FOR ALL LATIN AMERICAN AND CARIBBEAN STUDIES MAJORS AND CONCENTRATORS

Declaring the Major or Concentration

For additional information on Latin American and Caribbean Studies, please visit the Institute's website or contact Eliza Kwon-Ahn, Senior Manager of Business & Student Affairs, at ek2159@columbia.edu. Please note: major and concentration requirements were updated November, 2019.

MAJOR IN LATIN AMERICAN AND CARIBBEAN STUDIES

The major requires a minimum of 31 points as follows:

Select five of the following fourteen courses. One of these courses must be Latin American Civilization I (HIST UN2660), Latin American Civilization II (HIST UN2661) or Primary Texts in Latin American Civilization (LACV UN1020):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLEN GU4644</td>
<td>Revolution in/on the Caribbean</td>
</tr>
<tr>
<td>HIST UN1786</td>
<td>History of the City in Latin America</td>
</tr>
<tr>
<td>HIST UN2618</td>
<td>The Modern Caribbean</td>
</tr>
<tr>
<td>HIST UN2660</td>
<td>LATIN AMERICAN CIVILIZATION I</td>
</tr>
<tr>
<td>HIST UN2661</td>
<td>LATIN AMERICAN CIVILIZATION II</td>
</tr>
<tr>
<td>HIST BC2664</td>
<td>Reproducing Inequalities: Families in Latin American History</td>
</tr>
<tr>
<td>HIST BC2676</td>
<td>Latin America: Migration, Race, and Ethnicity</td>
</tr>
<tr>
<td>HIST BC2681</td>
<td>Women and Gender in Latin America</td>
</tr>
<tr>
<td>HIST GU4301</td>
<td>Politics and Justice in Latin America through Crime Fiction</td>
</tr>
<tr>
<td>LACV UN1020</td>
<td>Primary Texts of Latin American Civilization</td>
</tr>
<tr>
<td>POLS UN3560</td>
<td>Politics of Urban Development in Latin America</td>
</tr>
<tr>
<td>POLS UN3565</td>
<td>Drugs and Politics in the Americas</td>
</tr>
<tr>
<td>POLS GU4461</td>
<td>Latin American Politics</td>
</tr>
<tr>
<td>SPAN UN3300</td>
<td>Advanced Language through Content [in Spanish]</td>
</tr>
</tbody>
</table>

*** The SPAN UN3300 section taken for the Major must focus on Latin America. Please contact the ILAS Student Affairs Coordinator for details.

Language Requirement

Select one course on Spanish, Portuguese, or an indigenous language at the intermediate or advanced level; if students can demonstrate advance knowledge of one of these languages, they can replace this course with an area studies course.

Discipline of Choice
Select four courses in a discipline or theme of choice with substantive focus on Latin America. One of these courses must be a seminar. All students, however, need to take at least two courses in a discipline or theme outside of their specialization. The director of undergraduate studies advises students on areas of specialization and must approve courses with substantial Latin American or Caribbean contents not included in the list of eligible courses.

Up to 12 credits for Discipline of Choice requirement can be earned through study abroad. Students are encouraged to explore study abroad options before their junior year. Upon return, they should submit the syllabi and all coursework related to each course taken abroad for approval by the director of undergraduate studies.

**CONCENTRATION IN LATIN AMERICAN AND CARIBBEAN STUDIES**

The concentration requires a minimum of 18 points as follows:

Select three of the following fourteen courses. One of these courses must be in Latin American Civilization I (HIST UN2660), Latin American Civilization II (HIST UN2661) or Primary Texts in Latin America (LACV UN1020):

- **CLEN GU4644** Revolution in/on the Caribbean
- **HIST UN1786** History of the City in Latin America
- **HIST UN2618** The Modern Caribbean
- **HIST UN2660** LATIN AMERICAN CIVILIZATION I
- **HIST UN2661** LATIN AMERICAN CIVILIZATION II
- **HIST BC2664** Reproducing Inequalities: Families in Latin American History
- **HIST BC2676** Latin America: Migration, Race, and Ethnicity
- **HIST BC2681** Women and Gender in Latin America
- **HIST GU4301** Politics and Justice in Latin America through Crime Fiction
- **LACV UN1020** Primary Texts of Latin American Civilization
- **POLS UN3560** Politics of Urban Development in Latin America
- **POLS UN3565** Drugs and Politics in the Americas
- **POLS GU4461** Latin American Politics
- **SPAN UN3300** Advanced Language through Content [in Spanish]

*** The SPAN UN3300 section taken for the Concentration must focus on Latin America. Please contact the ILAS Student Affairs Coordinator for details.

**Language Requirement**

Select one course on Spanish, Portuguese, or an indigenous language at the intermediate or advanced level; if students can demonstrate advance knowledge of one of these languages, they can replace this course with an area studies course.

**Discipline of Choice:**

Select two courses in a discipline or theme of choice with substantive focus on Latin America. One of these courses must be a seminar. All students, however, need to take at least one course in a discipline or theme outside of their specialization. The director of undergraduate studies advises students on areas of specialization and must approve courses with substantial Latin American or Caribbean contents not included in the list of eligible courses.

Up to 6 credits for Discipline of Choice requirement can be earned through study abroad. Students are encouraged to explore study abroad options before their junior year. Upon return, they should submit the syllabi and all coursework related to each course taken abroad for approval by the director of undergraduate studies.
Latin American and Iberian Cultures

Departmental Office:

101 Casa Hispánica | 612 W. 116th Street | (212) 854-4187
http://www.laic.columbia.edu/

Director of Undergraduate Studies:

Prof. Alberto Medina | 502 Casa Hispánica | (212) 854-6238 | am3149@columbia.edu (srk29@columbia.edu)

Director of Graduate Studies:

Prof. Alessandra Russo | 405 Casa Hispánica | (212) 854-7485 | ar2701@columbia.edu

Director of the Spanish Language Program:

Dr. Lee B. Abraham | 402 Casa Hispánica | (212) 854-3764 | lba2133@columbia.edu

Director of the Portuguese Language Program:

José Antonio Castellanos-Pazos | 501 Casa Hispánica | (212) 854-0277 | jc846 (jc846@columbia.edu)@columbia.edu
(lba2133@columbia.edu)

The Department of Latin American and Iberian Cultures (LAIC) at Columbia, located in the Casa Hispánica, has long enjoyed an international reputation as a center for Hispanic and Lusophone studies. The department provides linguistic preparation in Spanish, Portuguese, and Catalan, and offers a flexible program to study manifestations of the Hispanic and Lusophone worlds in all historical periods—from the medieval to the globalized present—and in a variety of cultural contexts: the Iberian Peninsula, Latin America, the former colonies of Portugal, and the United States.

Students can enter the program at any level of linguistic and cultural preparedness. The department offers a placement exam to determine the level at which students may either begin or continue study. Majors and concentrators in Hispanic studies and Portuguese studies are typically double majors who bring insights and methods from fields such as history, political science, women's studies, anthropology, economics, Latino studies, Latin American studies, etc., which fosters engaging discussions.

Academic Programs

The department offers two majors. The major in Hispanic studies gives students a well-rounded preparation in the history and culture of the Hispanic world. The second option, a major in Hispanic studies with specialization, allows students to study the Hispanic world through a number of fields, among them Latin American studies, gender studies, political science, economics, history, and sociology. The department also offers two concentrations: Hispanic studies and Portuguese studies.

The language and major programs have also been designed in close consultation and cooperation with Barnard's Department of Spanish and Latin American Cultures. All courses taken in one program may be used to fulfill the requirements of the other. Hence, Columbia and Barnard students may move freely between departments of both institutions for courses that best fit their intellectual interests and schedules.

Advanced Placement

The department grants 3 credits for a score of 5 on the AP Spanish Language exam, which satisfies the foreign language requirement. Credit is awarded upon successful completion of a 3000-level (or higher) course with a grade of B or higher. This course must be for at least 3 points of credit and be taught in Spanish. Courses taught in English may not be used for language AP credit.

The department grants 0 credits for a score of 4 on the AP Spanish Language exam, but the foreign language requirement is satisfied.

The department grants 3 credits for a score of 5 on the AP Spanish Literature exam, which satisfies the foreign language requirement. Credit is awarded upon successful completion of a 3300-level (or higher) course with a grade of B or higher. This course must be for at least 3 points of credit and be taught in Spanish. Courses taught in English may not be used for language AP credit.

The department grants 0 credits for a score of 4 on the AP Spanish Literature exam, but the foreign language requirement is satisfied.

Study Abroad

The department strongly recommends that all Hispanic and Portuguese studies majors/concentrators study abroad. Most courses taken abroad can be used to fulfill the requirements for the major and concentration, and with adequate planning, even some of the requirements for a second major or concentration. A maximum of four (4) courses taken abroad may be applied to the major, and a maximum of three (3) to the concentration in Hispanic or Portuguese studies.

All students are strongly advised to take either SPAN UN3349 Hispanic Cultures I: Islamic Spain through the Colonial Period or SPAN UN3350 Hispanic Cultures II: Enlightenment to the Present before studying abroad. Actual or potential majors and concentrators in Hispanic or Portuguese studies should seek tentative approval of their programs from the director of undergraduate studies before their departure.

The Hispanic Institute

The department hosts the Hispanic Institute at Columbia. Founded in 1920 as the Instituto de las Españas, the Institute
sponsors and disseminates research on Hispanic and Luso-Brazilian culture. Since 1934, the Institute has published the *Revista Hispánica Moderna*, a distinguished journal in Hispanic criticism and theory.

**IN FULFILLMENT OF THE LANGUAGE REQUIREMENT**

For students with no knowledge of Spanish, Portuguese, or Catalan, at least four terms of the language are required: *UN1101-UN1102 (or UN1120) and UN2101-UN2102 (or UN2120). All courses must be taken for a letter grade to fulfill the language requirement.*

Students with prior knowledge of Spanish who plan to continue studying Spanish are required to take the department’s on-line placement examination before registering for courses. Students with prior knowledge of Portuguese or Catalan should speak with the director of language programs.

Students may be exempted from the language requirement in one of four ways:

1. Present a score of 4 or 5 on the AP Spanish Language or Spanish Literature Exams. Students who receive a score of 5 in either exam are awarded 3 AP credits upon successful completion of a 3.00-level (or above) course with a grade of B or higher. AP credit is not granted for a score of 4.
2. Present a score of 780 or above on the SAT Subject Test. Students with a score lower than 780 should take the department's on-line placement exam and follow the placement advice received.
3. Present a score of a 7, 6, or 5 on the International Baccalaureate Higher Level Exam in Spanish.
4. Obtain a score of 625 or higher in the department’s on-line placement exam. If the score in the on-line test qualifies a student for exemption from the language requirement, they are required to take a written version of the placement exam during orientation (for entering students) or during the semester (for continuing students). This written exam is offered every year on the Thursday before the beginning of classes in the fall semester from 10:00 a.m.-2:00 p.m. in Room 352 of the International Affairs Building (the Language Resource Center Computer Lab). Students do not need to make an appointment to take the exam.

**DEPARTMENTAL HONORS**

Beginning in Spring 2015, the department put in place a new timeline and training program for juniors, to assist students with planning and completing the Honors Thesis during their senior year. The Honors Thesis is an excellent option for any student interested in pursuing a Master's degree or Ph.D.; but, above all, it is a highly formative research and writing experience—one that can bear unexpected fruits toward any path the student decides to take in the future.

All students pursuing a major through the department may apply to write an Honors Thesis. The department envisions the thesis as an intellectually challenging and rewarding experience that crowns four years of undergraduate studies with an original contribution in the field chosen by the student.

The department supports students in shaping their research topic and provides frequent advising throughout the research and writing process. The timeline is as follows:

- **During the junior year**, students take into consideration the possibility of writing an Honors Thesis in the following year. The topic of the Honors Thesis may likely originate in an advanced course taken during the junior year; students may also choose to develop ideas discussed or papers written in courses taken in previous years. Juniors schedule a meeting (or, if the student is studying abroad, a Skype conversation) with the director of undergraduate studies to discuss their proposed topic and faculty adviser.
- **By May 15**, juniors who have decided to write an Honors Thesis in their senior year send a formal proposal to the director of undergraduate studies, which includes:
  - A title and a one-page abstract;
  - The name of the proposed faculty adviser;
  - An application for departmental partial funding support (for those who would like to pursue research during the summer).
- **By May 30**, the Honors Thesis committee reviews the proposals and informs the students of its decision.
- **In the fall of the senior year**:
  - Seniors selected to write the Honors Thesis enroll in SPAN UN3998 Supervised Individual Research (Spring) with their faculty adviser and write the Honors Thesis during the entire senior year under the direction of their adviser. For the purposes of the major, this independent study counts as a 3-point course towards elective courses.
  - Faculty advisers organize Honors Thesis Workshops to discuss students' ongoing projects and provide advising on research tools, methodological and theoretical frames, and overall writing process.
- **In the fall of the senior year**, students enroll in a Senior Seminar.
- **By April 15 of the senior year**, students complete and present their Honors Thesis for consideration towards departmental honors and prizes. Students submit their thesis in hard copy, following the formatting specifications provided on the LAIC website.

To be considered for departmental honors, a student must write an Honors Thesis and maintain a GPA of at least 3.6 in major courses. Normally no more than 10% of graduating majors receive departmental honors in a given academic year.
UNDERGRADUATE PRIZES
The faculty awards an undergraduate prize every year:

Susan Huntington Vernon Prize
Established in 1941 by a member of the noted family of New York Hispanophiles, it is given to the Columbia College senior major who has demonstrated excellence in the study of Spanish, Portuguese, and Latin American languages and cultures.

PROFESSORS
Carlos J. Alonso
Bruno Bosteels
Patricia E. Grieve
Alberto Medina
Graciela R. Montaldo
Gustavo Pérez-Firmat
Alessandra Russo
Jesús R. Velasco

ASSOCIATE PROFESSORS
Seth Kimmel

ASSISTANT PROFESSORS
Jerónimo Duarte-Riascos
Ana M. Fernández-Cebrián
Ana Paulina Lee

SENIOR LECTURERS
Guadalupe Ruiz-Fajardo
José Antonio Castellanos-Pazos
Angelina Craig-Flórez
Reyes Llopis-García
Francisco Rosales-Varo
José Plácido Ruiz-Campillo

LECTURERS
Lee B. Abraham
Francisca Aguiló Mora
Leyre Alejaldre Biel
Irene Alonso-Aparicio
Dolores Barbazán Capeáns
Lorena García Barroso
Ana Paula Huback
Juan Pablo Jiménez-Caicedo
Francisco Meizoso
João Nemi Neto
Diana P. Romero
Elsa Úbeda

MAJOR IN HISPANIC STUDIES
Students who declared this program before March 2016 (when requirements changed) should contact the Director of Undergraduate Studies to confirm their correct course of study.

Students may only register once in each of the Core Courses (SPAN UN3300, SPAN UN3349 and SPAN UN3350).

The major in Hispanic studies requires 11 courses (minimum of 33 points) as follows:

<table>
<thead>
<tr>
<th>Core Courses</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN UN3300</td>
<td>Advanced Language through Content [in Spanish]</td>
</tr>
<tr>
<td>SPAN UN3349</td>
<td>Hispanic Cultures I: Islamic Spain through the Colonial Period</td>
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<td>SPAN UN3350</td>
<td>Hispanic Cultures II: Enlightenment to the Present</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Elective Courses</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Select seven elective courses (21 points): a minimum of three 3000- or 4000-level electives must be chosen within the department and up to three electives related to Hispanic Studies may be taken outside the department.</td>
<td></td>
</tr>
</tbody>
</table>

Senior Seminar

SPAN UN3991 SENIOR SEMINAR

MAJOR IN HISPANIC STUDIES WITH SPECIALIZATION
Students who declared this program before March 2016 (when requirements changed) should contact the Director of Undergraduate Studies to confirm their correct course of study.

Students may only register once in each of the Core Courses (SPAN UN3300, SPAN UN3349 and SPAN UN3350).

The major in Hispanic studies with specialization requires 14 courses (minimum of 42 points) as follows. Students should consult the director of undergraduate studies to plan their program and refer to the Hispanic Studies Major Worksheet.

Core Courses

<table>
<thead>
<tr>
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<th></th>
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</tr>
</tbody>
</table>

Elective Courses

<table>
<thead>
<tr>
<th>Elective Courses</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Select ten elective courses (30 points): four of which must be chosen within the department and six of which must be in the field of specialization. Approved courses taken abroad may be counted as inside or outside the department for the specialization. A maximum of four courses taken abroad may be counted toward the major.</td>
<td></td>
</tr>
</tbody>
</table>

Senior Seminar

SPAN UN3991 SENIOR SEMINAR
* In exceptional cases and with the director of undergraduate studies' approval, students may take a senior seminar in their area of specialization as a seventh course outside the department, if they have completed enough foundational courses to manage the demands of an advanced seminar. In such cases, the director of undergraduate studies must receive a letter or e-mail from the seminar instructor indicating approval of a student's membership in the course; the seminar project must be on a Hispanic topic; and a copy of the project must be turned in to the director of undergraduate studies for the student's file upon completion of the course. Students who complete the senior seminar in another department may also count it as the third elective course on a Hispanic topic outside the department, in which case they may take a fourth 3000- or 4000-level course in the department.

**CONCENTRATION IN HISPANIC STUDIES**

Students who declared this program before March 2016 (when requirements changed) should contact the Director of Undergraduate Studies to confirm their correct course of study.

Students may only register once in each of the Core Courses (SPAN UN3300, SPAN UN3349 and SPAN UN3350).

The concentration in Hispanic studies requires eight courses (minimum of 24 points) as follows:

**Core Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN UN3300</td>
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<td>SPAN UN3349</td>
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</tr>
<tr>
<td>SPAN UN3350</td>
<td>Hispanic Cultures II: Enlightenment to the Present</td>
</tr>
</tbody>
</table>

**Elective Courses**

Select five elective courses (15 points): a minimum of four 3000- or 4000-level courses must be chosen within the department and up to one elective related to Hispanic Studies may be taken outside the department. A maximum of three courses taken abroad may be counted toward the concentration. Students may only register once for SPAN UN3300.

**CONCENTRATION IN PORTUGUESE STUDIES**

The concentration in Portuguese studies requires eight courses (minimum 24 points) as follows:

**Core Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PORT UN3101</td>
<td>Conversation about the Lusophone World</td>
</tr>
<tr>
<td>PORT UN3300</td>
<td>Advanced Language through Content</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PORT UN3330</td>
<td>Introduction to Portuguese Studies</td>
</tr>
<tr>
<td>PORT UN3350</td>
<td>Lusophone Africa and Afro Brazilian Culture</td>
</tr>
</tbody>
</table>
In any discussion of linguistics, in popular or academic contexts, the first question is always, what is linguistics, after all? This is remarkable. Language informs most of our mental and cultural activity, and linguistics is the just study of language.

Linguistics, especially since the 1960s, has become a highly multifarious, and even sprawling, field of inquiry. This requires that a major acquaint students with a number of subfields, all of which are crucial to understanding what modern linguistic analysis is about, and foster interdisciplinary inquiry as well. To wit, the person with a basic foundation in what constitutes linguistic study in our times (including realistic training for graduate study if desired) understands:

a) the basics of grammatical analysis in terms of sounds and sentence structure
b) how languages change over time
c) the mechanics of how languages express meaning and implication
d) the details and nuances of how language is used in social space
e) the ways and extent to which the world's 7000 languages differ from one another
f) the relationship between language and cognition writ large

### STUDY ABROAD

Undergraduates have engaged in unique travel and research projects, including sign language in Nicaragua; language attitudes in Kyrgyzstan; colloquial Arabic in Cairo; summer internship at the Max Planck Institute for Evolutionary Biology; and study abroad in Spain, England, India, Hungary, and Ireland.

### GRADUATE STUDY

Columbia's linguists have distinguished themselves with awards and plans after graduation, such as Fulbright Fellowships to France, Georgia, and Turkey; and graduate study of linguistics or psychology at Harvard, Stanford, UCSD, Northwestern, New York University, and SUNY Buffalo. Linguistics is also a natural background for the law, and our students have entered such law schools as Georgetown and Columbia.

There is no graduate program in linguistics at Columbia. Students interested in pursuing graduate study in linguistics in New York should investigate CUNY Graduate Center, New York University, or Teachers College (applied linguistics).

### AFFILIATED FACULTY

May Ahmar (Arabic; MESAAS)
Akeel Bilgrami (Philosophy)

Aaron Fox (Music)
Melissa Fusco (Philosophy)
Haim Gaifman (Philosophy)
Boris Gasparov (Slavic Languages)
E. Mara Green, (Anthropology, Barnard)
Julia Hirschberg (Computer Science)
Ana Paula Huback (Latin American and Iberian Studies)
Meredith Landman (Slavic Languages)
Karen Lewis (Philosophy, Barnard)
Lening Liu (Chinese; East Asian Languages and Cultures)
Reyes Llopis-Garcia (Latin American and Iberian Cultures)
David Lurie (Japanese; East Asian Languages and Cultures)
Kathleen McKeown (Computer Science)
John McWhorter (American Studies)
Yuan-Yuan Meng (Chinese; East Asian Languages and Cultures)
Michele Miozzo (Psychology)
Fumiko Nazikian (Japanese; East Asian Languages and Cultures)
Youssef Nouhi (Arabic; MESAAS)
Christopher Peacocke (Philosophy)
John Phan (East Asian Languages and Cultures)
Robert Remez (Psychology, Barnard)
Francisco Rosales-Varo (Latin American and Iberian Studies)
Carol Rounds (Hungarian; Italian)
José Plácido Ruiz-Campillo (Latin American and Iberian Studies)
Richard Sacks (English and Comparative Literature)
Ann Senghas (Psychology, Barnard)
Mariame Sy (Wolof; Pulaar; MESAAS)
Herbert Terrace (Psychology)
Alan Timberlake (Slavic Languages)
Silja Verona Weber (German; Germanic Languages)
Zhirong Wang (Chinese; East Asian Languages and Cultures)

### MAJOR IN LINGUISTICS

The complete major requirement – totaling 38 points – is the following:

1. LING UN3101 Introduction to Linguistics (3pts.)
2. LING GU4376 Phonetics and Phonology (3pts.)
3. LING GU4903 Syntax (3pts.)
4. One course from four out of five themes (12 pts. total):
   a) Language in time
   Content: Historical linguistics, as in how grammars transform over time (such as the development of Modern from Old English) in terms of sounds, structures, and meaning
   LING GU4108 Language History
   ENGL GU4901 History of the English Language
   CHNS GU4019 HISTORY OF CHINESE LANGUAGE
   b) Language in context
Content: How language varies in structure and usage according to sociological factors such as gender, class, race, power and culture

LING GU4800 LANGUAGE # SOCIETY
LING UN3102 Endangered Languages in the Global City: Lang, Culture, and Migration in Contemporary NYC
ANTH UN1009 Introduction to Language and Culture
ANTH GR6067 Language and Its Limits (graduate seminar open to undergraduates)
AMST UN3931 Topics in American Studies (Languages of America)
AMST UN3931 Topics in American Studies (Language Contact)
SPAN GU4010 LANGUAGE CROSSING IN LATINX CARIBBEAN CULTURAL PRODUCTION
SPAN BC3382 Languages in Contact: Sociolinguistic Aspects of U. S. Spanish (taught in Spanish)
PORT GU4033 Language # Queer Brazil (ENG)

(c) Language diversity
Content: How languages differ from one another and in which ways; especially valuable in this module are a) Field Methods, eliciting the vocabulary and structure of a lesser documented language by questioning a native speaker, in the fashion of professional linguists, b) courses focusing on the structure of individual languages

LING GU4206 Advanced Grammar and Grammars
LING GU4120 Language Documentation and Field Methods
LING GU4171 Languages of Africa
HNGR UN3343 Descriptive Grammar Hungarian

(d) Language and meaning
Content: semantics, philosophy of language, cognitive linguistics, natural language processing

LING GU4190 DISCOURSE ANALYSIS
PHIL UN2685 Introduction to Philosophy of Language
SPAN GR5450 A COGNITIVE LINGUISTICS ACCOUNT OF LANGUAGE
SPAN GU4030 Spanish Pragmatics (taught in Spanish)

(e) Psychology and biology of language
Content: psycholinguistics, neurolinguistics, language genesis. This is especially important given the burgeoning research on the actual structural representation of language in the brain, as well as increasingly influential proposals that ground language in larger thought processes (as opposed to the Chomskyan proposal that language is, to a considerable extent, generated via exclusive cognitive mechanisms).

LING UN3103 Language, Brain and Mind
PSYC BC3164 Perception and Language
PSYC GU4232 Production and Perception of Language
PSYC BC3369 Language Development
PSYC GU4242 Evolution of Language (Seminar) (graduate seminar open to undergraduates)
PSYC GU4272 Advanced Seminar in Language Development
PSYC GU4470 Psychology & Neuropsychology of Language (Seminar)

4. One elective course (3 pts.) from either a) one of the themes, or b) a linguistics-related course from another department subject to approval from the program. This option will allow students to either sample more widely or specialize somewhat in a subarea of linguistics that has come to interest them.

5. Senior thesis (two semesters, 3 pts. per semester)

6. Two language courses at the intermediate level (8pts.), separate from the core curriculum foreign language requirement. The language taken can be either an ancient or modern language, but should neither be the student’s native or semi-native language nor belong to one of the major groups of modern European languages (Germanic, Romance).

**SPECIAL CONCENTRATION IN LINGUISTICS**

The special concentration in linguistics is not sufficient for graduation in and of itself. It must be taken in conjunction with a major or a full concentration in another discipline.

Please note: the requirements for the special concentration in Linguistics were modified in the Fall 2019 semester. Students who entered Columbia before the Fall 2019 semester have the option of following the new or the old requirements. If you have any questions, please contact the Director of Undergraduate Studies.

For the new requirements, students must take 23 points in the linguistics program as specified below.

For the old requirements, students must take 18 points; the requirements are specified below, with the exception that the language requirement is one language course at the intermediate level (4pts.), separate from the core curriculum foreign language requirement.

The requirements for the special concentration (23 points) are as follows:

1. Three core courses in linguistics chosen from:
   - LING UN3101 Introduction to Linguistics
   - LING UN3102 Endangered Languages in the Global City: Lang, Culture, and Migration in Contemporary NYC
   - LING UN3103 Language, Brain and Mind
   - HNGR UN3343 Descriptive Grammar Hungarian
   - LING GU4108 Language History
   - LING GU4120 Language Documentation and Field Methods
   - LING GU4171 Languages of Africa
   - LING GU4190 DISCOURSE ANALYSIS
   - LING GU4206 Advanced Grammar and Grammars
   - LING GU4376 Phonetics and Phonology
   - LING GU4800 LANGUAGE # SOCIETY
   - LING GU4903 Syntax
2. Two additional courses from either a) the core linguistics courses, or b) a linguistics-related course from another department subject to approval from the program. Courses previously approved include those listed below:

**Anthropology:**
- ANTH UN1009 Introduction to Language and Culture
- ANTH GU4042 Agent, Person, Subject, Self
- ANTH GR6067 Language and Its Limits
- ANTH GR6125 Language, Culture, and Power

**Chinese:**
- CHNS GU4019 HISTORY OF CHINESE LANGUAGE

**Computer Science:**
- COMS W1012 Computational Linguistics (this is a section of COMS W1002 COMPUTING IN CONTEXT)
- COMS UN3261 Computer Science Theory
- COMS GU4705 Natural Language Processing
- COMS GU4706 Spoken Language Processing
- COMS GR6998 Topics in Computer Science

**Comparative Literature & Society:**
- CPLS GU4111 World Philology

**French:**
- FREN BC3011 History of the French Language

**Philosophy:**
- PHIL UN2685 Introduction to Philosophy of Language
- PHIL UN3411 SYMBOLIC LOGIC
- PHIL UN3685 PHILOSOPHY OF LANGUAGE
- PHIL GU4490 LANGUAGE AND MIND

**Psychology:**
- PSYC UN2215 Cognition and the Brain
- PSYC UN2440: Language and the Brain
- PSYC UN2450 Behavioral Neuroscience
- PSYC BC3164 Perception and Language
- PSYC UN3265 Auditory Perception (Seminar)
- PSYC BC3369 Language Development
- PSYC GU4232 Production and Perception of Language
- PSYC GU4272 Advanced Seminar in Language Development

**Spanish:**
- SPAN BC3382 Languages in Contact: Sociolinguistic Aspects of U. S. Spanish
- SPAN GU4010 LANGUAGE CROSSING IN LATINX
- CARIBBEAN CULTURAL PRODUCTION
- SPAN GU4030 Spanish Pragmatics
- SPAN GR5450 A COGNITIVE LINGUISTICS ACCOUNT OF LANGUAGE

**Sociology:**
- SOCI GU4030 Sociology of Language

3. Two language courses at the intermediate level (8pts.), separate from the core curriculum foreign language requirement. The language taken can be either an ancient or modern language, but should neither be the student’s native (or semi-native) language nor belong to one of the major groups of modern European languages (Germanic, Romance).

**IN FULFILLMENT OF THE LANGUAGE REQUIREMENT FOR LINGUISTICS**

The language taken in fulfillment of the linguistics requirement can be either an ancient or modern language, but should neither be the student’s native (or semi-native) language nor belong to one of the major groups of modern European languages (Germanic, Romance). In addition to the regularly taught courses listed under the Foreign Language Requirement, the following is a list of languages that have been offered at Columbia. See the list of languages offered through the Language Resource Center and consult with the Director of Undergraduate Studies about other languages to determine if they are acceptable for the linguistics language requirement.
Ancient Egyptian
Anglo-Saxon
Aramaic
Bosnian/Croatian/Serbian
Cantonese
Chagatay
Czeck
Finnish
Georgian
Hindi
Hungarian
Indonesian
Irish
Kannada
Kazakh
Korean
Nahuatl
Nepali
Old Church Slavonic
Quechua
Persian
Polish
Pulaar
Romanian
Sumerian Swahili
Syriac
Tajik
Tamil
Telugu
Ukrainian Uzbek
Urdu
Vietnamese
Wolof
Zulu
The major in mathematics is an introduction to some of the highlights of the development of theoretical mathematics over the past four hundred years from a modern perspective. This study is also applied to many problems, both internal to mathematics and arising in other disciplines such as physics, cryptography, and finance.

Majors begin by taking either Honors mathematics or the calculus sequence. Students who do not take MATH UN1207 Honors Mathematics A and MATH UN1208 HONORS MATHEMATICS B normally take MATH UN2010 LINEAR ALGEBRA in the second year. Following this, majors begin to learn some aspects of the main branches of modern mathematics: algebra, analysis, and geometry; as well as some of their subdivisions and hybrids (e.g., number theory, differential geometry, and complex analysis). As the courses become more advanced, they also become more theoretical and proof-oriented and less computational.

Aside from the courses offered by the Mathematics Department, cognate courses in areas such as astronomy, chemistry, physics, probability, logic, economics, and computer science can be used toward the major. A cognate course must be a 2000-level (or higher) course and must be approved by the director of undergraduate studies. In general, a course not taught by the Mathematics Department is a cognate course for the mathematics major if either (a) it has at least two semesters of calculus as a stated prerequisite, or (b) the subject matter in the course is mathematics beyond an elementary level, such as PHIL UN3411 SYMBOLIC LOGIC, in the Philosophy Department, or COMS W3203 DISCRETE MATHEMATICS, in the Computer Science Department.

Another requirement for majors is participation in an undergraduate seminar, usually in the junior or senior year. Applied math majors must take the undergraduate seminar in both the junior and senior year. In these seminars, students gain experience in learning an advanced topic and lecturing on it. In order to be eligible for departmental honors, majors must write a senior thesis.

### Courses for First-Year Students

The systematic study of mathematics begins with one of the following three alternative calculus and linear algebra sequences:

- **MATH UN1101** and **MATH UN1102**
- **MATH UN1201** and **MATH UN1202**
- **MATH UN2010** and **LINEAR ALGEBRA**

OR

- **MATH UN1101** and **MATH UN1102**
- **MATH UN1205** and **ACCELERATED MULTIVARIABLE CALCULUS**
- **MATH UN2010** and **LINEAR ALGEBRA**

OR

- **MATH UN1101** and **MATH UN1102**
- **MATH UN1207** and **HONORS MATHEMATICS A**
- **MATH UN1208** and **HONORS MATHEMATICS B**

Credit is allowed for only one calculus and linear algebra sequence.

*Calculus I, II* is a standard course in single-variable differential and integral calculus; *Calculus III, IV* is a standard course in multivariable differential and integral calculus. *Accelerated Multivariable Calculus* is an accelerated course in multivariable differential and integral calculus.

While *Calculus II* is no longer a prerequisite for *Calculus III*, students are strongly urged to take it before taking *Calculus III*. In particular, students thinking of majoring or concentrating in mathematics or one of the joint majors involving mathematics should take *Calculus II* before taking *Calculus III*. Note that *Calculus II* is a prerequisite for Accelerated Multivariable
Calculus, and both Calculus II and Calculus III are prerequisites for Calculus IV.

