

# Columbia University School of Professional Studies

Visiting Student
Registration Packet
(Spring 2020)

## Table of Contents

- I. Introduction pp. 4-5: Introduction to Columbia School of Professional Studies (SPS) Visiting Student Registration Packet.
- **II. Subject-Specific Course Guides pp. 6-53:** Subject-specific course guides provide you with general information about the hosting department and any information about course sequencing. Depending on the subject, you will find a list of courses and any prerequisites or notes that apply to them, a listing of core and elective categories, and courses arranged in an ascending order by course level.
  - 1. Anthropology pp. 6-9
  - 2. Biology pp. 10-13
  - 3. Business pp. 14-16
  - 4. Chemistry pp. 17-21
  - 5. Computer Science pp. 22-24
  - 6. Economics pp. 25-28
  - 7. English pp. 29-32
  - 8. Mathematics pp. 33-34
  - 9. Physics pp. 35-36
  - 10. Political Science pp. 37-39
  - 11. Psychology pp. 40-45
  - 12. Sociology pp. 46-47
  - 13. Statistics pp. 48-51
  - 14. Columbia CORE pp. 52
  - 15. Additional Subjects pp. 53
- **III.** Cross-Registration Policies pp. 54-63: If you want to take courses hosted by schools other than SPS, you will need to follow the cross-registration policies of the particular school. If you will not be attempting to cross-register into courses, then you may skip this section.
  - A. Columbia College (CC) pp. 54
  - B. Barnard College (BC) pp. 54-55
  - C. Columbia Business School pp. 55
  - D. Graduate School of Arts and Sciences (GSAS) pp. 55
  - E. Mailman School of Public Health pp. 55
  - F. School of Engineering and Applied Science (SEAS) pp. 55-56
  - G. School of International and Public Affairs (SIPA) pp. 56
  - H. School of Social Work pp. 56
  - I. School of the Arts (SoA) pp. 56
  - J. Teacher's College (TC) pp. 56

- K. School of Professional Studies (SPS) pp. 57-59
  - 1. Actuarial Science pp. 57
  - 2. Applied Analytics (APAN) pp. 57
  - 3. Bioethics pp. 57
  - 4. Construction Administration pp. 57
  - 5. Enterprise Risk Management (ERM) pp. 57
  - 6. Human Capital Management (HCM) pp. 58
  - 7. Information and Knowledge Strategy (IKNS) pp. 58
  - 8. Narrative Medicine pp. 58
  - 9. Negotiation and Conflict Resolution pp. 58
  - 10. Nonprofit Management pp. 58
  - 11. Sports Management pp. 58
  - 12. Sustainability Management pp. 58-59
  - 13. Sustainability Science pp. 59
  - 14. Technology Management pp. 59
- **IV. Sample Schedules pp. 60-63:** Sample schedules are broken down by course of study and based on courses that previous students have successfully enrolled in, with updated section information for the current term
  - A. Business Schedule pp. 60
  - B. Econ/Mathematics Schedule pp. 60-61
  - C. Varied Schedule #1 pp. 61-62
  - D. Varied Schedule #2 pp. 62
  - E. Pre-Medical Sequencing with sample schedule pp. 63-65
- **V. Glossary pp. 65-66:** commonly used registration-related terms for your convenience. Part of acclimating to the culture of SPS and Columbia is becoming acquainted with the many technical terms and acronyms that apply.
- **VI. Pro-Tips for Registration pp. 67**: some helpful registration tips to keep in mind while using this packet and enrolling in courses.

# I. Introduction

Welcome again to Columbia University School of Professional Studies (SPS) and New York City! We here on the Advising Team are so excited to have you studying with us for the Spring 2020 term. We know that registration can sometimes be a bit confusing and stressful, so we wanted to provide you with some guidance to help make your course enrollment go as smoothly as possible. Understanding this information will assist you in enrolling into courses of your choice, preparing backup courses should your first choice be unavailable, and highlighting some courses that you might have an interest in that you didn't even know exist!

Please note that *full* course information can be found on the <u>Directory of Classes (DoC)</u>, while supplemental information on courses can be found on our enrollment management system, <u>Student Services Online (SSOL)</u>, and <u>Vergil</u>. Additionally, because course information can change unpredictably, it is best to confirm the details of your course selection by way of the Directory of Classes, and the schedule function in SSOL after registering.

This Registration Packet is a *guide* to assist you in navigating the Directory of Classes given that it contains an abundance of information that covers all possible student interests, programs, and schools. This information becomes especially important when considering any prerequisite courses, approvals, or notes for a given section that may impact enrollment, but are not immediately obvious on SSOL, Vergil, or the course-level information on the DoC.

Please note that the courses and sample schedules found in this Registration Packet are not a directive of which courses you should take or which courses are right for you as an individual student. Additionally, the course selections are not meant to exhaust all course options available in this term. Instead, this packet is meant to include courses we have highlighted because we know that previous students have enrolled into them successfully or are the type of courses that may be of interest to you based on common courses of study.

**How to use this guide.** This guide is meant to be a registration resource to students, but particular registration needs may vary:

- 1. If you know what type of courses you want to take already, you can navigate to **Section II**, **subject-specific guides**, and identify the call number for the course(s) of your choice. You can jump to the subject-specific guides starting on **page 6**.
- 2. If you know that the courses you would like to take are hosted by a school outside of SPS, you can jump to the **Section III**, **cross-registration policies**, starting on **page 54**.

- 3. If you don't know which courses or in what combination with other subjects, you can navigate to the **Section**IV sample schedules at the end for some guidance. You can jump to the sample schedules starting on page 60.
- 4. If you are unsure about which courses you would like to take, then you can take a look at the **subject-specific guides** and **sample schedules** to get a sense.

We have also provided **Section V**, **Glossary**, starting on page 65, and **Section VI**, **Pro-Tips for Registration**, starting on page 67 for your convenience.

For many of the courses in this packet you should be able to enroll into them simply by putting the 5 digit section-specific call number into SSOL. However, if you are unable to enroll through SSOL one of the following conditions may apply:

- The course requires **Prerequisite Courses**. If you have taken these prerequisites or their equivalent previously, then by reaching out to the instructor to request approval we can use a **Registration Adjustment Form (RAF)** to enroll you into the course.
- The course is set to add all students onto a waitlist. This may be to prioritize specific types of students in certain programs or schools, or to verify prerequisites and previous studies. In these instances, you can elect to join the waitlist until priority registration ends or a determination is made on your enrollment request.
- The course is set to require all students to obtain **instructor approval**. Emailing the instructor with an enrollment request explaining how the course fits within your studies and why it is justified for you to take it must be provided. After identifying the instructor of the course and section in question, you can search the <u>Columbia People Directory</u>.
- The course is **not pre-approved** for SPS student enrollment. For courses hosted by Columbia College, Barnard, and the Graduate School of Arts and Sciences, courses not automatically 'Open to: SPS,' you may email the instructor to request approval. For all other schools, please follow the school-specific Cross-Registration guidelines listed in this Registration Packet.
- Although the courses listed in this packet are generally accessible to SPS students, in general if
  you encounter a course that you are unable to enroll in and does not meet one of these
  conditions, then it is a course that is **not eligible for enrollment** for you.

\*\*\*We will do everything we can to assist you in the registration process. But ultimately the responsibility is on each individual student to determine which courses to take in consultation with their primary advisor. \*\*\*

# II. Subject-specific Guides

# 1. Anthropology

#### General Information:

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.

Students interested in Anthropology courses may in turn be interested in courses in Sociology, Psychology, History, and Political Science.

As of 11/25/2019 for the spring 2020 term these courses are available:

Course Number	Course Name	Section Information	Prerequisites/Notes
UN1002	The Interpretation of Culture	<ul> <li>(call #11181)         <ul> <li>01 MW 1:10-</li> <li>2:25pm (Paige Wes)</li> </ul> </li> <li>(call #12201)         <ul> <li>02 TR 11:40-</li> <li>12:55pm</li> <li>(Vanessa Agard-Jones)</li> </ul> </li> </ul>	Discussion section required.
UN1008	The Rise of Civilization	• (call #11183) 01 TR 11:40am- 12:55pm (Terence D'Altroy)	Discussion section required.
UN1012	Interpretation of Culture-Discussion	• (call #11826) 01 • (call #11829)	Required discussion section.

		02 • (call #11830) 03 • (call #11831) 04	
UN1108	The Rise of Civilization- Discussion	• (call #11832) 01 • (call #11834) 02 • (call #11835) 03 • (call #11836) 04 • (call #11837) 05 • (call #11839) 06 • (call #11838) 07	Required discussion section.
UN2005	The Ethnographic Imagination	• (call #11204) 01 TR 4:10- 5:25pm (Maria Jos de Abreu)	Discussion section required.
UN2101	The Ethnographic Imagination- Discussion	• (call #11840) 01 • (call #11841) 02 • (call #11843) 03 • (call #11844) 04	Required discussion section.
UN3465	Women, Gender, Politics in the Muslim World	• (call #11189) 01 TR 2:40- 3:55pm (Lila Abu-Lughod)	Discussion section required.
UN3467	Women, Gender, Politics in the Muslim World-Discussion	• (call #11846) 01 • (call #11847) 02	Required discussion section.

		• (call #11848) 03	
UN3728	Ethnographies of Black Life	• (call #11499) 01 T 2:10- 4:00pm (Vanessa Agard- Jones)	Instructor permission required.
UN3821	Native America	• (call#11619) 01 T 2:10-4:00pm (Audra Simpson)	Intro courses in anthropology, history, and gender studies recommended.
UN3828	The Anthropology of War	<ul> <li>(call #11458) 01 W 2:10- 4:00pm (Nadia Abu El-Haj)</li> <li>(call #00426) 02 W 2:10- 4:00pm (Nadia Abu El-Haj)</li> </ul>	
UN3878	Neoliberal Urban Politics of Exclusion	• (call #11459) 01 T 2:10- 4:00pm (Steven Gregory)	
UN3879	The Medical Imaginary	<ul> <li>(call #11247) 01 M 10:10- 12:00pm (Lesley Sharp)</li> <li>(call #00432) 02 M 10:10- 12:00pm (Lesley Sharp)</li> </ul>	
UN3893	The Bomb	• (call #11439) 01 T 10:10- 12:00pm (Karen Seeley)	
UN3912	Ethnographic China	• (call #11415) 01 W 2:10- 4:00pm (Myron	

		Cohen)	
UN3993	World Archaeology	• (call #11441) 01 W 12:10- 2:00pm (Camilla Sturm)	Prerequisites: instructor permission and one of the following, ANTH 1007, 1008, ACLG V2028.
GU4390	Borders & Boundaries	• (call #11191) 01 M 10:10- 12:00pm (Claudio Lomnitz)	
GU4470	Critical Perspectives on Human-Animal Relations	• (call #11440) 01 F 10:10- 12:00pm (Brian Boyd)	

# 2. Biology

#### General Information:

The Biology department offers broad training in basic biological disciplines, with an emphasis in cell and molecular biology. The initial focus for the Department was on molecular biology and neurobiology, two areas that remain at the forefront of modern biology. The Department expanded into additional research areas over the past two decades, such as developmental biology, cell biology, structural biology, biophysics, chemical biology, and computational biology.

