

# POSTBACCALAUREATE PREMEDICAL PROGRAM

## Curriculum and Courses

The academic curriculum of the Postbaccalaureate Premedical Program is designed to fulfill the prerequisites for medical school admission. Because course requirements for medical school can vary, our premedical curriculum is designed to prepare Postbac Premed students to train anywhere in the nation. For the sequencing of the following required courses, please review the program timetables: [traditional](#), [part-time](#), or [accelerated](#). While enrolled in the program, students must fulfill all requirements with courses offered by Columbia's Faculty of Arts & Sciences. It is possible to complete some requirements with Barnard College course offerings, but students considering this option should discuss it with their advisors and understand the implications of this choice (see below under Biology and Organic Chemistry). All students are expected to have their advisors approve their programs of study. In addition to the following courses, students must gain at least 120 hours of [health care experience](#).

## English

One year of college English or the equivalent is required. Most Postbac Premed students have completed this requirement as undergraduates and do not need to complete course work in English at Columbia. Students should inform their advisors early on when they are especially interested in particular medical school programs (linkage or non-linkage), since some may have specific requirements for this subject of study.

## Mathematics

Students are required to complete one year (6 points) of college mathematics beyond pre-calculus, consisting of one term of calculus and one term of statistics. (Some students elect to take a second semester of calculus instead of statistics.)

If a student has not already successfully completed Calculus I, it may be taken as a co-requisite of Physics I or General Chemistry I.

## Courses

### MATH UN1101 CALCULUS I. 3.00 points.

Prerequisites: (see Courses for First-Year Students). Functions, limits, derivatives, introduction to integrals, or an understanding of pre-calculus will be assumed. (SC)

#### Spring 2024: MATH UN1101

Course Number	Section/Call Number	Times/Location	Instructor	Points	Enrollment
MATH 1101	001/00226	M W 6:10pm - 7:25pm LI002 Milstein Center	Lindsay Piechnik	3.00	95/100
MATH 1101	002/12300	T Th 10:10am - 11:25am 413 Kent Hall	Mrudul Thatte	3.00	42/100
MATH 1101	003/12301	T Th 2:40pm - 3:55pm 703 Hamilton Hall	Alex Xu	3.00	25/30
MATH 1101	004/12302	T Th 6:10pm - 7:25pm 312 Mathematics Building	Amal Mattoo	3.00	18/30
MATH 1101	005/12303	M W 2:40pm - 3:55pm 203 Mathematics Building	Mrudul Thatte	3.00	48/100
MATH 1101	006/12304	M W 4:10pm - 5:25pm 203 Mathematics Building	Jorge Pineiro Barcelo	3.00	45/100

#### Fall 2024: MATH UN1101

Course Number	Section/Call Number	Times/Location	Instructor	Points	Enrollment
MATH 1101	001/00081	T Th 1:10pm - 2:25pm 263 Macy Hall	Lindsay Piechnik	3.00	0/80
MATH 1101	002/00082	T Th 2:40pm - 3:55pm 405 Milbank Hall	Lindsay Piechnik	3.00	0/80
MATH 1101	003/11833	M W 10:10am - 11:25am Room TBA	Marco Castronovo	3.00	0/100
MATH 1101	004/11835	M W 11:40am - 12:55pm Room TBA	Marco Castronovo	3.00	0/100
MATH 1101	005/11837	M W 2:40pm - 3:55pm Room TBA	George Dragomir	3.00	0/100
MATH 1101	006/11838	M W 4:10pm - 5:25pm Room TBA	0. FACULTY	3.00	0/30
MATH 1101	007/11840	M W 6:10pm - 7:25pm Room TBA	Marco Sangiovanni Vincentelli	3.00	0/100
MATH 1101	008/11841	T Th 10:10am - 11:25am Room TBA	0. FACULTY	3.00	0/30
MATH 1101	009/11842	T Th 11:40am - 12:55pm Room TBA	George Dragomir	3.00	0/100
MATH 1101	010/11844	T Th 4:10pm - 5:25pm Room TBA	Marco Sangiovanni Vincentelli	3.00	0/100
MATH 1101	011/11845	T Th 6:10pm - 7:25pm Room TBA	0. FACULTY	3.00	0/30

**MATH UN1102 CALCULUS II. 3.00 points.**

Prerequisites: MATH UN1101 or the equivalent.