The third sequence, Honors Mathematics A-B, is for exceptionally well-qualified students who have strong Advanced Placement scores. It covers multivariable calculus (MATH UN1201 Calculus III - MATH UN1202 CALCULUS IV) and linear algebra (MATH UN2010 LINEAR ALGEBRA), with an emphasis on theory.

ADVANCED PLACEMENT

The department grants 3 credits for a score of 4 or 5 on the AP Calculus AB exam provided students complete MATH UN1102 CALCULUS II or MATH UN1201 Calculus III with a grade of C or better. The department grants 3 credits for a score of 4 on the AP Calculus BC exam provided students complete MATH UN1102 CALCULUS II or MATH UN1201 Calculus III with a grade of C or better. The department grants 6 credits for a score of 5 on the AP Calculus BC exam provided students complete MATH UN1201 Calculus III or MATH UN1205 Accelerated Multivariable Calculus MATH UN1207 Honors Mathematics A with a grade of C or better. Students can receive credit for only one calculus sequence.

PLACEMENT IN THE CALCULUS SEQUENCES

Calculus I
Students who have essentially mastered a precalculus course and those who have a score of 3 or less on an Advanced Placement (AP) exam (either AB or BC) should begin their study of calculus with MATH UN1101 CALCULUS I.

Calculus II and III
Students with a score of 4 or 5 on the AB exam, 4 on the BC exam, or those with no AP score but with a grade of A in a full year of high school calculus may begin with either MATH UN1102 CALCULUS II or MATH UN1201 Calculus III. Note that such students who decide to start with Calculus III may still need to take Calculus II since it is a requirement or prerequisite for other courses. In particular, they MUST take Calculus II before going on to MATH UN1202 CALCULUS IV. Students with a score of 5 on the BC exam may begin with Calculus III and do not need to take Calculus II.

Those with a score of 4 or 5 on the AB exam or 4 on the BC exam may receive 3 points of AP credit upon completion of Calculus II with a grade of C or higher. Those students with a score of 5 on the BC exam may receive 6 points of AP credit upon completion of Calculus III with a grade of C or higher.

Accelerated Multivariable Calculus
Students with a score of 5 on the AP BC exam or 7 on the IB HL exam may begin with MATH UN1205 Accelerated Multivariable Calculus. Upon completion of this course with a grade of C or higher, they may receive 6 points of AP credit.

Honors Mathematics A
Students who want a proof-oriented theoretical sequence and have a score of 5 on the BC exam may begin with MATH UN1207 Honors Mathematics A, which is especially designed for mathematics majors. Upon completion of this course with a grade of C or higher, they may receive 6 points of AP credit.

TRANSFERS INSIDE THE CALCULUS SEQUENCES

Students who wish to transfer from one calculus course to another are allowed to do so beyond the date specified on the Academic Calendar. They are considered to be adjusting their level, not changing their program. However, students must obtain the approval of the new instructor and their advising dean prior to reporting to the Office of the Registrar.

GRADING

No course with a grade of D or lower can count toward the major, interdepartmental major, or concentration. Students who are doing a double major cannot double count courses for their majors.

DEPARTMENTAL HONORS

In order to be eligible for departmental honors, majors must write a senior thesis. To write a senior thesis, students must register for MATH UN3999 Senior Thesis in Mathematics in the fall semester of their senior year. Normally no more than 10% of graduating majors receive departmental honors in a given academic year.

PROFESSORS

- Mohammed Abouzaid
- David A. Bayer (Barnard)
- Andrew Blumberg
- Simon Brendle
- Ivan Corwin
- Panagiota Daskalopoulos
- Aise Johan de Jong
- Daniela De Silva (Barnard Chair)
- Julien Dubedat
- Robert Friedman (Department Chair)
- Dorian Goldfeld
- Brian Greene
- Richard Hamilton
- Michael Harris
- Ioannis Karatzas
- Mikhail Khovanov
- Igor Krichever
- Chiu-Chu Liu
- Dusa McDuff (Barnard)
ASSOCIATE PROFESSORS
• Amol Aggarwal
• Chao Li

ASSISTANT PROFESSORS
• Elena Giorgi
• Francesco Lin
• Lindsay Piechnik (Barnard)
• Giulia Sacca
• Will Sawin

J.F. RITT ASSISTANT PROFESSORS
• Konstantin Aleshkin
• Amadou Bah
• Marco Castronovo
• Evgeni Dimitrov
• Kyle Hayden
• Milind Hegde
• Yash Jhaveri
• Florian Johne
• Inbar Klang
• Konstantin Matetski
• S. Michael Miller Eismeier
• Tudor Padurariu
• Akash Sengupta
• Xi Sisi Shen
• Evan Warner

SENIOR LECTURERS IN DISCIPLINE
• Lars Nielsen
• Mikhail Smirnov
• Peter Woit

LECTURERS IN DISCIPLINE
• George Dragomir

ON LEAVE
• Profs. Abouzaid, Aggarwal, Corwin, Daskalopoulos, Harris, Khovanov, Krichever, Liu, Okounkov, Thaddeus (Fall 2021)
• Profs. Abouzaid, Aggarwal, Castronovo, Corwin, Dubedat, Liu, Okounkov, Sawin, Thaddeus (Spring 2022)

MAJOR IN MATHEMATICS

The major requires 40-42 points as follows:

Select one of the following three calculus and linear algebra sequences (13-15 points including Advanced Placement Credit):

| MATH UN1101 | CALCULUS I |
| - MATH UN1102 | and CALCULUS II |
| - MATH UN1201 | and Calculus III |
| - MATH UN1202 | and CALCULUS IV |
| - MATH UN2010 | and LINEAR ALGEBRA |

OR

| MATH UN1101 | CALCULUS I |
| - MATH UN1102 | and CALCULUS II |
| - MATH UN1205 | and Accelerated Multivariable |
| - MATH UN2010 | Calculus |
| and LINEAR ALGEBRA |

OR

| MATH UN1101 | CALCULUS I |
| - MATH UN1102 | and CALCULUS II |
| - MATH UN1207 | and Honors Mathematics A |
| - MATH UN1208 | and HONORS MATHEMATICS B |

15 points in the following required courses:

| MATH UN3951 | Undergraduate Seminars in Mathematics I |
| - MATH UN3952 | and Undergraduate Seminars in Mathematics II (at least one term) |
| MATH GU4041 | INTRO MODERN ALGEBRA I |
| - MATH GU4042 | and INTRO MODERN ALGEBRA II |
| MATH GU4061 | INTRO MODERN ANALYSIS I |
| - MATH GU4062 | and INTRO MODERN ANALYSIS II |

12 points from the following:

1) Courses offered by the department numbered 2000 or higher

2) Courses from the list of approved cognate courses below. A maximum of 6 credits may be taken from courses outside the department. **

* Students who are not contemplating graduate study in mathematics may replace one or both of the two terms of MATH GU4061 - MATH GU4062 by one or two of the following courses: MATH UN2500 ANALYSIS AND OPTIMIZATION, MATH UN3007 Complex Variables, MATH UN3028 PARTIAL DIFFERENTIAL EQUATIONS, or MATH GU4032 Fourier Analysis.

** Additional courses may be selected only with prior written approval from the Director of Undergraduate Studies.

The program of study should be planned with a departmental adviser before the end of the sophomore year. Majors who are planning on graduate studies in mathematics are urged to obtain a reading knowledge of one of the following languages: French, German, or Russian.
Majors are offered the opportunity to write an honors senior thesis under the guidance of a faculty member. Interested students should contact the director of undergraduate studies.
The major requires 37-41 points as follows:

Select one of the following three calculus and linear algebra sequences (13-15 points including Advanced Placement Credit):

- MATH UN1101 and CALCULUS II
- MATH UN1201 and CALCULUS III
- MATH UN1202 and CALCULUS IV
- MATH UN2010 and LINEAR ALGEBRA

OR

- MATH UN1101 and CALCULUS II
- MATH UN1201 and Accelerated Multivariable Calculus
- MATH UN2010 and LINEAR ALGEBRA

OR

- MATH UN1101 and CALCULUS II
- MATH UN1207 and Honors Mathematics A
- MATH UN1208 and HONORS MATHEMATICS B

Select one of the following three courses:

- MATH UN2500 and ANALYSIS AND OPTIMIZATION
- MATH GU4032 and Fourier Analysis
- MATH GU4061 and INTRO MODERN ANALYSIS I
- APMA E4901 and SEM-PROBLEMS IN APPLIED MATH (junior year)
- APMA E4903 and SEM-PROBLEMS IN APPLIED MATH (senior year)

18 points in electives, with at least 9 points from the following courses. A maximum of 9 points may be selected from courses outside this list, with prior written approval from the Director of Undergraduate Studies.

- MATH UN2500 and ANALYSIS AND OPTIMIZATION
- MATH UN2030 and ORDINARY DIFFERENTIAL EQUATIONS
- MATH UN3007 and Complex Variables
- MATH UN3007 and Honors Complex Variables
- APMA E4204 and FUNCTNS OF A COMPLEX VARIABLE
- APMA E4204 and PARTIAL DIFFERENTIAL EQUATIONS
- APMA E4204 and PARTIAL DIFFERENTIAL EQUATIONS
- APMA E6301 and ANALYTIC METHODS FOR PDE'S
- MATH GU4032 and Fourier Analysis
- APMA E4300 and COMPUT MATH:INTRO-NUMERCL METH
- APMA E4101 and APPL MATH III:DYNAMICAL SYSTMS
The goal of this interdepartmental major is to provide substantial background in each of these two disciplines, focusing on some of the parts of each which are closest to the other. Students intending to pursue a Ph.D. program in either discipline are urged to take additional courses, in consultation with their advisers.

The major requires 20 points in computer science, 19-21 points in mathematics, and two 3-point electives in either computer science or mathematics.

**Computer Science**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS W1004</td>
<td>Introduction to Computer Science and Programming in Java</td>
</tr>
<tr>
<td>or COMS W1007</td>
<td>Honors Introduction to Computer Science</td>
</tr>
<tr>
<td>COMS W3134</td>
<td>Data Structures in Java</td>
</tr>
<tr>
<td>or COMS W3137</td>
<td>Honors Data Structures and Algorithms</td>
</tr>
<tr>
<td>COMS W3157</td>
<td>Advanced Programming</td>
</tr>
<tr>
<td>COMS W3203</td>
<td>DISCRETE MATHEMATICS</td>
</tr>
<tr>
<td>COMS W3261</td>
<td>Computer Science Theory</td>
</tr>
<tr>
<td>CSEE W3827</td>
<td>Fundamentals of Computer Systems</td>
</tr>
</tbody>
</table>

**Mathematics**

Select one of the following three calculus and linear algebra sequences (13-15 points including Advanced Placement Credit):

<table>
<thead>
<tr>
<th>Sequence</th>
<th>Calculus I and II</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH UN1101</td>
<td>and MATH UN1102</td>
</tr>
<tr>
<td>- MATH UN1201</td>
<td>and MATH UN1202</td>
</tr>
<tr>
<td>- MATH UN2010</td>
<td>and MATH UN2010</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>MATH UN1101</td>
<td>and MATH UN1102</td>
</tr>
<tr>
<td>- MATH UN1205</td>
<td>and MATH UN2010</td>
</tr>
<tr>
<td>- MATH UN2010</td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>MATH UN1101</td>
<td>and MATH UN1102</td>
</tr>
<tr>
<td>- MATH UN1207</td>
<td>and MATH UN1208</td>
</tr>
<tr>
<td>- MATH UN3951</td>
<td>Undergraduate Seminars in Mathematics I</td>
</tr>
<tr>
<td>or MATH UN3952</td>
<td>Undergraduate Seminars in Mathematics II</td>
</tr>
<tr>
<td>MATH GU4041</td>
<td>INTRO MODERN ALGEBRA I</td>
</tr>
</tbody>
</table>

**Electives**

Select two of the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSOR W4231</td>
<td>Analysis of Algorithms I</td>
</tr>
<tr>
<td>COMS W4241</td>
<td>Numerical Algorithms and Complexity</td>
</tr>
<tr>
<td>MATH BC2006</td>
<td>Combinatorics</td>
</tr>
<tr>
<td>MATH UN2500</td>
<td>ANALYSIS AND OPTIMIZATION</td>
</tr>
<tr>
<td>MATH UN3007</td>
<td>Complex Variables</td>
</tr>
<tr>
<td>MATH UN3020</td>
<td>Number Theory and Cryptography</td>
</tr>
<tr>
<td>MATH UN3386</td>
<td>Differential Geometry</td>
</tr>
<tr>
<td>MATH GU4051</td>
<td>Topology</td>
</tr>
<tr>
<td>MATH GU4061</td>
<td>INTRO MODERN ANALYSIS I</td>
</tr>
</tbody>
</table>

**Major in Economics-Mathematics**

For a description of the joint major in economics-mathematics, see the Economics section of this bulletin.

**Major in Mathematics-Statistics**

The program is designed to prepare the student for: (1) a career in industries such as finance and insurance that require a high level of mathematical sophistication and a substantial knowledge of probability and statistics, and (2) graduate study in quantitative disciplines. Students choose electives in finance, actuarial science, operations research, or other quantitative fields to complement requirements in mathematics, statistics, and computer science.

**Mathematics**

Select one of the following sequences:

<table>
<thead>
<tr>
<th>Sequence</th>
<th>Calculus I</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH UN1101</td>
<td>and MATH UN1102</td>
</tr>
<tr>
<td>- MATH UN1201</td>
<td>and MATH UN1202</td>
</tr>
<tr>
<td>- MATH UN2010</td>
<td>and MATH UN2010</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>MATH UN1101</td>
<td>and MATH UN1102</td>
</tr>
<tr>
<td>- MATH UN1205</td>
<td>and MATH UN2010</td>
</tr>
<tr>
<td>- MATH UN2010</td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>MATH UN1101</td>
<td>and MATH UN1102</td>
</tr>
<tr>
<td>- MATH UN1207</td>
<td>and MATH UN1208</td>
</tr>
<tr>
<td>- MATH UN3951</td>
<td>Undergraduate Seminars in Mathematics I</td>
</tr>
<tr>
<td>or MATH UN3952</td>
<td>Undergraduate Seminars in Mathematics II</td>
</tr>
<tr>
<td>MATH GU4041</td>
<td>INTRO MODERN ALGEBRA I</td>
</tr>
</tbody>
</table>

**Statistics**

**Introductory Course**
STAT UN1201 Calculus-Based Introduction to Statistics

**Required Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT GU4203</td>
<td>PROBABILITY THEORY</td>
</tr>
<tr>
<td>STAT GU4204</td>
<td>Statistical Inference</td>
</tr>
<tr>
<td>STAT GU4205</td>
<td>Linear Regression Models</td>
</tr>
</tbody>
</table>

Select one of the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT GU4207</td>
<td>Elementary Stochastic Processes</td>
</tr>
<tr>
<td>STAT GU4262</td>
<td>Stochastic Processes for Finance</td>
</tr>
<tr>
<td>STAT GU4264</td>
<td>STOCHASTIC PROCESSES-APPLIC</td>
</tr>
<tr>
<td>STAT GU4265</td>
<td>Stochastic Methods in Finance</td>
</tr>
</tbody>
</table>

**Computer Science**

Select one of the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS W1004</td>
<td>Introduction to Computer Science and Programming in Java</td>
</tr>
<tr>
<td>COMS W1005</td>
<td>Introduction to Computer Science and Programming in MATLAB</td>
</tr>
<tr>
<td>ENGI E1006</td>
<td>INTRO TO COMP FOR ENG/APP SCI</td>
</tr>
<tr>
<td>COMS W1007</td>
<td>Honors Introduction to Computer Science</td>
</tr>
</tbody>
</table>

or an advanced computer science offering in programming

**Electives**

An approved selection of three advanced courses in mathematics, statistics, applied mathematics, industrial engineering and operations research, computer science, or approved mathematical methods courses in a quantitative discipline. At least one elective must be a Mathematics Department course numbered 3000 or above.

---

**Mathematics**

Select one of the following three multivariable calculus and linear algebra sequences:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH UN1201</td>
<td>Calculus III</td>
</tr>
<tr>
<td>MATH UN1202</td>
<td>and CALCULUS IV</td>
</tr>
<tr>
<td>MATH UN2010</td>
<td>and LINEAR ALGEBRA</td>
</tr>
</tbody>
</table>

OR

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH UN1205</td>
<td>Accelerated Multivariable Calculus</td>
</tr>
<tr>
<td>MATH UN2010</td>
<td>and LINEAR ALGEBRA</td>
</tr>
</tbody>
</table>

OR

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH UN1207</td>
<td>Honors Mathematics A</td>
</tr>
<tr>
<td>MATH UN1208</td>
<td>and HONORS MATHEMATICS B</td>
</tr>
</tbody>
</table>

**Additional Courses**

Select at least 12 additional points from any of the courses offered by the department numbered 2000 or higher. A maximum of 3 credits may be taken from courses outside the department. *

* For mathematics courses taken in other departments, consult with the director of undergraduate studies.

Any course given by the Mathematics department fulfills the General Studies quantitative reasoning requirement when passed with a satisfactory letter grade.

---

**Concentration in Mathematics**

The concentration requires the following:

Students interested in modeling applications are recommended to take MATH UN2030 ORDINARY DIFFERENTIAL EQUATIONS and MATH UN3028 PARTIAL DIFFERENTIAL EQUATIONS.

Students interested in finance are recommended to take MATH GR5010 Introduction to the Mathematics of Finance, STAT GU4261 Statistical Methods in Finance, and STAT GU4221 Time Series Analysis.

Students interested in graduate study in mathematics or in statistics are recommended to take MATH GU4061 INTRO MODERN ANALYSIS I and MATH GU4062 INTRO MODERN ANALYSIS II.

Students preparing for a career in actuarial science are encouraged to replace STAT GU4205 Linear Regression Models with STAT GU4282 Linear Regression and Time Series Methods, and to take among their electives STAT GU4281 Theory of Interest.
MEDIEVAL AND RENAISSANCE STUDIES

Program Director: Prof. Adam Kosto, 404 Fayerweather Hall, ajkosto@columbia.edu

Program Administrator: To be announced, medren@columbia.edu

Medieval and Renaissance studies is an interdisciplinary program in which a student combines a concentration in medieval or Renaissance civilization with a major or concentration in one of the following departments:

- Art History and Archaeology
- Classics
- East Asian Languages and Cultures
- English and Comparative Literature
- French and Romance Philology
- Germanic Languages
- History
- Italian
- Latin American and Iberian Cultures
- Middle Eastern, South Asian, and African Studies
- Music
- Philosophy
- Religion
- Slavic Languages

For more information about the special concentration in medieval and Renaissance studies, visit http://medren.columbia.edu/.

Competence in two or more languages is essential, and courses in history, art, and literature are required. Applicants should consult with the Program Director to ensure that their selection of courses will count towards the special concentration.

Full Faculty List: https://medren.columbia.edu/people

FULLY CONCENTRATION IN MEDIEVAL AND RENAISSANCE STUDIES

Students considering the special concentration in medieval and Renaissance studies should consult with the director in advance of course registration to ensure that their selection of courses will count towards the special concentration.

Please note that requirements for the Special Concentration were revised November 2017.

In addition to fulfilling the requirements for a departmental major or concentration, students with this special concentration should plan on taking an additional four (4) courses in other departments of the program, to be chosen in consultation with an appropriate member of the committee.

Students must also demonstrate an ability to work with original language sources (other than in Early Modern English) from the medieval and/or Early Modern periods, either through language coursework focusing on the historical language (e.g., LATN UN3033 MEDIEVAL LANGUAGE # LITERATURE, MDES GU4214 Fourth Year Classical Arabic I) or through research (e.g., a senior thesis or seminar paper with substantial use of original language sources). Any courses outside the major used to demonstrate the language requirement may also count toward the course requirement for the special concentration. Students should gain approval of the director of the program in advance for plans to fulfill this language requirement.

EXECUTIVE COMMITTEE OF THE INTERDEPARTMENTAL COMMITTEE ON MEDIEVAL AND RENAISSANCE STUDIES

Christopher Baswell (English and Comparative Literature)
Susan Boynton (Music; Program Director, Medieval and Renaissance Studies)
Consuelo Dutschke (Rare Book and Manuscript Library)
Rachel Eisendrath (Barnard Department of English, Barnard Medieval and Renaissance Studies)
Carmela Franklin (Classics)
Seth Kimmel (Latin American and Iberian Cultures)
Adam Kosto (History)
Pamela Smith (History)
Alan Stewart (English and Comparative Literature)
Jesus Rodriguez-Velasco (Latin American and Iberian Cultures)
Michael Waters (Art History and Archaeology)
Eliza Zingesser (French and Romance Philology)
**Middle Eastern, South Asian, and African Studies**

**Departmental Office:** 401 Knox; 212-854-2556
http://mesaas.columbia.edu

**Director of Undergraduate Studies:** Hamid Dabashi, 416 Knox Hall, 212-854-7524; hd14@columbia.edu

**Language Coordinators:**
- **African Languages:** Mariame Sy, 408 Knox; 212-851-2439; sms2168@columbia.edu
- **Arabic:** Taoufik Ben Amor, 308 Knox; 212-854-2985; tb46@columbia.edu
- **Armenian:** Charry Karamanoukian, 407 Knox; 212-851-4002; ck2444@columbia.edu
- **Hebrew:** Naama Harel, 410 Knox, 212-854-6668; nh2508@columbia.edu
- **Hindi/Urdu:** Rakesh Ranjan, 409 Knox; 212-851-4107; rr2574@columbia.edu
- **Persian:** Saeed Honarmand, 313 Knox; sh3468@columbia.edu
- **Sanskrit:** Shiv Subramaniam, 309 Knox; 212-854-2893; sks2184@columbia.edu
- **Tamil:** Shiv Subramaniam, 309 Knox; 212-854-2893; sks2184@columbia.edu
- **Turkish:** Zuleyha Colak, 412 Knox; 212-854-0473; zc2208@columbia.edu

The undergraduate program in Middle Eastern, South Asian, and African studies (MESAAS) offers students the opportunity to study in depth the cultures, ideas, histories, and politics of several overlapping world regions. The program emphasizes a close engagement with intellectual traditions, creative movements, and political debates, drawing on a wide variety of historical and contemporary sources in literature, religion, political thought, law, the visual and performing arts, and new media. Courses also examine the historical and cultural contexts in which these traditions and debates have been produced.

### Majors and Concentrations

Majors develop two closely related skills. The first is linguistic expertise. A minimum of two years of course work in one language is required, and further work (including intensive summer language study) is greatly encouraged, because the aim is to study a cultural field through its own texts and discourses. The Department of Middle Eastern, South Asian, and African Studies offers courses in Arabic, Persian, Ottoman, Turkish, Hebrew, Armenian, Sanskrit, Hindi/Urdu, Tamil, Swahili and Wolof.

The second skill is learning how to think and write about complex cultural formations, drawing on a variety of methods and disciplinary approaches. The approaches vary according to the faculty members’ expertise, incorporating methods from relevant fields in the humanities and social sciences, such as literary criticism, film studies, cultural studies, political theory, and intellectual history.

The only difference between the MESAAS major and the concentration is that the latter does not require language proficiency.

### Professors

- Gil Anidjar
- Muhsin J. Ali al-Musawi
- Partha Chatterjee (emeritus)
- Hamid Dabashi
- Mamadou Diauf
- Laura Fair
- Wael Hallaq
- Gil Hochberg
- Sudipta Kaviraj
- Rashid Khalidi
- Mahmood Mamdani
- Joseph Massad
- Brinkley Messick
- Dan Miron (emeritus)
- Timothy Mitchell
- Sheldon Pollock (emeritus)
- Frances Pritchett (emerita)
- George Saliba (emeritus)

### Associate Professors

- Mana Kia
- Anupama Rao
- Debashree Mukherjee
- Jennifer Wenzel

### Assistant Professors

- Isabel Huacuja Alonso
- Sarah bin Tyeer
- Elaine van Dalen
- Ellen Centime Zeleke

### Senior Lecturers

- Aftab Ahmad
- May Ahmar
- Taoufik Ben Amor
- Zuleyha Colak
- Naama Harel
- Saeed Honarmand
- Abdul Nanji
- Youssef Nouhi
- Rakesh Ranjan

### Lecturers

- Ouijdane Absi
- Rym Bettaieb
- Abdelrazzaq Ben Tarif
- Reem Faraj
Additional Requirements
Fifteen additional points (generally five courses) are chosen in consultation with the director of undergraduate studies. These may include six points of coursework from other departments, subject to the director of undergraduate studies’ approval. Although students may have a particular interest (e.g., Arab political thought, Urdu literature, Armenian history, Iranian cinema, or contemporary West Africa), they are encouraged to gain exposure to the fullest range of courses and approaches offered by the faculty, and to familiarize themselves with other regions beyond their core area.

In Fulfillment of the Language Requirement (for Majors)
Enrollment in language courses is in some cases determined by placement exams. For more information, see Languages on the departmental website and, if necessary, consult the relevant Coordinator listed on that page. The website includes separate pages for each language, describing the program of instruction, courses for heritage speakers, summer language programs, and more. Language courses must be taken for a letter grade. Pass/D/Fail or Registration credit (R) is not permitted. Those seeking to waive a language requirement must take a proficiency test.

Students who enter with language proficiency at only the second-year level must complete one additional year of language study and one additional MESAAS course. When students enter with language proficiency at the third year level (or in cases where only two years of a particular language are offered in MESAAS), they must substitute three additional MESAAS courses.

Advising
Newly declared majors and concentrators should meet with the director of undergraduate studies in order to plan a program of study. The goal is to strike a balance between courses that help a student achieve depth in a particular area/discipline and those that foster a wider perspective.

Although students are encouraged to approach faculty in the department based on their specific interests, the director of undergraduate studies functions as an ad hoc adviser for all entering students, addressing issues of course requirements, credit, approval for courses in other departments or schools, study abroad, and, eventually, honors requirements (including the senior thesis). Students should not hesitate to contact the director of undergraduate studies to set up an appointment.

Grading
Courses in which the grade of D has been received do not count toward the major or concentration requirements, nor do those taken Pass/D/Fail, except for the first course taken toward the major or concentration.
Honors Program/Senior Thesis

Students may also wish to write a thesis. While not required for graduation, the thesis enables a student to be considered for departmental honors. It is advisable to begin planning for the thesis during the student's junior year. Interested students should attend the relevant information sessions and identify a potential faculty adviser.

All students who wish to write a thesis must enroll in MDES UN3960 HONORS THESIS SEMINAR PART 1, a full year course consisting of a 1-point segment in the Fall semester and a 3-point segment in the Spring semester. Students work closely with their peers in a supportive environment to produce a substantial piece of research (in the range of 40 pages). The primary intellectual guidance is provided by the faculty adviser, whereas the director of undergraduate studies and the honors seminar teaching assistant oversee the general development of the project. Every year in April, MESAAS hosts a senior colloquium in which students present their research. For more information on the honors program, see Frequently Asked Questions on the departmental website.

For additional guidelines, see Departmental Honors as outlined in the Academic Honors, Prizes, and Fellowships section of the Columbia College Bulletin.

Major in Middle Eastern, South Asian, and African Studies

Students should obtain a Major Declaration form from their advising dean and bring it to the director of undergraduate studies for approval. The director of undergraduate studies meets with students as necessary in order to establish and approve their individual programs of study. The requirements for the major are as follows:

Select a one-term introductory culture course, to be approved by the director of undergraduate studies

<table>
<thead>
<tr>
<th>AHUM UN1399</th>
<th>COLLOQUIUM ON MAJOR TEXTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDES UN3000</td>
<td>Theory and Culture</td>
</tr>
</tbody>
</table>

Select two years of a language regularly taught in the department, or substitutional courses for students who test out of this requirement with the approval of the director of undergraduate studies

Select 15 points of coursework, which may include up to six points from other departments, selected in consultation with the director of undergraduate studies

The MESAAS Major and its ‘tracks’

Students majoring in MESAAS are studying the languages, and central cultural and political aspects of the societies of the Middle East, South Asia, and Africa, in past and present. This can be done either with a focus on one of these three regions, i.e. the ‘African Studies’, the ‘South Asian Studies’, or the ‘Middle Eastern Studies’ track, or a comparative perspective on them, the ‘combined track’.

The coursework for each of those ‘tracks’ is composed of the same five elements: 1. an approved Introductory course; 2. a seminar on texts from the region; 3. 'Theory and Culture'; 4. five approved elective courses; 5. the regional language requirement.

Note that some MESAAS courses are already comparative by design and connect more than one region: for example, Societies and Cultures Across the Indian Ocean, or Postcolonial Thought, or courses on Persianate culture that include North India, or Middle East courses that include North Africa. These may satisfy requirements for more than one track, subject to approval by the Director of Undergraduate Studies (DUS).

African Studies

1. MDES UN3130 Major Debates in the Study of Africa or another approved introductory lecture course.
2. CC1020 African Civilization
3. MDES UN3000 Theory and Culture
4. Five additional courses on Africa, such as: South African Literature and Culture: Apartheid and After; East Africa and the Swahili Coast; or Pan Africanism (see the Courses page for more options). You may include up to two courses from other departments, in fields such as African history, politics, and philosophy, the anthropology of Africa, and African art, subject to the approval of the Director of Undergraduate Studies. For a listing of courses in other departments, see here.
5. Language: A minimum of two years of course work in Swahili, Arabic, Pular, or another African language. See the MESAAS language programs here. Those already fluent in an African language may substitute other courses—see FAQ. Not required for the concentration.

Middle Eastern Studies

1. ASCM UN2003 Islamic Civilization or another approved introductory lecture course.
2. Asian Humanities UN1399 Major Texts: Middle East/India
3. MDES UN3000 Theory and Culture
4. Five additional courses on the Middle East, such as: Arabic Self-Narratives; Central Questions in Islamic Law, Palestinian-Israeli Politics and Society, or Epics and Empires (see the Courses page for more options). You may include up to two courses from other departments, in fields such as Middle Eastern history, politics, and anthropology, or Islamic art, subject to the approval of the Director of Undergraduate Studies. Find a list of Middle East courses in other departments here.
5. Language: A minimum of two years of coursework in Arabic, Hebrew, Persian, Turkish, or Armenian. See the MESAAS language programs here. Those already fluent in a Middle Eastern language may substitute other courses—see FAQ. Not required for the concentration.

South Asian Studies
1. MDES UN2357 Indian Civilization or another approved introductory lecture course.
2. Asian Humanities UN3399 Major Texts: Middle East/India
3. MDES UN3000 Theory and Culture
4. Five additional courses on South Asia, such as: Mughal India; Gandhi and his Interlocutors; or Cinemas of India (see the Courses page for more options). You may include up to six points of course work from other departments, in fields such as South Asian history, politics, and anthropology, or Indian art, subject to the approval of the Director of Undergraduate Studies. Find a list of South Asia courses in other departments here.
5. Language: A minimum of two years of course work in Hindi/Urdu, Sanskrit, Persian, or other South Asian languages. See the MESAAS language programs here. Those already fluent in a South Asian language may substitute other courses—see FAQ. Not required for the concentration.

Combined

There is also a combined option. For this, you may satisfy the five requirements by choosing courses from any of the three tracks.
1. An approved introductory lecture course.
2. Asian Humanities UN1399 Major Texts: Middle East/India – OR: CC1020 African Civilization
3. MDES UN3000 Theory and Culture
4. Five additional courses, fitting one’s course of study, to be approved by DUS
5. Language: A minimum of two years of course work in any of the regional MESAAS languages, to be approved by the DUS.

CONCENTRATION IN MIDDLE EASTERN, SOUTH ASIAN, AND AFRICAN STUDIES

The requirements are identical with those for the major, except that there is no departmental language requirement. Fifteen points in department courses, selected with the approval of the director of undergraduate studies. These may not include elementary or intermediate language courses. Not more than two courses out of the general 15 points may be devoted to language study.
The music major provides aspiring musicians and/or scholars with a wide range of ways to think about music (performance-related, theoretical, historical, cultural, and compositional) and to concentrate on the aspects of music that most interest them—from popular and world music to computer music. Our faculty engage in cultural studies (i.e., ethnomusicology) and with current literary theory, connect with faculty of other departments (i.e., English, Philosophy, and Psychology), and are on the cutting edge of technological change. Students who have a passion for music and who have already developed basic skills in areas including performance, music history, composition, or ethnography, should consider a major in music.

**Music Performance**

For information on auditions, registration, and other aspects of performance not included below, visit [https://mpp.music.columbia.edu/](https://mpp.music.columbia.edu/)

or contact Magdalena Stern-Baczewska, Director of the Music Performance Program, in 618 Dodge, 212-854-1257.

Students with questions about the Columbia-Juilliard programs should consult Special Programs in this Bulletin or contact Rebecca Schiavo, 212-854-9478, rfb2195@columbia.edu.

**Lessons**

Individual lessons on instruments listed under Courses of Instruction may be taken for one half hour per week for 1 point of credit (or in the case of voice lessons at Barnard College, one full hour per week for 2 points). Auditions are only offered in the fall semester and courses are a one year commitment. There is a $300 lesson fee per semester for each instrumental instruction course.