## **Course Sequencing:**

For the first term of their introductory biology sequence, students may take either BIOL UN2005 Introductory Biology I: Biochemistry, Genetics & Molecular Biology, which has a prerequisite of chemistry, or EEEB UN2001 Environmental Biology I: Elements to Organisms, which does not require chemistry.

BIOL UN2005 Introductory Biology I: Biochemistry, Genetics & Molecular Biology should be taken later, after general chemistry.

Premedical students should consult with their advising dean or the pre-professional office for relevant details of medical school requirements.

Non-science majors who wish to take a biology course to fulfill the science requirement are encouraged to take BIOL UN1130 Genes and Development. They may also take, with the instructor's permission, BIOL UN3208 Introduction to Evolutionary Biology or EEEB UN2001 Environmental Biology I: Elements to Organisms.

Students interested in Biology courses may in turn be interested in courses in Chemistry, Physics, and Psychology.

#### As of 11/25/2019 for the spring 2020 term these courses are available:

#### Core Courses

Course Number	Course Name	Section Information	Prerequisites/Notes
BC1502	Introduction to Cellular and Molecular Biology	• (call #00019) 01 MWF 9:00- 9:50am	Prerequisites: BC1002 or equivalent preparation.  Corerequisites: BC1503 and BC1513

BC1503	Intro Lab to Cellular and Molecular Biology	• See <u>Directory</u> <u>of Classes</u>	Prerequisites: BC1002 or equivalent preparation, must attend the first lab.  Corerequisite: BC1502 and BC1513.
BC1513	Biology 1503 Recitation	<ul> <li>(call #00033)         <ul> <li>01 F 1:10-</li> <li>2:00pm (Jessica</li> <li>Goldstein and</li> <li>James Casey)</li> </ul> </li> <li>Call #00034)         <ul> <li>02 M 10:00-</li> <li>10:50am (Jessica</li> <li>Goldstein and</li> <li>James Casey)</li> </ul> </li> </ul>	Prerequisites: BC1002 or equivalent preparation.  Corerequisite: BC1502 and BC1513.
UN2005	Introductory Biology I: Biochemistry, Genetics & Molecular Biology	Not offered spring 2020	
UN2006	Introductory Biology II: Cell Biology, Development & Physiology	<ul> <li>(call #11547)         <ul> <li>01 TR 10:10-</li> <li>11:25am</li> <li>(Deborah</li> <li>Mowshowitz</li> <li>and Mary Ann</li> <li>Price)</li> </ul> </li> <li>(call #11548)         <ul> <li>02 TR 4:10-</li> <li>5:25pm</li> <li>(Deborah</li> <li>Mowshowitz</li> <li>and Mary Ann</li> <li>Price)</li> </ul> </li> </ul>	Prerequisites: EEEB UN2001 or BIOL UN 2005 or instructor's permission.  Students must register for recitation section UN2016.
UN2100	Molecular and Mendelian Genetics	• (call #00036) 01 TR 10:10- 11:25am (Jennifer MAnsfield)	Prerequisites: BC1500, 1501, 1502, 1503 or the equivalent. This course is a prerequisite for most 3000-level courses.
UN3031	Genetics	• (call #11251)	Prerequisites: UN 2005

		01 TR 10:10- 11:25am (Iva Greenwald and Michelle Attner)	and 2006 or equivalent.
UN3041	Cell Biology	Not offered spring 2020	Prerequisites: One year of biology, normally UN2005 and 2006
UN3501	Biochemistry	Not offered spring 2020	
UN3512	Molecular Biology	Not offered spring 2020	

# Elective courses

Course Number	Course Name	Section Information	Prerequisites/Notes
BC2262	Vertebrate Biology	• (call #00037) 01 MW 10:10- 11:25am (Paul Hertz)	Prerequisites: BC1500, 1501, 1502, 1503 or the equivalent.
BC2272	Ecology	• (call #00038) 01 MW 8:40- 9:55am (Hilary Callahan)	Prerequisites: BC1500, 1501, 1502, 1503 or the equivalent. This course is corequisite for BC2873 Laboratory in Ecology.
BC2278	Evolution	• (call #00039) 01 MW 10:10- 11:25am (Brian Morton)	Prerequisites: BC1500, 1501, 1502, 1503 or the equivalent.
BC2280	Animal Behavior	• (call #00040) 01 MW 11:40- 12:55pm (Alison Pischedda)	Prerequisites: BC1500, 1501, 1502, 1503 or the equivalent. This course is corequisite for BC2281 Laboratory in Animal Behavior.
UN2402	Contemporary Biology	• (call #11549)	Prerequisites: a course in

	II: Cell Biology, Development & Physiology		01 TR 4:10- 5:25pm (Deborah Mowshowitz and Mary Ann Price)	college chemistry and UN 2005 or 2401 or written permission of instructor.
UN2501	Contemporary Biology Lab	•	See <u>Directory</u> of Classes	Prerequisites: strongly recommended prerequisite or corerequisite: UN2005 or UN2401.
BC2841	Lab - Plan Evolution & Diversity	•	(call #00041) 01 T 1:10- 6:00pm (Hilary Callahan)	Prerequisites: BC1500, 1501, 1503, or equivalent. Must attend the first lab to hold place. Enrollment limited to 16.
UN3005	Neurobiology II: Development & Systems	•	(call #11491) 01 TR 10:10- 11:25am (Rafael Yuste)	Prerequisites: UN3004, one year of biology, or the instructor's permission.
UN3025	Neurogenetics	•	(call #11254) 01 TR 8:40- 9:55am (Oliver Hobert)	Prerequisites: UN2005 and 2006.
UN3040	Lab in Molecular Biology	•	(call #11490) 01 W 1:10- 5:00pm (Alice Heicklen)	Prerequisites: UN2005 and 2006 and Contemporary Biology Lab ( UN2501)
UN3360	Physiology	•	(call #00044) 01 TR 10:10- 11:25am (John Glendinning)	Prerequisites: BC 1500, 1501, 1502, 1503 or the equivalent
UN3361	Laboratory in Physiology	•	(call #00046) 01 W 1:10- 6:00pm (John Glendinning)	Prerequisites: BC3360

# 3. Business (Graduate-Level)

\*\*\*PLEASE NOTE THAT BUSINESS SCHOOL COURSES ARE SUBJECT TO STRICT CROSS-REGISTRATION GUIDELINES STATED ON PAGE 55\*\*\*

#### General Information:

To align with today's dynamic markets, Columbia SPS offers multiple non-degree Business programs and courses. Choose from among 20 graduate-level business courses and customize your curriculum to meet your goals and advance your career.

Are you preparing for a master's degree? Are you a business professional who wants to hone your leadership or marketing skills? These programs have been created to help you turn your aspirations into impact. You'll learn from scholar-practitioner faculty members who are leaders in their fields. Choose from flexible options including on-campus, online, full or part-time.

## **Course Sequencing:**

While the SPS Business programs recommend foundation courses for those with little to no academic or practical experience in business, there is no real sequencing of courses. That being said, please pay attention to prerequisites or other restrictions as detailed in the course descriptions.

As always, feel free to contact your advisor with any questions about course registration eligibility and cross-registration procedures.

## As of 11/25/2019 for the Spring 2020 term these courses will be available:

#### Business Courses

Course Number	Course Name	Section Information	Prerequisites/Notes
PS4007	Programming in Java	• (call #14301) 001 WF 6:10pm-8:00pm (Samuel Sultan)	
PS5001	Introduction to Finance	• (call #14302) 001 T 6:10pm-8:00pm (Stephen Hurley) • (call #14304)	

		003 W 6:10pm-8:00pm (Eleni Vrana) • (call #14303) D02 R 8:10pm-10:00pm (Mario Gonzalez-Corzo)	
PS5003	Corporate Finance	<ul> <li>(call #14305)         001 T 6:10pm-8:00pm         (Hany S Guirguis)         (call #14306)         003 F 2:10pm-4:00pm         (John D Van Ness)         (call #14307)         D02 R 8:10pm -10:00pm         (Kevin Sweeney)</li> </ul>	Professor open to (except for
PS5008	Options and Futures	• (call #14310) 001 R 6:10pm-8:00pm (Christos I Giannikos)  Notes: Not CC/SEAS	open to
PS5009	Financial Accounting	<ul> <li>(call #14311)     001 W 6:10pm-8:00pm     (Marc Blatter)</li> <li>(call #14312)     003 F 2:10pm-4:00pm     (Benedict O Okoh)</li> <li>(call #14313)     D02 T 8:10pm-10:00pm     (Rebecca Shaffer)</li> </ul>	(except for
PS5010	Managing Human Behavior in the Organization	<ul> <li>(call #14314)         001 R 8:10pm-10:00pm         (Edward F Pasquina)</li> <li>(call #14315)         003 F 12:10pm-2:00pm         (Jacqueline Strayer)</li> <li>(call #14316)         D02 T 8:10pm-10:00pm         (John Bockstoce)</li> </ul>	(except for
PS5020	Introduction to Marketing	• (call #14317)  001 M 6:10pm-8:00pm (Beth Hirschhorn and Jenny M Fernandez)  • (call #14318)  Notes: Not CC/SEAS D02 online	(except for

		D02 W 8:10pm-10:00pm (Lauri Harrison)	
PS5025	Marketing Strategy	<ul> <li>(call #14319) 001 M 6:10pm-8:00pm (Sandy Becker)</li> <li>(call #14320) D02 R 8:10pm-10:00pm (Andrew Blum)</li> </ul>	Prerequisites: BUSI PS5020 or Professor Approval  Notes: Not open to CC/SEAS (except for D02 online)
PS5030	Developing and Implementing New Ideas	<ul> <li>(call #14321) 001 R 6:10pm-8:00pm (Michael E Jr McGuire)</li> <li>(call #14322) 002 M 6:10pm-8:00pm (Joris Magenti)</li> </ul>	
PS5040	Security Analysis	• (call #14324) 001 R 6:10pm-8:00pm (Guy M Miller)	Prerequisites: BUSI PS5001 and BUSI PS5003 or Professor Approval required. If you have not taken PS5001 or PS5003 at Columbia University, please contact phb2120@columbia.edu for professor approval  Notes: Cont. Ed. students only; not open to CC/SEAS
PS5100	Global Emerging Markets	• (call #14325) 001 T 6:10pm-8:00pm (Panos Mourdoukoutas)	
PS5225	Delivering the Strategic Message	• (call #14326) 001 W 6:10pm-8:00pm (Matthew Frederick)	
PS5230	Navigating Facts & Communications: Truth	• (call #15027) 001 T 6:10pm-8:00pm (Liza Gross and Ambika Samarthya-Howard)	

# 4. Chemistry

#### General Information:

The Chemistry department offers a number of general and applied courses. Because the science is constantly changing, chemistry 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 take different trajectories, there is a core that provides the essential foundation students need regardless of the path they choose. Columbia University offers Chemistry courses of varying types, including General Chemistry, Chemical Physics, Biochemistry, and Environmental Chemistry.