Prerequisites: MATH UN1101 or the equivalent. Methods of integration, applications of the integral, Taylors theorem, infinite series. (SC)

**Spring 2024: MATH UN1102**

Course Number	Section/Call Number	Times/Location	Instructor	Points	Enrollment
MATH 1102	001/00227	T Th 2:40pm - 3:55pm LI103 Diana Center	Lindsay Piechnik	3.00	57/60
MATH 1102	002/12305	T Th 10:10am - 11:25am 203 Mathematics Building	Lucy Yang	3.00	34/100
MATH 1102	003/12306	T Th 1:10pm - 2:25pm 417 Mathematics Building	Tomasz Owsiak	3.00	61/64
MATH 1102	004/12307	T Th 6:10pm - 7:25pm 520 Mathematics Building	Fan Zhou	3.00	11/30
MATH 1102	005/12308	M W 11:40am - 12:55pm 520 Mathematics Building	Davis Lazowski	3.00	23/30
MATH 1102	006/12309	M W 2:40pm - 3:55pm 312 Mathematics Building	Andres Fernandez Herrero	3.00	33/100
MATH 1102	007/12310	M W 4:10pm - 5:25pm 312 Mathematics Building	Andres Fernandez Herrero	3.00	12/100

**Fall 2024: MATH UN1102**

Course Number	Section/Call Number	Times/Location	Instructor	Points	Enrollment
MATH 1102	001/11847	M W 1:10pm - 2:25pm Room TBA	Andres Ibanez Nunez	3.00	0/100
MATH 1102	002/11848	M W 2:40pm - 3:55pm Room TBA	Andres Ibanez Nunez	3.00	0/100
MATH 1102	003/11849	M W 4:10pm - 5:25pm Room TBA	O. FACULTY	3.00	0/30
MATH 1102	004/11850	T Th 8:40am - 9:55am Room TBA	Lucy Yang	3.00	0/100
MATH 1102	005/11851	T Th 10:10am - 11:25am Room TBA	Lucy Yang	3.00	0/100
MATH 1102	006/11852	T Th 6:10pm - 7:25pm Room TBA	Elliott Stein	3.00	0/64

**STAT UN1101 INTRODUCTION TO STATISTICS. 3.00 points.**

Prerequisites: intermediate high school algebra. Designed for students in fields that emphasize quantitative methods. Graphical and numerical summaries, probability, theory of sampling distributions, linear regression, analysis of variance, confidence intervals and hypothesis testing. Quantitative reasoning and data analysis. Practical experience with statistical software. Illustrations are taken from a variety of fields. Data-collection/analysis project with emphasis on study designs is part of the coursework requirement

**Spring 2024: STAT UN1101**

Course Number	Section/Call Number	Times/Location	Instructor	Points	Enrollment
STAT 1101	001/13613	M W 8:40am - 9:55am 517 Hamilton Hall	Alexander Clark	3.00	75/86
STAT 1101	002/13614	T Th 10:10am - 11:25am 602 Hamilton Hall	David Rios	3.00	70/86
STAT 1101	003/13615	M W 6:10pm - 7:25pm 602 Hamilton Hall	Banu Baydil	3.00	71/86

## Biology

Students are required to complete one year (6 points) of biology emphasizing biochemistry, genetics, evolution, cell biology, developmental biology, and physiology, and one semester (3 points) of biology lab involving dissection, experimentation, and data analysis. Students may take the laboratory course in either the fall or spring

semester or in the first summer session after the completion of the year of biology.

**Notes about Barnard College's biology courses:** Students considering taking the biology course sequence at Barnard College (BIOL X1500-1502) are advised that enrollment in it is subject to the availability of space. Further, enrollment in Barnard's biology courses disqualifies postbacs for linkage. While the Barnard course generally covers the same subject matter as the corresponding Columbia sequence, it does not emphasize biochemistry. Also, content corresponding to Columbia's fall semester course is offered at Barnard in the spring; and content corresponding to Columbia's spring semester course is offered at Barnard in the fall. These courses can be taken in either order. Barnard's biology lab is a two-semester sequence of 2-credit lab courses; however, students who take the Barnard biology lecture sequence are welcome to complete the lab requirement with the Columbia lab course.

## Courses

**BIOL UN2401 CONTEMPORARY BIOLOGY I. 3.00 points.**

Prerequisites: a course in college chemistry or the written permission of either the instructor or the premedical adviser.

Prerequisites: one year of college chemistry or the written permission of either the instructor or the premedical adviser is required. Recommended as the introductory biology course for science majors who have completed a year of college chemistry and premedical students.