- MPP UN1401 Bassoon Instruction
- MPP UN1403 Cello Instruction
- MPP UN1405 Clarinet Instruction
- MPP UN1407 Classical Saxophone Instruction
- MPP UN1409 Flute Instruction
- MPP UN1411 French Horn Instruction
- MPP UN1413 Guitar (Bluegrass) Instruction
- MPP UN1415 Guitar (Classical) Instruction
- MPP UN1417 Harp Instruction
- MPP UN1419 Oboe Instruction
- MPP UN1421 Organ Instruction
- MPP UN1423 Percussion Instruction
- MPP UN1425 Piano Instruction
- MPP UN1427 String Bass Instruction
- MPP UN1429 Trombone Instruction
- MPP UN1431 Trumpet Instruction
- MPP UN1433 Tuba Instruction
- MPP UN1435 Viola Instruction
- MPP UN1437 Violin Instruction
- MPP UN1439 Early Instruments: Harpsichord
- MPP UN1441 Early Instruments: Viola da Gamba
- MPP UN1443 Jazz Bass Instruction
- MPP UN1445 Jazz Bass (Electric) Instruction
- MPP UN1447 Jazz Guitar (Electric) Instruction
- MPP UN1449 Jazz Orchestration
- MPP UN1451 Jazz Percussion Instruction
- MPP UN1453 Jazz Piano Instruction
- MPP UN1455 Jazz Saxophone Instruction
- MPP UN1457 Jazz Trombone Instruction
- MPP UN1459 Jazz Trumpet Instruction
- MPP UN1461 Jazz Voice Instruction

**Ensembles**

Participation in the following ensembles is open to all members of the University community. Students who wish to receive course credit may register for 1 point per semester for these courses as liste.

See Music Performance Program website for audition and activity information about all of the below.

- **Columbia University Orchestra** – Jeffrey Milarsky, Conductor
  See -MPP UN1521 University Orchestra for audition and activity information.

- **Chamber Music Ensemble** – Magdalena Stern-Baczewska, Director, Music Performance Program
  See -MPP UN1531 Chamber Ensemble for audition and activity information.

- **Barnard-Columbia Chorus and Chamber Singers** – Gail Archer, Director
  See MUSI UN1593 Barnard-Columbia Chorus-MUSI UN1594 Barnard-Columbia Chorus and MUSI UN1595 Barnard-Columbia Chamber Singers-MUSI UN1596 Barnard-Columbia Chamber Singers for audition and activity information.

- **Collegium Musicum**
  See - MPP UN1511 Collegium Musicum for audition and activity information.
• **Jazz Ensembles** – Christopher Washburne, *Director*
  See -MPP UN1541 Columbia University Jazz Ensemble for audition and activity information.

• **World Music Ensembles** – Magdalena Stern-Baczewska, *Director, Music Performance Program*
  See - MPP UN1551 World Music Ensemble

**PRACTICE ROOMS**
Please see Practice Rooms and Policies for the most up to date information.

**GRADING**
Ensembles: Letter Grade

Instrumental Lesson: P/F

**DEPARTMENTAL HONORS**
For departmental honors, see the director of undergraduate studies during the first week of the first semester of senior year. A formal written proposal is required. Normally no more than 10% of graduating majors receive departmental honors in a given academic year.

**PROFESSORS**
Susan Boynton
Joseph Dubiel
Walter Frisch
Bradford Garton
Giuseppe Gerbino
Georg Friedrich Haas
George Lewis
Ana Maria Ochoa
Elaine Sisman
Christopher Washburne

**ASSOCIATE PROFESSORS**
Kevin A. Fellezs
Aaron Fox
Mariusz Kozak
Benjamin Steege

**ASSISTANT PROFESSORS**
Alessandra Ciucci
Zosha Di Castri
Julia Doe

**COORDINATOR OF MUSICIANSHIP**
Peter Susser

**LECTURERS**
Ashkan Behzadi
Mario Cancel-Bigay
Seth Cluett

Galen DeGraf
William Dougherty
Julia Hamilton
Jeffrey Milarsky
Joshua Navon
Russell O’Rourke
Magdalena Stern-Baczewska
Peter Susser
Suzanne Thorpe
Ralph Whyte

**ASSOCIATES IN MUSIC PERFORMANCE**
Sarah Adams
Dmitry Alexeev
Gail Archer (Barnard)
Elliot Bailen
Bruce Barth
Cyrus S. Beroukhim
Allen Blustine
Vicki Bodner
Paul Bollenback
Yari Bond
Maja Czer
Vince Cherico
Kenneth Cooper
Christine Correa
Adriano Dos Santos
David Fulmer
Brad Gemeinhardt
John David Gibson
Marc Goldberg
June Han
Brad Jones
Sue Ann Kahn
Arthur Kampela
James Kerr
Louis Kosma
Victor Lin
Paul-Martin Maki
Andrew Milne
Tony Moreno
Ah-Ling Neu
Ugonna Okegwo
Muneko Otani
Susan Palma-Nidel
Richard Rood
Susan Rotholz
Louise Sasaki
James Nyoraku Schlefer
Michael Seltzer
Don Sickler
Michael Skelly
Helen Sung
Jessica Thompson
Masayo Ishigure Tokue
Guidelines for All Music Majors and Concentrators

A program of study should be planned with the Director of Undergraduate Studies (DUS) in the first semester of the sophomore year. Students planning to focus on a particular area (i.e. computer music, composition, ethnomusicology, music theory or music history) may wish to select a faculty adviser in that area.

Music Theory & Ear-Training

All music majors and concentrators are required to take the Music Theory sequence through Music Theory IV and the Ear-Training sequence through Ear-Training IV. Placement exams are given prior to your initial enrollment in both the Music Theory sequence and Ear-Training sequence, to determine at what level you will be placed in each. For students who do not place in Music Theory I and/or Ear Training I on the placement exam, they must complete these course(s) before they start the corresponding sequence(s):

MUSI UN1002 FUNDAMENTALS OF MUSIC and MUSI UN1312 INTRODUCTORY EAR-TRAINING.

Keyboard Proficiency

All music majors are required to take a keyboard proficiency exam upon entrance into the first semester of Theory. Those who do not pass the exam are required to take MUSI UN1518 KEYBOARD HARMONY/MUSICIANSHIP.

Language Recommendations

For students who plan to do graduate work in music, studying German, French, Italian and/or Latin is recommended.

Focus in Composition

For students interested in focusing on the area of Composition, you must take these courses in this order:

MUSI UN2319 Music Theory II
MUSI UN3310 Techniques of 20th Century Music
MUSI UN3239 Introduction to Composition
MUSI UN3241 Advanced Composition

Major in Music

The major in music requires a minimum of 40 points, including the following courses:

You must complete up to Music Theory IV:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>MUSI UN2318</td>
<td>MUSIC THEORY I</td>
</tr>
<tr>
<td>- MUSI UN2319</td>
<td>and MUSIC THEORY II</td>
</tr>
<tr>
<td>MUSI UN3321</td>
<td>MUSIC THEORY III</td>
</tr>
<tr>
<td>- MUSI UN3322</td>
<td>and MUSIC THEORY IV</td>
</tr>
</tbody>
</table>

You must complete up to Ear-Training IV, ET V is optional:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSI UN2314</td>
<td>Ear Training, I</td>
</tr>
<tr>
<td>- MUSI UN2315</td>
<td>and Ear Training, II</td>
</tr>
<tr>
<td>MUSI UN3316</td>
<td>EAR-TRAINING III</td>
</tr>
<tr>
<td>- MUSI UN3317</td>
<td>and Ear Training, IV</td>
</tr>
<tr>
<td>MUSI GU4318</td>
<td>Ear Training, V</td>
</tr>
<tr>
<td>MUSI UN3128</td>
<td>HIST-WEST MUS: MID AGE- BAROQUE</td>
</tr>
<tr>
<td>- MUSI UN3129</td>
<td>and HIST-WEST MUS:CLASSICAL-20TH CENTURY</td>
</tr>
<tr>
<td>MUSI UN3400</td>
<td>Topics in Music and Society</td>
</tr>
</tbody>
</table>

Electives: At least two 3000- or 4000-level electives.

The remaining points are to be earned through 1000-level MPP courses, 2000, 3000 or 4000-level courses subject to these constraints:

1. No more than 6 points of 2000-level courses.
2. No more than 4 points of 1000-level MPP courses and UN1518 combined (list below):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>MPP UN1401</td>
<td>Bassoon Instruction</td>
</tr>
<tr>
<td>MPP UN1403</td>
<td>Cello Instruction</td>
</tr>
<tr>
<td>MPP UN1405</td>
<td>Clarinet Instruction</td>
</tr>
<tr>
<td>MPP UN1407</td>
<td>Classical Saxophone Instruction</td>
</tr>
<tr>
<td>MPP UN1409</td>
<td>Flute Instruction</td>
</tr>
<tr>
<td>MPP UN1411</td>
<td>French Horn Instruction</td>
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<tr>
<td>MPP UN1413</td>
<td>Guitar (Bluegrass) Instruction</td>
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<tr>
<td>MPP UN1415</td>
<td>Guitar (Classical) Instruction</td>
</tr>
<tr>
<td>MPP UN1417</td>
<td>Harp Instruction</td>
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<td>Oboe Instruction</td>
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<tr>
<td>MPP UN1421</td>
<td>Organ Instruction</td>
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<tr>
<td>MPP UN1423</td>
<td>Percussion Instruction</td>
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<td>Piano Instruction</td>
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<td>MPP UN1427</td>
<td>String Bass Instruction</td>
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<td>Trombone Instruction</td>
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<td>Trumpet Instruction</td>
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<td>MPP UN1435</td>
<td>Viola Instruction</td>
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<td>Early Instruments: Harpsichord</td>
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<tr>
<td>MPP UN1441</td>
<td>Early Instruments: Viola da Gamba</td>
</tr>
<tr>
<td>MPP UN1443</td>
<td>Jazz Bass Instruction</td>
</tr>
<tr>
<td>MPP UN1445</td>
<td>Jazz Bass (Electric) Instruction</td>
</tr>
</tbody>
</table>
CONCENTRATION IN MUSIC

The concentration in music requires a minimum of 28 points, including the following courses:

You must complete up to Music Theory IV:
MUSI UN2318 - MUSI UN2319
MUSIC THEORY I
and MUSIC THEORY II
MUSI UN3321 - MUSI UN3322
MUSIC THEORY III
and MUSIC THEORY IV

You must complete up to Ear-Training IV, ET V is optional:
MUSI UN2314 - MUSI UN2315
Ear Training, I
and Ear Training, II
MUSI UN3316 - MUSI UN3317
EAR-TRAINING III
and Ear Training, IV
MUSI GU4318
Ear Training, V
MUSI UN3128 - MUSI UN3129
HIST-WEST MUS: MID AGE-BAROQUE
and HIST-WEST MUS:CLASSICAL-20TH CENTURY
MUSI UN3400
Topics in Music and Society

Electives: At least one 3000- or 4000-level electives.

The remaining points are to be earned through 1000-level MPP courses, 2000, 3000 or 4000-level courses subject to these constraints:

1. No more than 6 points of 2000-level courses.
2. No more than 4 points of 1000-level MPP courses and
   UN1518 combined (list below):

Special Concentration in Jazz Studies

Students interested in a special concentration in jazz studies should see Jazz Studies.
Students interested in philosophy may pursue a major either in philosophy or in economics-philosophy. Because philosophy treats issues fundamental to both the sciences and the humanities, students are also welcome to combine their philosophy major with work in other fields. Before declaring a major in philosophy or economics-philosophy, and before deciding to combine philosophy with another discipline, students should meet with the director of undergraduate studies to formulate the program best for them.

Philosophy majors are given a foundation in logic and philosophical methodology, and are asked to confront fundamental questions in the main areas of philosophy: epistemology and metaphysics, ethics and political philosophy, philosophy of mind and language, and history of philosophy. The department requires that all majors take at least one seminar (PHIL UN3912), designed to allow students to focus on particular philosophical issues or texts in greater depth. Outstanding seniors may also pursue their own philosophical project in a senior thesis.

Over and above the courses required of all majors, there is room for considerable flexibility. Through an appropriate choice of electives from among the department’s offerings (and from related courses in other departments), there are special opportunities for focusing more intensively on one or two subfields of philosophy, e.g., logic and the philosophy of mathematics, philosophy of science, ethics and political philosophy, or the history of philosophy. Students should consult with the director of undergraduate studies on how best to pursue such programs.

**Senior Thesis**

Undergraduates majoring in Philosophy or Economics-Philosophy may propose to write a senior thesis. Students who wish to write a thesis should approach a faculty member at the end of their junior or beginning of their senior year, and begin working on the proposal early in the fall semester of their senior year. Proposals are due in early December, and will be reviewed by a committee which will include the Director of Undergraduate Studies; students will be notified of the committee’s decision within two weeks. Students whose proposals are approved should register for their faculty advisor’s section of Supervised Independent Research for the spring term of the senior year. Theses are due in early April.

Students who have a grade point average of 3.6 or above in the major and who complete a thesis will be placed into consideration for departmental honors, though any senior may complete a thesis regardless of their grade point average (upon approval of the proposal).

See the full policy and procedure concerning senior theses on the departmental webpage:

[http://philosophy.columbia.edu/content/senior-thesis-philosophy](http://philosophy.columbia.edu/content/senior-thesis-philosophy)

**Departmental Honors**

Departmental honors are highly competitive. Normally no more than 10% of the majors graduating in the department each year will receive departmental honors.

In order to qualify for departmental honors in philosophy, a student must have a grade point average of at least 3.6 in the major.

For students with a GPA of 3.6 or above, there are two possible routes to consideration:

1. A student may complete a senior thesis; those students who complete senior theses will automatically be considered for honors without having to be nominated.
2. A student may be nominated by a faculty member early in the spring semester of the senior year; nominated students will be invited to submit a writing sample at least 15 pages in length. A nominated student who is also writing a thesis may submit their thesis as the writing sample, or may choose to submit a different work.

Both the senior theses and writing samples are due in early April. The departmental honors committee will then review the submitted material and the academic records of the writers, and will report to the full faculty.

The full faculty will then decide which students to recommend for departmental honors to the Columbia College and General Studies administrations.

**Professors**

David Albert
Akeel Bilgrami
Taylor Carman (Barnard)
Haim Gaifman
Lydia Goehr
Robert Gooding-Williams
Axel Honneth
Jenann Ismael
Patricia Kitcher
Philip Kitcher
Wolfgang Mann
Christia Mercer
Michele Moody-Adams
John Morrison (Barnard)
Fred Neuhouser (Barnard)
Christopher Peacocke
Carol Rovane
Achille Varzi
Katja Vogt

ASSOCIATE PROFESSORS
Jessica Collins

ASSISTANT PROFESSORS
Allison Aitken
Justin Clarke-Doane
Melissa Fusco
Dhananjay Jagannathan
Tamar Lando
Karen Lewis (Barnard)
Francey Russell (Barnard)

AFFILIATED FACULTY
Souleymane Bachir Diagne (French and Romance Philology)
Jon Elster (Political Science)
Kent Greenawalt (University Professor)
Wayne Proudfoot (Religion)
Joseph Raz (Law School)
Gayatri Spivak (University Professor)

MAJOR IN PHILOSOPHY
Students considering a major in philosophy are strongly encouraged to meet with the director of undergraduate studies early in their sophomore year. All majors must consult with the director of undergraduate studies each term before registering for classes in order to plan and update their individual programs of study.

Students planning to major in philosophy are advised to begin with PHIL UN1010 METHODS/PROB OF PHILOS THOUGHT. Beginning students are especially encouraged to take 2000-level courses, both in the history of philosophy and in systematic philosophy. These courses are typically less specialized and less narrowly focused than higher-numbered ones. More advanced students are encouraged to take 3000-level courses. The department requires that all majors take at least one seminar, PHIL UN3912.

No more than one course at the 1000-level can be counted toward the major. In order to enroll in one of the 4000-level courses, students must have taken at least four courses in Philosophy.

The major requires a minimum of 30 points in philosophy chosen from courses prefixed with UN or GU:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL UN2101</td>
<td>The History of Philosophy I: Presocratics to Augustine</td>
</tr>
<tr>
<td>PHIL UN2201</td>
<td>History of Philosophy II: Aquinas to Kant</td>
</tr>
<tr>
<td>PHIL UN3411</td>
<td>SYMBOLIC LOGIC</td>
</tr>
<tr>
<td></td>
<td>At least one course in either metaphysics or epistemology e.g., PHIL W3960, or a related course to be chosen in consultation with the director of undergraduate studies.</td>
</tr>
<tr>
<td></td>
<td>Select at least one course in either ethics or social and political philosophy from the following:</td>
</tr>
<tr>
<td></td>
<td>PHIL UN2702</td>
</tr>
<tr>
<td></td>
<td>PHIL UN3701</td>
</tr>
<tr>
<td></td>
<td>PHIL UN3751</td>
</tr>
<tr>
<td></td>
<td>A related course to be chosen in consultation with the director of undergraduate studies.</td>
</tr>
<tr>
<td>PHIL UN3912</td>
<td>Seminar</td>
</tr>
</tbody>
</table>

CONCENTRATION IN PHILOSOPHY
Philosophy, as an academic discipline, has significant points of contact with a wide range of other subjects—in the humanities, the social sciences, and the natural sciences. A concentration in philosophy thus can be an attractive option for many students. Those considering becoming concentrators are strongly encouraged to meet with the director of undergraduate studies early in their sophomore year, in order to discuss their specific interests and to plan their programs of study. All concentrators should consult with the director of undergraduate studies each term before registering for courses.

The concentration requires a minimum of 24 points in philosophy, chosen from courses prefixed with UN or GU. There are no specific courses required for the concentration.

Students may choose courses prefixed with GR only with the instructor’s permission.

PHIL UN3912 is open to junior and senior concentrators who have taken at least four courses in philosophy.
MAJOR IN ECONOMICS-PHILOSOPHY

Please read Guidelines for all Economics Majors, Concentrators, and Interdepartmental Majors in the Economics section of this Bulletin.

Economics-Philosophy is an interdisciplinary major that, while introducing students to the basic methodologies of economics and philosophy, stresses areas of particular concern to both. These include subjects such as rationality and decision making, justice and efficiency, freedom and collective choice, and the logic of empirical theories and their testing. Many of the issues are dealt with historically, and classic texts of Plato, Kant, Mill, Marx, and Smith are reviewed.

Two advisers are assigned for the interdepartmental major, one in the Department of Economics and one in the Department of Philosophy. Please note that the Economics adviser can only advise on the Economics requirements and the Philosophy adviser can only advise on the Philosophy requirements.

The Economics-Philosophy major requires a total minimum of 54 points: 25 points in Economics, 16 points in Philosophy, 6 points in Mathematics, 3 points in Statistics, and 4 points in the interdisciplinary seminar as follows:

**Economics Core Courses**
- ECON UN1105 Principles of Economics
- ECON UN3211 Intermediate Microeconomics
- ECON UN3213 Intermediate Macroeconomics
- ECON UN3412 Introduction To Econometrics

**Mathematics Sequence**
Select a mathematics sequence

**Statistics**
Select a statistics course

**Economics Electives**
Three electives are required; refer to the Economics section of this bulletin.

**Philosophy Courses**
- PHIL UN1010 METHODS/PROB OF PHILOS THOUGHT
- PHIL UN3411 SYMBOLIC LOGIC
- PHIL UN3701 ETHICS (a social or political philosophy course may be substituted, please consult the Philosophy DUS)
- PHIL UN3551 or PHIL UN3960 PHILOSOPHY OF SCIENCE
- PHIL GU4561 Probability and Decision Theory

**Seminar**
- ECPH GU4950 Economics and Philosophy Seminar (or another seminar in philosophy or economics approved by advisers in both department)

Students who declared before Spring 2014:
The requirements for this program were modified in 2014. Students who declared this program before Spring 2014 should contact the director of undergraduate studies for the department in order to confirm their options for major requirements.
The Physical Education Department offers a variety of activities in the areas of aquatics, fitness, martial arts, individual/dual sports, team sports, and outdoor education. Most of the activities are designed for the beginner level. Intermediate/advanced courses are offered at selected times. All courses are designed to develop and/or improve skills and knowledge, increase physical activity, and promote well-being. Courses aim to promote holistic, sustainable opportunities to engage with physical activity and physical well-being concepts. A major goal is to provide a positive, enjoyable experience for students, leading to the development of an active, healthy lifestyle.

The majority of the courses are offered in ten time preferences. However, there are early morning conditioning activities, Friday-only classes at Baker Athletics Complex, and special courses that utilize off-campus facilities during weekends. A description of the scheduled activities for each time preference is included in the Department of Physical Education website.

A list of the activities for the term is included in the Directory of Classes and on the website. Students may select physical education courses during online registration. Students may register for only one section of Physical Education each term.

**Physical Education Requirement**

Successful completion of two Physical Education courses is a Columbia College requirement that students are advised to complete by the end of the first year. Students may elect to take one or two additional terms of Physical Education Activities for credit. Students receive 1 point of academic credit for each completed term of physical education for a possible total of 4 points.

For more information on this requirement, please visit the Core Curriculum—Physical Education Requirement section of the bulletin.

**Medical Conditions**

Students who request to have their Physical Education activities limited or waived because of a medical condition should contact the Director of Undergraduate Studies for Physical Education.

In some situations, students may require an evaluation by a clinician at Health Services at Columbia in order to receive a waiver. In consultation with the Director of Physical Education, students may be instructed to contact Dr. Melanie Bernitz, Medical Director of Columbia Health Programs, who facilitates these evaluations.

**Grading**

The grading in all physical education courses is Pass/Fail. Students who fulfill the attendance and participation requirement receive a Pass. Those who miss more than the permissible number of classes and who do not drop the course by the official drop deadline receive a W (Withdrawal). Those who anticipate attendance problems should contact their instructors or the Director of Undergraduate Studies for Physical Education.

**Swim Test**

All students are also required to pass a swimming test or take beginning swimming for one term to fulfill the swimming requirement. A waiver of the swimming test requirement may be granted if a student has a disability certified by a medical authority that precludes swimming. Students may also request waivers and accommodations on the grounds of religious observance or gender identity/expression. All requests for waivers and accommodations are reviewed by the director of physical education.

**Locker and Towel Service**

Students have access to a lock/towel service and, with the exception of tennis, equipment for the activities is supplied by the Physical Education Department.

**Intercollegiate Athletics**

Students who are participating on an intercollegiate team should register for the appropriate team section of PHED UN1005 Intercollegiate Athletics. Intercollegiate athletes are responsible for taking the swimming test. Student athletes who cannot pass the test should take beginning swimming at the first possible opportunity.

Student athletes who register correctly and participate on a team receive a Pass; those who drop off a team in midterm and still wish to receive academic credit must notify the Physical Education Office and be placed in an activity to complete the attendance requirement. Otherwise, the student must officially drop Intercollegiate Athletics or they receive a mark of W (Withdrawal).

**Director of Physical Education Programs**

**Jeffrey Ryder**

**Associates**

Cemi Abreu
Julia Anderson
Michael Aufrichtig
Caroline Blum
James Bolster
Rich Bonfiglio
Christie Bonn
Victoria Borja
Michael Burr
Amber Cannady
Diana Caskey
Jesse Chapman
Brian Chenoweth
Demerae Christianson
Nathaniel Clark
Simon Cleary
Tyler Cordell
Theodore Cowling
Jared Czech
Aphrodite Daphnis
Derek Davis
Scott Donie
Lauren Dudziak
Samantha Fahey
Alex Fatovic
Aliza Feuerstein
Wilfred Frederic
Jumpei Harada
Jessica Harrington
Matt Herhal
Andrew Hess
Juli Jimenez
Brian Jines
Lauren Kahn
Amphone Keovongmanysar
Anastasia Kirtiklis
Beth Krysiak
Andrew Laiosa
Gustavo Leal
SeoungWoo Lee
Peggy Levine
Robert Lieblein
Frank Lisante
Janiel Mason
Kyle Massey
James McDermott
Tarah McShane
Gaurav Misra
Richard Mueller
Sara Negrette
A.J. Nelson
Caroline Nelson-Nichols
Joseph Nord
Joshua Osit
Pepper Pavlish
Sarah Perron
Ken Pollard
Olivia Raxter
Arielle Robinson

Daniel Rosenblum
Greg Rosnick
Chris Sachvie
Tamara Sagadore
Allison Salter
Joanne Schickerling
Marlon Sears
Anne Marie Skylis
Maraya Slatter
Jen Spicer
Marquise Stancil
Erik Supplee
Dan Tischler
Cassie Vondrak
Samantha Warren
Amy Weeks
Elizabeth Young
Physics

Departmental Office: 704 Pupin; 212-854-3348
http://www.columbia.edu/cu/physics

Director of Undergraduate Studies: Dr. Jeremy Dodd, 924 Pupin; 212-854-3969; jeremy.dodd@columbia.edu

The physics major offers a rigorous preparation in the intellectual developments of modern physics, along with extensive exposure to the mathematical and experimental techniques required to conduct basic and applied research in physics.

For the major, the department offers a set of required courses well-suited to prepare students for the most rigorous course of graduate study. These can be supplemented by elective courses in a variety of advanced topics. Although most majors go on to graduate work in physics, the intellectual skills acquired in the study of physics can also provide the basis for work in a variety of other scientific and nonscientific areas.

The physics concentration is for students who are interested in physics but are uncertain about graduate study in physics; for those who want to explore other subjects along with physics; for those who want to find a physics- or technology-related job after graduation; or for those who are considering a professional school such as law or medicine. The department helps concentrators custom design programs to ensure maximum flexibility in meeting students’ intellectual needs and career goals. With appropriate selection of courses, the concentrator can explore other subjects yet maintain the option of graduate study in physics.

Research is an extremely important component of the Columbia physics experience. Because the department has a very small student-to-faculty ratio, essentially all physics majors and concentrators engage in experimental, computational, or theoretical research under the close supervision of a faculty member during part, if not all, of their time at Columbia.

Registration for Introductory Courses

The department offers a stand-alone one-semester course for nonscience majors, one introductory sequence in physics intended primarily for preprofessional students, and three introductory sequences in physics for engineering and physical science majors. Students are given credit for courses from only one of the different sequence groups.

Mixing courses across the sequences is strongly discouraged; however, physics majors who begin their studies with PHYS UN1401 Introduction To Mechanics and Thermodynamics - PHYS UN1402 INTRO ELEC/MAGNETSM # OPTCS should take PHYS UN2601 Physics, III: Classical and Quantum Waves as the third-semester course.

Introductory Sequences

Nonscience Majors:
PHYS UN1001 Physics for Poets

Preprofessional Students:
PHYS UN1201 General Physics I
- PHYS UN1202 and General Physics II

Accompanying laboratory course:
PHYS UN1291 General Physics Laboratory
- PHYS UN1292 and General Physics Laboratory II

Engineering and Physical Science Majors:
Select one of the following sequences with accompanying laboratory course:

Sequence A:
PHYS UN1401 Introduction To Mechanics and
- PHYS UN1402 Thermodynamics
- PHYS UN1403 and INTRO ELEC/MAGNETSM # OPTCS

Sequence B:
PHYS UN1601 Physics, I: Mechanics and
- PHYS UN1602 Relativity
- PHYS UN2601 and Physics, II: Thermodynamics,

Sequence C:
PHYS UN2801 Accelerated Physics I
- PHYS UN2802 and Accelerated Physics II

Sequence A is a self-contained group of three courses, while Sequences B and C anticipate more course work in the Physics Department. Students considering a physics major are strongly encouraged to begin one of these sequences in their first year.

Laboratory

Many of the introductory courses include a laboratory, as indicated. A $75 per term laboratory fee is charged for all 1000-level and 2000-level laboratories.

Advanced Placement

Students may earn a maximum of 6 credits in physics. The department grants 6 credits for a score of 4 or 5 on the AP Physics B exam, but the student is not entitled to any exemptions. The amount of credit is reduced to 3 if the student takes a 1000-level physics course.

The department grants 3 credits for a score of 4 or 5 on the AP Physics C/Mech exam, but the student is not entitled to any exemptions. The amount of credit is reduced to 0 if the student takes PHYS UN1001, PHYS UN1201, PHYS UN1401 or PHYS UN1601.

The department grants 3 credits for a score of 4 or 5 on the AP Physics C/E&M exam, but the student is...
not entitled to any exemptions. The amount of credit is reduced to 0 if the student takes PHYS UN1001, PHYS UN1202, PHYS UN1402 or PHYS UN1602.

**PROFESSORS**

Igor Aleiner  
Boris Altshuler  
Elena Aprile  
Dmitri Bassov  
Andrei Beloborodov  
Allan Blaer (*emeritus*)  
Gustaf Brooijmans  
Norman Christ  
Brian Cole  
Frederik Denef  
Richard Friedberg (*Barnard emeritus*)  
Brian Greene (Mathematics)  
Miklos Gyulassy (*emeritus*)  
Charles J. Hailey  
Timothy Halpin-Healy (Barnard)  
Sven Hartmann (*emeritus*)  
Tony Heinz (*emeritus*)  
Emlyn Hughes  
Lam Hui  
Laura Kay (Barnard Astronomy)  
Tsung Dao Lee (*emeritus*)  
Yuri Levin  
Szabolcs Marka  
Robert Mawhinney (Chair)  
Andrew Millis  
Alfred H. Mueller  
Reshmi Mukherjee (Barnard)  
John Parsons  
Aron Pinczuk (Applied Physics)  
Malvin Ruderman  
Frank Sciulli (*emeritus*)  
Michael Shaevitz  
Michael Tuts  
Yasutomo Uemura  
Erick Weinberg  
William Zajc  

**ASSOCIATE PROFESSORS**

Brian Humensky  
Janna Levin (Barnard)  
Brian Metzger  
Alberto Nicolis  
Abhay Pasupathy  
Ozgur Sahin (Biology)  
Tanya Zelevinsky  

**ASSISTANT PROFESSORS**

Cory Dean  
Bradley Johnson  
Georgia Karagiorgi  
Rachel Rosen  
Sebastian Will  

**SENIOR LECTURER IN DISCIPLINE**

Jeremy Dodd  

**ADJUNCT PROFESSOR**

Morgan May  

**LECTURER**

Burton Budick  
Eric Raymer  

**ON LEAVE**

Amber Miller  

**GUIDELINES FOR ALL PHYSICS MAJORS, CONCENTRATORS, AND INTERDEPARTMENTAL MAJORS**

Majors and concentrators should plan their programs of study with the director of undergraduate studies before the beginning of the junior year.

Prospective physics majors are strongly encouraged to begin one of the introductory physics sequences in their first year. Majors should aim to acquire as extensive a background in mathematics as possible.

The department considers laboratory experience to be an essential part of the physics curriculum. Majors and concentrators can gain such experience in the intermediate-level laboratories, the electronics laboratory, and through experimental research in faculty research groups.

**Grading**

A grade of C- or better must be obtained for a course to count toward the majors or the concentration. The grade of P is not acceptable, but a course that was taken P/D/F may be counted if and only if the P is uncovered by the Registrar’s deadline.

**MAJOR IN PHYSICS**

**Physics Courses**

The major in physics requires a minimum of 41 points in physics courses, including:

**Introductory Sequences**

Select one of the following sequences:

- **Sequence A**: Students with a limited background in high school physics may elect to take:
### Core Physics Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS UN3003</td>
<td>Mechanics</td>
</tr>
<tr>
<td>PHYS UN3007</td>
<td>Electricity and Magnetism</td>
</tr>
<tr>
<td>PHYS UN3008</td>
<td>Electromagnetic Waves and Optics</td>
</tr>
<tr>
<td>PHYS GU4021</td>
<td>Quantum Mechanics I</td>
</tr>
<tr>
<td>PHYS GU4022</td>
<td>Quantum Mechanics II</td>
</tr>
<tr>
<td>PHYS GU4023</td>
<td>Thermal and Statistical Physics</td>
</tr>
</tbody>
</table>

### Elective Courses

Select at least six points of the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS UN3002</td>
<td>From Quarks To the Cosmos: Applications of Modern Physics</td>
</tr>
<tr>
<td>PHYS GU4003</td>
<td>Advanced Mechanics</td>
</tr>
<tr>
<td>PHYS GU4011</td>
<td>Particle Astrophysics and Cosmology</td>
</tr>
<tr>
<td>PHYS GU4018</td>
<td>Solid-State Physics</td>
</tr>
<tr>
<td>PHYS GU4019</td>
<td>Mathematical Methods of Physics</td>
</tr>
<tr>
<td>PHYS GU4040</td>
<td>Introduction to General Relativity</td>
</tr>
<tr>
<td>PHYS GU4050</td>
<td>Introduction to Particle Physics</td>
</tr>
</tbody>
</table>

With the permission of the Director of Undergraduate Studies, 4000- or 6000-level courses offered in this or other science departments

### Laboratory Work at the Intermediate Level *

Select one of the following options:

**Option 1:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS UN3081</td>
<td>Intermediate Laboratory Work (two semesters)</td>
</tr>
<tr>
<td>PHYS UN3083</td>
<td>Electronics Laboratory</td>
</tr>
</tbody>
</table>

**Option 2:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS UN3081</td>
<td>Intermediate Laboratory Work (three semesters)</td>
</tr>
</tbody>
</table>

### Senior Seminar

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS UN3072</td>
<td>Seminar in Current Research Problems</td>
</tr>
</tbody>
</table>

* Approved experimental work with a faculty research group may satisfy one semester of the laboratory requirement.