## **Course Sequencing:**

Sequencing for Chemistry courses vary depending on the extent to which the student has taken chemistry courses at the high school level. One track is to take **Chemistry I-Lecture 1403**, and then following up with **General Chemistry II-Lecture 1404** + 1500. A second track is to skip 1403, 1404, and 1500 because the equivalents of these have already been taken and take **Physical Chemistry I-Lectures 3079**, **Physical Chemistry II-Lectures 3080**, and 3085 **Physical and Analytical Chemistry Laboratory I** instead.

Students interested in Chemistry may in turn be interested in courses in Mathematics, Statistics, Biology, and Physics.

## As of 11/25/2019 for the spring 2020 term these courses are available:

#### Core courses

Course Number	Course Name	Section Information	Prerequisites/Notes
UN1403	General Chemistry I- Lecture	• (call #11594) 01 TR 6:10- 7:25pm (Ruben Savizky)	Notes: to be enrolled in 1403 sec 1, you must register for UN1405 rec.
UN1404	General Chemistry II- Lecture	• (call #11595) 01 TR 11:40- 12:55pm (Angelo Cacciuto)	Notes: to be enrolled in UN1404 Sec 1, you must register for UN1406-Recitation.

		• (call #11596) 02 MW 6:10- 7:25pm (Robert Beer)	To be enrolled in UN1404 Sec 2, you must register for UN1408-Recitation.
UN1405	General Chemistry I - Recitation	• See <u>Directory</u> <u>of Classes</u>	Corerequisites: UN1403, 1405
UN1406	General Chemistry II- Recitation	• See <u>Directory</u> <u>of Classes</u>	Corerequisites: must register for UN1404 Sec 1
UN1408	General Chemistry II- Recitation	• See <u>Directory</u> of Classes	Corerequisites: must register for UN1404 Sec 2
UN1500	General Chemistry Laboratory	• See <u>Directory</u> <u>of Classes</u>	Corerequisites: UN1403 + 1404.
UN1501	General Chemistry Lab-Lecture	<ul> <li>(call #11631)         <ul> <li>01 M 11:40-</li> <li>12:55pm (Sarah</li> <li>Hansen and</li> <li>Joseph Ulichny)</li> </ul> </li> <li>(call #11632)         <ul> <li>02 M 7:35-</li> <li>8:50pm (Sarah</li> <li>Hansen and</li> <li>Joseph Ulichny)</li> </ul> </li> </ul>	Notes: Students must register for 1500 and UN1501
UN1507	Intensive General Chemistry-Lab	<ul> <li>(call #11633) M 1:00-6:00pm (Luis Avila) <ul> <li>(call #11634) F</li> <li>1:00-6:00pm</li> <li>(Luis Avila)</li> </ul> </li></ul>	Prerequisites: UN 1604 or UN 2045.  Corerequisites: UN2045.
UN2046	Intensive Organic Chemistry for 1st Year	• (call #11635) 01 TR 11:40- 12:55pm (Colin Nuckolls)	Prerequisites: UN2045.  Recitation requirement to be arranged with TA
UN2408	First-Year Seminar in Chemical Research	• (call #11646) 01 F 12:00- 12:50 (Vesna	Prerequisites: UN1403 or 1604 or 2045 or instructor permission

			Gasperov)	
UN2444	Organic Chemistry II- Lectures	•	(call #12120) 01 MW 11:40- 12:55pm (Karen Philips) (call #12219) 02 MW 6:10- 7:25pm (Charles Doubleday)	Prerequisites: UN 1404 or 1604 and 1500.  To be enrolled in UN2444 Sect 1, you must register for UN2446-Recitation.  To be enrolled in UN2444 Sect 2, you must register for UN2444 Sect 2, you must register for UN2448-Recitation.
UN2446	Organic Chemistry - Recitation	•	See <u>Directory</u> of Classes	Note: to be enrolled in UN2444 Sect 1, you must register for UN2446 recitation.
UN2448	Organic Chemistry- Recitation	•	See <u>Directory</u> of Classes	Note: to be enrolled in UN2444 Sect 2, you must register for UN2448 recitation.
UN2494	Organic Chemistry Lab II Synthesis	•	See <u>Directory</u> of Classes	Prerequisites: UN1403 and 1404, and UN1500 and 2493.  Corerequisites: UN2444. Please note you must have completed UN2493 or the equivalent before you register for UN2494.
UN2496	Organic Chemistry Laboratory II	•	See <u>Directory</u> of Classes	Note: You must be enrolled for Lab section 01 or 02 or 03.
UN3079	Physical Chemistry I- Lectures	•	Not offered Spring 2020 term	
UN3080	Physical Chemistry II- Lectures	•	(call #12149) 01 MW 10:10-	Prerequisites: UN3079

		11:25 (Xiaoyang Zhu)	Corerequisites: UN3086  Recitation requirement to be arranged with TA
UN3085	Physical and Analytical Chemistry Laboratory I	<ul> <li>Not offered Spring 2020 term</li> </ul>	
UN3086	Physical and Analytical Chemistry Laboratory II	• (call #11655) 01 T 12:00- 6:00pm (Luis Avila)	Prerequisites: UN3085.  Corerequisites: UN3080 is acceptable corequisite for UN3086.
UN3546	Advanced Organic Chemistry Laboratory	• (call #11657) 01 M 1:00- 6:00pm (Fay Ng) • (call #11658) 02 T 1:00- 6:00pm (Fay Ng)	Prerequisites: UN2493 and UN2494

# Upper-level courses

Course Number	Course Name	Section Information	Prerequisites/Notes
GU4102	Chemistry for the Brain	• (call #12150) 01 TR 10:10- 11:25am (Dalibor Sames)	Prerequisites: Organic chemistry and biology courses, neuroscience or neurobiology recommended but not required.
GR6222	Quantum Chemistry II	• (call #12155) 01 MW 11:40- 12:55pm (Richard Friesner)	Prerequisites: GU 4221
GR8109	Concise	• (call #12239)	Instructor approval

	Organometallic Chemistry	01 MW 10:10- 11:25am (Jack Norton)	required for undergraduate students.  Notes: course dates are Mar 10-May4
GR8130	Chemistry of Nanocrystals	• (call #12240) 01 TR 11:40- 12:55pm (Jonathan Owen)	Instructor approval required for undergraduate students.
GR8223	Quantum Chemistry III	• (call #12241) 01 MW 11:40- 12:55pm (David Reichman)	Instructor approval required for undergraduate students.

# 5. Computer Science

\*\*\*PLEASE NOTE THAT THE COMPUTER SCIENCE DEPARTMENT COURSES ARE SUBJECT TO STRICT CROSS-REGISTRATION GUIDELINES STATED ON PAGE 55\*\*\*

#### General Information:

Computer Science courses are currently some of the most popular at Columbia University due to the large scope of areas in which the principles of computer science can be applied and the increasing market demand for this knowledge in nearly all sectors. Courses include those dedicated to understanding the theoretical and mathematical basis of computer science, as well as programming languages, operating systems, computer architecture, and specific applications and functions.

## Sequencing Information:

Computer Science courses build sequentially on each other. In addition, students often combine Computer Science courses with Mathematics courses including:

Linear Algebra (COMS 3251, MATH 2010, APMA 3101, APMA 2101)
Calculus I (UN1101)
Calculus II (UN1102)
Calculus III (UN1201)

Students interested in Computer Science courses may in turn be interested in courses in subject areas including Mathematics, Engineering, Statistics, and Business.

## As of 11/25/2019 for the spring 2020 term these courses are available:

Course Number	Course Name	Section Information	Prerequisites:
W1004	Introduction to Computer Science and Programming in Java	<ul> <li>(call #12611)         <ul> <li>01 TR 1:10-</li> <li>2:55pm (Adam Cannon)</li> </ul> </li> <li>(call #12612)         <ul> <li>02 TR 2:40-</li> <li>3:55pm (Adam Cannon)</li> </ul> </li> </ul>	Introductory course.

W3102	Developmental Technology	• (call #12613) 01 F 2:10- 4:00pm (Gary Zamchick)	Prerequisites: Fluency in at least one programming language.
W3134	Data Structures in Java	• (call #12615) 01 MW 5:40- 6:55pm (Paul Blaer)	Prerequisites: W1004
W3157	Advanced Programming	• (call #12618) 001 TR 4:10- 5:25pm (Jae Lee)	Prerequisites: W3134 or W3137
W3203	Discrete Mathematics	• (call #12619) 01 MW 10:10- 11:25pm (Anaf Salleb-Aouissi)	Prerequisites: Any introductory course in computer programming.
W3251	Computational Linear Algebra	• (call #12620) 01 TR 2:40- 3:55pm (Tony Dear)	
W3261	Computer science Theory	<ul> <li>(call #12622) 01 TR 10:10- 11:25pm (Mihalis Yannakakis)</li> <li>(cal #12910) 02 TR 11:40- 12:55pm (Mihalis Yannakakis)</li> </ul>	Prerequisites: W3203 Corequisites: W3134, W3136, W3137
BC3420	Privacy in a Networked World	• (call #00066) 01 R 4:10- 6:00pm (Rebecca Wright)	
CSEE W3827	Fundamentals of	• (call #14445)	Prerequisites: Any

	Computer Systems	01 MW 2:40- 3:55pm (Simha Sethumadhavan )	introductory course in computer programming.
STAT 4001	Probability and Statistics	•	Calculus through multiple integration and infinite sums.
W4111	Introduction to Databases	• (call #12624) 01 MW 1:10- 2:25pm (Kenneth Ross) • (call #13586) 02 F 10:10- 12:40pm (Donald Ferguson)	Prerequisites: W3134 or W3137 or W3136 and fluency in Java.
W4115	Programming Language and Translators	• (call #12625) 01 MW 2:40- 3:55pm (Ronghui Gu)	Prerequisites: W3134 or 3136 or 3137 and 3261 and CSEE 3827 or equivalent.
W4118	Operating Systems I	• (call #12625) 01 W 4:10- 6:40pm (Jae Lee)	Prerequisites: CSEE W3827 and knowledge of C and programming tools as covered in W3136, 3157, or W3101.
W4995	Topics in Computer Science	• See <u>Directory</u> of Classes.	Prerequisites: Instructor's Permission.