The fundamental principles of biochemistry, molecular biology, and genetics. Website: <http://www.columbia.edu/cu/biology/courses/c2005/index.html>. SPS and TC students may register for this course, but they must first obtain the written permission of the instructor, by filling out a paper Registration Adjustment Form (Add/Drop form). The form can be downloaded at the URL below, but must be signed by the instructor and returned to the office of the registrar. registrar. <http://registrar.columbia.edu/sites/default/files/content/reg-adjustment.pdf>

**Fall 2024: BIOL UN2401**

Course Number	Section/Call Number	Times/Location	Instructor	Points	Enrollment
BIOL 2401	001/10395	T Th 10:10am - 11:25am Room TBA	Michelle Attner, Marko Jovanovic	3.00	0/200
BIOL 2401	002/10396	T Th 4:10pm - 5:25pm Room TBA	Michelle Attner, Marko Jovanovic	3.00	0/200

**BIOL UN2501 CONTEMPORARY BIOLOGY LAB. 3.00 points.**

Enrollment per section limited to 28. Lab Fee: \$150.

Fee: Lab Fee - 150.00

Prerequisites: Strongly recommended prerequisite or corequisite: BIOL UN2005 or BIOL UN2401.

Prerequisite or corequisite: BIOL UN2005 or BIOL UN2401. Contemporary Biology Lab is designed to provide students with hands-on exploration of fundamental and contemporary biological tools and concepts. Activities include in depth study of mammalian anatomy and physiology through dissection and histology, as well as a series of experiments in genetics and molecular biology, with emphasis on data analysis and experimental technique

**Spring 2024: BIOL UN2501**

Course Number	Section/Call Number	Times/Location	Instructor	Points	Enrollment
BIOL 2501	001/10502	M 1:10pm - 5:00pm 922 Schermerhorn Hall	Ava Brent	3.00	16/28
BIOL 2501	002/10503	T 1:10pm - 5:00pm 922 Schermerhorn Hall	Joshua Abrams	3.00	22/28
BIOL 2501	003/10707	W 1:10pm - 5:00pm 922 Schermerhorn Hall	Ava Brent	3.00	18/28
BIOL 2501	004/10504	Th 5:40pm - 9:30pm 922 Schermerhorn Hall	Joshua Abrams	3.00	19/28

**Fall 2024: BIOL UN2501**

Course Number	Section/Call Number	Times/Location	Instructor	Points	Enrollment
BIOL 2501	001/10715	M 1:10pm - 5:00pm 922 Schermerhorn Hall	Ava Brent	3.00	0/30
BIOL 2501	002/10716	T 1:10pm - 5:00pm 922 Schermerhorn Hall	Joshua Abrams	3.00	0/30
BIOL 2501	003/10717	W 1:10pm - 5:00pm 922 Schermerhorn Hall	Ava Brent	3.00	0/30
BIOL 2501	004/10718	Th 5:40pm - 9:30pm 922 Schermerhorn Hall	Joshua Abrams	3.00	0/30
BIOL 2501	005/10719	F 1:10pm - 5:00pm 922 Schermerhorn Hall	Ava Brent	3.00	0/30

**BIOL UN2402 CONTMP BIO II:CELL BIO,DEV,PHYS. 3.00 points.**

Prerequisites: a course in college chemistry and BIOL UN2005 or BIOL UN2401, or the written permission of either the instructor or the premedical adviser.

Prerequisites: a course in college chemistry and BIOL UN2005 or BIOL UN2401, or the written permission of either the instructor or the premedical adviser. Cellular biology and development; physiology of cells and organisms. Same lectures as BIOL UN2006, but recitation is optional. For a detailed description of the differences between the two courses, see the course web site or <http://www.columbia.edu/cu/biology/ug/advice/faqs/gs.html>. Website: <http://www.columbia.edu/cu/biology/courses/c2006/>, SPS, Barnard, and TC students may register for this course, but they must first obtain the written permission of the instructor, by filling out a paper Registration Adjustment Form (Add/Drop form). The form can be downloaded at the URL below, but must be signed by the instructor and returned to the office of the registrar. <http://registrar.columbia.edu/sites/default/files/content/reg-adjustment.pdf>

**Spring 2024: BIOL UN2402**

Course Number	Section/Call Number	Times/Location	Instructor	Points	Enrollment
BIOL 2402	001/10710	T Th 10:10am - 11:25am 417 International Affairs Bldg	Alice Heicklen, Mary Ann Price, Jellert Gaublonne	3.00	30/400
BIOL 2402	002/10711	T Th 4:10pm - 5:25pm 309 Havemeyer Hall	Alice Heicklen, Mary Ann Price, Jellert Gaublonne	3.00	28/400

## Biochemistry (Recommended)

Because increasing numbers of medical schools require a semester of biochemistry, it is strongly recommended that postbacs take biochemistry. Usually, students take it during the application year.