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## Mathematics Courses

Calculus through MATH UN1202 CALCULUS IV or MATH UN1208 HONORS MATHEMATICS B; and MATH UN3027 Ordinary Differential Equations or the equivalent.

Recommended cognate courses: MATH UN2010 LINEAR ALGEBRA, MATH UN3007 Complex Variables, and MATH UN3028 PARTIAL DIFFERENTIAL EQUATIONS.

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### Concentration in Physics

The concentration in physics requires a minimum of 24 points in physics, including one of the introductory sequences.

### Interdisciplinary Major

It is also possible to major in astrophysics, biophysics, and chemical physics. Students interested in these areas should consult with the director of undergraduate studies and with cognate departments (astronomy, biological sciences, chemistry).

For astrophysics requirements please see:

http://bulletin.columbia.edu/columbia-college/departments-instruction/astrophysics/#requirementstext

For biophysics requirements please see:

http://bulletin.columbia.edu/columbia-college/departments-instruction/biological-sciences/#requirementstext

For chemical physics requirements please see:

http://bulletin.columbia.edu/columbia-college/departments-instruction/chemistry/#requirementstext
**Political Science**

**Departmental Office:** 710 International Affairs Building; 212-854-3707  
http://www.polisci.columbia.edu

**Director of Undergraduate Studies:**  
Prof. David Johnston, 720 International Affairs Building; 212-854-3955; djj1@columbia.edu

**Economics-Political Science Advisers:**  
Economics: Prof. Susan Elmes, Director of Undergraduate Studies, 1006 International Affairs Building; se5@columbia.edu  
Political Science: Prof. Carlo Prato, 718 International Affairs Building; 212-854-7540; cp2928@columbia.edu

**Political Science-Statistics Advisers:**  
Political Science: Prof. Naoki Egami, 734 International Affairs Building; 212-854-3623; naoki.egami@columbia.edu  
Statistics: Prof. Ronald Neath, 612 West 115th Street, Room 612; 212-853-1398; rcn2112@columbia.edu  
Statistics: Prof. Gabriel Young, 612 West 115th Street, Room 614; 212-853-1395; gy2107@columbia.edu

The discipline of political science focuses on issues of power and governance and, in particular, on political institutions, both formal and informal. It also focuses on political behavior, political processes, political economy, and state-society relations.

The field consists of four substantive subfields: American politics, which covers such topics as national and local politics, elections, and constitutional law; comparative politics, which aims at understanding the political systems of other countries, both by studying individual states and by engaging in cross-national comparisons; international relations, which deals with the ways that states and other political actors behave in the international arena, including such topics as security, foreign policies, international organizations, and international economic relations; and political theory, which analyzes the history of normative political thought as well as of analytic concepts such as the nature of justice or liberty.

Other broad topics, such as “political economy,” or the study of the relationships between economic and political processes, overlap with the subfields, but also constitute a separate program (see below). Methodology, including statistical analysis and formal modeling, also occupies an important place in the discipline.

**Advanced Placement**

The department grants credit toward the major for work completed under the College Entrance Examination Board (CEEB) Advanced Placement Program. Students receive 3 academic credits and exemption from POLS UN1201 INTRO TO AMERICAN POLITICS or POLS UN1501 Introduction to Comparative Politics for scores of 5 in the United States and Comparative Government and Politics AP Exams.

**Advising**

The Department of Political Science offers a variety of advising resources to provide undergraduate majors and concentrators with the information and support needed to successfully navigate through the program. These resources are described below.

**Undergraduate Advising Office**

Students should take questions or concerns about the undergraduate program to the department's undergraduate advising office first. If advisers cannot answer a student's question, they then refer the student to the appropriate person.

The undergraduate advising office is staffed by political science Ph.D. students who hold open office hours each week (the schedule can be found online at https://polisci.columbia.edu/content/undergraduate-advising). During open hours, advisers are available to respond to questions and concerns about requirements, course selection, course of study, transfer and study abroad credit, and any other aspect of the program. Students may also reach advisers by email at polisciadvising@columbia.edu.

Students should also consult the undergraduate advisers for assistance in completing the political science program planning form (available online at https://polisci.columbia.edu/content/undergraduate-forms-library). The advisers must sign and date this form in the approval column next to any listed class that requires approval to fulfill program requirements (transfer courses, non-traditional courses, etc.). Each student's planning form is kept on file in the department, so that each semester they may meet with an adviser to update it.

The advisers are also available to speak with students about academic and professional issues, including research interests, internships, and post-college plans. Since the advisers have been through the graduate school application process, they are great resources with whom students may discuss the process. Also, as current Ph.D. students in the department, they are familiar with the research interests of political science faculty and can therefore refer students to a professor whose research aligns with the students' interests for focused thesis advice, information about academic, professional, and research opportunities, or professional development.

**Requesting a Faculty Adviser**

Often the best way for students to obtain advising from a faculty member is to contact a professor with whom they have taken a class in an area of interest. Students also have the option of having a faculty adviser assigned by the department. To request a faculty adviser, students should complete the Faculty Adviser Request Form and submit it to the undergraduate coordinator during the first two weeks of the semester. The link to the
Students may consult with their faculty adviser for any substantive issue, but still must visit walk-in advising hours to have courses approved, to have planning forms reviewed and approved, and to discuss departmental requirements and regulations.

**Director of Undergraduate Studies**
The director of undergraduate studies oversees the department’s undergraduate programs and is available during office hours. While a student's first stop for advising should be the undergraduate advising office, the director of undergraduate studies is available to answer any questions that the undergraduate advisers or the undergraduate coordinator cannot.

**Economics–Political Science Adviser**
Economics–political science majors may consult with the economics-political science adviser during office hours. However, students should also see an undergraduate adviser to discuss major requirements and fill out a planning form.

**Political Science–Statistics Adviser**
Political science–statistics majors may consult with the political science-statistics adviser during office hours. However, students should also see an undergraduate adviser to discuss major requirements and fill out a planning form.

**Faculty At-Large**
All faculty are available for consultation with students during office hours or by appointment to discuss interests in political science, course selection, and other academic or post-college matters. The faculty may provide advice about graduate schools, suggest literature that the student might consult as sources for research, recommend specific courses or professors based on the student’s interests, or offer information about research opportunities with faculty. However, students should note that any issues surrounding departmental regulations and requirements, major certification, course approvals, etc., should be addressed initially with the undergraduate advisers.

**HONORS PROGRAM**
The department offers the Honors Program for a limited number of seniors who want to undertake substantial research projects and write honors theses. The honors thesis is expected to be about 75 pages in length and of exceptional quality.

Honors students perform research as part of a full-year honors seminar (POLS UN3998-POLS UN3999, 8 points total) during their senior year, in place of the seminar requirement for majors. Students may, however, take additional seminars to fulfill other course requirements for the major. Theses are due in late March or early April. To be awarded departmental honors, the student must satisfy all the requirements for the major, maintain a 3.6 GPA in the major, and complete a thesis of sufficiently high quality to merit honors.

The honors seminar director provides general direction for the seminar and supervises all students. Each student also works with a faculty member in his or her major subfield (American politics, comparative politics, international relations, or political theory) and a teaching assistant. The honors seminar meets weekly for part of the year and addresses general issues involved in research and thesis writing, such as how to develop research questions and projects, methodology, sources of evidence, and outlining and drafting long papers. The sessions are also used for group discussions of students’ research and thesis presentations. Students are also expected to meet periodically with the supervising professor and preceptor.

Students who wish to apply to the Honors Program must notify the department in writing by the end of the spring semester of the junior year. Please check the department website for the official deadline. Normally no more than 10% of graduating majors receive departmental honors in a given academic year. Applicants are required to have already completed the methods requirement for the major.

**Application Materials**
Applications to the Honors Program must include the following:

1. A cover page with the student’s name, CUID number, e-mail address, and school (Columbia College or General Studies);
2. An official transcript, which may be obtained from the Office of the Registrar in Kent Hall, or from Student Services Online (SSOL);
3. A writing sample, preferably a paper written for a political science course;
4. A brief description (no more than one page) of a possible thesis topic.

Completed applications should be sent to:

Department of Political Science
Attn: Departmental Honors
420 West 118th Street
Mail Code 3320
New York, NY 10027

In addition, students are encouraged to find a faculty sponsor for their thesis proposal. Students who have identified a faculty sponsor should indicate the sponsor in the proposal; students without a faculty sponsor should identify a faculty member with whom they would like to work. Research areas for the political science department faculty are listed on the department's website. Students will be notified by e-mail of the decision taken on their applications before fall registration.

Students who are not accepted into the honors seminar or who decide after the application deadline that they would like to write an honors thesis may take one or two semesters POLS UN3901 INDEPENDENT RESEARCH I and POLS UN3902 INDEPENDENT RESEARCH II in order to...
write a thesis to submit for honors consideration. Any member of the department’s full-time faculty may sponsor independent study courses. Part-time faculty are not obligated to sponsor these courses.

For registration information and more details about this process, students should contact the Academic Affairs Coordinator. Note that most honors theses are about 75 pages in length. All theses must be submitted along with a confidential assessment of the paper by the supervising instructor in order to be considered for departmental honors. Students who choose this path must also complete all the requirements for the major and maintain a minimum major GPA of 3.6. Theses are due in late March or early April, and decisions about departmental honors are announced in May.

**DEPARTMENTAL PRIZES AND FELLOWSHIPS**

The Department of Political Science administers the following prizes and awards. Unless otherwise noted, students do not play an active part in the nomination process. Rather, faculty members nominate students at their own discretion. Departmental prizes are reserved for political science majors.

**Charles A. Beard Prize**

A cash prize awarded every other year to the student who writes the best paper in political science during the academic year.

**Caroline Phelps Stokes Prize**

A cash prize established at the bequest of Caroline Phelps Stokes is awarded to a student who has been a degree candidate at Columbia College or Barnard College for at least one academic year, and who has written the best essay in course or seminar work on the general subject of human rights.

**Allan J. Willen Memorial Prize**

A cash prize awarded to the Columbia College student who writes the best seminar paper on a contemporary American political problem.

**Edwin Robbins Academic Research/Public Service Fellowship**

The Robbins Fellowship provides a stipend each summer for at least two political science students in Columbia College who will be engaged in research in important matters of politics or policymaking or who will be working, without other compensation, as interns in a governmental office, agency, or other public service organization. Each spring, the department invites students to submit fellowship proposals. Awards are announced in late April or early May.

**Phyllis Stevens Sharp Fellowship in American Politics**

The Phyllis Stevens Sharp Endowment Fund provides stipends each year during the summer for one or more Columbia College or School of General Studies students majoring or concentrating in political science to support research in American politics or policy making, or otherwise uncompensated internships in a government office, agency, or other public service organization. Each spring, the department invites students to submit fellowship proposals. Awards are announced in late April or early May.

**EARLY ADMISSION TO THE MASTER'S DEGREE PROGRAM IN POLITICAL SCIENCE FOR COLUMBIA AND BARNARD POLITICAL SCIENCE UNDERGRADUATES**

While the Department of Political Science does not offer a joint bachelor of arts/master’s degree, it does allow Columbia and Barnard undergraduates to apply for early admission to its master’s degree program.

Students should apply during the fall semester of their senior year for admission to the M.A. program in the following fall semester, after completion of the B.A. degree. The department and the Graduate School of Arts and Sciences may award up to one-half residence unit of advanced standing and/or up to three courses (nine to twelve credits) of transfer credit for graduate courses (4000-level and above) taken at Columbia in excess of the requirements for the Columbia bachelor’s degree, as certified by the dean of the undergraduate school awarding the bachelor’s degree.

For further information about the application process and minimum qualifications for early admission, please contact the director of undergraduate studies.

For further information about requirements for the M.A. degree, see [https://gsas.columbia.edu/degree-programs/ma-programs/political-science](https://gsas.columbia.edu/degree-programs/ma-programs/political-science).

**PROFESSORS**

Richard K. Betts  
Jagdish Bhagwati (also Economics)  
Alessandra Casella (also Economics)  
Partha Chatterjee (Anthropology)  
Jean L. Cohen  
Michael Doyle (also School of International and Public Affairs; Law School)  
Jon Elster  
Robert Erikson  
Virginia Page Fortna  
Timothy Frye  
Ester Fuchs (School of International and Public Affairs)  
Andrew Gelman (also Statistics)
Guidelines for all Political Science Majors, Concentrators, and Interdepartmental Majors

Planning Forms

Major Planning forms are available on the department website.

Policy on Double-Counting Courses

- Policies about double-counting courses to fulfill requirements in more than one major may be found here:
  - Columbia College
  - School of General Studies
- Courses in the Core Curriculum do not fulfill requirements for the Political Science major.

Policy on Counting Credits outside the Department of Political Science

- Courses taken at other institutions or other Columbia departments may not be used to meet the requirement of a major or concentration in political science without the approval of the Director of Undergraduate Studies or the department’s undergraduate adviser. Students should secure such approval in advance of registration.

Pass/D/Fail and Grading Policy

- A grade of “Pass” is acceptable only for the first course taken toward the major or concentration.
- The course used to fulfill the research methods requirement cannot be taken Pass/D/Fail.
- Students must receive a grade of at least C- in order for a course to count towards the major or concentration.

AP Credit Policy

- Students who receive transfer credit for one or more AP exams in political science may count a maximum of one AP course toward the major or concentration, contingent upon completing an upper-level (3000 or higher) course with a grade of C or higher in the subfield in which the AP exam was taken. All transfer credits must be approved by
the Director of Undergraduate Studies or the undergraduate adviser (polisciadvising@columbia.edu).

Transfer Credit Policy

- For the political science major, a maximum of three courses in political science may be transferred from other institutions, including study abroad and AP credit. For the political science concentration as well as the economics-political science and political science-statistics interdisciplinary majors, a maximum of two courses in political science may be transferred from other institutions.

All transfer credits must be approved in writing by the Director of Undergraduate Studies or the undergraduate adviser (polisciadvising@columbia.edu).

- Students wishing to count transfer credits toward the major or concentration should send the undergraduate adviser (polisciadvising@columbia.edu) their transfer credit report, the syllabi of the courses they want to count toward departmental requirements, and a statement of how they want to apply the transfer credits to the requirements.

Independent Study Policy

- Independent Study (POLS UN3901 INDEPENDENT RESEARCH I in the fall or POLS UN3902 INDEPENDENT RESEARCH II in the spring) taken in fulfillment of course requirements for the major/concentration must be taken for at least 3 points of credit.

MAJOR IN POLITICAL SCIENCE

Program of Study

To be planned with the department as soon as the student starts to register for courses toward the major. Students should not wait until they formally declare the major before meeting with an undergraduate adviser during the registration period to plan their programs for the major.

Course Requirements

Students must choose a Primary Subfield and a Secondary Subfield to study. The subfields are as follows:

- American Politics (AP)
- Comparative Politics (CP)
- International Relations (IR)
- Political Theory (PT)

The major in political science requires a minimum of 9 courses in political science, to be distributed as follows:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLS UN1201</td>
<td>INTRO TO AMERICAN POLITICS</td>
</tr>
</tbody>
</table>

Introductory Courses

Students must take two of the following introductory courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLS UN1501</td>
<td>Introduction to Comparative Politics</td>
</tr>
<tr>
<td>POLS UN1601</td>
<td>INTERNATIONAL POLITICS</td>
</tr>
<tr>
<td>POLS UN1101</td>
<td>POLITICAL THEORY I</td>
</tr>
</tbody>
</table>

NOTE: Introductory courses taken that do not fit into the Primary or Secondary Subfield will be counted in the Political Science Elective category.

Primary Subfield

Minimum three courses.

Minor Subfield

Minimum two courses.

Seminars

Two 4-point 3000-level seminars, at least one of which is in the student’s Primary Subfield.

(See “Seminars” section below for more information)

Research Methods *

Minimum one course in research methods. Courses that satisfy the research methods requirement are:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLS UN3220</td>
<td>Logic of Collective Choice</td>
</tr>
<tr>
<td>POLS UN3704</td>
<td>RESEARCH DESIGN: DATA ANALYSIS</td>
</tr>
<tr>
<td>POLS UN3720</td>
<td>RESEARCH DESIGN: SCOPE AND METHODS</td>
</tr>
<tr>
<td>POLS UN3706</td>
<td>Empirical Research Methods in Political Science</td>
</tr>
<tr>
<td>POLS UN3768</td>
<td>Experimental Research</td>
</tr>
<tr>
<td>POLS GU4710</td>
<td>PRINC OF QUANT POL RESEARCH 1</td>
</tr>
<tr>
<td>POLS GU4712</td>
<td>PRINC OF QUANT POL RESEARCH 2</td>
</tr>
<tr>
<td>POLS GU4720</td>
<td>QUANT METH 1 APPL REG CAUS INF</td>
</tr>
<tr>
<td>POLS GU4722</td>
<td>QUANT METH 2 STAT THEO# CAUS INF</td>
</tr>
<tr>
<td>POLS GU4724</td>
<td>QUANT METH 3 EXPERIMENTAL METH</td>
</tr>
<tr>
<td>POLS GU4762</td>
<td>Politics in the Lab</td>
</tr>
<tr>
<td>POLS GU4764</td>
<td>Design and Analysis of Sample Surveys</td>
</tr>
<tr>
<td>POLS GU4790</td>
<td>Advanced Topics in Quantitative Research</td>
</tr>
<tr>
<td>POLS GU4792</td>
<td>Quantitative Methods: Research Topics</td>
</tr>
</tbody>
</table>

Political Science Electives

Minimum one course (in any subfield).

* A student may take another course inside or outside the department that provides relevant training in research methods to satisfy this requirement only with the written permission in advance of the Director of Undergraduate Studies or the department’s undergraduate adviser. If a course outside the political science department is used to satisfy the research methods requirement, this same course cannot be used toward other majors/concentrations or programs.
Seminars

Students are expected to take two 3000-level 4-point seminars. They may choose from among the seminars offered, though at least one of the seminars taken must be in the student’s Primary Subfield (that in which at least 9 other points have been completed). Entry into seminars requires the instructor’s permission.

For detailed seminar registration guidelines, see the department website. Seminars cannot be taken for R credit or Pass/D/Fail.

Barnard colloquia are open to students with the permission of the instructor. However, Barnard colloquia may not be used to fulfill the seminar requirement, though they may be used to fulfill subfield or elective requirements. Note that admission to Barnard colloquia is by application to the Barnard Political Science Department only. Please consult with the Barnard Political Science Department for more information.

Recommended Courses

In addition to political science courses, students are strongly advised, but not required, to take six points in a related social science field.

MAJOR IN ECONOMICS–POLITICAL SCIENCE

The major in economics-political science is an interdisciplinary major that introduces students to the methodologies of economics and political science and stresses areas of particular concern to both. This program is particularly beneficial to students planning to do graduate work in schools of public policy and international affairs.

Two advisers are assigned for the interdepartmental major, one in the Department of Economics and one in the Department of Political Science. Please note that the economics adviser can only advise on economics requirements and the political science adviser can only advise on political science requirements.

Course Requirements

For the political science part of the major, students must choose a Primary Subfield and a Secondary Subfield to study. The corresponding introductory courses in both subfields must be taken, plus two electives in the Primary Subfield and one in the Secondary Subfield. The subfields are as follows:

- American Politics (AP)
- Comparative Politics (CP)
- International Relations (IR)
- Political Theory (PT)

The economics–political science major requires a total of 59 points: 22 points in economics, 17 points in political science, 6 points in mathematics, 6 points in statistical methods, 4 points in a political science seminar, and 4 points in the interdisciplinary seminar as follows:

Core Requirements in Economics

Students must take all of the following core economics courses:

- ECON UN1105 Principles of Economics
- ECON UN3211 Intermediate Microeconomics
- ECON UN3213 Intermediate Macroeconomics
- ECON UN3412 Introduction To Econometrics
- POLS GU4712 PRINC OF QUANT POL RESEARCH 2
- ECON GU4370 Political Economy

Core Requirements in Mathematics and Statistics

Students must take all of the following core mathematics and statistics courses:

- MATH UN1101 CALCULUS I
- MATH UN1201 Calculus III
- STAT UN1201 Calculus-Based Introduction to Statistics

Economics Electives

Students must take two electives at the 3000 level or higher in the Department of Economics.

Political Science Courses

Students must choose a Primary Subfield and a Secondary Subfield to study. The subfields are as follows: American Politics (AP), Comparative Politics (CP), International Relations (IR), and Political Theory (PT).

- Primary Subfield: Minimum three courses, one of which must be the subfield’s introductory course.
- Secondary Subfield: Minimum two courses, one of which must be the subfield’s introductory course.

Seminars

Students must take the following two seminars:

- ECPS GU4921 Seminar In Political Economy
- and a Political Science Department seminar, in the student’s Primary Subfield. Please select one of the following:
  - POLS UN3911 Course POLS UN3911 Not Found
  - POLS UN3921 AMERICAN POLITICS SEMINAR
  - POLS UN3951 COMPARATIVE POLITICS SEMINAR
  - POLS UN3961 INTERNATIONAL POLITICS SEMINAR

* Students who wish to count toward the political science seminar requirement a course that is not in the above list of approved seminars must obtain permission from the political science Director of Undergraduate studies. Barnard colloquia may not be used to fulfill the seminar requirement. Note that admission to Barnard colloquia is by application to the Barnard political science department only.
Major in Political Science–Statistics

The interdepartmental major of political science–statistics is designed for students who desire an understanding of political science to pursue advanced study in this field and who also wish to have at their command a broad range of sophisticated statistical tools to analyze data related to social science and public policy research.

Students should be aware of the rules regarding the use of the Pass/D/Fail option. Courses in which a grade of D has been received do not count toward the major requirements.

Political science–statistics students are eligible for all prizes reserved for political science majors.

The political science-statistics major requires a minimum of 15 courses in political science, statistics, and mathematics, to be distributed as follows:

**Political Science**

Primary Subfield

-Students must choose a Primary Subfield to study. Within the subfield, students must take a minimum of three courses, including the subfield's introductory course. The subfields and their corresponding introductory courses are as follows:

<table>
<thead>
<tr>
<th>Subfield</th>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Politics</td>
<td>POLS UN1201</td>
<td>INTRO TO AMERICAN POLITICS</td>
</tr>
<tr>
<td>Comparative Politics</td>
<td>POLS UN1501</td>
<td>Introduction to Comparative Politics</td>
</tr>
<tr>
<td>International Relations</td>
<td>POLS UN1601</td>
<td>INTERNATIONAL POLITICS</td>
</tr>
<tr>
<td>Political Theory</td>
<td>POLS UN1101</td>
<td>POLITICAL THEORY I</td>
</tr>
</tbody>
</table>

-Additionally, students must take one 4-point 3000-level seminar in their Primary Subfield.

Research Methods

-Students must take the following two research methods courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLS GU4710</td>
<td>PRINC OF QUANT POL RESEARCH 1</td>
</tr>
<tr>
<td>POLS UN3704</td>
<td>RESEARCH DESIGN: DATA ANALYSIS</td>
</tr>
<tr>
<td>POLS GU4712</td>
<td>PRINC OF QUANT POL RESEARCH 2</td>
</tr>
</tbody>
</table>

**Statistics**

-Students must take one of the following sequences:

Sequence A — recommended for students preparing for graduate study in statistics:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH UN1101</td>
<td>CALCULUS I</td>
</tr>
<tr>
<td>MATH UN1102</td>
<td>CALCULUS II</td>
</tr>
<tr>
<td>MATH UN2010</td>
<td>LINEAR ALGEBRA</td>
</tr>
<tr>
<td>STAT UN1201</td>
<td>Calculus-Based Introduction to Statistics</td>
</tr>
<tr>
<td>STAT GU4203</td>
<td>PROBABILITY THEORY</td>
</tr>
</tbody>
</table>

Sequence B — recommended for students preparing to apply statistical methods to other fields:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT UN1101</td>
<td>Introduction to Statistics</td>
</tr>
<tr>
<td>STAT UN2102</td>
<td>Applied Statistical Computing</td>
</tr>
<tr>
<td>STAT UN2103</td>
<td>APPLIED LINEAR REG ANALYSIS</td>
</tr>
<tr>
<td>STAT UN2104</td>
<td>Applied Categorical Data Analysis</td>
</tr>
<tr>
<td>STAT UN3105</td>
<td>Applied Statistical Methods</td>
</tr>
<tr>
<td>STAT UN3106</td>
<td>Applied Data Mining</td>
</tr>
</tbody>
</table>

Statistics Elective

Students must take an approved elective in a statistics or a quantitatively oriented course in a social science.

1. Students taking Statistics Sequence A may replace the mathematics requirements with both MATH UN1207 Honors Mathematics A and MATH UN1208 HONORS MATHEMATICS B.

Concentration in Political Science

Program of Study

To be planned with the department as soon as the student starts to register for courses toward the concentration. Students should not wait until they formally declare the concentration before meeting with an undergraduate adviser during the registration period to plan their programs for the concentration.

Concentration Requirements

Students must choose a Primary Subfield and a Secondary Subfield to study. The subfields are as follows:

- American Politics (AP)
- Comparative Politics (CP)
- International Relations (IR)
- Political Theory (PT)

The concentration in political science requires a minimum of 7 courses in political science, to be distributed as follows:

Introductory Courses

Students must take two of the following introductory courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLS UN1201</td>
<td>INTRO TO AMERICAN POLITICS</td>
</tr>
<tr>
<td>POLS UN1501</td>
<td>Introduction to Comparative Politics</td>
</tr>
<tr>
<td>MATH UN1601</td>
<td>INTERNATIONAL POLITICS</td>
</tr>
<tr>
<td>MATH UN1101</td>
<td>POLITICAL THEORY I</td>
</tr>
</tbody>
</table>

Note: Introductory courses taken that do not fit into the Primary or Secondary Subfield will be counted in the Political Science Elective category.
**Primary Subfield**
Minimum two courses.

**Secondary Subfield**
Minimum two courses.

**Research Methods** *
Minimum one course in research methods. Courses that satisfy the methods requirement are:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLS UN3220</td>
<td>Logic of Collective Choice</td>
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<td>POLS UN3704</td>
<td>RESEARCH DESIGN: DATA ANALYSIS</td>
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<tr>
<td>POLS UN3706</td>
<td>Empirical Research Methods in Political Science</td>
</tr>
<tr>
<td>POLS UN3720</td>
<td>RESEARCH DESIGN: SCOPE AND METHODS</td>
</tr>
<tr>
<td>POLS UN3768</td>
<td>Experimental Research</td>
</tr>
<tr>
<td>POLS GU4710</td>
<td>PRINC OF QUANT POL RESEARCH 1</td>
</tr>
<tr>
<td>POLS GU4712</td>
<td>PRINC OF QUANT POL RESEARCH 2</td>
</tr>
<tr>
<td>POLS GU4720</td>
<td>QUANT METH 1 APPL REG CAUS INF</td>
</tr>
<tr>
<td>POLS GU4722</td>
<td>QUANT METH 2 STAT THEO# CAUS INF</td>
</tr>
<tr>
<td>POLS GU4724</td>
<td>QUANT METH 3 EXPERIMENTAL METH</td>
</tr>
<tr>
<td>POLS GU4762</td>
<td>Politics in the Lab</td>
</tr>
<tr>
<td>POLS GU4764</td>
<td>Design and Analysis of Sample Surveys</td>
</tr>
<tr>
<td>POLS GU4790</td>
<td>Advanced Topics in Quantitative Research</td>
</tr>
<tr>
<td>POLS GU4792</td>
<td>Quantitative Methods: Research Topics</td>
</tr>
</tbody>
</table>

### Political Science Electives
Minimum two courses (in any subfield).

* A student may take another course inside or outside the department that provides relevant training in research methods to satisfy this requirement only with the written permission in advance of the Director of Undergraduate Studies or the department’s undergraduate adviser. If a course outside the political science department is used to satisfy the research methods requirement, this same course cannot be used toward other majors/concentrations or programs.

**Recommended Courses**
In addition to courses in political science, students are strongly advised, but not required, to take six credits in a related social science field.
PSYCHOLOGY

Departmental Office: 406 Schermerhorn; 212-854-3608
https://psychology.columbia.edu/

Directors of Undergraduate Studies:

Psychology Major and Concentration:
Prof. Patricia Lindemann, 358E Schermerhorn
Extension: pgl2@columbia.edu (Students with last names beginning A-J)
Prof. Katherine Fox-Glassman, 314 Schermerhorn; kfg2111@columbia.edu (Students with last names beginning K-S)
Prof. Chris Baldassano, 370 Schermerhorn
Extension: cab2304@columbia.edu (Students with last names beginning T-Z)

Neuroscience and Behavior Major:
Psychology: Prof. Alfredo Spagna, 315 Schermerhorn; as5559@columbia.edu (Students with last names beginning A-L)
Psychology: Prof. Caroline Marvin, 317 Schermerhorn; cbm2118@columbia.edu (Students with last names beginning M-Z)
Biology (CC): Prof. Stuart Firestein, sjf24@columbia.edu
Biology (GS): Prof. Deborah Mowshowitz, 744 Mudd; dbm2@columbia.edu

Director of Instruction and Academic Affairs:
Prof. Caroline Marvin, 317 Schermerhorn; cbm2118@columbia.edu

Directors of Senior Thesis Research Intensive:
Prof. Lila Davachi, 371 Schermerhorn Extension; ld24@columbia.edu
Prof. Nim Tottenham, 419E Schermerhorn; nlt7@columbia.edu

Preclinical Adviser: Prof. E’mett McCaskill, 415O Milbank; emccaski@barnard.edu

Administrative Manager: Joanna Borchert-Kopczuk, 406 Schermerhorn; 212-854-3940; jbk2330@columbia.edu

Undergraduate Curriculum Assistant: Liz Parish, 406 Schermerhorn; 212-854-8859; psych-uca@columbia.edu

The Department of Psychology offers students a comprehensive curriculum in psychological science, including research methods, cognition, neuroscience, developmental, social, and clinical areas. The curriculum prepares majors for graduate education in these fields and also provides a relevant background for social work, education, medicine, law, and business. Psychology course offerings are designed to meet the varying needs and interests of students, from those wishing to explore a few topics in psychology or to fulfill the science requirement, to those interested in majoring in Psychology or in Neuroscience and Behavior.

PROGRAM GOALS

The department’s program goals start with the development of a solid knowledge base in psychological science. Consistent with the value psychology places on empirical evidence, courses at every level of the curriculum nurture the development of skills in research methods, quantitative literacy, and critical thinking, and foster respect for the ethical values that undergird the science of psychology.

Most of these program goals are introduced in PSYC UN1001 The Science of Psychology, the recommended first psychology course required for all majors that satisfies the prerequisite for most 2000-level courses. These goals are extended and reinforced in our statistics (1600-level) and research methods (1400-level) research methods courses, as well as in the 2000-level lecture courses and 3000- and 4000-level seminars. Each of the 2000-level lecture courses enables students to study systematically, and in greater depth, one of the content areas introduced in PSYC UN1001 The Science of Psychology. These lecture courses are the principal means by which psychology majors satisfy the distribution requirements, ensuring not only depth but also breadth of coverage across three central areas of psychology: (1) perception and cognition, courses in the 2200s, (2) psychobiology and neuroscience, courses in the 2400s, and (3) social, personality, and abnormal psychology, courses in the 2600s. To complete the major, students take one or more advanced seminars and are encouraged to participate in supervised research courses, where they have the opportunity to explore research questions in depth and further develop their written and oral communication skills.

RESEARCH PARTICIPATION

All qualified students are welcome to apply to join a research lab and contribute to ongoing projects. Students may volunteer to work in a lab, register for supervised individual research (PSYC UN3950 Supervised Individual Research), or participate in the department’s Senior Thesis Research Intensive Program. Information on faculty research is available on the departmental website. Students are advised to read about research laboratories on faculty lab sites and visit the professor’s office hours to discuss opportunities. At the beginning of the fall term, the department also hosts a Lab-Preview event for students to learn about research opportunities for the upcoming semester.

PROGRAM PLANNING

Majors and concentrators in psychology and majors in neuroscience and behavior should begin planning a program of study as early as possible. All necessary forms and information are available in Program Planning Tips. All majors and concentrators in Psychology and majors in Neuroscience and Behavior should complete a Major Requirement Checklist before consulting a program adviser to discuss program plans. At minimum, all students must submit
a Major Requirement Checklist prior to the start of their final semester, so that graduation eligibility can be certified. Once the MRC is submitted, the Undergraduate Curriculum Assistant and the DUS’s will review your curriculum plans and advise if changes need to be made.

**ADVISING**

The Department of Psychology offers a variety of advising resources to provide prospective and current undergraduate majors and concentrators with the information and support needed to successfully plan their programs. An overview of these resources is provided on the Psychology Undergraduate Advising Resources website.

Students are encouraged to consult with Peer, Faculty, and Program Advisers as they plan their course of study in Psychology or Neuroscience and Behavior. Faculty and Peer Advisers are important contacts for general advice on class choices, research opportunities, and post-graduation plans. For definitive answers to questions regarding major requirements and other aspects of your degree, including transfer credit, current and prospective majors should consult their Program Adviser (Director of Undergraduate Studies) or the Undergraduate Curriculum Assistant in the departmental office. Program Adviser assignments and contact information are provided on the departmental website. For additional information about program, faculty, peer, and pre-clinical advising, please see the Psychology Undergraduate Advising Resources website.