## 6. Economics

#### General Information:

Columbia University offers a wide range of Economics courses covering both general economics theory and courses focused on the practical application of economics in specific settings. Please note that Economics courses above 5000 are not open to Visiting Students.

## **Course Sequencing:**

The core sequencing for Economics courses begins with a course entitled **UN1105 Principles of Economics** and continues into **UN3211 Intermediate Microeconomics**, **UN3213 Intermediate Macroeconomics**, and **UN3412 Introduction to Econometrics**. For elective courses, electives in Economics all require **Principles of Economics** and select courses require subsequent courses in the sequence listed above. Please check the section and prerequisite information listed below for additional details.

Students interested in Economics courses may in turn be interested in courses in subject areas including Business, Statistics, Mathematics, Political Science, and Computer Science.

As of 11/25/2019 for the spring 2020 term these courses are available. Additional electives can be found on the Directory of Classes:

Course Code	Course Name	Section Information	<u>Prerequisites</u>
UN1105	Principles of Economics	<ul> <li>(call # 13663) 01 MW 8:40-9:55am (Sunil Gulati)</li> <li>(call # 13662) 02 TR 4:10-5:25am (Brendan O'Flaherty)</li> <li>(call # 13661) 03 TR 10:10-11:25am (Waseem Noor)</li> </ul>	Introductory course. No pre-reqs, but students must register for discussion section UN1155
UN11 55	Principles of Economics-Disc	• (call #47389) 01	Note: Required for UN1105.

BC20 10	The Economics of Gender	• (call #00162) 01 MW 11:40-12:55pm (Homa Zarghamee)	
UN25 57	The Global Economy	• (call #13665) 01 TR 11:40-12:55pm (Ronald Miller)	Prerequisites: IM1105.
BC30 13	Economic History of the United States	• (call #00165) 01 MW 1:10-2:25pm (David Weiman)	Prerequisites: BC3035 or 3033.
BC30 18	Econometrics	• (call #00163) 01 TR 11:40-12:55pm (Noha Emara)	Prerequisites: Econ BC3033 or 3035 and BC2411 or STAT W111 or W1211.
UN30 25	Financial Economics	• (call #00164) 01 MW 2:40-3:55pm (Martina Jasova)	Prerequisites: UN3211 and 3213 and STAT UN1201.
UN32 11	Intermediate Microeconomics	<ul> <li>(call #13667) 01 MW 2:40am-3:55pm (Wouter Vergote)</li> <li>(call #13688) 02 TR 11:40-12:55pm (Caterina Musatti)</li> <li>(call #13669) 03 MW 11:40-12:55pm (Ingmar Nyman)</li> </ul>	Prerequisites: ECON UN1105 and MATH UN1101 or UN 1201 or UN1207 - students must register for discussion section UN3212.
UN32 12	Intermediate Microeconomics- Disc	• (call #13670) 01	Required for UN3211.
UN32 13	Intermediate Macroeconomics	<ul> <li>(call #13671) 01</li></ul>	Prerequisites: ECON UN1105 and MATH UN1101. Corequisites: MATH UN1201 - must register

		(Stephanie Schmitt-Grohe) • (call #13673) 03 TR 1:10-2:25pm (Irasema Alonso)	for discussion section UN3214.
UN32 14	Intermediate Macroeconomics- Disc	• (call #13674) 001	Required for UN3213.
UN34 12	Introduction to Econometrics	<ul> <li>(call #13676) 01 TR 2:40pm-3:55pm (Seyhan Erden)</li> <li>(call #13677) 02 MW 1:10pm-2:25pm (Tamrat Gashaw)</li> <li>(call #13678)</li> </ul>	Prerequisites: ECON UN3211 or UN3213; MATH UN1201 or UN1205 or UN1207; STAT UN1201 - must register for discussion section UN3413.
UN34 13	Intro to Econometrics-Disc	• (call #13679) 001	Required for UN3412.
UN39 01	Economics of Education	• (call #13681) 01 W 2:10-4:00pm (Miguel Urquiola)	Prerequisites: UN3211 and 3213 and 3412.
GU42 11	Advanced Microeconomics	• (call #13683) 01 MW 1:10-2:25pm (Susan Elmes)	Prerequisites: UN3211 and 3213 and MATH UN3010. Students must register for required discussion section.  Corerequisites: MATH
			UN2500.

GU42 30	Economics of New York City	• (call #13685) 01 TR 10:10-11:25am (Donald Davis)	Prerequisites: UN3211 and UN3213 and STAT UN1201.
GU42 51	Industrial Organization	• (call #13686) 01 MW 11:40-12:55pm (Wouter Vergote)	Prerequisites: UN3211 UN3213.
GU42 80	Corporate Finance	<ul> <li>(call #13688) 01</li></ul>	Prerequisites: UN3211 and UN3212 and STAT UN 1201.

# 7. English

#### General Information:

The English department offers many courses of varying levels of difficulty and specificity. In addition to courses on English literature generally, specific courses may focus on specific period areas, genre areas such as Poetry, Prose Fiction/Narrative, Drama/Film/New Media, and geographic areas, including British, American, and Comparative/Global literature.

## **Course Sequencing:**

The sequencing for English courses refers to the one course English majors are required to take first, **UN3001 Literary Texts, Critical Methods.** 

Students interested in English courses may in turn be interested in courses in subject areas including History, Sociology, Linguistics, Applied Mathematics, and Business.

## As of 11/25/2019 for the spring 2020 term these courses are available:

Core courses

Course Number	Course Name	Section Information	Prerequisites/Notes
UN3001	Literary Texts & Critical Methods	• (call #10938) 01 W 6:10- 7:25pm (Edward Mendelson)	Introductory Course.  Must also register for a section of UN3011.
UN3011	Literary Texts & Critical Methods Seminar	<ul> <li>(call #11046) 01 M 6:10-8:00 (Veronica Belafi)</li> <li>(call #11048) 02 M 6:10-8:00 (Naomi Michalowicz)</li> <li>(call #11051) 03 M 12:10- 2:00pm (Anne Potter)</li> <li>(call #11052)</li> </ul>	Seminar section Must also register for section of UN3001.

	04 M 12:10- 2:00pm (Emma Styles-Swaim)  • (call #11053) 05 M 12:10- 2:00pm (Anna Waller)
--	--

Elective courses

Course Number	Course Name	Section Information	Prerequisites/Notes
UN3231	Snake Oil: Con Artists of American Fiction	• (call #10561) 01 W 12:10- 2:00pm (Amanda Lowe)	
UN3270	British Literature: 1950-Present	• (call #10998) 01 MW 2:40- 3:55pm (Jack Halberstam)	
UN3336	Shakespeare II	• (call #10940) 01 MW 10:10- 11:25am (James Shapiro)	
UN3343	Women in Renaissance Drama Culture	• (call #10941) 01 R 2:10- 4:00pm (Lauren Robertson)	
UN3394	How Writers Think	• (call #10942) 01 T 2:10- 4:00pm (Susan Mendelsohn)	
UN3710	American Literature & Culture	• (call #11119) 01 W 6:10- 8:00pm (Ann Douglas)	

UN3738	Philanthropy & Social Difference	• (call #10980) 01 W 2:10- 4:00pm (Victoria Rosner)	
UN3851	Indian Writing in English	• (call #10945) 01 R 4:10-6:00 (Gauri Viswanathan)	
UN3950	Poetics of the Warrior	• (call #11670) 01 R 4:10- 6:00pm (Marianne Giordani)	
GU4104	Renaissance Literature & Sexuality	• (call #10946) 01 R 2:10- 4:00pm (Julie Crawford)	
GU4404	Victorian Poetry	• (call #10947) 01 MW 10:10- 12:25am (Erik Gray)	
GU4621	Harlem Renaissance	• (call #10964) 01 TR 10:10- 11:25am (Robert O'Meally)	
GU4622	African American Literature II	• (call #10999) 01 MW 2:40- 3:55pm (Farah Griffin)	
GU4729	Canterbury Tales	• (call #10997) 01 TR 10:10- 11:25am (Eleanor Johnson)	
GU4750	Clarissa	• (call #11767) 01 T 12:10-	

		2:00pm (Jenny Davidson)	
GR6112	America's Shakespeare	• (call #10952) 01 T 10:10- 12:00pm (James Shapiro)	
GR6135	Renaissance Drama	• (call #11485) 01 T 4:10- 6:00pm (Jean Howard and Kim Hall)	
GR6553	Woolf, Women, and War	• (call #10954) 01 W 2:10- 4:00pm (Sarah Cole)	
GR6631	Literary-Cultural History	• (call #10978) 01 T 6:10- 8:00pm (Andrew Delbanco)	
GR6663	American Sympathy	• (call #10951) 01 W 2:10- 4:00pm (Aaron Ritzenberg)	
GR6913	Teaching Writing: Theory & Practice	• (call #10949) 01 M 2:10- 4:00pm (Aaron Ritzenberg)	Requires instructor's permission.

## 8. Mathematics

#### General Information:

The Mathematics department offers courses of varying difficulty, scope, and application. This includes courses dedicated to pure mathematical theory, the relations between different areas of mathematical analysis, and the application of mathematics in specific areas, such as computer science and finance.

## **Course Sequencing:**

The sequencing for Mathematics is highly structured and most courses build on each other in terms of content. The sequencing begins with the Calculus sequence, continues into GU4041-42 Modern Algebra I-II, and completes with GU4061 Modern Analysis. The remainder of the courses are electives taken within the mathematics department or qualifying partner programs/departments.

Additional electives can be found on the <u>Directory of Classes</u>.

Students interested in Mathematics courses may in turn be interested in courses in subject areas including Statistics, Economics, Computer Science, Applied Mathematics, and Business.

For additional details and information on department offerings, course sequences, and program requirements, please see the website for the <u>Mathematics Department</u>.

## As of 11/25/2019 for the spring 2020 term these courses are available:

Course Number	Course Name	Section Information	Prerequisites
UN1101	Calculus I	• See <u>Directory</u> of Classes.	Pre-calculus or equivalent.
UN1102	Calculus II	• See <u>Directory</u> of Classes.	Prerequisites: UN1101.
UN1201	Calculus III	• See <u>Directory</u> of Classes.	Prerequisites: UN1101.
UN1202	Calculus IV	• (call #00067) 01 TR 10:10- 11:25am (Daniela Silva) • (call #00275)	Prerequisites: UN1102 or UN1201 or the equivalent.

		02 TR 2:40- 3:55pm (Lindsay Piechnik)	
UN1205	Accelerated Multivariable Calculus	• (call #12046) 01 MW 2:40- 3:55pm (Florian Johne)	Prerequisites: UN1101 or UN1102.
UN2010	Linear Algebra	• See <u>Directory</u> of Classes.	Prerequisites: UN1201.
GU4041	Modern Algebra I	• (call #12116) 01 TR 10:10- 11:25am (Michael Harris)	Prerequisites: UN1102, UN1202, and UN2010.
GU4042	Modern Algebra II	• (call #12121) 01 TR 1:10- 2:25pm (Yihang Zhu)	Prerequisites: UN1102, and UN1202, and UN 2010.
GU4061	Modern Analysis	• (call #12124) 01 MW 1:10- 2:25pm (Hui Yu) • (call #12125) 02 MW 4:10- 5:25pm (Hui Yu)	Prerequisites: UN1202 and UN2010.
GU4062	Modern Analysis II	• (call #12126) 01 MW 1:10- 2:25pm (Evgeni Dimitrov)	Prerequisites: UN1202 and UN2010.

## 9. Physics

#### General Information:

The Physics department offers courses that provide 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.

**Course Sequencing:** The physics department maintains several tracks, one for non-science majors, science majors, and those planning to pursue graduate education in physics. Please find additional information located <a href="https://example.com/here">here</a>.

Additional electives can be found on the <u>Directory of Classes</u>.

Students interested in Physics courses may in turn be interested in courses in subject areas including Mathematics, Chemistry, Statistics, Computer Science, and Biology.

As of 11/25/2019 for the spring 2020 term these courses are available:

Course Number	Course Name	Section Information	Prerequisites/Notes
UN1201	General Physics I	• (call #15888) 01 MW 5:40- 6:55pm (Michael Tuts)	Prerequisites: some basic background in calculus or concurrently taking MATH UN1101.  Students must register for PHYS UN1203 Recitation with Same Instructor.
UN1202	General Physics II	• (call #15889) 01 MW 10:10- 11:25pm (Cory Dean) • (call #15890) 02 TR 6:10- 7:25pm (Burton Budick)	Prerequisites: this course will use elementary concepts from calculus (MATH UN1101).  Students must register for accompanying lab PHYS UN1291-UN1292.

			The sequences PHYS UN1201-1202 satisfies the requirements for medical school.
UN1291	General Physics Laboratory	• See <u>Directory</u> of Classes.	Corequisites: UN1201.
UN1292	General Physics Laboratory II	• See <u>Directory</u> of Classes.	Corequisites: UN1202.
UN1401	Introduction to Mechanics and Thermodynamics	• Not offered Spring 2020.	
UN1402	Introduction to Electricity, Magnetism, and Optics	<ul> <li>(call #15891) 01 MW 1:10- 2:25pm (Georgia Karagiorgi)</li> <li>(call #15893) 02 TR 10:10- 11:25am (Tanya Zelevinsky)</li> </ul>	Prerequisites: UN1401.  Corerequisites: MATH UN1102.
UN1403	Introduction to Classical and Quantum Waves	• Not offered Spring 2020.	
UN1601	Physics I: Mechanics and Relativity	• Not offered Spring 2020.	
UN1602	Physics II: Thermodynamics, Electricity, and Magnetism	• (call #15894) 01 TR 10:10- 11:25am (Jeremy Dodd)	Prerequisites: UN1601.  Corerequisites: MATH UN1201 or equivalent.
UN2601	Physics III: Classical and Quantum Waves	• Not offered Spring 2020.	
UN2801	Accelerated Physics I	• Not offered Spring 2020.	
UN2802	Accelerated Physics II	• (call #15896) 01 TR 10:10-	Prerequisites: UN2801.

### 10. Political Science

#### General Information:

The Political Science department offers courses covering both general Political Science theory and courses focused on four main areas of study, including American Politics, Comparative Politics, International Relations, and Political Theory.

#### **Course Sequencing:**

The sequencing for Political Science courses normally begins with two introductory courses of among UN1201 Introduction to American Politics, UN1501 Introduction to Comparative Politics, UN1601 International Politics, and UN1101 Political Theory I. Each course has an associated Discussion section that students must register for as well.

The department also maintains an extensive <u>list of Research Methods courses</u> relevant for Political Science.

The department also hosts elective **GU4700 Mathematical Methods for Political Science**, which provides students a basic set of mathematical tools needed to read, evaluate, and contribute in research areas that rely on mathematical techniques.

Students interested in Political Science courses may in turn be interested in courses in subject areas including Sociology, History, Communications, Economics, Statistics, and Business.

#### As of 11/25/2019 for the spring 2020 term these courses are available:

Course Code	Course Name	Section Information	Pre-requisites
UN1101	Political Theory I	• Not offered Spring 2020.	Required Discussion course UN1111
UN1111	Political Theory I-Disc	• Not offered Spring 2020.	No Pre-Registration; Those Interested Should Join Waitlist.
UN1201	Intro to American Politics	• (call #00381) 01 TR 10:10- 11:25pm (Michael Miller)	

UN1211	Intro to American Politics-Disc	• (call #00177) 001 M 3:10- 4:00pm (Stethem)	No Pre-Registration; Those Interested Should Join Waitlist
UN1501	Introduction to Comparative Politics	• Not offered Spring 2020.	Required Discussion course UN1511
UN1511	Intro to Comparative Politics-Disc	• Not offered Spring 2020.	No Pre-Registration; Those Interested Should Join Waitlist
UN1601	International Politics	• (call #14434) 01 MW 11:40- 12:55pm	Discussion section UN1511 is mandatory.
UN1611	International Politics- Disc	• List of discussion sections 14 in fall 2019	
UN3100	Justice	• (call #10557) 01 MW 2:40- 3:55pm (David Johnston)	
UN3205	Public Opinion and American Democracy	• (call #0384) 01 MW 10:10- 11:25am (Katherine Krimmel)	
UN3208	State Politics	• (call #14435) 01 MW 6:10- 7:25pm (Carlos Vargas-Ramos)	
UN3245	Racial and Ethnics Politics	• (call #14437) 01 TR 4:10- 5:25pm (Yamil Velez)	
UN3254	First Amendment Values	• (call #00385) 01 T 4:10-	

		6:00pm (Paula Franzese)	
UN3591	Civil Wars & Political Violence	• (call #14438) 01 TR 10:10- 11:25am (Jack Snyder)	

# 11. Psychology

#### General Information:

The Psychology department offers courses covering a wide range of general psychology, including Perception, Cognition, Neuroscience, Social, Personality, and Abnormal. Please note that Clinical, Counseling, and Education Psychology courses are hosted by Teacher's College.

#### **Course Sequencing:**

The sequencing for Psychology courses begins with three foundational courses, **UN1001 Introductory Psychology**, **Statistics or 1001 Introduction to Psychology**, and **Research Methods (1420, 1450, 1455, 1490)**. The sequencing continues requiring the student to take one course in each of three groups of courses that meet the distribution requirement, which are the groups of Perception & Cognition, Psychobiology & Neuroscience, and Social, Personality and Abnormal.

Students interested in Psychology courses may in turn be interested in courses in subject areas including Statistics, Neuroscience, Sociology, and Political Science.

#### As of 11/25/2019 for the spring 2020 term these courses are available:

#### Core Courses

Course Number	Course Title	Section Information	Prerequisites and Notes
UN1001	The Science of Psychology	• (call #11768) 01 TR 1:10-2:25 (Patricia Lindemann) • (call #11796) 02 MW 1:10- 2:25pm (Svetlana Rosis)	Introductory course  Registration is blocked for this course and every student must join the WAITLIST to be admitted.
BC1001	Introduction to Psychology	• (call #00125) 01 MW 8:40- 9:55am (E'mett McCaskill) • (call #00126)	This course is prerequisite for subsequent psychology courses.

		02 MW 4:10- 5:25pm (Patricia Stokes) • (call #00127) 03 TR 2:40- 3:55pm (Sarbina Jhanwar)	
BC1010	Intro Lab Experimental Psychology	• (call #00128) 01 T 10:10- 1:00pm (Ken Light) • (call #00129) 02 T 1:10- 4:00pm (Ken Light) • (call #00130) 03 R 10:10- 1:00pm (Ken Light).=	Intended for students who have not previously been enrolled in a psychology lab course.
UN1420	Research Methods: Human Behavior	• (call #11770) 01 M 4:10- 6:00pm (Patricia Lindemann)	Prerequisites 1001 or 1010 and a statistics course (1610 or equivalent).  Recommended after UN1610
UN1450	Research Methods: Social Cognition & Emotion	• Not offered Spring 2020.	Prerequisites 1001 or 1010 and a statistics course (1610 or equivalent).  Recommended after UN1610
UN1455	Research Methods: Social & Personality	• Not offered Spring 2020.	Prerequisites 1001 or 1010 and a statistics course (1610 or equivalent).  Recommended after UN1610
UN1490	Research Methods:	Not offered	Prerequisites 1001 or

	Cognition and Decision Making	Spring 2020.	1010 and a statistics course (1610 or equivalent).  Recommended after UN1610
UN1610	Introductory Statistics for Behavioral Scientists	• (call #10957) 01 TR 10:10- 11:25 (Christopher Baldassano)	UN1001 or UN1010  This course is recommended for those interested in psychology, but STAT UN1001, 1101, 1201, and PSYC UN1660 are alternative statistics courses.  Majors have priority.  Must register for a section of UN1611
UN2235	Thinking and Decision Making	• (call #10963) 01 TR 11:40- 12:55pm (Herbert Terrace)	Prerequisites: an introductory course in psychology.

## Electives:

The Psychology Department hosts numerous elective. Please refer to this website for a full listing of <u>electives</u>.

Course Number	Course Title	Section Information	Prerequisites and Notes
UN1420	Experimental Psychology of Human Behavior	• (call #11770) 01 M 4:10-6:00 (Patricia Lindemann)	Prerequisites: UN1001. or UN1010 and UN1610.
UN2250	Evolution of Cognition	• (call #10963) 01 TR 11:40-	Prerequisites: UN1001 or UN1010.