**EMAIL COMMUNICATION**

The department maintains an e-mail distribution list with the UNIs of all declared majors and concentrators. Students are held responsible for information sent to their Columbia e-mail addresses. Students should read these messages from the department regularly and carefully. They are intended to keep students informed about deadlines, requirements, events, and opportunities. Prospective majors or concentrators who would like to be added to the e-mail distribution list should contact the Undergraduate Curriculum Assistant (uca@psych.columbia.edu) in the departmental office.

**GUIDE TO COURSE NUMBERS**

Course numbers reflect the structure of the Psychology curriculum:

- The 1000-level comprises introductions to psychology, introductory research methods courses, and statistics. PSYC UN1001 The Science of Psychology is an introductory course with no prerequisites, which can serve as the prerequisite for most of the 2000-level courses. PSYC UN1021 Science of Psychology: Explorations and Applications is an alternative version of PSYC UN1001 The Science of Psychology and fulfills the same requirements. The 1400s contain the research methods laboratory courses, and the 1600s contain statistics courses;

- The 2000-level comprises lecture courses that are introductions to areas within psychology; most require PSYC UN1001 The Science of Psychology as a prerequisite.
- The 3000-level comprises more advanced and specialized undergraduate courses; most are given in a seminar format and require instructor permission.
- The 3900s are the courses that are the courses providing research opportunities for undergraduates.
- The 4000-level comprises advanced seminars suitable for both advanced undergraduates and graduate students, and require instructor permission.

Subcategories within the 2000-, 3000-, and 4000-levels correspond to the three groups in our distribution requirement for undergraduate Psychology majors:

1. Perception and cognition (2200s, 3200s, and 4200s),
2. Psychobiology and neuroscience (2400s, 3400s, and 4400s), and
3. Social, personality, and abnormal psychology (2600s, 3600s, and 4600s).

Additionally, we designate Integrative and Applied courses using x800s (e.g., GU4880) and Advanced Topics in Psychology Research using the x900s (e.g., UN1910, UN1920, UN1930, UN1990, GU4930)

Note that Barnard psychology courses do not follow the same numbering scheme.

**SENIOR THESIS ADVANCED RESEARCH**

Starting in Fall 2021, we will be restructuring the Honors program to become the Psych/Neuro Senior Thesis Advanced Research program. This change is intended to expand the number of Psychology and Neuroscience & Behavior students we can accept into this rigorous training program. (Note that this change goes into effect for all new applicants; policies for students that have already been enrolled in ‘Honors’ will remain as they were prior to this change.)

Students with strong interests in psychological/neuroscientific research are encouraged to apply for admission to the Psychology Department’s Psych/Neuro Senior Thesis Advanced Research program in the fall of their junior year or the equivalent, such that they will be able to participate in the three consecutive semesters (spring - fall - spring) that are required in the program.

Important: Students will need to confirm that a professor has agreed to mentor them before being admitted into the program. Therefore, interested applicants should reach out to potential mentors to find a lab placement before applying. Tip: The best way to ensure finding a mentor is to get involved
in that mentor’s research before asking if they can provide mentoring/supervision on your thesis. Please read through all the information below before submitting your application.

Students interested in engaging in a Psych/Neuro Senior Thesis:

The series includes:

1. Enrolling in a 3-semester Senior Thesis Advanced Research series, which includes a weekly seminar and research commitment, that must occur consecutively in your Junior year spring semester and Senior year (fall & spring), or equivalent [NOTE: this research course includes performing intensive, independent research with a lab mentor, writing a final thesis, and oral presentation of the thesis at the end of the 3rd semester]

2. Enrolling in a one-semester methods course (PSYC UN1920, UN1420/21, UN1450/51, UN1455/56, UN1490/91) in any semester during undergrad (i.e., before or during the series). Students are strongly encouraged to complete this methods training during or before the spring of their junior year (or equivalent).

Students interested in engaging in a Psych/Neuro Senior Thesis and aspiring to be eligible for Academic Honors in Psychology or Neuroscience and Behavior:

All students aspiring to graduate with Academic Honors must enroll in the series described above. However, acceptance to and participation in this program does not automatically result in earning academic honors (see requirements for academic honors below).

Note the students majoring in Neuroscience & Behavior may earn academic honors through the Department of Biological Sciences instead. (Please check their website for more details on that process.)

Honors Requirements:

The Psych/Neuro Senior Thesis Advanced Research program is open to students majoring in Psychology or Neuroscience & Behavior and includes the following:

Senior Thesis Advanced Research Seminar (UN3930): This is a two-hour, 1-4 credit course that meets biweekly, during which students present and discuss their ongoing research. Students in the course also attend the Psychology Department’s Colloquium Series, which features researchers from outside the Department speaking on a variety of topics in Psychology/Neuroscience. The seminar and colloquia always take place on Wednesdays from 4:10 - 6:00 p.m. Students in the Psych/Neuro Senior Thesis Advanced Research program enroll in this course during the spring of their junior year and during the fall and spring of their senior years, or the equivalent.

Senior Thesis Research: Starting in the spring of their junior year and continuing through senior year, all students in the Psych/Neuro Senior Thesis Advanced Research program conduct research under the supervision of a Psychology Department faculty member or a faculty member/principal investigator in a psychology- or neuroscience-focused lab outside the department, including at Barnard College, the Zuckerman Mind Brain Behavior Institute, Columbia Business School, Columbia University Irving Medical Center, and other research institutions in the area.

Research Methods Course: To fulfill this requirement, students should complete a methods course (PSYC UN1920 The How-To’s of Research; PSYC UN1420/21 Research Methods: Human Behavior; PSYC UN1450/51 Research Methods: Social Cognition & Emotion; PSYC UN1455/56 Research Methods: Social & Personality Psychology; PSYC UN1490/91 Research Methods: Cognition & Decision-making).

Senior Thesis: Students in the Psych/Neuro Senior Thesis Advanced Research program complete an original research project under the supervision of their faculty advisor. Senior students present their research orally at the last colloquium of the Spring term, and also submit a written senior thesis.

Eligibility for Academic Honors:

Students participating in the Psych/Neuro Senior Thesis Advanced Research program are also eligible to receive academic honors when they graduate, provided they 1) complete all components of the program, 2) earn a GPA in the major of 3.6 or higher at the time of graduation, and 3) are recommended by the Psychology department faculty. Please note that academic honors can be awarded to no more than 10% of the graduating class each year, so while only students who have participated in this senior thesis research intensive are eligible to receive academic honors, not everyone in the Senior Thesis Advanced Research program will receive academic honors.

How to Apply:

The application is due in mid fall, and decisions are communicated in time for admitted students to register to begin Psych/Neuro Senior Thesis Advanced Research-related classes in the spring.

The application process comprises the following steps:

1. Identifying a lab sponsor: If you think you might be interested in applying, you should start reaching out to labs that you’re interested in well in advance of the application deadline to see if they might have openings for research assistants and if they’d be willing to mentor you in your research. Keep in mind that mentoring a student is a significant commitment on the part of a professor, and so it may be difficult to identify a professor who can provide mentorship. You can find more information/advice on securing research opportunities in labs on our coursework site. Successful applicants typically demonstrate how their own research interests fall in line with those of their proposed sponsor and attest that their faculty member/PI has agreed to sponsor them. Once you have secured a position...
in a lab, you and your mentor will need to fill out the mentor agreement form.

2. Complete the online application: The application will be made available on our psychology department website, and comprises a few relatively short questions asking students to describe their previous coursework and research-related experiences and to write about their intended research interests.

REQUIREMENTS FOR ADMISSION TO GRADUATE PROGRAMS IN PSYCHOLOGY

Most graduate programs in psychology, including those in clinical psychology, require:

An undergraduate course in introductory psychology:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC UN1001</td>
<td>The Science of Psychology</td>
</tr>
</tbody>
</table>

A course in statistics such as one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC UN1610</td>
<td>Introductory Statistics for Behavioral Scientists</td>
</tr>
<tr>
<td>PSYC UN1660</td>
<td>Advanced Statistical Inference</td>
</tr>
<tr>
<td>STAT UN1001</td>
<td>INTRO TO STATISTICAL REASONING</td>
</tr>
<tr>
<td>STAT UN1101</td>
<td>Introduction to Statistics</td>
</tr>
<tr>
<td>STAT UN1201</td>
<td>Calculus-Based Introduction to Statistics</td>
</tr>
</tbody>
</table>

A laboratory course in research methods such as one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC UN1420</td>
<td>RESEARCH METHODS - HUMAN BEHAVIOR</td>
</tr>
<tr>
<td>PSYC UN1450</td>
<td>RESEARCH METHODS - SOCIAL COGNITION # EMOTION</td>
</tr>
<tr>
<td>PSYC UN1455</td>
<td>RESEARCH METHODS: SOCIAL/PERSONALITY</td>
</tr>
<tr>
<td>PSYC UN1490</td>
<td>RESEARCH METHODS - COGNITION/DECISION MAKING</td>
</tr>
</tbody>
</table>

Students should also take a variety of more advanced undergraduate courses and seminars. Students interested in PhD programs in any area of psychology are very strongly encouraged to participate in a research lab and may wish to enroll in PSYC UN3950 Supervised Individual Research. Students are also encouraged to apply for the Senior Thesis Research Intensive program in the early fall of their junior year.

Students interested in clinical psychology should obtain experience working in a community service program in addition to supervised individual research experience. Students should consult the department's pre-clinical adviser, Prof. E'mett McCaskill, and attend the department's pre-clinical advising events for more information. Additional resources to help prepare students for graduate study in psychology, and for careers in clinical psychology, are available on the Department of Psychology’s website. Students may also sign-up for the preclinical advising listserv to receive emails about events and relevant information.

ONLINE INFORMATION

The Department of Psychology website provides access to a wide variety of information for majors and prospective majors. Among other useful resources, students will find syllabi posted for most lecture and lab courses and for many advanced seminars. Students should read the on-line course syllabi prior to registering for psychology courses. For assistance in finding all necessary resources, students should contact the undergraduate curriculum assistant (psych-uncia@columbia.edu).

SCIENCE REQUIREMENT

PSYC UN1001 The Science of Psychology, PSYC UN1021 Science of Psychology: Explorations and Applications, PSYC UN1010 Mind, Brain and Behavior (no longer offered), and any PSYC course in the 2200- or 2400-level may be used to fulfill the science requirement.

2600-level and some other psychology courses, including PSYC BC1001 INTRODUCTION TO PSYCHOLOGY and other Barnard psychology courses, may not be used to fulfill the science requirement.

All 3- and 4-point courses numbered in the 32xx, 34xx, 42xx, and 44xx can partially fulfill the science requirement. With prior departmental approval, some additional courses may also be used to partially fulfill the science requirement. For more detailed information regarding psychology courses that may be applied toward the science requirement, see the Core Curriculum section in this bulletin.

EVENING AND COLUMBIA SUMMER COURSES

The department normally offers at least one lab course in the late afternoon with evening labs. A number of other courses are occasionally offered in late afternoon and evening hours. No more than one quarter of the courses required for the major are normally available in the evening. Working students may find early morning (8:40 a.m.) classes, as well as Summer Session offerings, helpful in completing degree requirements.

Any course offered by the Psychology Department during the Summer Session is applicable toward the same major requirement(s) as the corresponding course of that same number offered during the academic year. For instance, PSYC S1001D The Science of Psychology meets the same major requirements as does PSYC UN1001 The Science of Psychology.

See Academic Regulations—Study Outside Columbia College in this Bulletin for additional information.
PROFESSORS
Dima Amso
Niall Bolger
Lila Davachi
Geraldine Downey
William Fifer (Psychiatry, Pediatrics)
Norma Graham
Carl Hart
Tory Higgins
Donald C. Hood
Nikolaus Kriegeskorte
Janet Metcalfe
Kevin Ochsner (Chair)
Rae Silver (Barnard)
Daphna Shohamy
Herbert Terrace
Nim Tottenham
Sarah M.N. Woolley

ASSOCIATE PROFESSORS
Valerie Purdie-Greenaway
Randy Auerbach (Psychiatry)

ASSISTANT PROFESSORS
Mariam Aly
Christopher Baldassano
Larisa Heiphetz
Bianca Marlin
Sarah Canetta (Psychiatry)

LECTURERS IN DISCIPLINE
Katherine Fox-Glassman
Patricia Lindemann
Caroline Marvin
Alfredo Spagna

ADJUNCT FACULTY
Usha Barahmand
Jennifer Blaze
Helen Brew
Jeffrey Cohen
Irit Felsen
David Friedman
Hannah Hoch
Nora Isuoff
Trenton Jerde
Tina Kao
Svetlana Komissarouk
E’mett McCaskill
Michele Miozzo
Jenna Reinin
Svetlana Rosis
Eric Schoenberg
Ayanna Sorett

GUIDELINES FOR ALL PSYCHOLOGY MAJORS, CONCENTRATORS, AND INTERDEPARTMENTAL MAJORS

Double Majors/Concentrations
All students attempting to complete double majors, double concentrations, or a combination of a major and a concentration should consult the college rules for double counting of courses.

Overlapping Courses
Students cannot receive credit for two courses—one completed at Columbia and one at another institution (including Barnard) —if those courses have largely overlapping content. For example, PSYC UN1001 The Science of Psychology is similar in content to introductory psychology courses offered at many other institutions, including Barnard; only one such course will receive credit. Similarly, PSYC UN2630 Social Psychology and PSYC BC1138 Social Psychology have overlapping content; only one will receive credit. Please refer to the table of Overlapping Courses for a partial list of courses at Columbia and Barnard that are known to overlap.

Grade Requirements for the Major
A grade of C- or higher must be earned and revealed on the transcript in any Columbia or Barnard course, including the first, that is used to satisfy the major requirements. The grade of P is not accepted for credit towards the Psychology major, Psychology concentration, or Neuroscience and Behavior major.

Courses taken on a Pass/D/Fail basis may not be used to satisfy the major or concentration requirements unless the grade of P is uncovered by the Registrar’s deadline. Students may petition to have their P/D/F grades uncovered after the registrar’s deadline for the following three courses only: PSYC UN1001 Science of Psychology, PSYC UN1010 Mind, Brain, & Behavior (no longer offered), and PSYC UN1610 Introductory Statistics for Behavioral Scientists. Courses taken for a P grade may not be used to satisfy the major or concentration requirements, except for P grades earned in the Spring 2020 semester.

Major Requirement Checklist
Prior to the start of their final semester, all seniors must submit a Major Requirement Checklist showing all major courses they have taken and those they plan to take. The Psychology department evaluates each checklist to determine whether or not the course plan completes the major requirements and then notifies the student accordingly. If the student’s course plan changes, or if it does not satisfy the major requirements, a revised checklist must be submitted. Departmental approval of an accurate and up-to-date checklist will help ensure completion of all major requirements on time for graduation.
MAJOR IN PSYCHOLOGY

Please read Guidelines for all Psychology Majors, Concentrators, and Interdepartmental Majors (p. 346) above.

The Psychology Major requirements changed in 2020. Students entering an undergraduate degree program at Columbia in Fall 2020 or later must complete the new major requirements. Students who entered Columbia prior to Fall 2020 may choose to complete either the new major requirements or the old ones.

New Major Requirements (for students entering Columbia Fall 2020 or later)

Students must complete 11 courses in Psychology or an approved cognate discipline. To count toward the major, a course must be taken for 3 or more points. At least 6 of the 11 courses must be in the Columbia Psychology Department.

These 11 courses must include:
1. Introductory Psychology Course
2. One Statistics course
3. One Research Methods course
4. One Group I Course
5. One Group II Course
6. One Group III Course
7. One course meeting the Seminar requirement
8. One course meeting the integrative/applied Special Elective requirement
9. Enough PSYC electives to complete 11 courses

Each course may fulfill only one of these major requirements. See below for details on each of these requirements.

Old Major Requirements (for students entering Columbia prior to Fall 2020)

Students must complete 30 or more points to complete the Psychology Major. Those 30 points must include:
1. Introductory Psychology Course
2. One Statistics course
3. One Research Methods course
4. One Group I Course
5. One Group II Course
6. One Group III Course
7. One course meeting the Seminar requirement
8. One course meeting the integrative/applied Special Elective requirement
9. Enough PSYC electives to complete 30 points

See below for details on each of these requirements. Note that no course may be counted twice in fulfillment of the major requirements.

The Introductory Psychology Course
• PSYC UN1001 The Science of Psychology

A Statistics Course
Select one of the following:
• PSYC UN1610 Introductory Statistics for Behavioral Scientists
• PSYC UN1660 Advanced Statistical Inference
• STAT UN1001 INTRO TO STATISTICAL REASONING
• STAT UN1101 Introduction to Statistics (formerly STAT W1111)
• STAT UN1201 Calculus-Based Introduction to Statistics (formerly STAT W1211)

A Research Methods Course
Select one of the following:
• PSYC UN1420 RESEARCH METHODS - HUMAN BEHAVIOR
• PSYC UN1450 RESEARCH METHODS - SOCIAL COGNITION # EMOTION
• PSYC UN1455 RESEARCH METHODS: SOCIAL/PERSONALITY
• PSYC UN1490 RESEARCH METHODS - COGNITION/DECISION MAKING

Majors are strongly advised to complete the statistics and research methods requirements, in that order, by the fall term of their junior year. Students are advised to verify the specific prerequisites for research methods courses, most of which require prior completion of a statistics course.

Distribution Requirement
One course (3 points or more) must be taken from each of the following three groups (in addition to the introductory, statistics, and research methods courses described above):
• Group I—Perception and cognition: courses numbered in the 2200s, 3200s, or 4200s.
• Group II—Psychobiology and neuroscience: courses numbered in the 2400s, 3400s, or 4400s. Also PSYC UN1010 Mind, Brain and Behavior (no longer offered).
• Group III—Social, personality, and abnormal: courses numbered in the 2600s, 3600s, or 4600s.

As of Fall 2019, Research Methods courses no longer fulfill any of the Group distribution requirements.

Seminar Requirement
In addition, students must complete one course meeting the Seminar requirement. A seminar course must be taken for 3 or more points.

All courses offered through the Columbia Psychology Department and numbered in the 3200s, 3400s, 3600s, 4200s,
4400s, and 4600s count toward the seminar requirement. Not all Barnard courses taught in a seminar format fulfill this requirement—see Barnard Courses, below, for more information.

Seminars are usually taken in the junior and senior year as a culmination of the major program, but any students who have met the prerequisites and gain the instructor’s permission to join the course may enroll. Enrollment in all seminar courses requires the instructor’s permission; students are advised to contact instructors at least one month prior to registration to request seminar admission. Note that honors, senior thesis research intensive, and supervised individual research courses (PSYC UN3910 Honors Seminar, PSYC UN3920 Honors Research, PSYC UN3930 Senior Thesis Research Intensive Seminar, and PSYC UN3950 Supervised Individual Research) will not meet the seminar requirement.

For those completing the new major requirements, no course may be counted twice in fulfillment of the above major requirements: separate courses must be taken to fulfill the seminar requirement and each distribution group.

Special Elective (for the New Major requirements)
For students entering Columbia in Fall 2020 or later, one course must be taken to fulfill the integrative/applied Special Elective.

The Special Elective encompasses a wide range of courses: those that cut across and connect different sub-disciplines within psychology; those that integrate psychology with other disciplines; those that apply psychology to real-world problems; those that dig deeper into advanced statistics and methods topics; and those that offer hands-on experience with psychology research.

The following courses are pre-approved to count toward the Special Elective requirement. If you would like to count a course that does not appear on this list, please contact your Program Advisor prior to enrolling.

- PSYC UN3950 SUPERVISED INDIVIDUAL RESEARCH or PSYC UN3920 Honors Research (taken for 3 or 4 points) or PSYC UN3930 Senior Thesis Research Intensive Seminar
- PSYC UN1910 Research Ethics in Psychology
- PSYC UN1930 Behavioral Data Science
- PSYC UN1990 Global Behavioral Science
- PSYC UN3615 Children at Risk (Lecture)
- PSYC GU4612 Frontiers of Justice
- PSYC GU4930 Fundamentals of Human Brain Imaging: from theory to practice
- STAT UN2102 Applied Statistical Computing
- STAT GU4243 APPLIED DATA SCIENCE
- PSYC BC1088 THE SCIENCE OF LIVING WELL
- PSYC BC2175 Addictive Behaviors (overlaps with PSYC 2460 Drugs & Behavior)
- PSYC BC3155 Psychology and Law
- PSYC BC3465 Field Work # Research Seminar: Toddler Center
- PSYC BC3466 FIELD WORK # RESEARCH SEMINAR: TODDLER CENTER
- PSYC BC3473 Clinical Field Practicum
- PHIL V2400 Psychology and Philosophy of Human Experience
- NSBV BC3387 Topics in Neuroethics

Electives
Additional psychology courses ("electives") must be taken for a total of 30 points (or 11 courses for the new major requirements).

Once a student has met the specific requirements of the major, any other psychology or approved cognate courses they take to complete the 30-point (or, for students entering Columbia in Fall 2020 or later, the 11-course) minimum constitute electives.

As described below, these may include a limited number of research courses, transfer courses, and Barnard psychology courses not approved for specific requirements.

No course may be counted twice in fulfillment of the above major requirements.

Research Credits
No more than 4 points of PSYC UN3950 Supervised Individual Research or PSYC UN3920 Honors Research may be taken in any one term, and no more than 8 points total of research and field work courses (PSYC UN3950 SUPERVISED INDIVIDUAL RESEARCH, PSYC BC3466 FIELD WORK # RESEARCH SEMINAR: TODDLER CENTER, PSYC BC3473 Clinical Field Practicum, PSYC BC3592 Senior Research Seminar and PSYC BC3599 Individual Projects) may be applied toward the major. See below for further restrictions on applying Barnard courses toward the psychology major. Under the new 11-course major, research courses must be taken for 3 or 4 points in order to count toward the major; a maximum of 2 such courses may be applied toward the major. (See below for further restrictions on applying Barnard courses toward the psychology major).

Barnard Courses
For students completing the 30-point major: No more than 9 credits in Barnard courses (or a combination of transfer and Barnard credits) may be applied toward the major.

For students completing the 11-course major: A maximum of 5 courses counted toward the major may be from outside Columbia ("outside Columbia" includes both Barnard and transfer courses).

The table of approved Barnard psychology courses indicates which courses have been approved for specific requirements of the psychology major. Courses not on the approved list may
only be applied toward a specific requirement with prior written approval from one of the directors of undergraduate studies. Psychology courses not on the approved list for a specific requirement may be applied as elective credit toward the 30 points for the major (or towards the 11 courses needed for the new major requirements).

As of Fall 2019, Barnard Lab courses do not count towards the Research Methods requirement of the Psychology Major or Concentration.

Non-Psychology Courses
For students completing the 11-course major: Some courses offered outside of Psychology departments can count toward major requirements (e.g., courses taken in the Statistics Department; cognate courses offered through Philosophy, Business, Law, etc.). A maximum of 2 such non-PSYC courses may be applied toward the major. Courses offered in the Barnard Psychology or Neuroscience departments do not count toward this limit.

Transfer Credits
For students completing the 30-point major: No more than 9 transfer credits (or a combination of transfer and Barnard credits) will be accepted toward the psychology major.

For students completing the 11-course major: No more than 3 transfer courses can be applied toward the psychology major. Any transfer courses thus applied count toward the limit of 5 courses from outside Columbia.

Approval of transfer credits on a student’s Entrance Credit Report toward general requirements for the B.A. degree does not grant approval of these credits toward the psychology major. Students must apply for written approval of transfer credit towards the major by submitting the Major Requirement Substitution Form. This form, along with additional information about transfer credits can be found on the Transfer Credit page of our website. To be approved for the major, a course taken at another institution should be substantially similar to one offered by the department, the grade received must be a B- or better, and the course must have been taken within the past 8 years. As noted above, if two courses overlap in content, only one will be applied towards the major. With the exception of approved Barnard courses, students should consult with one of the directors of undergraduate studies before registering for psychology courses offered outside the department.

Students who have completed an introductory psychology course at another institution prior to declaring a psychology major should submit a Major Requirement Substitution Form to verify whether or not this course meets departmental standards for major transfer credit. If transfer credit toward the major is not approved, the student must enroll in PSYC UN1001 The Science of Psychology or PSYC UN1021 Science of Psychology: Explorations and Applications or PSYC BC1001 INTRODUCTION TO PSYCHOLOGY to complete this major requirement.

AP Psychology Transfer Credit
As of Fall 2019, the Psychology Department will accept a score of 5 on the AP Psychology exam, or a score of 7 on the Higher Level IB Psychology exam, to meet the Science of Psychology requirement. The AP/IB Psychology exam does not count as a course or toward a student’s points total for their program; students placing out of the Science of Psychology requirement in this way will need to take an additional course to fulfill the required number of courses or points for their program.

The College Board Advanced Placement (AP) statistics scores do not satisfy the statistics requirement. Students who have completed AP statistics may opt to take a more advanced statistics course to fulfill this requirement with the approval of one of the directors of undergraduate studies.

MAJOR IN NEUROSCIENCE AND BEHAVIOR
Please read Guidelines for all Psychology Majors, Concentrators, and Interdepartmental Majors (p. 346) above.

The department cosponsors an interdepartmental major in neuroscience and behavior with the Department of Biological Sciences. For assistance in planning the psychology portion of the neuroscience and behavior major, refer to the Program Planning Tips website and use the appropriate major requirement checklist.

No course may be counted twice in fulfillment of the biology or psychology requirements described below. Many graduate programs in neuroscience also require one year of calculus, one year of physics, and chemistry through organic.

Required Courses
In addition to one year of college general chemistry, ten courses are required to complete the major—five from the Department of Biological Sciences and five from the Department of Psychology. For the definitive list of biology requirements, see the Department of Biological Sciences website.

Required Chemistry Courses
One year of college chemistry is required prior to taking Introductory Biology.

Required Biology Courses
1. BIOL UN2005 INTRO BIO I: BIOCHEM,GEN,MOLEC
2. BIOL UN2006 INTRO BIO II:CELL BIO,DEV/PHY
3. BIOL UN3004 Neurobiology I: Cellular and Molecular Neurobiology
4. BIOL UN3005 Neurobiology II: Development & Systems
5. One additional 3000- or 4000-level biology course from a list approved by the biology adviser to the program.

- BIOL UN3006 PHYSIOLOGY
- BIOL UN3019 Brain Evolution
- BIOL UN3022 Developmental Biology
- BIOL UN3025 Neurogenetics
- BIOL UN3031 GENETICS
- BIOL UN3799 Molecular Biology of Cancer
- BIOL UN3041 Cell Biology
- BIOL UN3073 Cellular and Molecular Immunology
- BIOL UN3193 Stem Cell Biology and Applications
- BIOC UN3300 Biochemistry
- BIOL GU4034 Seminar on the Global Threat of Antimicrobial Resistance
- BIOL GU4035 Seminar in Epigenetics
- BIOL GU4075 Biology at Physical Extremes
- BIOL GU4080 ANCIENT AND MODERN RNA WORLDS
- BIOL GU4082 Theoretical Foundations and Applications of Biophysical Methods
- BIOL GU4260 Proteomics Laboratory
- BIOL GU4290 Biological Microscopy
- BIOL GU4300 Drugs and Disease
- BIOC GU4305 Seminar in Biotechnology
- BIOC GU4323 Biophysical Chemistry I
- BIOC GU4324 Biophysical Chemistry II
- BCHM GU4501 BIOCHEM I-STRUCTURE/METABOLISM
- BIOC GU4512 Molecular Biology
- BIOL GU4510 Genomics of Gene Regulation
- BIOL GU4560 Evolution in the age of genomics

3. One statistics or research methods course from the following:

- PSYC UN1420 RESEARCH METHODS - HUMAN BEHAVIOR
- PSYC UN1450 RESEARCH METHODS - SOCIAL COGNITION & EMOTION
- PSYC UN1455 RESEARCH METHODS: SOCIAL/PERSONALITY
- PSYC UN1490 RESEARCH METHODS - COGNITION/DECISION MAKING
- PSYC UN1610 Introductory Statistics for Behavioral Scientists
- PSYC UN1660 Advanced Statistical Inference
- STAT UN1101 Introduction to Statistics
- STAT UN1201 Calculus-Based Introduction to Statistics
- Please note, STAT UN1001 does not count towards the Neuroscience & Behavior major.

4. One additional 2000- or 3000-level psychology lecture course from a list approved by the psychology adviser to the program:

- PSYC S2210Q Cognition: Basic Processes
- PSYC UN2215 Cognition and the Brain or PSYC S2215D Cognition and the Brain
- PSYC UN2220 Cognition: Memory and Stress
- PSYC W2225 Attention and Perception
- PSYC W2230 Perception and Sensory Processes
- PSYC UN2235 THINKING AND DECISION MAKING or PSYC S2235Q Thinking and Decision Making
- PSYC UN2250 Evolution of Cognition
- PSYC UN2280 Developmental Psychology
- PSYC UN2420 Animal Behavior
- PSYC UN2430 COGNITIVE NEUROSCIENCE
- PSYC UN2440 Language and the Brain
- PSYC UN2450 Behavioral Neuroscience or PSYC S2450Q Behavioral Neuroscience
- PSYC UN2460 Drugs and Behavior
- PSYC UN2470 Fundamentals of Human Neuropsychology
- PSYC UN2480 The Developing Brain
- PSYC UN2481 Developmental Cognitive Neuroscience
- PSYC S2490D Evolutionary Psychology
- PSYC UN2620 Abnormal Behavior or PSYC S2620Q Abnormal Behavior
- PSYC UN2690 Frontiers of Justice

*Please make careful note of this list, as courses not listed here will not count towards the P4 requirement.
5. One advanced psychology seminar from a list approved by the psychology adviser to the program:

- PSYC W3265 Auditory Perception (Seminar)
- PSYC UN3270 Computational Approaches to Human Vision (Seminar)
- PSYC UN3280 Seminar In Infant Development or PSYC S3280D Seminar in Infant Development
- PSYC S3285D The Psychology of Disaster Preparedness
- PSYC UN3290 Self: A Cognitive Exploration (Seminar)
- PSYC GU4202 Theories of Change in Human Development
- PSYC GU4222 The Cognitive Neuroscience of Aging (Seminar)
- PSYC GU4223 Memory and Executive Function Thru the Lifespan
- PSYC GU4224 Consciousness and Cognitive Science
- PSYC GU4225 CONSCIOUSNESS # ATTENTION
- PSYC GU4229 Attention and Perception(Seminar)
- PSYC GU4232 Production and Perception of Language
- PSYC GU4235 Special Topics in Vision (Seminar)
- PSYC GU4236 Machine Intelligence
- PSYC GU4239 Cognitive neuroscience of narrative and film
- PSYC GU4242 Evolution of Language (Seminar)
- PSYC GU4244 Language and Mind
- PSYC GU4250 Evolution of Intelligence, Cognition, and Language (Seminar)
- PSYC GU4265 Auditory Perception
- PSYC GU4270 COGNITIVE PROCESSES
- PSYC G4272 Advanced Seminar in Language Development
- PSYC GU4280 Core Knowledge (Seminar)
- PSYC GU4281 The Psychology of Curiosity
- PSYC GU4282 The Neurobiology and Psychology of Play
- PSYC G4285 Multidisciplinary Approaches to Human Decision Making (Seminar)
- PSYC GU4287 Decision Architecture
- PSYC GU4289 THE GAMES PEOPLE PLAY:PSYCH OF STRAT DEC
- PSYC S3410Q Seminar in Emotion
- PSYC W3435 Neurobiology of Reproductive Behavior (Seminar)
- PSYC UN3445 The Brain & Memory
- PSYC UN3450 Evolution of Intelligence, Animal Communication, # Language/ PSYC G4450 The Evolution of Intelligence & Consciousness (Seminar)
- PSYC UN3481 Critical Periods in Brain Development and Behavior
- PSYC W3484 Life Span Development: Theory and Methods
- PSYC UN3496 Neuroscience and Society or PSYC S3496Q Neuroscience and Society
- PSYC W4415 Methods and Issues in Cognitive Neuroscience (Seminar)
- PSYC GU4420 Animal Cognition (Seminar)
- PSYC GU4430 Learning and the Brain (Seminar)
- PSYC GU4435 Non-Mnemonc Functions of Memory Systems
- PSYC GU4440 TOPICS-NEUROBIOLOGY & BEH or PSYC S4440Q Topics in Neurobiology and Behavior
- PSYC G4460 Cognitive Neuroscience and the Media (Seminar)
- PSYC GU4470 Psychology & Neuropsychology of Language (Seminar)
- PSYC GU4480 Psychobiology of Infant Development (Seminar)
- PSYC GU4482 Neural Plasticity
- PSYC G4485 Affective Neuroscience (Seminar)
- PSYC GU4486 Developmental and Affective Neuroscience (Seminar)
- PSYC GU4490 Inheritance (Seminar)
- PSYC G4492 Psychobiology of Stress
- PSYC GU4493 Stress and the Brain
- PSYC G4495 Ethics, Genetics, and the Brain
- PSYC GU4496 Behavioral Neuroimmunology
- PSYC GU4498 Behavioral Epigenetics
- PSYC S3610D The Psychology of Stereotyping & Prejudice
- PSYC UN3615 Children at Risk (Lecture)(Seminar)
- PSYC UN3620 Seminar in Developmental Psychopathology
- PSYC UN3623 Topics in Clinical Psychology
- PSYC UN3624 Adolescent Mental Health: Causes, Correlates, Consequences
- PSYC UN3625 Clinical Neuropsychology (Seminar) or PSYC S3625D Clinical Neuropsychology Seminar
- PSYC UN3655 Field Experimentation Methods for Social Psychology
- PSYC UN3661 Happiness Studies Seminar
- PSYC UN3671 Motivation Science
- PSYC UN3680 Social Cognitive Neuroscience (Seminar)/ PSYC GU4685 Social Cognitive Neuroscience (Seminar)
- PSYC UN3691 Interpersonal Cognition Seminar: Close Relationships, Identity, and Memory
- PSYC UN3693 Stress in an Interpersonal Context
• PSYC GU4612 Frontiers of Justice
• PSYC GU4615 PSYCH OF CULTURE & DIVERS
• PSYC GU4627 Seminar in Anxiety, Obsessive-Compulsive, and Related Disorders
• PSYC GU4630 Advanced Seminar in Current Personality Theory and Research (Seminar)
• PSYC GU4635 The Unconscious Mind (Seminar)
• PSYC GU4645 Culture, Motivation, and Prosocial Behavior
• PSYC GU4646 Socio-Ecological Psychology
• PSYC GU4670 Theories in Social and Personality Psychology (Seminar)
• PSYC GU4672 Moral Psychology
• PSYC GU4673 Political Psychology
• PSYC GU4682 FAQs about Life: Applications of Psychological Research to Everyday Experiences
• PSYC GU4685 Social Cognitive Neuroscience (Seminar)
• PSYC GU4686 Barriers and Levers for Behavior Change
• PSYC GU4690 Social Factors and Psychopathology (Seminar)
• PSYC GU4695 Psychology of Close Relationships (Seminar)
• PSYC GU4880 In Service of Equity: Examining Developmental Science through the Lens of Policy

Note: Students wishing to use a seminar course not listed above to meet the P5 seminar requirement must contact their psychology adviser before enrolling to request permission for an exception. Generally speaking, permission for such exceptions is only granted when there is a compelling case related to the student’s research or area of study. Students requesting permission to use a course not on this list must ensure that their substantive coursework in the seminar (generally their final paper) is on a neuroscience-focused topic.

Transfer Credit for Psychology Courses Taken Elsewhere

Students should consult a psychology adviser before registering for psychology courses offered outside the department. With the adviser's approval, one, and only one, course from another institution, including Barnard, may be applied toward the psychology portion of the Neuroscience and Behavior major. Students who wish to obtain credit for a course taken at Barnard or at another institution should complete the Major Requirement Substitution Form. To be approved for the major, the course should be substantially similar to one offered by this department and approved for this major, and the grade received must be a C- or better if from Barnard, or B- or better if from another institution. As of Fall 2019, the Psychology department accepts a score of 5 on the AP Psychology exam, or a score of 7 on the Higher Level IB Psychology exam, to meet the PSYC UN1001 The Science of Psychology requirement. The AP/IB Psychology exam does not count as a course or toward a student’s points total for their program; students placing out of the Science of Psychology requirement in this way will need to take an additional course -- approved by the Psychology adviser -- to fulfill the required number of courses for their program.

Advanced Placement (AP) statistics scores will not satisfy the statistics/research methods requirement. Students who have completed AP Statistics are encouraged to enroll in a 1400-level research methods course to fulfill this requirement.

Exceptions to Biology Requirements

Any exceptions must be approved in advance by a biology adviser and students must receive an email notification of that approval. Students may substitute Barnard College courses only with prior permission from a Biology Department adviser.

CONCENTRATION IN PSYCHOLOGY

Please read Guidelines for all Psychology Majors, Concentrators, and Interdepartmental Majors (p. 346) above.

The Psychology Concentration requirements changed in 2020. Students entering an undergraduate degree program at Columbia in Fall 2020 or later must complete the new concentration requirements. Students who entered Columbia prior to Fall 2020 may choose to complete either the new concentration requirements or the old ones.

New Concentration Requirements (for students entering Columbia Fall 2020 or later)

Students must complete 7 courses in Psychology or an approved cognate discipline. To count toward the concentration, a course must be taken for 3 or more points. The following requirements must be met:

1. PSYC UN1001 The Science of Psychology or PSYC UN1021 Science of Psychology: Explorations and Applications
2. A Statistics or Research Methods course (PSYC UN1610 Introductory Statistics for Behavioral Scientists, STAT UN1001 INTRO TO STATISTICAL REASONING, STAT UN1101 Introduction to Statistics, STAT UN1201 Calculus-Based Introduction to Statistics, or a Research Methods course in the PSYC 14xx’s)
3. Either 3 courses in one group, or 1 course in each of the 3 groups: Group I - Cognition & Perception; Group II - Psychobiology & Neuroscience; Group III - Social, Personality, & Abnormal
4. Additional elective courses in psychology to complete the 7-course requirement
Restrictions on research credits, Barnard credits, non-psychology courses, and transfer credits are modified from those of the psychology major as follows:

- No more than 2 transfer courses from other institutions can be applied toward the concentration.
- No more than 3 total courses from outside Columbia (Barnard and/or transfer) can be applied to the concentration.
- A maximum of 1 non-PSYC course can count toward concentration requirements (e.g., courses taken in the Statistics Department; cognate courses offered through Philosophy, Business, Law, etc.).
- No more than 1 semester of PSYC UN3950 SUPERVISED INDIVIDUAL RESEARCH or other supervised research course (taken for 3 or 4 points) can count towards the concentration.

Except as noted above, other regulations outlined in the Psychology Major section regarding grades, transfer credits, and overlapping courses also apply toward the Psychology Concentration.

Old Concentration Requirements (for students entering Columbia prior to Fall 2020)

A concentration in psychology requires a minimum of 18 points, including PSYC UN1001 The Science of Psychology or PSYC UN1021 Science of Psychology: Explorations and Applications and courses in at least two of the three groups listed under “Distribution Requirement” for the psychology major.

Restrictions on research credits, Barnard credits, and transfer credits are modified from those of the psychology major as follows:

1. Only 4 points total may be applied toward the concentration from research or field-work courses, including: PSYC UN3950 Supervised Individual Research, PSYC UN3920 Honors Research PSYC BC3466 FIELD WORK # RESEARCH SEMINAR: TODDLER CENTER, PSYC BC3473 Clinical Field Practicum, PSYC BC3592 Senior Research Seminar, and PSYC BC3599 Individual Projects;
2. Only 5 points from Barnard (including PSYC BC1001 INTRODUCTION TO PSYCHOLOGY) may be applied toward the concentration.
3. Only 5 points total (including any Barnard points) from approved psychology courses taken at other institutions may be applied toward the concentration.

As of Fall 2019, Barnard Lab courses do not count towards the Research Methods requirement of the Psychology Major or Concentration.

Except as noted above, other regulations outlined in the Psychology Major section regarding grades, transfer credits, and overlapping courses also apply toward the Psychology Concentration.
Some of society’s most pressing problems—gun violence, the opioid epidemic, climate change, obesity, mass incarceration, health and healthcare inequalities across the globe—concern public health. These complex problems and the emergence of novel challenges in the future demand a nimble application of public health knowledge and principles, leveraging the foundations of a liberal arts education in order to achieve solutions. Viable solutions will require cross-sector collaborations and systems-level, policy, and environmental action that will affect the social, political, and economic determinants of health. Necessary for leaders to solve these types of societal problems is a broad set of fundamental set of skills. Critical thinking, analytical, problem-solving, and communications skills are necessary to contextualize these problems historically, philosophically, socially, and culturally, and to conceptualize dynamic needs and evidence-based solutions to key parts of these problems.

Public health is integral to a civil society. The many determinants of population health—from the environmental, social, political, and economic factors that shape rates of disease in human populations to the biological factors that ultimately constitute the corporeal mechanisms for disease in individuals—are complex and intertwined. Moreover, how population health is understood, protected, and promoted, is replete with controversies and tensions that are ripe for intellectual interrogation. As such, population health and its connection to civil society is an inherently interdisciplinary area of inquiry. The health and well-being of human populations brings together numerous disciplines, including but not limited to anthropology, architecture, biology, chemistry, demography, ecology, economics, history, international development, mathematics, political science, psychology, sociology, and statistics.

The special concentration in public health is intended to be a secondary emphasis of study that complements the disciplinary specialization of a major or concentration. The goal for the undergraduate special concentration in public health is to foster critical understanding and analysis of the multiple ways in which population health both shapes and is shaped by civil society, complementing the foundation created by the Core curriculum. At the heart of the special concentration in public health are historical and contemporary issues in population health in the context of an increasingly connected, global, urban, aging, and inequitable world. The key themes of inequality, globalization, urbanization, development, the environment, and aging serve as the framework for the constituent courses in the special concentration in public health.

**FACULTY**

James Colgrove
Linda Fried
Dana March Palmer
Terry McGovern
Rachel Moresky
Ana Navas-Acien
Anne Paxton
Marni Sommer

**SPECIAL CONCENTRATION IN PUBLIC HEALTH**

The special concentration, comprising a minimum of 25 points of coursework, consists of five required courses (16 points) and at least three electives (minimum of 9 points) that provide additional depth and dimension to the underlying themes of the concentration.

**Core Public Health Course Requirements**

The required courses create a rich intellectual foundation in public health, providing students with a multifaceted view of the social production of health, as well as an integrated exposure to and understanding of the core disciplines of public health. Together, they serve to illuminate and allow students to analyze critically the social production of health and its connections with and implications for civil society. These courses have no prerequisites, and can be taken individually, as the student’s schedule permits.

**Required Courses for the Special Concentration in Public Health**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUBH UN3100</td>
<td>FUNDAMENTALS OF GLOBAL HEALTH</td>
</tr>
<tr>
<td>PUBH UN3200</td>
<td>INTRODUCTION TO PUBLIC HEALTH</td>
</tr>
<tr>
<td>PUBH GU4100</td>
<td>(Y)OUR LONGER LIFE</td>
</tr>
<tr>
<td>PUBH GU4200</td>
<td>Environment, Health, and Justice: Concepts and Practice</td>
</tr>
<tr>
<td>HSPB UN2950</td>
<td>Social History of U.S. Public Health</td>
</tr>
</tbody>
</table>

**Elective Courses**

Elective courses (minimum of 9 points) in the Special Concentration in Public Health will allow students to draw upon courses offered in a wide range of departments and centers.
across the University. Proposed electives must be approved by
the Director of Undergraduate Studies.

Examples of departments with relevant elective courses include:
African American Studies; Comparative Literature and Society;
The Center for Ethnicity and Race; Earth and Environmental
Sciences; Economics; Ecology, Evolution, and Environmental
Biology; History; Human Rights; History of South East Asia;
Political Science; Psychology; Sociology; Statistics; Sustainable
Development; Women’s Studies; Urban Studies. Elective
courses are designed to allow students to add dimension and
depth to their interests in public health, along the main themes
of the Special Concentration. Electives may also allow students
to amplify the connections to public health in their major area
of study. Conversely, students may choose to take electives that
allow them to gain more breadth in concepts to which they have
been exposed in the set of required public health courses.

Elective Examples (At least 3)

### Population Health, Inequality, and Society

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFAS GU4035</td>
<td>Criminal Justice and the Carceral State in the 20th Century United States</td>
</tr>
<tr>
<td>CPLS GU4320</td>
<td>Marginalization in Medicine: A Practical Understanding of the Social Implications of Race</td>
</tr>
<tr>
<td>CPLS GU4220</td>
<td>Narrative, Health, and Social Justice</td>
</tr>
<tr>
<td>CSER UN3445</td>
<td>City, Environment, and Vulnerability</td>
</tr>
<tr>
<td>CSER UN3905</td>
<td>Asian Americans and the Psychology of Race</td>
</tr>
<tr>
<td>CSER UN3924</td>
<td>Latin American and Latina/o Social Movements</td>
</tr>
<tr>
<td>CSER UN3942</td>
<td>Race and Racisms</td>
</tr>
<tr>
<td>CSER GU4340</td>
<td>Visionary Medicine: Racial Justice, Health and Speculative Fictions</td>
</tr>
<tr>
<td>CSER GU4482</td>
<td>INDIGENOUS PEOPLES:MOVEMENT/RTS</td>
</tr>
<tr>
<td>CSER GU4483</td>
<td>SUBCITIZENSHIP</td>
</tr>
<tr>
<td>ECON GU4438</td>
<td>Economics of Race in the U.S.</td>
</tr>
<tr>
<td>EEEB GU4321</td>
<td>Human Nature: DNA, Race &amp; Identity</td>
</tr>
<tr>
<td>HIST UN2523</td>
<td>History of Health Inequality in the Modern United States</td>
</tr>
<tr>
<td>HIST UN3437</td>
<td>Poisoned Worlds: Corporate Behavior and Public Health</td>
</tr>
<tr>
<td>HIST UN3911</td>
<td>Medicine and Western Civilization</td>
</tr>
<tr>
<td>HIST W4985</td>
<td>Citizenship, Race, Gender and the Politics of Exclusion</td>
</tr>
<tr>
<td>HIST GU4584</td>
<td>Drug Policy and Race</td>
</tr>
<tr>
<td>HIST GU4588</td>
<td>Substance Abuse Politics in African–American History</td>
</tr>
<tr>
<td>HRTS BC3850</td>
<td>Human Rights and Public Health</td>
</tr>
<tr>
<td>HRTS GU4215</td>
<td>NGOs # THE HUMAN RIGHTS MOVEMENT</td>
</tr>
<tr>
<td>HRTS GU4230</td>
<td>Refugees, Forced Migration, and Displacement</td>
</tr>
<tr>
<td>HRTS GU4500</td>
<td>SOCIO-ECONOMIC RIGHTS</td>
</tr>
<tr>
<td>HRTS GU4700</td>
<td>Ethical Dilemmas in Healthcare: A Human Rights Approach</td>
</tr>
<tr>
<td>HRTS GU4880</td>
<td>Human Rights in the United States</td>
</tr>
<tr>
<td>POLS UN3220</td>
<td>Logic of Collective Choice</td>
</tr>
<tr>
<td>POLS UN3245</td>
<td>Race and Ethnicity In American Politics</td>
</tr>
<tr>
<td>POLS UN3595</td>
<td>Social Protection Around the World</td>
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<tr>
<td>SOCI V2230</td>
<td>Food and the Social Order</td>
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<tr>
<td>SOCI W2420</td>
<td>Course SOCI W2420 Not Found</td>
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<tr>
<td>SOCI UN3010</td>
<td>Methods for Social Research</td>
</tr>
<tr>
<td>SOCI UN3213</td>
<td>Sociology of African American Life</td>
</tr>
<tr>
<td>SOCI W3214</td>
<td>Immigration and the Transformation of American Society</td>
</tr>
<tr>
<td>SOCI UN3261</td>
<td>Sexuality and Society</td>
</tr>
<tr>
<td>SOCI UN3265</td>
<td>MINORITIES/ETHNIC GP-AMER LIFE</td>
</tr>
<tr>
<td>SOCI UN3323</td>
<td>Race, Gender, Sexuality, and Punishment</td>
</tr>
<tr>
<td>SOCI W3643</td>
<td>Stratification and Inequality</td>
</tr>
<tr>
<td>SOCI W3913</td>
<td>Race and Ethnicity in a Global World</td>
</tr>
<tr>
<td>SOCI UN3914</td>
<td>Seminar in Inequality, Poverty, and Mobility</td>
</tr>
<tr>
<td>WMST GU4506</td>
<td>Gender Justice</td>
</tr>
<tr>
<td>SOCI UN3915</td>
<td>Stigma and Discrimination</td>
</tr>
<tr>
<td>SOCI UN3920</td>
<td>Social Networks</td>
</tr>
<tr>
<td>SOCI UN3931</td>
<td>Sociology of the Body</td>
</tr>
<tr>
<td>SOCI W3923</td>
<td>Adolescent Society</td>
</tr>
<tr>
<td>SOCI UN3960</td>
<td>Law, Science, and Society</td>
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</tbody>
</table>

### Globalization, Urbanization, Development, and the Environment

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>EEEB GU4127</td>
<td>Disease Ecology</td>
</tr>
<tr>
<td>EEEB GU4111</td>
<td>Ecosystem Ecology and Global Change</td>
</tr>
<tr>
<td>EEEB GU4260</td>
<td>Food, Ecology, and Globalization</td>
</tr>
<tr>
<td>EESC UN2330</td>
<td>SCIENCE FOR SUSTAINABLE DEVPT</td>
</tr>
<tr>
<td>EESC W4403</td>
<td>Managing and adapting to climate change</td>
</tr>
<tr>
<td>EESC GU4600</td>
<td>Earth Resources and Sustainable Development</td>
</tr>
<tr>
<td>FSPH UN1100</td>
<td>FOOD, PUBLIC HEALTH &amp; PUBLIC POLICY</td>
</tr>
<tr>
<td>HIST GU4811</td>
<td>Encounters with Nature: The History of Environment and Health in South Asia and Beyond</td>
</tr>
<tr>
<td>HRTS GU4915</td>
<td>Human Rights and Urban Public Space</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
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<tr>
<td>HSEA GU4844</td>
<td>GLOBAL HONG KONG</td>
</tr>
<tr>
<td>SDEV UN2300</td>
<td>Challenges of Sustainable Development</td>
</tr>
<tr>
<td>SDEV UN3330</td>
<td>Ecological and Social Systems for Sustainable Development</td>
</tr>
<tr>
<td>SDEV UN3350</td>
<td>Course SDEV UN3350 Not Found (Environmental Policy and Governance for Sustainability)</td>
</tr>
<tr>
<td>SDEV UN3355</td>
<td>Climate Change and Law</td>
</tr>
<tr>
<td>SDEV UN3360</td>
<td>Disasters and Development</td>
</tr>
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<td>SDEV UN3400</td>
<td>Human Populations and Sustainable Development</td>
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<tr>
<td>SDEV UN3410</td>
<td>Cities # Sustainability</td>
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<tr>
<td>SOCI UN3324</td>
<td>Global Urbanism</td>
</tr>
<tr>
<td>URBS UN3450</td>
<td>Neighborhood and Community Development</td>
</tr>
<tr>
<td>URBS UN3993</td>
<td>Senior Seminar: The Built Environment</td>
</tr>
<tr>
<td>URBS UN3565</td>
<td>Cities in Developing Countries: Problems and Prospects</td>
</tr>
<tr>
<td>URBS UN3315</td>
<td>Metropolitics of Race and Place</td>
</tr>
<tr>
<td>URBS UN3550</td>
<td>Community Building and Economic Development</td>
</tr>
<tr>
<td>URBS UN3565</td>
<td>Cities in Developing Countries: Problems and Prospects</td>
</tr>
</tbody>
</table>

**Individuals, Bodies, and Population Health**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>FSEB UN1020</td>
<td>Food and the Body</td>
</tr>
<tr>
<td>PSYC UN2460</td>
<td>Drugs and Behavior</td>
</tr>
<tr>
<td>PSYC UN2480</td>
<td>The Developing Brain (The Developing Brain)</td>
</tr>
<tr>
<td>PSYC UN2650</td>
<td>Introduction to Cultural Psychology</td>
</tr>
</tbody>
</table>

**Quantitative Foundations**

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>STAT UN1001</td>
<td>INTRO TO STATISTICAL REASONING</td>
</tr>
<tr>
<td>STAT UN1101</td>
<td>Introduction to Statistics</td>
</tr>
</tbody>
</table>
REGIONAL STUDIES
EAST CENTRAL EUROPEAN CENTER

http://ece.columbia.edu/

Director: Prof. Alan Timberlake, 1228 International Affairs Building; 212-854-8488; at2205@columbia.edu

Related Departments: Anthropology, Economics, History, Political Science, Slavic Languages and Literatures, and Sociology.

Language Requirement: Two years or demonstrated reading knowledge of one of the following languages: Czech, Hungarian, Polish, Romanian, Russian, Bosnian/Croatian/Serbian, or Ukrainian.

The regional studies major is designed to give undergraduates the general mastery of a discipline and at the same time permit them to do specialized work in the history and cultures of a particular geographic area through the associated institutes of the Faculty of Arts and Sciences. It is an interdisciplinary major in which students divide their work between the associated institute and an appropriate academic department. Students plan their programs with the consultant of the associated institute they have selected.

MAJOR IN REGIONAL STUDIES

The major in regional studies requires a minimum of 36 points, of which 18 must be credited by the associated institute, i.e. East Central European Center, and an additional 18 must be in one of the College departments designated as relevant by the institute. Six points of seminar work approved by the institute are required of all majors and are included in the total of 36 points.

Language Study

Courses taken to satisfy the institute’s language requirement are not counted toward the 18 institute points.
The Religion Department's curriculum is designed to engage students in critical, comparative, and interdisciplinary exploration of religious life. The faculty's research and teaching build upon the shared understandings that religion continues to be a central and influential component of human life, society, and politics—and that, furthermore, religious transmission and authority are constantly being shaped in dynamic interactions with other religious traditions, societies, and cultures. Courses and seminars in religion teach students how to analyze and investigate religious texts, histories, beliefs, bodies, and communities using a variety of disciplinary and methodological approaches.

Students are also encouraged to conduct their studies by exploring one or more zone of inquiry. These are focus areas that integrated in the departmental curriculum and complement the tradition-based approaches. They provide broad and alternative frames that aim to identify problems, chart trajectories cutting across different field specialties, and set parameters for theoretical and methodological questions. The zones are: Time (History, Modernity), Transmission (Tradition, Memory, Institutions), Space (Place, Geography, Virtual Space), Body (Materiality, Mind, Bio-ethics), and Media (Transportation, Information, Communication).

Majors and concentrators in religion gain both a foundation in the study of religious traditions in historical contexts and zones of inquiry, all grounded in theoretical and methodological debates that shape academic and public discussions about religion. Lecture courses, seminars, and colloquia are designed to balance students’ growing understanding of particular religious topics, dynamics, and traditions with intensive engagement with critical theoretical, political, and philosophical debates. Students are encouraged to pursue a course of study in which they develop breadth and depth, as well as the tools and expertise to pose (and even answer) necessary questions about religious phenomena of the past or present.

As the study of religion is truly interdisciplinary, students find their work in the department enhanced by their coursework in the College's Core curriculum and in related departments. Many religion courses are listed in the College's Global Core requirement, and numerous religious works are central texts in Literature Humanities and Contemporary Civilization. Majors and concentrators are required to take courses outside of religion in related fields to expand their vision of approaches to religion.

In addition, the University's wide offerings in the languages of various religious traditions (including Arabic, Chinese, Greek, Hebrew, Japanese, Persian, Latin, Sanskrit, and Tibetan) augment many students' abilities to conduct research in religion. Students likewise are actively encouraged to explore the world-renowned archival resources within Columbia's libraries (including the Rare Book and Manuscript Room, the Burke Library at Union Theological Seminary, the C.V. Starr East Asian Library), and to explore and investigate the equally wide range of living religious communities represented in New York’s global neighborhoods.

Prospective majors should first arrange to meet with the Director of Undergraduate Studies. All students are then allocated a faculty adviser, and must submit a copy of the Declaration of Major form to the director of undergraduate studies. After agreeing upon a plan for the major or concentration, students must obtain final approval and confirmation from the Director of Undergraduate Studies.

**GUIDELINES FOR ALL RELIGION MAJORS AND CONCENTRATORS**

**Major in Religion**

All majors are encouraged to pursue both depth and breadth by constructing a program of study in consultation with the Director of Undergraduate Studies. The program should include courses in a variety of religious traditions. Students who write a senior thesis may include a term of individually supervised research as one of the courses for their major.

**Courses**

For the major the following 9 courses are required:

- 1 gateway course (1000 level)
- 2 introductory courses (2000 level)
- 2 intermediate courses (3000 level)
- 2 seminars (4000 level)
- 1 additional course at any level
- RELI UN3199 Theory(formerly Juniors Colloquium)

**Concentration in Religion**

To be planned in consultation with the Director of Undergraduate Studies and with a member of the faculty in an area in which the student has a particular interest. The program should include some study in a breadth of religious traditions.

**Courses**

For the concentration the following 7 courses are required:

- 1 gateway course (1000 level)
- 2 introductory courses (2000 level)
- 2 intermediate courses (3000 level)
- 1 seminar (4000 level)
- RELI UN3199 Theory
**DEPARTMENTAL HONORS**

Students who write a senior thesis and maintain a GPA of 3.66 or above in the major may be considered for departmental honors. Writing a senior thesis qualifies a student for consideration for departmental honors but does not assure it. Normally no more than 10% of graduating majors receive departmental honors in a given academic year.

**COURSE NUMBERING**

Courses are numbered by level and type:
- 1000-level: Gateway lecture course
- 2000-level: Introductory and “traditions” lectures
- 3000-level: Intermediate lecture
- 4000-level: Seminar

and Zone:
- x100-199: Theory (RELI UN3199)
- x200-299: Time (zone)
- x300-399: Transmission (zone)
- x400-499: Space (zone)
- x500-599: Body (zone)
- x600-699: Media (zone)

**PROFESSORS**

Gil Anidjar
Courtney Bender (DUS)
Beth Berkowitz (Barnard)
Elizabeth Castelli (Barnard)
Matthew Engelke
Katherine Pratt Ewing
Bernard Faure
Najam Haider (Barnard)
John Hawley (Barnard)
Rachel McDermott (Barnard)
David (Max) Moerman (Barnard)
Josef Sorett (chair)
Mark Taylor

**ASSOCIATE PROFESSORS**

Michael Como
Yannik Thiem

**ASSISTANT PROFESSORS**

Clémence Boulouque
Tiffany Hale (Barnard)
Gale Kenny (Barnard)
Timothy Vasko (Barnard)
Zhaohua Yang

**ADJUNCT FACULTY**

Obery Hendricks
David Kittay
Derek Mancini-Lander

Hussein Rashid
Thomas Yarnall

**POSTDOCTORAL FELLOWS**

Mohamed Ait Amer Meziane (IRCPL)
Daniel Herskowitz (IIJS)

**PROFESSORS EMERITI**

Wayne Proudfoot
George Rupp
Robert Somerville
Robert Thurman
Chun-fang Yu

**GUIDELINES FOR ALL RELIGION MAJORS AND CONCENTRATORS**

**Senior Thesis**

Many students choose to write a senior honors thesis in order to pursue an advanced topic in greater depth, or to work on a particular area of interest with one of their professors. This opportunity is available to all students who major in the department, regardless of GPA, and serves for many as their undergraduate capstone experience.

Students who write a senior thesis may apply for up to 3 points of directed reading with their thesis adviser. The deadline for application for the honors thesis in religion is the last day of exams in the student’s junior spring term, and must be submitted for approval to the director of undergraduate studies. The application must include both a prospectus for the paper and a letter of support by the faculty member who has agreed to direct the thesis. The prospectus (5-7 pages) should detail a research program and the central question(s) to be pursued in the paper, preparation for the thesis, and a timeline. The primary adviser of the thesis must be a member of the Religion Department faculty.

Many students find that identifying a thesis project earlier in the junior year, in conjunction with the Juniors colloquium, presents an opportunity to develop a proposal in advance of deadlines for summer research funding from various sources, including the undergraduate schools and the Institute for Religion Culture and Public Life.

**Grading**

Courses in which a grade of D has been received do not count toward the major or concentration requirements.

**MAJOR IN RELIGION**

All majors are encouraged to pursue both depth and breadth by constructing a program of study in consultation with the Director of Undergraduate Studies and with a member of the faculty in an area in which they have particular interest. The program should include courses in a variety of religious traditions. Students
who write a senior thesis may include a term of individually supervised research as one of the courses for their major.

For the major the following 9 courses are required:

- 1 gateway course (1000 level)
- 2 introductory courses (2000 level)
- 2 intermediate courses (3000 level)
- 2 seminars (4000 level)
- 1 additional course at any level
- RELI UN3199 Theory (formerly Juniors Colloquium)

**CONCENTRATION IN RELIGION**

To be planned in consultation with the Director of Undergraduate Studies and with a member of the faculty in an area in which the student has a particular interest. The program should include some study in a breadth of religious traditions.

For the concentration the following 7 courses are required:

- 1 gateway course (1000 level)
- 2 introductory courses (2000 level)
- 2 intermediate courses (3000 level)
- 1 seminar (4000 level)
- RELI UN3199 Theory
SLAVIC LANGUAGES

Departmental Office: 708 Hamilton; 212-854-3941
http://www.columbia.edu/cu/slavic/

Director of Undergraduate Studies:
Prof. Jessica Merrill, 715 Hamilton Hall; 2120854-3941; jem2159@columbia.edu

Russian Language Program Director:
Prof. Alla Smyslova, 708 Hamilton; 212-854-8155; as2157@columbia.edu

The Department of Slavic Languages and Literatures is devoted to the study of the cultures, literatures, and languages of Russia and other Slavic peoples and lands. We approach our study and teaching of these cultures with an eye to their specificity and attention to their interaction with other cultures, in history and in the contemporary global context. We focus not only on the rich literary tradition, but also on the film, theater, politics, art, music, media, religious thought, critical theory, and intellectual history of Russians and other Slavs. Our approach is interdisciplinary.

Students who take our courses have different interests. Many of our courses are taught in English with readings in English and have no prerequisites. As a consequence, our majors and concentrators are joined by students from other literature departments, by students of history and political science who have a particular interest in the Slavic region, and by others who are drawn to the subject matter for a variety of intellectual and practical reasons.

We provide instruction in Russian at all levels (beginning through very advanced), with a special course for heritage speakers. To improve the proficiency of Russian learners and speakers, we offer a number of literature and culture courses in which texts are read in the original and discussion is conducted in Russian. We offer three levels of other Slavic languages: Bosnian-Croatian-Serbian, Czech, Polish, and Ukrainian (with additional courses in culture in English). All language courses in the Slavic Department develop the four basic language skills (speaking, listening, reading, and writing) and cultural understanding.

Our department prides itself on the intellectual vitality of its program and on the sense of community among students and faculty. As they explore Russian and Slavic languages, literatures, and cultures, students develop not only their specific knowledge and cultural understanding, but also the capacity for critical thought, skills in analyzing literary and other texts, and the ability to express their ideas orally and in writing. Our graduates have used their knowledge and skills in different ways: graduate school, Fulbright and other fellowships, journalism, publishing, law school, NGO work, public health, government work, and politics. Our faculty is proud of its students and graduates.

MAJORS AND CONCENTRATIONS

Guided by the director of undergraduate studies and other faculty members, students majoring in Slavic create a program that suits their intellectual interests and academic goals. They choose from three tracks: Russian Language and Culture (for those with a strong interest in mastering the language), Russian Literature and Culture (for those who want to focus on literary and cultural studies), and Slavic Studies (a flexible regional studies major for those interested in one or more Slavic cultures). In each major, students may count related courses in other departments among their electives.

In addition to its majors, the department offers five concentrations. Three are analogous to the major tracks (Russian Language and Culture, Russian Literature and Culture, and Slavic Studies). There is also a concentration in Russian Literature that does not require language study and another concentration in Slavic Cultures that allows students to focus on a Slavic language and culture other than Russian.

Motivated seniors are encouraged but not required to write a senior thesis. Those who write a thesis enroll in the Senior Seminar in the fall term and work individually with a thesis adviser. Students have written on a wide range of topics in literature, culture, media, and politics.

SLAVIC CULTURE AT COLUMBIA OUTSIDE OF THE CLASSROOM

All interested students are welcome to take part in departmental activities, such as conversation hours, Slavic student organizations, the department's various film series (Russian, East Central European, Central Asian, and Ukrainian), and the country’s first undergraduate journal of Eastern European and Eurasian Culture, The Birch. The Slavic Department has close ties to the Harriman Institute and the East Central European Center, which sponsor lectures, symposia, performances, and conferences.

STUDY AND RESEARCH ABROAD

The department encourages its students to enrich their cultural knowledge and develop their language skills by spending a semester or summer studying in Russia, the Czech Republic, Poland, Ukraine, or the countries of the former Yugoslavia. The department helps students find the program that suits their needs and interests. Undergraduates may apply to the Harriman Institute for modest scholarships for research during winter/spring breaks or the summer.

ADVANCED/NEWL PLACEMENT

A score of 5 on the AP/NEWL Russian exam satisfies the foreign language requirement. Upon successful completion of a 3-point 3000 level (or higher) course at Columbia, the Department of Slavic Languages will award 3 points of AP credit, provided the grade in the course is a B or better. Courses taught in English may not be used to earn AP credit. No credit
or placement is given for the SAT II Subject test. If you wish to continue with Russian at Columbia, you should take the departmental placement test and speak with the Russian program director prior to registration to ensure proper placement.