		12:55pm (Herbert Terrace)	
UN2420	Animal Behavior	• (call #10972) 01 TR 2:40- 3:55pm (Sarah Wooley)	Prerequisites: UN1001 or UN1010.
UN2430	Cognitive Neuroscience	• (call #11773) 01 MW 2:40- 3:55pm (Mariam Aly)	Prerequisites: UN1001.
UN2650	Intro to Cultural Psychology	• (call #11774) 01 MW 10:10- 11:25am (Valerie Purdie- Greenaway)	Introductory course.
UN3290	Self: A Cognitive Exploration	• (call #11775) 01 F 12:10- 2:00pm (Karen Kelly)	Request instructor approval and join waitlist.
UN3481	Critical Periods in Brain	• (call #11056) 01 R 10:10- 12:00pm (Sarah Canetta)	Request instructor approval and join waitlist.
UN3625	Clinical Neuropsychology	• (call #11013) 01 M 12:10- 2:00pm (E'mett McCaskill)	Prerequisites: UN 1010 or UN2450.  Request instructor approval and join waitlist.
UN3693	Stress in an Interpersonal Context	• (call #10973) 01 M 4:10- 6:00pm (Katherine Zee)	Request instructor approval and join waitlist.
GU4223	Memory & Executive Function throughout the Lifespan	• (call #11806) 01 W 12:10- 2:00pm (David Friedman)	Prerequisites: UN1001 or 1010.  Requires instructor's

			permission.
GU4225	Consciousness & Attention	• (call #10965) 01 T 10:10- 12:00pm (Alfredo Spagna)	Request instructor approval and join waitlist
GU4244	Language and Mind	• (call #11808) 01 W 2:10- 4:00pm (Nora Isacoff)	Prerequisites: UN1001  Request instructor approval and join waitlist.
GU4270	Cognitive Processes	• (call #10961) 01 T 12:10- 2:00pm (Janet Metcalfe)	Graduate Students Only.  Request instructor approval and join waitlist.
GU4281	The Psychology of Curiosity	• (call #11012) 01 R 12:10- 2:00pm (Caroline Marvin)	Prerequisites: UN1001  Request instructor approval and join waitlist.
GU4287	Decision Architecture	• (call #11810) 01 W 10:10- 12:00pm(Kather ine Fox- Glassman)	Prerequisites: UN2335  Request instructor approval and join waitlist.
GU4440	Topics in Neurobiology & Behavior	<ul> <li>(call #11811)</li> <li>01 R 12:10- 2:00pm (Rae Silver)</li> <li>(call #11812)</li> <li>02 F 2:10- 4:00pm (Jennifer Blaze)</li> </ul>	Request instructor approval and join waitlist.
GU4480	Psychobiology of Infant Development	• (call #11813) 01 T 4:10-	Prerequisites: UN1001 or 1010.

		6:00pm (William Fifer)	Request instructor approval and join waitlist.
GU4670	Theory of Social and Personality Psychology	• (call #11011) 01 W 2:10- 4:00pm (Tory Higgins)	Request instructor approval and join waitlist.
GU4690	Social Factors & Psychopathology	• (call #11814) 01 M 2:10- 4:00pm (Garaldine Downey)	Request instructor approval and join waitlist.

# 12. Sociology

#### General Information:

The Sociology department provides a variety of courses examining patterns of association, and 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.

Students interested in Sociology courses may in turn be interested in courses in Political Science, Psychology, History, and English.

As of 11/25/2019 for the spring 2020 term these courses are available:

Course Number	Course Name	Section Information	Prerequisites/Notes
UN1000	The Social World	• (call #16612) MW 11:40-12:55pm (Adam Reich)	Notes: required discussion section UN1100.
UN1100	The Social World- Discussion	• See <u>Directory of Classes</u> .	Notes: required discussion section for UN1000.
UN3000	Social Theory	• (call #00668) 01 TR 2:40-3:55pm (Deborah Becher)	
UN3009	Contemporary Sociological Theory	• (call #16171) 01 MW 5:40-6:55pm (Andreas Wimmer)	
W3010	Methods for Social Research	• (call #00002) 01 TR 4:10-5:25pm (Amy Zhou)	Prerequisites: UN1000.
W3011	Methods for Social Research - Discussion	• (call #16172) 01 W 6:10-7:00pm • (call #16174) 02 R 6:10-7:00pm	Prerequisites: UN1000. Discussion section for UN3010.

BC3214	Sociology of African American Life	• (call #00003) 01 MW 2:40-3:55pm (Mignon Moore)	One introductory course in sociology suggested.
UN3302	Sociology of Gender	• (call #00006) 01 MW 4:10-5:25pm (Elizabeth Bernstein)	One introductory course in sociology suggested.
UN3901	Sociology of Culture	• (call #00005) 01 T 2:10-4:00pm (Jonathan Rieder)	Prerequisites: BC1003 or equivalent and permission of the instructor.
UN3921	Higher Education and Inequality	• (call #16188) 01 W 2:10-4:00 (Teresa Sharpe)	
UN3926	Race, Place, and the United States	• (call #16189) 01 M 4:10-6:00pm (Kristin Murphy)	
UN3981	Migration & Development	• (call #16253) 01 R 8:10-10:00am (Yao Lu)	

#### 13. Statistics

#### General Information:

The Statistics department offers many types of courses that can be taken standalone or combined with courses in other subjects. Statistics is the art and science of study design and data analysis. Probability theory is the mathematical foundation for the study of statistical methods and for the modeling of random phenomena. Statistics courses build on a foundation in probability and statistical theory to provide practical training in statistical methods, study design, and data analysis.

#### **Course Sequencing:**

Students interested in statistical concepts, who plan on consuming, but not creating statistics, should take **UN1001 Introduction to Statistical Reasoning**. The course is designed for students who have taken a precalculus 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 **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 **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**.

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 should take as one of their electives STAT GU4281 Theory of Interest.

Students preparing for graduate study in statistics are encouraged to replace two electives with MATH GU4061 Introduction To Modern Analysis I and MATH GU4062 Introduction To Modern Analysis II.

Students interested in Statistics may in turn be interested in courses in Mathematics, Economics, Business, and Chemistry.

As of 11/25/2019 for the spring 2020 term these courses are available:

Course Number	Course Name	Section Information	Prerequisites/Notes	
UN1001	Intro to Statistical Reasoning  • (call #46676) 01 MW 10:10- 11:25am (Guy Cohen) • (call #46677) 02 TR 10:10- 11:25am (Victor de la Pena) • (call #46678) 03 TR 6:10- 7:25pm (Anthony Donoghue)		Introductory course.	
UN1101	Introduction to Statistics	• (call #46713) 01 MW 8:40- 9:55am (Banu Baydil) • (call #46714) 02 TR 10:10- 11:25am (David Rios) • (call #46715) 03 TR 6:10- 7:25pm (Ha Nguyen)	Prerequisites: intermediate high school algebra.	
UN1201	Calculus-Based Introduction to Statistics	• See <u>Directory</u> of Classes.	Prerequisites: one semester of Calculus.	
UN2102	Applied Statistical Computing	• (call #46679) 01 TR 4:10- 5:25pm (Wayne	Corerequisites: an introductory course in statistics (UN1101 is	

		Lee)	recommended).
UN3106	Applied Data Mining	• (call #16760) 01 TR 2:40- 3:55pm (Vincent Dorie)	Prerequisites: UN2103
GU4001	Introduction to Probability and Statistics	<ul> <li>(call #13714)         <ul> <li>01 TR 1:10-</li> <li>2:25pm (Larry Wright)</li> </ul> </li> <li>(call #13715)         <ul> <li>02 MW 6:10-</li> <li>7:25pm (Daniel Rabinowitz)</li> </ul> </li> </ul>	Prerequisites: Calculus through multiple integration and infinite sums.
GU4203	Probability Theory	<ul> <li>(call #16761) 01 TR 6:10- 7:25pm (David Rios)</li> <li>(call #16762) 02 TR 6:10- 7:25pm (David Rios)</li> </ul>	Prerequisites: at least one semester and preferable two of calculus. An introductory course (UN 1201) is strongly recommended.
GU4204	Statistical Inference	<ul> <li>(call #16763) 01 MW 2:40- 3:55pm (Ronald Neath)</li> <li>(call #16764) 02 TR 6:10- 7:25pm (Bodhisattva Sen)</li> <li>(call #16765) 03 TR 6:10- 7:25pm (Bodhisattva Sen)</li> </ul>	Prerequisites: GU 4203. At least one semester of calculus is required; two or three are strongly recommended.
GU4205	Linear Regression Models	• (call #46716) 01 S 12:10- 2:40pm (Jingchen Liu)	Prerequisites: GU 4204.

GU4206	Statistical Computer and Introduction to Data Science	•	(call #16766) 01 F 10:10- 12:40pm (Thibault Vatter)	Prerequisites: GU 4204 and 4205.
GU4207	Elementary Stochastic Processes	•	(call #16767) 01 MW 11:40- 12:55pm (Mark Brown)	Prerequisites: GU 4203.

# Upper level courses

Course Number	Course Names	Section Information	Prerequisites/Notes
GR5203	Probability	• (call #46692) 01 TR 6:10- 7:25pm (David Rios)	Prerequisites: at least one semester of calculus.
GR5204	Statistical Inference	• (call #16774) 01 TR 6:10- 7:25pm (Bodhisattva Sen)	Prerequisites: GR5203.
GR5205	Linear Regression Models	• (call #46717) 01 S 12:10- 2:40pm (Jingchen Liu)	Prerequisites: GR 5203 and 5204 or equivalent.
GR5206	Statistical Computing and Introduction to Data Science	• (call #16775) 01 F 10:10- 12:40pm (Thibault Vatter)	Corerequisites: GR5204 and GR5205 or equivalent.
GR5207	Elementary Stochastic Processes	• (call #16776) 01 MW 11:40- 12:55pm (Mark Brown)	Corerequisites: GR5203.
GR5241	Statistical Machine	• See <u>Directory</u>	Prerequisites: GR5206

Learning	of Classes.	or equivalent.

### 14. Columbia CORE

The **Core Curriculum** is a set of common courses required for all Columbia College undergraduates and considered the necessary general education for students, irrespective of their choice in major. This section is for students who are interested in learning about the Columbia CORE for the purposes of transferring into Columbia College.

For complete Spring 2020 course information for Core courses, please navigate to the Directory of Classes <u>here</u>. Please note that these courses are *not pre-approved* for registration for SPS students.

#### The Classes

Literature Humanities
Contemporary Civilization
University Writing
Art Humanities
Music Humanities
Frontiers of Science

#### Additional requirements

Science requirement
Global Core requirement
Foreign Language requirement
Physical Education requirement

For additional information and details about the Columbia Core Curriculum, please click <u>here.</u>

# 15. Additional Subjects

Additionally, here are some subjects that previous students have taken courses in that may be of interest to you:

#### Writing

Modern Languages (Spanish, German, French, Arabic, Chinese)

**Human Rights** 

**Quantitative Methods for Social Sciences** 

**Art History** 

**Humanities** 

Women's Studies

Architecture

**Astronomy** 

<u>Film</u>

Religion

**Theater** 

Music

**Dance** 

# IV. Cross-Registration Policies

Cross-Registration occurs whenever an SPS student enrolls into a course hosted by another school at Columbia. Cross-registration can greatly increase the number of courses you have access to, which allows you to customize your educational experience based on your interests and future goals to a higher degree. Although cross-registration is a common occurrence here at SPS, there are some specific steps in the cross-registration process and certain schools of Columbia have comparatively more rigorous policies for cross-registration.

If you are interested in cross-registration please follow these steps:

- 1) First, please be sure to review the <u>SPS Cross-Registration policies</u> listed on the School of Professional Studies Registration Page.
- 2) Identify the course that requires cross-registration (i.e., you cannot enroll into it on SSOL on your own, the course is not pre-approved or Open to: SPS) and then identify the school of Columbia that hosts this course.
- Navigate to the relevant cross-registration policy here in section IV based on the hosting school.
- 4) Follow the cross-registration policies listed below.

#### Some things to keep in mind:

- You may not attend classes without being formally registered for a course on SSOL.
- Again, some courses or programs may say they require a RAF to have the course manually added to your
  account. To access and fill out that form, please click the link <a href="here">here</a>.
- Some courses or programs may say they require **instructor permission**. To locate an instructor's email and other contact information, please use the **Columbia Staff Directory**, available <u>here</u>.
- Please note that cross-registration courses **should** *not* be viewed as **guarantees**, as they are often released to non-program students if (and only if) those who require them for their degree have already registered. It is advisable to register for that which is open to your program, and then treat these courses as back-up options just in case.

#### A. Columbia College (Columbia Undergraduate School)

- Most Columbia College courses can be enrolled in without following a specific cross-registration process through SSOL.
- However, if a course is not pre-approved for SPS enrollment, it is possible to request permission from
  the instructor to enroll into the course by way of email, so long as there are no notes that indicate only
  specific majors may enroll.

• By forwarding instructor approval to your advisor, you will then be able to use an RAF to enroll into the course.

#### B. Barnard College (Undergraduate Partner School)

- Please review Barnard's cross-registration policies available <a href="here">here</a>.
- Barnard courses appear in departmental course listings with the prefix "BC" before the course number.
- Please check the "Note" field in the course section details in the CU Directory. If the course does not have restrictions, you should be able to register for it.
- To request permission into any other course, you need instructor approval.
- By forwarding instructor approval to your advisor, you will then be able to use an RAF to enroll into the course.

#### C. Columbia Business School (Graduate School)

- Course registration for Business School MBA, EMBA, and PhD courses each follows a specific and concise deadline found at the links below:
  - o MBA Cross-Registration
  - EMBA Cross-Registration
  - o PhD Cross-Registration
- Business School courses can be identified by the letter B followed by numbers. For example, Fall 2019
   Business B8731 section 001 Global Healthcare Strategy
- Please read all the FAQs on the website they offer great insight.
- Please note, if you are somehow able to register via SSOL for a Business School course please drop the
  course. The Business School will audit registration and drop you from the course if you do not follow
  their cross registration policy!

#### D. Graduate School of Arts and Sciences (GSAS) (Graduate School)

- A number of GSAS courses can be enrolled in without following a specific cross-registration process through SSOL.
- However, if a course is not pre-approved for SPS enrollment, it is possible to request permission from the instructor to enroll into the course by way of email, so long as there are no notes that indicate only specific majors may enroll.
- By forwarding instructor approval to your advisor, you will then be able to use an RAF to enroll into the course.

#### E. Mailman School of Public Health (Graduate School)

- The Public Health school maintains its own <u>Cross-Registration Application Form</u> that must be completed independently of an RAF.
- Identify the <u>specific department</u> that is hosting the course in Mailman and then reach out to the respective Dean of Student Affairs requesting approval.

- By forwarding instructor approval to your advisor, you will then be able to use an RAF to enroll into the course.
- Courses taken through the School of Professional Studies cannot subsequently be transferred to a degree program at the Mailman School of Public Health.

#### F. School of Engineering and Applied Science (SEAS) (Undergraduate and Graduate School)

- To request permission into Computer Science and Engineering courses, please send your advisor a completed RAF (you may list a maximum of 4 courses, though the most you can be approved of is two of these courses in a given term)
  - The SEAS Department will review all requests during the first and second week of the start of the Fall or Spring (Summer you may register freely).
  - A SEAS representative will email you directly with the decision from the department (Approval or Denial).
  - Once the decision is rendered by the department consult with your advisor directly to make any additional changes to your cross-registration.

#### G. School of International and Public Affairs (SIPA) (Graduate School)

- Please click review the <u>SIPA cross-registration website</u> to view the courses available for non-SIPA students.
- Register via SSOL for the courses on the list only.
- For Undergraduate Students you must submit <u>SIPA cross registration</u> form along with instructor permission through the portal.
- Please note if you are unable to register via SSOL for a course found on the list, you will use the SIPA cross registration form and attach instructor permission.

#### H. School of Social Work (Graduate School)

- The School of Social Work maintains their own <u>cross-registration form</u> that must be completed. In addition to submitting this form, you must obtain instructor approval and forward this to their Student Service Office at <u>swstudentservices@columbia.edu</u>.
  - With the appropriate permission, students with the necessary prerequisites may enroll in certain courses on a space-available basis.

#### I. School of the Arts (SOA) (Graduate School)

- Undergraduate courses in film, theatre, writing, and visual arts are available to SPS students on a space-available basis.
- Although not permitted to enroll in M.F.A. writing courses, Postbaccalaureate Studies students may
  cross-register in selected graduate courses in the other divisions of the School of the Arts on a spaceavailable basis, with the permission of the Advisor or Program Director of the School of Professional
  Studies and the appropriate division of the School of the Arts.

#### J. <u>Teacher's College</u> (Graduate Partner School)

- Teacher's College maintains their own <u>Directory of Classes</u>, which is separate from the DoC.
- To request permission into any of these courses, you will need instructor approval.
- By forwarding instructor approval to your advisor, you will then be able to use an RAF to enroll into the course.
- Please note that TC uses a different Registrar and so there can be a delay between the acceptance of the cross-registration request and its addition to your schedule in SSOL.

#### K. School of Professional Studies Graduate Programs (Graduate/Non-Degree School)

Please note that, in general, for courses you are interested in taking from other SPS graduate programs, you can feel free to contact your advisor. Furthermore, not every class in every program will be available.
 To inquire about the availability of certain courses to request approval to take them, please see the program-specific procedures below:

#### 1. Actuarial Science

- To request permission into any of these courses, email the Actuarial Science advisor, Tanya Trueheart, at <a href="mailto:tt2707@columbia.edu">tt2707@columbia.edu</a> with your course request, your resume, and any additional information you believe might be relevant (e.g., your background in math, if you have passed any actuarial exams, etc.).
  - The courses and concepts tend to be mathematically challenging, so background is an important factor for approval.

#### 2. Applied Analytics

- Only courses open for cross-registration are **APAN 5100, 5300, 5800, 5160**, and **5210** (most popular)
- To request permission into any of these courses, please email the Applied Analytics advisor working on cross-registration requests between January 13th and January 17th. His name is Kyle Wilson and can be contacted at <a href="mailto:kw2849@columbia.edu">kw2849@columbia.edu</a>. Kyle will then send you a Google Form for your request.

#### 3. Bioethics

- To request permission into any of these courses, you need instructor approval.
- By forwarding instructor approval to your advisor, you will then be able to use an RAF to enroll into the course.

#### 4. Construction Administration

- To request permission into any of these courses, you must provide the following to the Advisor, Mydashia Hough, the program advisor, at <a href="mailto:mh3931@columbia.edu">mh3931@columbia.edu</a>:
  - Written evidence of both the relevance of the course for your current program of study and highlight what you expect to contribute to the class.

- Depending on the course, students must demonstrate relevant preparatory subject matter knowledge (i.e. transcripts, samples of coursework, resume, work experience, etc.)
- You must be in good academic standing per University and SPS requirements.
- You may not apply if you have been rejected from the MS Construction Administration Program.

#### 5. Enterprise Risk Management

- To request permission into any of these courses you will need permission from one of the ERM advisors, which is broken down by last name:
  - o **A-Li** Joshua Gleich (<u>jg4173@columbia.edu</u>)
  - o **Liang-Wang** Brian Martineau (<u>bm2973@columbia.edu</u>)
  - Wei-Z Cameel Singh (<u>cs3511@columbia.edu</u>)
- Please note that ERM courses may contain notes that restrict the class to ERM students only.

#### 6. Human Capital Management

- To request permission into any of these courses, please contact your primary advisor and send your resume and a brief letter explaining why you believe they should be allowed to take the course.
- The cross-registration request will then be forwarded to the program for review.

#### 7. Information & Knowledge Strategy

- To request permission into any of these courses, please contact the program advisor, Jason Alicea, at ja3421@columbia.edu.
- Please note that this is an executive program that follows a part-time, cohort model and thus cross-registration may be limited to select courses.

#### 8. Narrative Medicine

- Please obtain instructor approval to cross-register into Narrative Medicine courses.
- By forwarding instructor approval to your advisor, you will then be able to use an RAF to enroll into the course.
- Additionally, please note that the content of Narrative Medicine often involves the personal experience
  and intimate stories of students in the program, and for this reason cross-registration may be limited to
  select courses.

#### 9. Negotiation and Conflict Resolution

- For many courses, this program will have one section that is offered to NECR-only students and one that is offered to general SPS students. Instructor approval is not required to register for the open section.
- To request permission into any of the alternative courses, please reach out to the program advisor, Andy Huemmer, at <a href="mailto:ah3175@columbia.edu">ah3175@columbia.edu</a>.

#### 10. Nonprofit Management

• To request permission into any of these courses, please contact the program director Cindy Lott directly at <a href="mailto:cml2137@columbia.edu">cml2137@columbia.edu</a> with a copy of your resume and a short statement on why you would like to take the course and how it aligns with your academic and career interests.

#### 11. Sports Management

- To request permission into any of these courses, you must provide the following to Mydashia Hough, the program advisor, at <a href="mailto:mh3931@columbia.edu">mh3931@columbia.edu</a>:
  - Written evidence of both the relevance of the course for your current program of study and highlight what you expect to contribute to the class.
  - Opending on the course, students must demonstrate relevant preparatory subject matter knowledge (i.e. transcripts, samples of coursework, resume, work experience, etc.).
  - You must be in good academic standing per University and SPS requirements.
  - You may not apply if you have been rejected from the MS Sports Management Program.

#### 12. Sustainability Management

- Cross-registration into eligible SUMA courses for non-SUMA students will begin January 16th, 2020.
  - Any course open for cross-registration per section notes in the <u>Directory of Classes</u> will allow students to add themselves into a class directly on SSOL or onto the waitlist, if one exists.
  - For classes with a waitlist, please note that waitlists tend to fluctuate by about 30% on average during the change of program period.

#### 13. Sustainability Science

Sustainability Science (SUSC) courses sometimes require a technical background, so if you are interested
in registering for any of these courses, please reach out to Kristie Stack, Associate Director of Graduate
Programs in Sustainability Management and Science, at <a href="kd2528@columbia.edu">kd2528@columbia.edu</a> with your resume and a
brief statement of interest in the course.