**PROFESSORS**

Valentina Izmirlieva  
Liza Knapp (Chair)  
Mark Lipovetsky (Leiderman)  
Irina Reyfman

**ASSISTANT PROFESSORS**

Adam Leeds  
Jessica Merrill  
Ofer Dynes

**TERM ASSISTANT PROFESSORS**

Erica Drennan (Barnard)

**SENIOR LECTURERS**

Alla Smyslova  
Christopher Harwood

**LECTURERS**

Aleksandar Boskovic  
Christopher Caes  
Tatiana Mikhailova  
Yuri Shevchuk

**ON LEAVE**

Valentina Izmirlieva (Fall 2021)  
Irina Reyfman (Fall 2021, Spring 2022)

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**GUIDELINES FOR ALL SLAVIC MAJORS AND CONCENTRATORS**

**Senior Thesis**

A senior thesis is not required for any Slavic major. Students who wish to undertake a thesis project should confer with the director of undergraduate studies during the registration period in April of their junior year and register to take RUSS UN3595 Senior Seminar in the fall term of their senior year. Students can opt to expand the thesis into a two-semester project register for RUSS UN3998 Supervised Individual Research, with their thesis adviser, in the spring term of their senior year. Senior Seminar may satisfy one elective requirement; the optional second semester of thesis work adds one course to the 15 required for the major.

**Grading**

Courses in which a grade of D has been received do not count toward major or concentration requirements.

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**MAJOR IN RUSSIAN LANGUAGE AND CULTURE**

This major is intended for students who aim to attain maximal proficiency in the Russian language. Intensive language training is complemented by an array of elective courses in Russian culture that allow students to achieve critical understanding of contemporary Russian society and of Russian-speaking communities around the world. Since this major emphasizes language acquisition, it is not appropriate for native Russian speakers.

The program of study consists of 15 courses, distributed as follows:

Eight semesters of coursework in Russian language (from first- through fourth-year Russian) or the equivalent

Select two of the following surveys; at least one of these should be a Russian literature survey (RUSS UN3220 or RUSS UN3221):

- RUSS UN3220 Literature and Empire: The Reign of the Novel in Russia (19th Century) [In English]
- RUSS UN3221 LIT # REVOLUTION (20TH C LIT)
- RUSS UN3223 Magical Mystery Tour: The Legacy of Old Rus'
- SLCL UN3001 Slavic Cultures
- RUSS GU4006 Russian Religious Thought, Praxis, and Literature
- CLRS GU4022 Russia and Asia: Orientalism, Eurasianism, Internationalism
- RUSS GU4107 RUSS LIT/CULTR-NEW MILLENNIUM

Five additional courses in Russian culture, history, literature, art, film, music, or in linguistics, chosen in consultation with the director of undergraduate studies. At least one of the selected courses should be taught in Russian.

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**MAJOR IN RUSSIAN LITERATURE AND CULTURE**

The goal of this major is to make students conversant with a variety of Russian literary, historical and theoretical texts in the original, and to facilitate a critical understanding of Russian literature, culture, and society. It is addressed to students who would like to complement serious literary studies with intensive language training, and is especially suitable for those who intend to pursue an academic career in the Slavic field.
The program of study consists of 15 courses, distributed as follows:

Six semesters of coursework in Russian language (from first-through third-year Russian) or the equivalent.

Select three of the following surveys; two of which must be in Russian literature (RUSS UN3220 and RUSS UN3221):

- RUSS UN3220: Literature and Empire: The Reign of the Novel in Russia (19th Century) [In English]
- RUSS UN3221: LIT # REVOLUTION (20TH C LIT)
- RUSS UN3223: Magical Mystery Tour: The Legacy of Old Rus'
- SLCL UN3001: Slavic Cultures
- RUSS GU4006: Russian Religious Thought, Praxis, and Literature
- CLRS GU4022: Russia and Asia: Orientalism, Eurasianism, Internationalism
- RUSS GU4107: RUSS LIT/CULTR-NEW MILLENNIUM

Six additional courses in Russian literature, culture, history, film, art, music, or in advanced Russian language, chosen in consultation with the director of undergraduate studies. At least one course should be taught in Russian.

Students considering graduate study in Russian literature are strongly advised to complete four years of language training.

MAJOR IN SLAVIC STUDIES

This flexible major provides opportunities for interdisciplinary studies within the Slavic field. Students are encouraged to choose one target language (Bosnian-Croatian-Serbian, Czech, Polish, Russian, or Ukrainian), though there are possibilities for studying a second Slavic language as well. Generally, the major has one disciplinary focus in history, political science, economics, religion, anthropology, sociology, art, film, or music.

In addition, this program allows students to focus on a particular Slavic (non-Russian) literature and culture or to do comparative studies of several Slavic literatures, including Russian. Students should plan their program with the director of undergraduate studies as early as possible, since course availability varies from year to year.

The program of study consists of 15 courses, distributed as follows:

Six semesters of coursework in one Slavic language (from first-through third-year Russian, Bosnian-Croatian-Serbian, Czech, Polish, or Ukrainian) or the equivalent.

Two relevant courses in Russian, East/Central European or Eurasian history.

Two relevant literature or culture courses in Slavic, preferably related to the target language.

Five additional courses with Slavic content in history, political science, economics, literature, religion, anthropology, sociology, art, film, or music, chosen in consultation with the director of undergraduate studies. Two of these electives may be language courses for students who opt to include a second Slavic language in their program.

Altogether students should complete four courses in a single discipline, including, if appropriate, the required history or literature/culture courses.

CONCENTRATION IN RUSSIAN LANGUAGE AND CULTURE

This program is intended for students who aim to attain proficiency in the Russian language. Intensive language training is complemented by an array of elective courses in Russian culture that allow students to achieve critical understanding of contemporary Russian society and of Russian-speaking communities around the world. Since this concentration emphasizes language acquisition, it is not appropriate for native Russian speakers.

The program of study consists of 10 courses, distributed as follows:

Six semesters of coursework in Russian language (from first-through third-year Russian) or the equivalent.

Select one of the following surveys:

- SLCL UN3001: Slavic Cultures
- RUSS UN3220: Literature and Empire: The Reign of the Novel in Russia (19th Century) [In English]
- RUSS UN3221: LIT # REVOLUTION (20TH C LIT)
- RUSS UN3223: Magical Mystery Tour: The Legacy of Old Rus'
- CLRS GU4022: Russia and Asia: Orientalism, Eurasianism, Internationalism

Three additional courses in Russian culture, history, literature, art, film, music, or in linguistics, chosen in consultation with the director of undergraduate studies; at least one of the selected courses should be taught in Russian.

CONCENTRATION IN SLAVIC (NON-RUSSIAN) LANGUAGE AND CULTURE

This program is intended for students who aim to attain proficiency in a Slavic language other than Russian. Intensive language training is complemented by an array of elective courses in Slavic cultures that allow students to achieve critical understanding of the communities that are shaped by the Slavic language of their choice. Since this concentration emphasizes
language acquisition, it is not appropriate for native speakers of the target language.

The program of study consists of 10 courses, distributed as follows:

Six semesters of coursework in one Slavic language (from first- through third-year Bosnian-Croatian-Serbian, Czech, Polish, or Ukrainian) or the equivalent.

Four additional courses in Slavic literature, culture or history, or in linguistics, chosen in consultation with the director of undergraduate studies; at least two should be directly related to the target language of study.

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**CONCENTRATION IN RUSSIAN LITERATURE AND CULTURE**

The goal of this concentration is to make students conversant with a variety of Russian literary texts and cultural artifacts that facilitate a critical understanding of Russian culture. It is addressed to students who would like to combine language training with study of the Russian literary tradition.

The program of study consists of 10 courses, distributed as follows:

Four semesters of coursework in Russian language (first- and second-year Russian) or the equivalent.

Select two of the following surveys; one of which must be a literature survey (RUSS UN3220 or RUSS UN3221)

- RUSS UN3220: Literature and Empire: The Reign of the Novel in Russia (19th Century) [In English]
- RUSS UN3221: LIT # REVOLUTION (20TH C LIT)
- RUSS UN3223: Magical Mystery Tour: The Legacy of Old Rus'
- RUSS GU4006: Russian Religious Thought, Praxis, and Literature
- SLCL UN3001: Slavic Cultures
- CLRS GU4022: Russia and Asia: Orientalism, Eurasianism, Internationalism
- RUSS GU4107: RUSS LIT/CULTR-NEW MILLENNIUM

Four additional courses in Russian literature, culture, and history, chosen in consultation with the director of undergraduate studies.

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**CONCENTRATION IN RUSSIAN LITERATURE**

This concentration is addressed to serious literature students who would like to pursue Russian literature but have no training in Russian. It allows students to explore the Russian literary tradition, while perfecting their critical skills and their techniques of close reading in a variety of challenging courses in translation.

The program of study consists of 8 courses, with no language requirements, distributed as follows:

Select two of the following Russian literature surveys (in translation):

- RUSS UN3220: Literature and Empire: The Reign of the Novel in Russia (19th Century) [In English]
- RUSS UN3221: LIT # REVOLUTION (20TH C LIT)

Six additional courses, focused primarily on Russian literature, culture, and history, though courses in other Slavic literatures are also acceptable if approved by the director of undergraduate studies.

Relevant literature courses from other departments may count toward the concentration only if approved by the director of undergraduate studies.

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**CONCENTRATION IN SLAVIC STUDIES**

This flexible concentration provides opportunities for interdisciplinary studies within the Slavic field. Students are encouraged to choose one target language (Bosnian-Croatian-Serbian, Czech, Polish, Russian, or Ukrainian), and one disciplinary focus in history, political science, economics, religion, anthropology, sociology, art, film, or music. In addition, this program allows students to focus on a particular Slavic (non-Russian) literature and culture, or to do comparative studies of several Slavic literatures, including Russian.

The program of study consists of 10 courses, distributed as follows:

Four semesters of coursework in one Slavic language (first- and second-year Bosnian-Croatian-Serbian, Czech, Polish, Russian, or Ukrainian) or the equivalent.

One relevant courses in Russian, East/Central European or Eurasian history.

One relevant literature or culture course in Slavic, preferably related to the target language.

Four additional courses with Slavic content in history, political science, economics, literature, religion, anthropology, sociology, art, film, or music, chosen in consultation with the director of undergraduate studies.

Altogether students should complete three courses in a single discipline, including, if appropriate, the required history or literature/culture courses.
**Sociology**

**Department Office:** 501 Knox Hall; 212-853-1909  
http://www.sociology.columbia.edu

**Director of Undergraduate Studies:** Teresa Sharpe, 501 Knox; ts2785@columbia.edu

**Director of Academic Administration and Finance:** Teresa Aguayo, 501C Knox Hall; 212-854-9890; ta2015@columbia.edu

**Student Program Coordinator:** Winston Gordon, 501 Knox; wg2339@columbia.edu

Sociology is the study of society. In examining patterns of association, sociologists explore the interactions of people, communities, and organizations. In this sense, sociology is not the study of people; it is the study of the relationships among people. This study includes the associations between people and the products of human interaction, such as organizations, technologies, economies, cities, culture, media, and religion. In the kinds of questions it asks, sociology is a deeply humanist discipline and sociologists demand the analytic rigor of scientific investigation.

In training students in our department, we encourage them to ask big questions and we work to give them the tools to provide answers. These tools might mean ethnographic observation, pouring through historical archives, looking at census data, analyzing social networks, or interviewing people from various walks of life.

As a bridging discipline that seeks the scientific exploration of questions that matter to human communities, such as inequality and social injustice, sociology addresses many of the same areas of life as our neighboring social science disciplines. Yet we often approach these areas quite differently. For example, problems of economic and political life are a central concern to sociologists. Rather than explore these as independent or particular features of society, we seek to embed them within the complex whole of the social world. Students will find the Department of Sociology to be a broad, demanding department that provides its students with the conceptual and methodological tools to make sense of the opportunities and social problems of the global communities in which we live.

**Grading**

A letter grade of C- or better is needed in all Sociology courses in order to satisfy the program requirements.

**Departmental Honors**

In order to register for the *Senior Seminar*, students must have completed SOCI UN3010 Methods for Social Research and have had their research project accepted by the faculty member teaching the Senior Seminar. Submissions of research projects are due by May 1 preceding the seminar. Normally no more than 10% of graduating majors receive departmental honors in a given academic year.

**Professors**

Peter Bearman  
Courtney Bender (Religion)  
Elizabeth Bernstein (Barnard)  
Yinon Cohen  
Jonathan R. Cole  
Thomas A. DiPrete  
Gil Eyal  
Todd Gitlin (Journalism)  
Bruce Kogut (Business)  
Jennifer Lee  
Bruce Link (School of Public Health)  
Debra C. Minkoff (Barnard)  
Mignon Moore (Chair, Barnard)  
Aaron Pallas (Teachers College)  
Jonathan Rieder (Barnard)  
Saskia Sassen  
Seymour Spilerman  
David Stark (also School of International and Public Affairs)  
Julien Teitler (Social Work)  
Diane Vaughan  
Sudhir Alladi Venkatesh  
Amy Stuart Wells (Teachers College)  
Bruce Western (Chair)  
Andreas Wimmer

**Associate Professors**

Mark Hatzenbuehler (Sociomedical)  
Jennifer Lena (Teachers College)  
Desmond Upton Patton (School of Social Work)  
Adam Reich (Director of Graduate Studies)  
Emmanuelle Saada (French and Romance Philology)  
Josh Whitford

**Assistant Professors**

Maria Abascal  
Debbie Becher (Barnard)  
Christel Kesler (Barnard)  
Yao Lu  
Angela M. Simms (Barnard)  
Gerard Torrats-Espinosa  
Dan Wang (Business School)  
Amy Yuan Zhou (Barnard)
LECTURERS
Denise Milstein
Teresa Sharpe
Kristin Murphy

ON LEAVE
Prof. Stark (2018 - 2019)
Prof. Whitford (2019 - 2020)

MAJOR IN SOCIOLOGY
The major in sociology requires a minimum of 30-31 points as follows:

**Core Courses**
The following three courses are required (10 points):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOCI UN1000</td>
<td>THE SOCIAL WORLD</td>
</tr>
<tr>
<td>SOCI UN3000</td>
<td>Social Theory</td>
</tr>
<tr>
<td>SOCI UN3010</td>
<td>Methods for Social Research</td>
</tr>
</tbody>
</table>

**Elective Courses**
Select six courses (20-21 points) in the Department of Sociology, to include at least three lecture courses (2000- or 3000-level, 3 points each) and at least two seminars (4 points each). The sixth course could be either a lecture course (to a total of 30 points) or a seminar (to a total of 31 points). For students taking the two-semester Senior Seminar, the sixth course must be a seminar. Some examples of electives include:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOCI UN3020</td>
<td>Social Statistics</td>
</tr>
<tr>
<td>SOCI UN3213</td>
<td>Sociology of African American Life</td>
</tr>
<tr>
<td>SOCI UN3235</td>
<td>Social Movements</td>
</tr>
<tr>
<td>SOCI UN3490</td>
<td>Mistake, Misconduct, Disaster</td>
</tr>
<tr>
<td>SOCI UN3285</td>
<td>Israeli Society and the Israeli-Palestinian Conflict</td>
</tr>
<tr>
<td>SOCI UN3264</td>
<td>The Changing American Family</td>
</tr>
<tr>
<td>SOCI UN3900</td>
<td>Societal Adaptations to Terrorism</td>
</tr>
<tr>
<td>SOCI UN3914</td>
<td>Seminar in Inequality, Poverty, and Mobility</td>
</tr>
<tr>
<td>SOCI UN3915</td>
<td>Stigma and Discrimination</td>
</tr>
<tr>
<td>SOCI UN3931</td>
<td>Sociology of the Body</td>
</tr>
<tr>
<td>SOCI UN3974</td>
<td>Sociology of Schools, Teaching and Learning</td>
</tr>
<tr>
<td>SOCI UN3985</td>
<td>Queer Practice</td>
</tr>
<tr>
<td>SOCI UN3995</td>
<td>Senior Seminar</td>
</tr>
<tr>
<td>SOCI UN3996</td>
<td>Senior Seminar</td>
</tr>
</tbody>
</table>

* These may include the two-semester Senior Seminar (SOCI UN3995-SOCI UN3996).

CONCENTRATION IN SOCIOLOGY
The concentration in sociology requires a minimum of 20 points as follows:

**Core Courses**
The following three courses are required (10 points):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOCI UN1000</td>
<td>THE SOCIAL WORLD</td>
</tr>
</tbody>
</table>
The Statistics Department Office:
1005 School of Social Work (1255 Amsterdam Avenue); 212-851-2132
http://www.stat.columbia.edu

Statistics Major and Concentration Advising:
Ronald Neath, 612 Watson; 212-853-1398; rcn2112@columbia.edu
Gabriel Young, 610 Watson; 212-853-1395; giv2107@columbia.edu (rcn2112@columbia.edu)

Data Science Major Advising:
Computer Science: Augustin Chaintreau, 610 CEPSR; 212-939-7082; augustin@cs.columbia.edu (cannon@cs.columbia.edu)
Statistics: Ronald Neath, 612 Watson; 212-853-1398; rcn2112@columbia.edu
Statistics: Gabriel Young, 610 Watson; 212-853-1395; giv2107@columbia.edu (rcn2112@columbia.edu)

Economics - Statistics Major Advising:
Economics: Susan Elmes, 1006 IAB; 212-854-9124; se5@columbia.edu
Statistics: Ronald Neath, 612 Watson; 212-853-1398; rcn2112@columbia.edu
Statistics: Gabriel Young, 610 Watson; 212-853-1395; giv2107@columbia.edu (rcn2112@columbia.edu)

Mathematics - Statistics Major Advising:
Mathematics: Julien Dubedat, 601 Mathematics; 212-854-8806; jd2653@columbia.edu
Statistics: Ronald Neath, 612 Watson; 212-853-1398; rcn2112@columbia.edu
Statistics: Gabriel Young, 610 Watson; 212-853-1395; giv2107@columbia.edu (rcn2112@columbia.edu)

Political Science - Statistic Major Advising:
Political Science: Alessandra Casella, 1030 IAB; 212-854-8059; acasella@columbia.edu (rvs3@columbia.edu)
Statistics: Ronald Neath, 612 Watson; 212-853-1398; rcn2112@columbia.edu
Statistics: Gabriel Young, 610 Watson; 212-853-1395; giv2107@columbia.edu (rcn2112@columbia.edu)

Department Administrator:
Dood Kalicharan, 1003 School of Social Work; 212-851-2130; dk@stat.columbia.edu

The Department offers several introductory courses. Students interested in statistical concepts, who plan on consuming, but not creating statistics, should take STAT UN1001 INTRO TO STATISTICAL REASONING. The course is designed for students who have taken a pre-calculus course, and the focus is on general principles. It is suitable for students seeking to satisfy the Barnard quantitative reasoning requirements. Students seeking an introduction to applied statistics should take STAT UN1101 Introduction to Statistics. The course is designed for students who have some mathematical maturity, but who may not have taken a course in calculus, and the focus is on the elements of data analysis. It is recommended for pre-med students, and students contemplating the concentration in statistics. Students seeking a foundation for further study of probability theory and statistical theory and methods should take STAT UN1201 Calculus-Based Introduction to Statistics. The course is designed for students who have taken a semester of college calculus or the equivalent, and the focus is on preparation for a mathematical study of probability and statistics. It is recommended for students seeking to complete the prerequisite for econometrics, and for students contemplating the major in statistics. Students seeking a one-semester calculus-based survey of probability theory and statistical theory and methods should take STAT GU4001 INTRODUCTION TO PROBABILITY AND STATISTICS. This course is designed for students who have taken calculus, and is meant as a terminal course. It provides a somewhat abridged version of the more demanding sequence STAT GU4203 PROBABILITY THEORY and STAT GU4204 Statistical Inference. While some mathematically mature students take the more demanding sequence as an introduction to the field, it is generally recommended that students prepare for the sequence by taking STAT UN1201 Calculus-Based Introduction to Statistics.

The Department offers the Major in Statistics, the Concentration in Statistics, and interdisciplinary majors with Computer Science, Economics, Mathematics, and Political Science. The concentration is suitable for students preparing for work or study where substantial skills in data analysis are valued and may be taken without mathematical prerequisites. The concentration consists of a sequence of six courses in applied statistics, but students may substitute statistics electives numbered 4203 or above with permission of the concentration advisors. The major consists of mathematical and computational prerequisites, an introductory course, and five core courses in probability theory and theoretical and applied statistics together with three electives. The training in the undergraduate major is comparable to a masters degree in statistics.

Students may wish to consult the following guidelines when undertaking course planning. It is advisable to take STAT UN1101 Introduction to Statistics and STAT UN2102 Applied Statistical Computing before taking any of the more advanced concentration courses. STAT UN2103 APPLIED LINEAR REG ANALYSIS, STAT UN2104 Applied Categorical Data Analysis, STAT UN3105 Applied Statistical Methods, and STAT UN3106 Applied Data Mining. It is advisable to take STAT UN1201 Calculus-Based Introduction to Statistics, STAT GU4203 PROBABILITY THEORY,
STAT GU4204 Statistical Inference, and STAT GU4205 Linear Regression Models in sequence. Courses in stochastic analysis should be preceded by STAT GU4203 PROBABILITY THEORY, and for many students, it is advisable to take STAT GU4207 Elementary Stochastic Processes before embarking on STAT GU4262 Stochastic Processes for Finance, STAT GU4264 STOCHASTIC PROCESSES-APPLIC, or STAT GU4265 Stochastic Methods in Finance. Most of the statistics courses numbered from 4221 to 4234 are best preceded by STAT GU4205 Linear Regression Models. The data science courses STAT GU4206 Statistical Computing and Introduction to Data Science, STAT GU4241 Statistical Machine Learning, and STAT GU4242 Advanced Machine Learning should be taken in sequence.

Advanced Placement

The Department offers three points of advanced credit for a score of 5 on the AP statistics exam. Students who are required to take an introductory statistics course for their major should check with their major advisor to determine whether this credit provides exemption from their requirement.

Departmental Honors

Students are considered for department honors on the basis of GPA and the comprehensiveness and difficulty of their course work in the Department. The Department is generally permitted to nominate one tenth of graduating students for departmental honors.

Undergraduate Research in Statistics and the Summer Internship

Matriculated students who will be undergraduates at Columbia College, Barnard College, the School of General Studies, or the School of Engineering and Applied Sciences may apply to the Department's summer internship program. The internship provides summer housing and a stipend. Students work with Statistics Department faculty mentors. Applicants should send a brief statement of interest and a copy of their transcript to Ms. Dood Kalicharan in the Statistics Department office by the end of March to be considered. If summer project descriptions are posted on the Department's website, please indicate in the statement of interest which project is of interest. Students seeking research opportunities with Statistics Department faculty during the academic year are advised to be entrepreneurial and proactive: identify congenial faculty whose research is appealing, request an opportunity to meet, and provide some indication of previous course work when asking for a project.

Professors

David Blei (with Computer Science)
Richard R. Davis
Victor H. de la Peña
Andrew Gelman (with Political Science)
Ioannis Karatzas (with Mathematics)
Jingchen Liu
Shaw-Hwa Lo
David Madigan
Marcel Nutz (with Mathematics)
Liam Paninski
Philip Protter
Daniel Rabinowitz
Bodhisattva Sen
Michael Sobel
Simon Tavaré (with Biological Sciences)
Zhiliang Ying
Ming Yuan
Tian Zheng (Chair)

Associate Professors

John Cunningham
Samory Kpotufe
Arian Maleki
Sumit Mukherjee

Assistant Professors

Cynthia Rush
Anne van Delft

Term Assistant Professors

Marco Avella
Carsten Chong
Haoran Li
Xiaofei Shi
Thibault Vatter
Johannes Wiesel

Adjunct Faculty

Demissie Alemayehu
Flavio Bartmann
Mark Brown
Guy Cohen
Regina Dolgoarshinnykh
Anthony Donoghue
Hammou El Barmi
Tat Sang Fung
Xiaofu He
Margaret Holen
Irene Hueter
Ying Liu
Ka-Yi Ng
Ha Nguyen
Cristian Pasarica
David Rios
Ori Shental
Haiyuan Wang

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The requirements for this program were modified in March 2016. Students who declared this program before this date should contact the director of undergraduate studies for the department in order to confirm their options for major requirements.

The major should be planned with the director of undergraduate studies. Courses taken for a grade of Pass/D/Fail, or in which the grade of D has been received, do not count toward the major. The requirements for the major are as follows:

**Mathematics and Computer Science Prerequisites**
- **MATH UN1101** CALCULUS I
- **MATH UN1102** CALCULUS II
- **MATH UN1201** Calculus III
- **MATH UN2010** LINEAR ALGEBRA

One of the following five courses:
- **COMS W1007** Honors Introduction to Computer Science
- **ENGI E1006** INTRO TO COMP FOR ENG/APP SCI
- **COMS W1005** Introduction to Computer Science and Programming in MATLAB
- **STAT UN2102** Applied Statistical Computing
- **COMS W1004** Introduction to Computer Science and Programming in Java

**Core courses in probability and statistics**
- **STAT UN1201** Calculus-Based Introduction to Statistics
- **STAT GU4203** PROBABILITY THEORY
- **STAT GU4204** Statistical Inference
- **STAT GU4205** Linear Regression Models
- **STAT GU4206** Statistical Computing and Introduction to Data Science
- **STAT GU4207** Elementary Stochastic Processes

Three approved electives in statistics or, with permission, a cognate field.

- Students preparing for a career in actuarial science are encouraged to replace two electives with **MATH GU4061 INTRO MODERN ANALYSIS I** and **MATH GU4062 INTRO MODERN ANALYSIS II**.

**Concentration in Statistics**
Courses taken for a grade of Pass/D/Fail, or in which the grade of D has been received, do not count towards the concentration. The requirements for the concentration are as follows.

- **STAT UN1101** Introduction to Statistics
- **STAT UN2102** Applied Statistical Computing
- **STAT UN2103** APPLIED LINEAR REG ANALYSIS
- **STAT UN2104** Applied Categorical Data Analysis
- **STAT UN3105** Applied Statistical Methods
- **STAT UN3106** Applied Data Mining

- Students may replace courses required for the concentration by approved Statistics Department courses.

**Major in Data Science**
In response to the ever growing importance of "big data" in scientific and policy endeavors, the last few years have seen an explosive growth in theory, methods, and applications at the interface between computer science and statistics. The Statistics Department and the Department of Computer Science have responded with a joint-major that emphasizes the interface between the disciplines.

Courses taken for a grade of Pass/D/Fail, or in which the grade of D has been received, do not count toward the major. The requirements for the major are as follows:

**Mathematical Prerequisites**
- **MATH UN1101** CALCULUS I
- **MATH UN1102** CALCULUS II
- **MATH UN1201** Calculus III
- **MATH UN2010** LINEAR ALGEBRA

**Statistics Required Courses**
- **STAT UN1201** Calculus-Based Introduction to Statistics
- **STAT GU4203** PROBABILITY THEORY
- **STAT GU4204** Statistical Inference
- **STAT GU4205** Linear Regression Models
- **STAT GU421** Statistical Machine Learning

or **COMS W4771** Machine Learning

**Statistics Electives**
Select two of the following courses:
- **STAT UN3106** Applied Data Mining
- **STAT GU4206** Statistical Computing and Introduction to Data Science
- **STAT GU4243** APPLIED DATA SCIENCE
The economics-statistics major requires a total of 59 points: 29 in economics, 15 points in statistics, 12 points in mathematics, and 3 points in computer science, as follows:

**Economics Core Courses**
Complete the Economics core courses.

**Economics Electives**
Select three electives at the 3000-level or above, of which no more than one may be a Barnard course.

**Mathematics**
Select one of the following sequences:
- MATH UN1101 - MATH UN1102 - MATH UN1201 - MATH UN2010
  - CALCULUS I and CALCULUS II and Calculus III and LINEAR ALGEBRA
- MATH UN1101 - MATH UN1102 - MATH UN1205 - MATH UN2010
  - CALCULUS I and CALCULUS II and Accelerated Multivariable Calculus and LINEAR ALGEBRA
- MATH UN1207 - MATH UN1208
  - Honors Mathematics A and HONORS MATHEMATICS B

**Statistics**
Select one of the following courses:
- STAT UN1201 - STAT GU4203 - STAT GU4204 - STAT GU4205
  - Calculus-Based Introduction to Statistics
  - PROBABILITY THEORY
  - Statistical Inference
  - Linear Regression Models
One elective from among courses numbered STAT GU4206 through GU4266.

**Computer Science**
Select one of the following courses:
- COMS W1004 - COMS W1005 - COMS W1007
  - Introduction to Computer Science and Programming in Java
  - Introduction to Computer Science and Programming in MATLAB
  - Honors Introduction to Computer Science

**ECON GU4918** Seminar In Econometrics

Students who declared before Spring 2014:
The requirements for this program were modified in 2014. Students who declared this program before Spring 2014 should contact the director of undergraduate studies for the department in order to confirm their options for major requirements.
MAJOR IN MATHEMATICS-STATISTICS

The program is designed to prepare the student for: (1) a career in industries such as finance and insurance that require a high level of mathematical sophistication and a substantial knowledge of probability and statistics; and (2) graduate study in quantitative disciplines. Students choose electives in finance, actuarial science, operations research, or other quantitative fields to complement requirements in mathematics, statistics, and computer science.

Courses taken for a grade of Pass/D/Fail, or in which the grade of D has been received, do not count toward the major. The requirements for the major are as follows:

Mathematics
Select one of the following sequences:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH UN1101</td>
<td>CALCULUS I</td>
</tr>
<tr>
<td>MATH UN1102</td>
<td>CALCULUS II</td>
</tr>
<tr>
<td>MATH UN1201</td>
<td>Calculus III</td>
</tr>
<tr>
<td>MATH UN2010</td>
<td>LINEAR ALGEBRA</td>
</tr>
<tr>
<td>MATH UN2500</td>
<td>ANALYSIS AND OPTIMIZATION</td>
</tr>
</tbody>
</table>

OR

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH UN1101</td>
<td>CALCULUS I</td>
</tr>
<tr>
<td>MATH UN1102</td>
<td>CALCULUS II</td>
</tr>
<tr>
<td>MATH UN1205</td>
<td>Accelerated Multivariable Calculus</td>
</tr>
<tr>
<td>MATH UN2010</td>
<td>LINEAR ALGEBRA</td>
</tr>
<tr>
<td>MATH UN2500</td>
<td>ANALYSIS AND OPTIMIZATION</td>
</tr>
</tbody>
</table>

Statistics required courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT UN1201</td>
<td>Calculus-Based Introduction to Statistics</td>
</tr>
<tr>
<td>STAT GU4203</td>
<td>PROBABILITY THEORY</td>
</tr>
<tr>
<td>STAT GU4204</td>
<td>Statistical Inference</td>
</tr>
<tr>
<td>STAT GU4205</td>
<td>Linear Regression Models</td>
</tr>
</tbody>
</table>

And select one of the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT GU4207</td>
<td>Elementary Stochastic Processes</td>
</tr>
<tr>
<td>STAT GU4262</td>
<td>Stochastic Processes for Finance</td>
</tr>
<tr>
<td>STAT GU4264</td>
<td>STOCHASTIC PROCESSES-APPLIC</td>
</tr>
<tr>
<td>STAT GU4265</td>
<td>Stochastic Methods in Finance</td>
</tr>
</tbody>
</table>

Computer Science
Select one of the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS W1004</td>
<td>Introduction to Computer Science and Programming in Java</td>
</tr>
<tr>
<td>COMS W1005</td>
<td>Introduction to Computer Science and Programming in MATLAB</td>
</tr>
</tbody>
</table>

Major in Political Science–Statistics

The interdepartmental major of political science–statistics is designed for students who desire an understanding of political science to pursue advanced study in this field and who also wish to have at their command a broad range of sophisticated statistical tools to analyze data related to social science and public policy research.

Students should be aware of the rules regarding the use of the Pass/D/Fail option. Courses in which a grade of D has been received do not count toward the major requirements.

Political science–statistics students are eligible for all prizes reserved for political science majors.

The political science-statistics major requires a minimum of 15 courses in political science, statistics, and mathematics, to be distributed as follows:

Political Science
Students must choose a primary subfield to study. Within the subfield, students must take a minimum of three courses, including the subfield's introductory course. The subfields and their corresponding introductory courses are as follows:

American Politics:
**Comparative Politics:**
- **POLS UN1501** Introduction to Comparative Politics

**International Relations:**
- **POLS UN1601** INTERNATIONAL POLITICS

**Political Theory:**
- **POLS UN1101** POLITICAL THEORY I

Additionally, students must take a 4-point seminar in their primary subfield.