#### 14. Technology Management

- Requests can only be made for Masters in Technology Management courses. Executive Tech (eTech)
   Management courses are not open to any other SPS programs

# V. Sample Schedules

## Business schedule

BUSI 5003 Corporate Finance BUSI 5010 Managing Human Behavior in the Organization BUSI 5030 Developing and Implementing New Ideas BUSI 5020 Introduction to Marketing

	Monday	Tuesday	Wednesday	Thursday	Friday
9:00am- 12:00pm					
1:00-3:00pm					
3:00-6:00pm					
6:10-8:00pm	BUSI 5020 Introduction to Marketing	BUSI 5003 Corporate Finance	BUSI 5030 Developing and Implementing New Ideas		
8:10-10:00pm				BUSI 5010 Managing Human Behavior in the Organization	

## Econ/Mathematics schedule

**ECON 3025 Financial Economics** 

**ECON 3018 Econometrics** 

ECON 3118 Econometrics Lab/Recitation

**MATH 2030 Ordinary Differential Equations** 

MATH 5010 Introduction to the Mathematics of Finance

	Monday	Tuesday	Wednesday	Thursday	Friday
9:00-11:30am					
11:40am- 12:55pm		ECON 3018 Econometrics		ECON 3018 Econometrics	
1:00-2:20pm					
2:40-3:55pm	ECON 3025 Financial Economics		ECON 3025 Financial Economics		
4:10-5:25pm		MATH 2030 Ordinary Differential Equation		MATH 2030 Ordinary Differential Equation	
5:30-7:30pm					
7:40-8:55pm	MATH 5010 Intro to the Math of Finance		MATH 5010 Intro to the Math of Finance		

# Varied Schedule #1

CHEM 1403 General Chemistry Lecture
CHEM 1405 General Chemistry Recitation
MATH 1003 College Algebra-Analytic Geometry
SPAN 1101 Elementary Spansh I
PSYC 1001 Introduction to Psychology

	Monday	Tuesday	Wednesday	Thursday	Friday
9:00-11:30am					
11:40- 12:55pm	SPAN 1101 Elementary Spanish I		SPAN 1101 Elementary Spanish I	SPAN 1101 Elementary Spanish I	

1:00-2:30pm					
2:40-3:55pm		PSYCH 1001 Intro to Psychology		PSYCH Intro to Psychology	
5:10-6:00pm	CHEM 1405 General Chemistry I - Recitation				
6:10-7:25pm	MATH 1003 College Algebra	CHEM 1403 General Chemistry Lectures	MATH 1003 College Algebra	CHEM 1403 General Chemistry Lectures	

# Varied schedule #2

DNCE 2250 Hip Hop Dance & Culture POLS 3100 Japanese Politics SOCI 3937 Sociology of Gender WMST 3530 Practicing Intersectionality

	Monday	Tuesday	Wednesday	Thursday	Friday
9:00-10:00am					
10:10- 11:25am	WMST 2150 Practicing Intersectionali ty		WMST 2150 Practicing Intersectionali ty		
11:40- 12:55pm	DNCE 2250 Hip Hop Dance & Culture		DNCE 2250 Hip Hop Dance & Culture		
1:00-2:30pm					
2:40-3:55pm	UN3100 Justice		UN3100 Justice		

02	UN3302		
0.	Sociology of Gender		
	ogy of er	ogy of Sociology of	ogy of Sociology of

### Pre-Medical Sequencing and Sample Schedule

\*\*\*PLEASE ALSO REFER TO SUBJECT-SPECIFIC SECTIONS OF THIS REGISTRATION PACKET, SUCH AS BIOLOGY, CHEMISTRY, PHYSICS, etc.\*\*\*

- 1 year of General Chemistry and General Chemistry Lab (CHEM UN1403 + UN1404 with lab UN1500, which should be taken concurrent or subsequent to UN1404)
- 1 year of Cell and Molecular Biology and Biology Lab (BIOL UN2401 + UN2402 with labs UN2501, which should be taken concurrently with either UN2401 or 2402)
- 1 year of Organic Chemistry and Organic Chemistry Lab (CHEM UN2443 + UN2444 with labs UN2493 and UN2494)
- 1 year of General Physics and Physics Lab (PHYS UN1201 + UN1291, then UN1202 + UN1292)
- 1 semester of Biochemistry (Biology and Chemistry UN3300)
- 1 semester of Statistics (STAT UN1101)
- 1 semester of Introductory Psychology (PSYCH UN1000)

Other things to keep in mind:

Most medical schools require a year of English – emphasizing skill acquisition in writing. (UN3001+3011)

Many medical schools currently require mathematical competency focused in areas covered in calculus and statistics. We therefore recommend that all students complete a semester of calculus in addition to statistics. (MATH UN1101 + STAT UN1101).

A number of medical schools actually require a semester of biochemistry and an increasing number will likely add it as a requirement in the future. Although our introductory biology sequence covers many of the foundational concepts of biochemistry, we cannot guarantee that all medical schools will accept this in fulfillment of a prerequisite requirement. We will be continuing to engage in conversations with individual schools to assess this and will keep you updated regarding these conversations. (BIO+CHEM UN3300).

A smaller subset of schools require more than one year of introductory biology. Many recommend specific advanced level classes. If you are a Texas or California resident, you should pay particular attention to your state

school requirements as they are among the schools that require the additional biology (BIOL courses after introduction).

A few schools have also begun to add social and behavioral science courses into their requirements including, but not limited to, psychology and sociology (**PSYCH UN1000 + SOCI UN1000**).

PLEASE NOTE: It is your responsibility to keep up to date with prerequisite requirements for the schools to which you intend to apply. These are subject to change from year to year. Check the current edition of the <u>MSAR</u> (Medical School Admission Requirements), which is updated annually and released in April, for the most up-to-date information. Most medical schools also list their requirements in greater detail on their individual websites. For links to these pages please go here: <a href="https://services.aamc.org/30/msar/home">https://services.aamc.org/30/msar/home</a>.

# Pre-medical schedule with Psych focus

BIOL 1502 Introduction to Cellular and Molecular Biology

**BIOL 1513 Recitation for 1503** 

BIOL 1503 Intro Lab for Cellular & Molecular Biology

**PSYC 2250 Evolution of Cognition** 

**PSYC 3166 Social Conflict** 

	Monday	Tuesday	Wednesday	Thursday	Friday
9:00-9:50am	BIOL 1502 Intro to Cellular and Molecular Biology		BIOL 1502 Intro to Cellular and Molecular Biology		BIOL 1502 Intro to Cellular and Molecular Biology
10:10am- 12:00pm			PSYC 3166 Social Conflict		
11:40am- 12:55pm		PSYC 2250 Evolution of Cognition		PSYC 2250 Evolution of Cognition	
1:10-2:00pm	BIOL 1503 Intro Lab for Cellular & Molecular Biology				BIOL 1513 Recitation for 1503

2:00-4:00pm	BIOL 1503		
	Intro Lab for		
	Cellular &		
	Molecular		
	Biology		

# V. Glossary

**Enrollment/Registration:** the process of adding a course onto your schedule.

**Directory of Classes:** a database of ALL course information for the current and previous terms.

**Change of Program Period (CoP):** the period in which you may register for courses. For the spring 2020 term the Change of Program period runs from Tuesday, January 21st to Friday, January 31st (1/21-1/31).

**Prerequisite courses:** courses that are required to enroll and succeed in a subsequent course.

**Cross-Registration:** Any registration by one student into a course hosted by another school. For example, an SPS student registering into a Columbia College course. Please see section IV for additional details.

**Registration Adjustment Form (RAF):** Registration form that can enable you to change your schedule. For this packet, the most common use of the RAF is to enroll into a course that a student cannot add on SSOL for any number of reasons (e.g., the course is looking for Prerequisites). The RAF is available electronically by clicking here.

**Instructor Approval:** approval to enroll into a course. Please note that for some courses that you are unable to enroll yourself into instructor approval will be sufficient and this approval can be obtained by email and then forwarded to your respective advisor for combination with an RAF. However, for cross-registration purposes into courses outside of SPS, Columbia College (CC), Barnard, and the Graduate School of Arts and Sciences (GSAS), instructor approval by itself is never sufficient for cross-registration. Please see section IV for additional details.

**People Directory:** staff directory of Columbia University. Individual instructors can be searched and contact information for them can be retrieved. Directory can be accessed by clicking <a href="here">here</a>.

**Course/Class:** a set curriculum hosted by a particular department and school (e.g. Introduction to Marketing).

**Section:** A particular instance of a given course course that varies in terms of instructor, time, and location (e.g., Introduction to Marketing Section 1 with Professor Smith on Tuesdays from 4:00-5:15 in Lewisohn Hall 614).

**Course Number:** The alphanumeric combination that specifies the subject matter and standing level of a course (e.g., UN 1101 Calculus 1, which indicates that this is an undergraduate level course at the 1000 level). For a full breakdown of Columbia's Course Listing please click <a href="here">here</a>.

**Call Number:** The unique 5-digit code associated with each section of a given course (e.g., 13846).

**Department Code:** The four letter code representing the Academic Department that manages the course.

**Points:** The number of classroom contact hours of a given course (equivalent to 'credit' at other institutions)

**Location:** where the course will be held. Each building of Columbia University has a specific Building Code that can be used to identify the location of the course in question. Given that the location of courses can change over time and prior to starting, we have omitted location information on this Registration Guide. Please confirm the location of the course through the DoC and SSOL using the 'schedule' or 'grades' function. A list of Building Codes can be found <a href="here">here</a>. Online courses will say 'online' or remain unlisted for their location.

**Enrollment Status:** the type of enrollment of a student. Full-time status at SPS is defined as taking at least 12 credits in a given term. Part-time is defined as any credit load below 12 credits, and half-time is defined as taking 6 credits in a given term.

## VI. Pro-Tips for Registration

Here are some additional things to keep in mind:

- Given the number of types of students and their standing, the courses listed in this Registration Packet are courses in which you *may* be eligible to enroll. Your individual student situation may impact your ability to enroll in these courses (e.g., if you lack certain prerequisites or the relevant class standing).
- Pay attention to the information contained in a Columbia course listing, as they contain important information about the hosting department, school, and the level of the course in question (e.g., MATH UN1101 Calculus I). For a full breakdown of Columbia's Course Listing please click <a href="here">here</a>.
  - o **UN:** courses numbered 1000-3999 are primarily for undergraduates
  - **GU:** mixed level courses numbered 4000-4999 are open to both undergraduate and graduate students.
  - **GR:** courses numbered 5000-9999 are primarily for graduate students.
  - If you are an undergraduate student, please check in with your advisor about taking courses about the 4000 level.
- It is advised to select courses that are your first choice, while maintaining a **course backup plan** of courses just in case for whatever reason you are unable to get into them. This is especially important for cross-registration requests, which can take some time to process and can be determined within the Change of Program period.
- Be sure to pay particular attention to the course sequencing information listed at the beginning of each subject-specific section. If you lack specific prerequisite courses on your account, and you will unless you have taken these courses previously at Columbia, you may think that you are unable to join a course. However, through instructor approval you can enroll in a course and join the sequencing based on previous courses you have taken or knowledge and skills you have acquired professionally.