**Research Methods**
Students must take the following two research methods courses:
- **POLS GU4710** PRINC OF QUANT POL RESEARCH 1
- **or** **POLS UN3704** RESEARCH DESIGN: DATA ANALYSIS
- **POLS GU4712** PRINC OF QUANT POL RESEARCH 2

**Statistics**
Select one of the following two sequences.

**Sequence recommended for students preparing for graduate study in statistics.**
- **MATH UN1101** CALCULUS I
- **MATH UN1102** CALCULUS II
- **MATH UN2010** LINEAR ALGEBRA
- **STAT UN1201** Calculus-Based Introduction to Statistics
- **STAT GU4203** PROBABILITY THEORY
- **STAT GU4204** Statistical Inference
- **STAT GU4205** Linear Regression Models
- **STAT GU4206** Statistical Computing and Introduction to Data Science

Students taking the first track may replace the Mathematics prerequisites with both of **MATH UN1207** and **MATH UN1208**

**Sequence recommended for students preparing to apply statistical methods in the social sciences.**
- **STAT UN1101** Introduction to Statistics
- **STAT UN2102** Applied Statistical Computing
- **STAT UN2103** APPLIED LINEAR REG ANALYSIS
- **STAT UN2104** Applied Categorical Data Analysis
- **STAT UN3105** Applied Statistical Methods
- **STAT UN3106** Applied Data Mining

**Statistics elective:**
Students must take an approved elective in a statistics or a quantitatively oriented course in a social science.
Sustainable Development

Departmental Office: The Earth Institute, Office of Academic and Research Programs, Hogan, B-Level; http://sdev.ei.columbia.edu

Co-Directors of Undergraduate Studies:
Ruth DeFries, 212-851-1647; rd2402@columbia.edu
Jason Smerdon, 845-365-8493; jsmerdon@ldeo.columbia.edu

Program Administrators:
Natalie Unwin-Kuruneri, 212-854-8536; natalie@ei.columbia.edu
Sylvia Montijo, sm4084@columbia.edu

Sustainable development is founded on the premise that human well-being should advance without irreparable harm to ecosystems and the vital services they provide, without depleting essential resources, and without posing risks to future generations. The term "sustainable" refers to managing the world’s economy in a manner consistent with the continued healthy functioning of Earth’s ecosystems, oceans, atmosphere and climate. In this context, "development" refers to continued social, political, and economic progress aimed at improving the well-being of the global community, especially for the poorest people.

Academic Programs

The Earth Institute—in collaboration with Columbia College, the School of General Studies, the School of International and Public Affairs, and the Departments of Earth and Environmental Science; Ecology, Evolution, and Environmental Biology; and Earth and Environmental Engineering—offers a major and a special concentration in sustainable development.

These programs are designed to: engage students in this emergent interdisciplinary discussion, provide knowledge of the theory and practice of sustainable development, stimulate a critical examination of historical and conceptual antecedents, provide experience in the complex challenges of sustainable development through direct engagement, and help them imagine alternative futures for our rapidly changing world. With help from the Earth Institute faculty, courses are specifically created to address the very real and complex issues of development as they relate to the interactions of the natural and social systems.

The major focuses heavily on the sciences and provides students with a working knowledge of issues on a range of interacting subject areas. After declaring the major, students are assigned an academic adviser from within the Earth Institute, who advises on class selection and career development. Students benefit from a support system of faculty, advisers, and program managers, and have access to the multitude of resources for internships, study abroad programs, and career development.

The special concentration is intentionally more flexible, but its structure allows students to benefit from the cross-disciplinary courses and to build the expertise to allow them to address the fundamental issue of how to move towards a trajectory of sustainability.

The sustainable development program is structured to ensure that students graduate with the skills and knowledge to enable them to advance professionally in the public, private, governmental, and nonprofit sectors, and to pursue advanced degrees. Those interested in sustainable development are encouraged to participate in lectures, conferences, and other programs sponsored by the Earth Institute.

Grading

A letter grade of C- or better is needed in all program-related courses in order to satisfy the program requirements.

Sustainable Development Faculty

Susana Adamo (Center for International Earth Information Network)
Satyajit Bose (School of International and Public Affairs)
Steve Cohen (The Earth Institute; School of International and Public Affairs)
Lisa Dale (The Earth Institute; Ecology, Evolution, and Environmental Biology)
Ruth DeFries (Ecology, Evolution, and Environmental Biology) (Co-Director)
Paul Gallay (Ecology, Evolution and Environmental Biology)
Francesco Fiondella (International Research Institute for Climate and Society)
Michael Gerrard (Center for Climate Change Law and Columbia Law School)
Adela Gondek (Ecology, Evolution and Environmental Biology)
Radley Horton (Center for Climate Systems Research)
Joyce Klein-Rosenthal (The Earth Institute)
Jacqueline Klopp (The Earth Institute)
Upmanu Lall (Columbia Water Center; International Research Institute for Climate and Society)
Kytt McManus (Center for International Earth Science Information Network)
Rachel Moresky (Population and Family Health)
John Mutter (Earth and Environmental Sciences; School of International and Public Affairs)
Linda Pistolesi (Center for International Earth Science Information Network)

Jason Smerdon (Lamont-Doherty Earth Observatory) (Co-Director)

Martin Stute (Lamont-Doherty Earth Observatory)

Phil Weinberg (Ecology, Evolution and Environmental Biology)

### MAJOR IN SUSTAINABLE DEVELOPMENT

The sustainable development foundation courses should be taken first and students should then work with the program adviser on further course selection and sequencing.

The major in sustainable development requires a minimum of 15 courses and a practicum as follows:

<table>
<thead>
<tr>
<th><strong>Sustainable Development Foundation</strong></th>
<th><strong>EESC UN2100</strong></th>
<th>Earth's Environmental Systems: The Climate System and Earth's Environmental Systems: The Life System (EESC UN2310 is co-requisite with EESC UN2300)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDEV UN1900</td>
<td>Introduction to Sustainable Development Seminar</td>
<td>EESC UN2200</td>
</tr>
<tr>
<td>SDEV UN2300</td>
<td>Challenges of Sustainable Development</td>
<td>EESC UN2000</td>
</tr>
<tr>
<td>EESC UN2330</td>
<td>SCIENCE FOR SUSTAINABLE DEVPT</td>
<td>EESC UN2050</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Basic Disciplinary Foundation</strong></th>
<th><strong>EESC UN2100</strong></th>
<th>Earth Resources and Sustainable Development and Earth's Environmental Systems: The Climate System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select one of the following science sequences.</td>
<td>EESC UN2200</td>
<td>Earth Resources and Sustainable Development and EARTH'S ENVIRONMENTAL SYSTEMS: THE SOLID EARTH</td>
</tr>
<tr>
<td>CHEM UN1403</td>
<td>GENERAL CHEMISTRY I-LECTURES and GENERAL CHEMISTRY II-LECTURES</td>
<td>EESC UN2300</td>
</tr>
<tr>
<td>- CHEM UN1404</td>
<td></td>
<td>EESC UN2100</td>
</tr>
<tr>
<td>EEEB UN2001</td>
<td>Environmental Biology I: Elements to Organisms and Environmental Biology II: Organisms to the Biosphere (EESC UN2310 is a co-requisite with EEEB UN2002)</td>
<td>EEEB UN3005</td>
</tr>
<tr>
<td>- EEEB UN2002</td>
<td></td>
<td>EESC BC3017</td>
</tr>
<tr>
<td>EESC UN1600</td>
<td>Earth Resources and Sustainable Development and Earth's Environmental Systems: The Climate System</td>
<td>MATH UN2010</td>
</tr>
<tr>
<td>- EESC UN2100</td>
<td></td>
<td>STAT UN1201</td>
</tr>
<tr>
<td>EESC UN1600</td>
<td>Earth Resources and Sustainable Development and EARTH'S ENVIRONMENTAL SYSTEMS: THE SOLID EARTH</td>
<td>STAT UN1203</td>
</tr>
<tr>
<td>- EESC UN2200</td>
<td></td>
<td>STAT UN3105</td>
</tr>
<tr>
<td>EESC UN1600</td>
<td>Earth Resources and Sustainable Development and Earth's Environmental Systems: The Life System (EESC UN2310 is co-requisite with EESC UN2300)</td>
<td>STAT UN3106</td>
</tr>
<tr>
<td>- EESC UN2300</td>
<td></td>
<td>STAT GU4203</td>
</tr>
<tr>
<td>EEEB UN3005</td>
<td>Introduction to Statistics for Ecology and Evolutionary Biology</td>
<td>STAT GU4204</td>
</tr>
<tr>
<td>- EEEB UN3007</td>
<td></td>
<td>STAT GU4205</td>
</tr>
<tr>
<td>EEEB UN3005</td>
<td>Introduction to Statistics for Ecology and Evolutionary Biology</td>
<td>STAT GU4207</td>
</tr>
<tr>
<td>- EEEB UN3007</td>
<td></td>
<td>Analysis and Solutions to Complex Problems</td>
</tr>
</tbody>
</table>

Select two of the following courses:

<table>
<thead>
<tr>
<th><strong>Select two of the following social science courses:</strong></th>
<th><strong>ANTH UN1002</strong></th>
<th>The Interpretation of Culture</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH UN2004</td>
<td>INTRO TO SOC # CULTURAL THEORY</td>
<td></td>
</tr>
<tr>
<td>ANTH BC2427</td>
<td>ANTHROPOLOGY OF CLIMATE CHANGE</td>
<td></td>
</tr>
<tr>
<td>ECON UN1105</td>
<td>Principles of Economics</td>
<td></td>
</tr>
<tr>
<td>HIST UN2222</td>
<td>NATURE # POWER: ENV HIST NORTH AMERICA</td>
<td></td>
</tr>
<tr>
<td>POLS UN1201</td>
<td>INTRO TO AMERICAN POLITICS (Students can take POLS 1201 or SDEV 2050)</td>
<td></td>
</tr>
<tr>
<td>POLS UN1501</td>
<td>Introduction to Comparative Politics (Students can take POLS 1501 OR POLS 1601)</td>
<td></td>
</tr>
<tr>
<td>POLS UN1601</td>
<td>INTERNATIONAL POLITICS</td>
<td></td>
</tr>
<tr>
<td>SDEV UN2000</td>
<td>Introduction to Environmental Law</td>
<td></td>
</tr>
<tr>
<td>SDEV UN2050</td>
<td>Environmental Policy and Governance</td>
<td></td>
</tr>
<tr>
<td>SDEV UN3400</td>
<td>Human Populations and Sustainable Development</td>
<td></td>
</tr>
<tr>
<td>SOCI UN1000</td>
<td>THE SOCIAL WORLD</td>
<td></td>
</tr>
</tbody>
</table>

Select one of the following quantitative foundations courses:

<table>
<thead>
<tr>
<th><strong>Select two of the following quantitative foundations courses:</strong></th>
<th><strong>EEEB UN3005</strong></th>
<th>Introduction to Statistics for Ecology and Evolutionary Biology</th>
</tr>
</thead>
<tbody>
<tr>
<td>EEEB UN3005</td>
<td>Introduction to Statistics for Ecology and Evolutionary Biology</td>
<td>EESC BC3017</td>
</tr>
<tr>
<td>MATH UN2010</td>
<td>LINEAR ALGEBRA</td>
<td>STAT UN1201</td>
</tr>
<tr>
<td>STAT UN1203</td>
<td>APPLIED LINEAR REG ANALYSIS</td>
<td>STAT UN3105</td>
</tr>
<tr>
<td>STAT UN3106</td>
<td>Applied Data Mining</td>
<td>STAT GU4203</td>
</tr>
<tr>
<td>STAT GU4204</td>
<td>Statistical Inference</td>
<td>STAT GU4205</td>
</tr>
<tr>
<td>STAT GU4207</td>
<td>Elementary Stochastic Processes</td>
<td>Analysis and Solutions to Complex Problems</td>
</tr>
</tbody>
</table>

Select two of the following courses:
ANTH BC3932 Climate Change, Global Migration, and Human Rights in the Anthropocene
CIEE E3260 ENGINEER FOR DEVP COMMUNITIES
EAEE W4304 Closing the carbon cycle
ECIA W4100 MGMT # DEVPT OF WATER SYSTEMS
EESC BC3032 Agricultural and Urban Land Use: Human-Environment Interactions
EESC GU4600 Earth Resources and Sustainable Development
HIST GU4811 Encounters with Nature: The History of Environment and Health in South Asia and Beyond
PUBH UN3100 FUNDAMENTALS OF GLOBAL HEALTH
PUBH GU4200 Environment, Health, and Justice: Concepts and Practice
SDEV UN3330 Ecological and Social Systems for Sustainable Development
SDEV UN3355 Climate Change and Law
SDEV UN3360 Disasters and Development
SDEV UN3366 Energy Law
SDEV UN3410 Cities & Sustainability
URBS UN3565 Cities in Developing Countries: Problems and Prospects
SDEV GU4250 CLIMATE CHANGE: RESILIENCE # ADAPTATION

The Summer Ecosystems Experience for Undergraduates (SEE-U)*

Skills/Actions
Select two of the following courses:
EAAE E4257 ENVIR DATA ANALYSIS # MODELING
EESC GU4050 Global Assessment and Monitoring Using Remote Sensing
EESC BC3050 Big Data with Python: Python for Environmental Analysis and Visualisation
SDEV UN2320 Economic and Financial Methods for Sustainable Development
SDEV UN3390 GIS for Sustainable Development
SDEV UN3450 SPATIAL ANALYSIS FOR SDEV
SOCL UN3010 Methods for Social Research
SUMA PS4100 Sustainability Management
SDEV GU4101 Qualitative Research Methods for Sustainable Development
SDEV GU4240 Science Communication

The Summer Ecosystems Experience for Undergraduates (SEE-U)*

Practicum
Select one of the following courses:
INAF U4420 Oil, Rights and Development
SDEV UN3998 Sustainable Development Independent Study
SUMA PS4310 Practicum in Innovation Sustainability Leadership
SUMA PS4734 Earth Institute Practicum

Electives
Select two courses from the following areas. Courses can be combined across Areas 2-5 only. If you select Area 1, you must complete two thesis courses and these will fulfill the elective requirement:

Area 1: Senior Thesis Sequence (EESC BC3800/ EESC BC3801 and EESC UN3901) **
Area 2: Upper level courses from the approved electives list (see link in footnotes to access list) ****
Area 3: Additional courses listed under Analysis and Solutions to Complex Problem
Area 4: Additional courses listed under Skills/Actions
Area 5
SDEV UN3310 Ethics of Sustainable Development
SDEV GU4350 PUBLIC LANDS IN THE AMERICAN WEST

Capstone Workshop
SDEV UN3280 Workshop in Sustainable Development
SDEV UN3550 BANGLADESH: LIFE-TECT ACTV DELTA

* The Summer Ecosystem Experiences for Undergraduates (SEE-U): Please note that students in the major or the special concentration who take SEE-U as a 6-point course can use 3 points towards the Complex Problems requirement and 3 points towards the Skills/Action requirement. If SEE-U is taken for 3 points, it can only count as one Complex Problems class.

** If choosing the senior thesis option to fulfill the elective requirements, students must take both courses in the senior thesis sequence.

****For a full list of previously approved electives, please visit the sustainable development program website: http://sdev.ei.columbia.edu/curriculum/major/.

Note: Please visit the Sustainable Development website for requirements: Majors: http://sdev.ei.columbia.edu/curriculum/major/

SPECIAL CONCENTRATION IN SUSTAINABLE DEVELOPMENT
In addition to the requirements of the special concentration, students must complete a major or a full concentration.
The sustainable development foundation courses should be taken first and students should then work with the program adviser on further course selection and sequencing.

The special concentration in sustainable development requires a minimum of 9 courses and a practicum as follows:

<table>
<thead>
<tr>
<th>Sustainable Development Foundation</th>
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<tr>
<td>SDEV UN1900</td>
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<tr>
<td>SDEV UN2300</td>
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<td>EESC UN2330</td>
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<tr>
<th>Natural Science Systems</th>
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<tbody>
<tr>
<td>CHEM UN1403</td>
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<td>EEEB UN1001</td>
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<td>EEEB UN2002</td>
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<td>PHYS UN1201 - PHYS UN1291</td>
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<th>Human Science Systems</th>
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<td>ANTH UN1002</td>
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<td>ANTH UN2004</td>
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<td>ANTH BC2427</td>
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<td>ECON UN1105</td>
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<td>HIST UN2222</td>
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<td>POLS UN1201</td>
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<tr>
<td>POLS UN1501</td>
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<table>
<thead>
<tr>
<th>Analysis and Solutions to Complex Problems</th>
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<tbody>
<tr>
<td>ANTH BC3932</td>
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<tr>
<td>CIEE E3260</td>
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<td>EEEE W4304</td>
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<td>ECIA W4100</td>
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<td>EESC BC3032</td>
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<td>HIST GU4811</td>
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<td>PUBH UN3100</td>
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<td>SDEV UN3366</td>
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<td>SDEV UN3410</td>
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<td>URBS UN3565</td>
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<tr>
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<td>EESC BC3050</td>
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<td>EESC GU4050</td>
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<td>SDEV UN2320</td>
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<td>SDEV UN3390</td>
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<td>SDEV UN3450</td>
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<tr>
<td>SDEV GU4101</td>
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<tr>
<td>SDEV GU4240</td>
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<tr>
<td>SUMA PS4100</td>
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</tbody>
</table>
SOCI UN3010  Methods for Social Research

The Summer Ecosystem Experiences for Undergraduates (SEE-U) *

Practicum
Select one of the following courses:
INAF U4420  Oil, Rights and Development
SDEV UN3998  Sustainable Development
              Independent Study
SUMA PS4310  Practicum in Innovation
              Sustainability Leadership
SUMA PS4734 Earth Institute Practicum

Capstone Workshop
SDEV UN3280  Workshop in Sustainable Development
SDEV UN3550  BANGLADESH:LIFE-TECT
              ACTV DELTA

* The Summer Ecosystem Experiences for Undergraduates (SEE-U): Please note that students in the major or the special concentration who take SEE-U as a 6-point course can use 3 points towards the Complex Problems requirement and 3 points towards the Skills/Action requirement. If SEE-U is taken for 3 points, it can only count as one Complex Problems class.

Note: Sustainable Development Website for Special Concentrators: http://sdev.ei.columbia.edu/curriculum/special-concentration/
Urban Studies
Urban Studies at Columbia

Columbia Adviser: Prof. Amy Chazkel; ac2227@columbia.edu
713 Milstein Learning Center
212-854-4073
Department Assistant: Valerie Coates

Mission

The Barnard–Columbia Urban Studies program enables students to explore and understand the urban experience in all of its richness and complexity. It recognizes the city as an amalgam of diverse peoples and their social, political, economic, and cultural interactions within a distinctive built environment. Students study the evolution and variety of urban forms and governance structures, which create opportunities for, as well as constrain, the exercise of human agency, individual and collective. They explore the place of the city in different historical and comparative contexts, as well as in the human imagination.

Majors build an intellectual foundation that combines interdisciplinary coursework and a concentration of study within a single field. Through the two-semester junior colloquium, students study urban history and contemporary issues, and at the same time hone their interdisciplinary, analytical and research skills. This shared experience prepares them for their independent research project in their senior year. We encourage our majors to use New York City as a laboratory, and many courses draw on the vast resources of the city and include an off-campus experience.

Student Learning Outcomes

Having successfully completed the major in Urban Studies, the student will be able to:

• Apply concepts or methods from more than one social science or adjacent discipline to analyze an urban issue or problem.
• Describe the distinctive social, cultural, and spatial features of cities and illustrate their impacts on the urban experience.
• Apply basic skills of empirical reasoning to an urban problem.
• Explain how the idea of the city varies in different historical and comparative contexts.
• Demonstrate familiarity with a particular disciplinary approach to the city as an object of study.
• Demonstrate understanding of the history and variety of urban forms and governance structures.
• Articulate a well-defined research question, conduct independent research using primary sources and a variety of theoretical and methodological approaches, and write a substantive research paper.
• Communicate ideas effectively in written or oral form.
• Organize and present group research projects.

Director: Gergely Baics (History and Urban Studies)
Associate Director: Aaron Passell (Urban Studies)

Columbia College Advisor: Amy Chazkel, Bernard Hirschhorn Associate Professor of Urban Studies
General Studies Advisor: Aaron Passell, Associate Director (Urban Studies)

Urban Studies Faculty

Assistant Professors: Gergely Baics (History and Urban Studies), Deborah Becher (Sociology), Angela Simms (Sociology and Urban Studies), Nick R. Smith (Architecture and Urban Studies)

Associate Professors: Mary Rocco (Term, Urban Studies), Christian Siener (Term, Urban Studies), Chandler Miranda (Term, Urban Studies)

The Urban Studies Advisory Committee consults on matters of curriculum and program direction. For more information, please consult the Advisory Committee web page on the program website.

Major in Urban Studies

A minimum of 42 credits is required to complete the Urban Studies major. The major in Urban Studies is comprised of seven curricular requirements:

Requirement U: Introduction to Urban Studies (1 course)
URBS UN1515 Introduction to Urban Studies

Requirement A: Urban-Related Social Sciences (3 courses)

One course dealing primarily with urban subject matter from each of three of the following disciplines: Anthropology, Economics, History, Political Science, Sociology. For students declaring a major in Urban Studies after Spring 2018, one of the three courses must be History.

Each course should be chosen from the following disciplines: Anthropology, Economics, History, Political Science, Public Health, Sociology, or Urban Studies and be focused on urban issues. The three courses must be selected from three separate disciplines and they must appear on the Urban Studies approved list to fulfill the ‘A’ requirement for the major (if a course does not appear on the list that you believe should, please contact the Associate Director). Each course should also be taken with a different professor (i.e. you may not use two courses with the same professor to fulfill two of your A requirements). We recommend that you complete at least two of your three
‘A’ courses before taking the Junior Seminar, but this is not a hard requirement.

Requirement B: Urban-Related Non-Social Science (1 course)
One course dealing primarily with urban subject matter from a discipline not listed above (such as Architecture, Art History, English, Environmental Science, etc.)

Requirement C: Methods of Analysis (1 course)
One course in methods of analysis, such as URBS UN2200 INTRODUCTION TO GIS METHODS. Methods courses in related disciplines will also be considered for the requirement. Please consult the program website or the Associate Director

Requirement D: Specialization (5 courses)
Five or more courses in a specialization from one of the participating departments. Barnard College students can double-count one A, B, or C course toward this requirement (only one of five), with the approval of the Director; Columbia College and General Studies students cannot double-count courses. Barnard majors also have specific requirements for each specialization, which are outlined in detail on the program website, urban.barnard.edu.

Requirement E: Junior Seminar (1 course)
We recommend that you complete at least two of your three ‘A’ courses before taking the Junior Seminar, but this is not a hard requirement.

URBS UN3545 JUNIOR SEMINAR IN URBAN STUDIES
Multiple sections of this course are taught each semester by various faculty on different topics. For more information, please consult the program website or the Associate Director.

Requirement F: Senior Seminar (2 courses)
An original senior thesis written in conjunction with a two-semester research seminar on a topic of your choice. Please consult with your Urban Studies advisor and choose from among:

URBS UN3992 Senior Seminar: The Built Environment
URBS UN3993 Senior Seminar: The Built Environment

URBS UN3994 Senior Seminar: New York Field Research
URBS UN3995 Senior Seminar: New York Field Research

URBS UN3996 Senior Seminar: International Topics in Urban Studies
URBS UN3997 Senior Seminar: International Topics in Urban Studies

Students who, for some reason, will not be able to complete the Fall-Spring Senior Seminar sequence should consult with the Associate Director about alternatives.

A complete list and courses that fulfill requirements A–E can be found on the program's website, urban.barnard.edu.

Appropriate substitutions may be made for courses listed above with the approval of the Associate Director.

There is no minor in Urban Studies.

There is no concentration in Urban Studies.
The Visual Arts Program in the School of the Arts offers studio art classes as a component of a liberal arts education and as a means to an art major, concentration, and joint major with the Art History and Archaeology Department.

Courses in which a grade of D has been received do not count toward the major or concentration requirements.

Only the first course a student takes in the department may be taken for a grade of Pass/D/Fail.

Please Note: Visual Arts courses are currently open for registration and will be closed during the change of program period. If you are interested in taking a Visual Arts class at that time, please add your name to the waitlist of the course and attend the first day of the class. If a Visual Arts class is full, visit arts.columbia.edu/undergraduate-visual-arts-program.

The Visual Arts Undergraduate Program requires a departmental signature when declaring a major. After meeting with their college academic adviser, students should set up a meeting to consult with the director of undergraduate studies, Professor Susanna Coffey (sjc2191@columbia.edu). Please email Laura Mosquera (lm3004@columbia.edu) for the current Requirements Worksheet for the Visual Arts Major, Art History and Visual Arts Interdepartmental Major or Visual Arts Concentration.

The Visual Arts Program requires a departmental signature when declaring a major. After meeting with their college academic adviser, students should set up a meeting to consult with the director of undergraduate studies, Professor Susanna Coffey (sjc2191@columbia.edu). Please email Laura Mosquera (lm3004@columbia.edu) for the current Requirements Worksheet for the Visual Arts Major, Art History and Visual Arts Interdepartmental Major or Visual Arts Concentration.

**PROFESSORS**
Gregory Amenoff
Susanna Coffey (1 Year Appointment for 2021-22)
Jon Kessler
Sarah Sze
Rirkrit Tiravanija
Tomas Vu-Daniel

**ASSOCIATE PROFESSORS**
Matthew Buckingham
Nicola López (Chair)

**ASSISTANT PROFESSORS**
Delphine Fawundu (Director of Graduate Studies)
Sable Elyse Smith

**GUIDELINES FOR ALL VISUAL ARTS MAJORS, CONCENTRATORS, AND INTERDEPARTMENTAL MAJORS**
A maximum of 12 credits from other degree-granting institutions may be counted toward the major, only with the approval of the director of undergraduate studies.

**MAJOR IN VISUAL ARTS**
A total of 35 points are required as follows:

<table>
<thead>
<tr>
<th>Visual Arts (32 points)</th>
<th>Art History (3 points)</th>
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</thead>
<tbody>
<tr>
<td>VIAR UN1000 BASIC DRAWING (formerly VIAR R1001)</td>
<td>AHIS UN2405 Twentieth-Century Art (formerly AHIS W3650)</td>
</tr>
<tr>
<td>or VIAR UN1004 Basic Drawing - NYC as Muse</td>
<td></td>
</tr>
<tr>
<td>VIAR UN2300 Sculpture I</td>
<td></td>
</tr>
<tr>
<td>or VIAR UN2200 Ceramics I</td>
<td></td>
</tr>
<tr>
<td>Five additional VIAR 3-point studio courses (15 points)</td>
<td></td>
</tr>
<tr>
<td>VIAR UN3800 SEM IN CONTEMP ART PRACTICE</td>
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</tbody>
</table>

Senior Thesis consists of the following four courses:

<table>
<thead>
<tr>
<th>VIAR UN3990</th>
<th>VIAR UN3910</th>
</tr>
</thead>
<tbody>
<tr>
<td>- VIAR UN3910</td>
<td>- VIAR UN3911</td>
</tr>
<tr>
<td>SENIOR THESIS I</td>
<td>SENIOR THESIS II</td>
</tr>
<tr>
<td>and Visiting Critic I (formerly VIAR R3901 and VIAR R3921)</td>
<td>and VISITING CRITIC II</td>
</tr>
</tbody>
</table>

Senior Thesis
Before taking the Senior Thesis, majors are advised to complete 18 points of required Visual Arts courses. Senior Thesis consists of four 2-point courses taken over two semesters:

VIAR UN3900 SENIOR THESIS I
VIAR UN3901 SENIOR THESIS II (4 points) and VIAR UN3910 Visiting Critic I
VIAR UN3911 VISITING CRITIC II (4 points). (Senior Thesis I and Visiting Critic I run concurrently and Senior Thesis II and Visiting Critic II run concurrently).

Visual arts majors must sign up for a portfolio review to enroll in Senior Thesis. Portfolio reviews are scheduled in April preceding the semester for which students seek entry. Portfolios are evaluated by the director of undergraduate studies and a faculty committee. After each semester of Senior Thesis,
a faculty committee evaluates the work and performance completed.

**MAJOR IN ART HISTORY AND VISUAL ARTS**

The combined major requires the completion of sixteen or seventeen courses. Up to two 3-point courses in art history may be replaced by a related course in another department, with approval of the adviser. It is recommended that students interested in this major begin the requirements in their sophomore year. The requirements for the major are as follows:

### Art History (25 points)

- **AHIS UN3000** INTRO LIT/METHODS OF ART HIST (formerly VIAR W3895)
- Seven additional art history (AHIS) 3-point lecture courses:
  - At least one course in three of four historical periods, as listed below
  - An additional two courses drawn from at least two different world regions, as listed below
  - Two additional lectures of the student’s choice

### Visual Arts (21 points)

- **VIAR UN1000** BASIC DRAWING (formerly VIAR R1001)
  - or VIAR UN1004 Basic Drawing - NYC as Muse
- **VIAR UN2300** Sculpture I (formerly VIAR R3330)
  - or VIAR UN2200 Ceramics I
  - Five additional VIAR 3-point studio courses (15 points)

In the senior year, students must complete either a seminar in the Department of Art History and Archaeology or a senior project in visual arts (pending approval by the Visual Arts Department).

Students electing the combined major should consult with the director of undergraduate studies in Visual Arts, as well as with the undergraduate program coordinator in the Art History and Archaeology Department.

**NOTE:** Chronological divisions are approximate. In case of ambiguities about course eligibility to fill the requirement, consult the director of undergraduate studies in Art History and Archaeology.

### Historical Periods

- Ancient (up to 400 CE/AD)
- 400 - 1400
- 1400 - 1700
- 1700 - present

### World Regions

- Africa
- Asia
- Europe, North America, Australia

### Concentration in Visual Arts

A total of 21 points are required as follows:

**Visual Arts (18 points)**

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<thead>
<tr>
<th>Course</th>
<th>Description</th>
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<tbody>
<tr>
<td>VIAR UN1000</td>
<td>BASIC DRAWING (formerly VIAR R1001)</td>
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<tr>
<td>or VIAR UN1004</td>
<td>Basic Drawing - NYC as Muse</td>
</tr>
<tr>
<td>VIAR UN2300</td>
<td>Sculpture I (formerly VIAR R3330)</td>
</tr>
<tr>
<td>or VIAR UN2200</td>
<td>Ceramics I</td>
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</table>

Four additional VIAR 3-point studio courses (12 points)

**Art History (3 points)**

One 20th-century Art History 3-point course or equivalent, such as:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
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<tbody>
<tr>
<td>AHIS UN2405</td>
<td>Twentieth-Century Art (formerly AHIS W3650)</td>
</tr>
</tbody>
</table>
Women's and Gender Studies

Program Office: 763 Schermerhorn Extension; 212-854-3277; 212-854-7466 (fax)
http://irwgs.columbia.edu/

Director of Undergraduate Studies: Prof. Lila Abu-Lughod, 756 Schermerhorn Extension; la310@columbia.edu

Located within the Institute for Research on Women, Gender, and Sexuality and taught in cooperation with Barnard College’s Department of Women’s, Gender and Sexuality Studies, the program in women’s and gender studies provides students with a culturally and historically situated, theoretically diverse understanding of feminist scholarship and its contributions to the disciplines. The program introduces students to feminist discourse on the cultural and historical representation of nature, power, and the social construction of difference. It encourages students to engage in the debates regarding the ethical and political issues of equality and justice that emerge in such discussion, and links the questions of gender and sexuality to those of racial, ethnic, and other kinds of hierarchical difference.

Through sequentially organized courses in women’s, gender, and sexuality studies, as well as required discipline-based courses in the humanities and social sciences, the major provides a thoroughly interdisciplinary framework, methodological training, and substantive guidance in specialized areas of research. Small classes and mentored thesis-writing give students an education that is both comprehensive and tailored to individual needs. The major culminates in a thesis-writing class, in which students undertake original research and produce advanced scholarship.

Graduates leave the program well prepared for future scholarly work in women’s, gender, and sexuality studies, as well as for careers and future training in law, public policy, social work, community organizing, journalism, and professions in which there is a need for critical and creative interdisciplinary thought.

Major in Women’s and Gender Studies

The requirements for this program were modified on September 22, 2014. Students who declared this program before this date should contact the director of undergraduate studies for the department in order to confirm their correct course of study.

Students should plan their course of study with the undergraduate director as early in their academic careers as possible. The requirements for the major are:

- WMST UN1001 Introduction to Women’s and Gender Studies
- or WMST UN3125 Introduction to Sexuality Studies
- WMST UN3311 FEMINIST THEORY

WMST UN3514 Historical Approaches to Feminist Questions
WMST UN3521 Senior Seminar I
WMST UN3915 GENDER # POWER IN GLOBAL PERSP

Six approved Elective Courses on women, gender, and/or sexuality in consultation with the director of undergraduate studies.*

* Electives will be selected in coordination with the director of undergraduate studies to best suit students’ specific interests and to provide them with the appropriate range of courses, whether their focus is ethnic studies, pre-med, pre-law, sociology, public healthy, queer studies, visual culture, literature, or another area of interest. Students are encouraged to take a broad interdisciplinary approach. The director of undergraduate studies will help students fine-tune their academic program in conjunction with IRWGS courses, cross-listed courses, and other courses offered at Columbia.

Concentration in Women’s and Gender Studies

The requirements for this program were modified on September 22, 2014. Students who declared this program before this date should contact the director of undergraduate studies for the department in order to confirm their correct course of study.

The same requirements as for the major, with the exception of WMST UN3521 Senior Seminar I.

Special Concentration for Those Majoring in Another Department

The requirements for this program were modified on September 22, 2014. Students who declared this program before this date should contact the director of undergraduate studies for the department in order to confirm their correct course of study.

WMST UN1001 Introduction to Women’s and Gender Studies; plus four additional approved elective courses on gender.
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