### Courses

**BIOC UN3300 BIOCHEMISTRY. 3.00 points.**

Prerequisites: one year each of Introductory Biology and General Chemistry. Corequisites: Organic Chemistry. Primarily aimed at nontraditional students and undergraduates who have course conflicts with BIOC UN3501.

Prerequisites: one year each of Introductory Biology and General Chemistry. Corequisites: Organic Chemistry. Biochemistry is the study of the chemical processes within organisms that give rise to the immense complexity of life. This complexity emerges from a highly regulated and coordinated flow of chemical energy from one biomolecule to another. This course serves to familiarize students with the spectrum of biomolecules (carbohydrates, lipids, amino acids, nucleic acids, etc.) as well as the fundamental chemical processes (glycolysis, citric acid cycle, fatty acid metabolism, etc.) that allow life to happen. In particular, this course will employ active learning techniques and critical thinking problem-solving to engage students in answering the question: how is the complexity of life possible? NOTE: While Organic Chemistry is listed as a corequisite, it is highly recommended that you take Organic Chemistry beforehand

## Chemistry

Students are required to complete one year (8 points) of general chemistry and one semester (3 points) of general chemistry laboratory. The General Chemistry sequence must be completed before taking Columbia's Biology or Organic Chemistry courses. General chemistry lecture courses have corresponding, mandatory recitations. The laboratory course has a mandatory one-hour laboratory lecture course associated with it, and should be taken alongside or after General Chemistry II. AP credits cannot be used to fulfill the general chemistry requirement.

Chemistry is a course sequence that students are advised to begin in the fall or spring term. Students who enroll in Chemistry I in the spring are advised to take the 12-week Chemistry II course in the summer.

## Courses

### CHEM UN1403 GENERAL CHEMISTRY I-LECTURES. 4.00 points.

CC/GS: Partial Fulfillment of Science Requirement

Corequisites: MATH UN1101

Corequisites: MATH UN1101 Preparation equivalent to one year of high school chemistry is assumed. Students lacking such preparation should plan independent study of chemistry over the summer or take CHEM UN0001 before taking CHEM UN1403. Topics include stoichiometry, states of matter, nuclear properties, electronic structures of atoms, periodic properties, chemical bonding, molecular geometry, introduction to quantum mechanics and atomic theory, introduction to organic and biological chemistry, solid state and materials science, polymer science and macromolecular structures and coordination chemistry. Although CHEM UN1403 and CHEM UN1404 are separate courses, students are expected to take both terms sequentially. The order of presentation of topics may differ from the order presented here, and from year to year. Students must ensure they register for the recitation that corresponds to the lecture section. When registering, please add your name to the wait list for the recitation corresponding to the lecture section (1405 for lecture sec 001; 1407 for lecture sec 002; 1409 for lecture sec 003; 1411 for lecture sec 004). Information about recitation registration will be sent out before classes begin. DO NOT EMAIL THE INSTRUCTOR. Please check the Directory of Classes for details

#### Spring 2024: CHEM UN1403

Course Number	Section/Call Number	Times/Location	Instructor	Points	Enrollment
CHEM 1403	001/11152	T Th 6:10pm - 7:25pm 309 Havemeyer Hall	Ruben Savizky	4.00	96/120
CHEM 1403	AU1/18946	T Th 6:10pm - 7:25pm Othr Other	Ruben Savizky	4.00	8/10

#### Fall 2024: CHEM UN1403

Course Number	Section/Call Number	Times/Location	Instructor	Points	Enrollment
CHEM 1403	001/11207	M W 10:10am - 11:25am Room TBA	Gerard Parkin	4.00	0/220
CHEM 1403	002/11450	T Th 10:10am - 11:25am Room TBA	Xavier Roy	4.00	0/170
CHEM 1403	003/11140	T Th 6:10pm - 7:25pm Room TBA	Ruben Savizky	4.00	0/170
CHEM 1403	004/11141	M W 6:10pm - 7:25pm Room TBA	Robert Beer	4.00	0/120

### CHEM UN1500 GENERAL CHEMISTRY LABORATORY. 3.00 points.

CC/GS: Partial Fulfillment of Science Requirement

Lab Fee: \$140.

Corequisites: CHEM UN1403, CHEM UN1404

Corequisites: CHEM UN1403, CHEM UN1404 An introduction to basic lab techniques of modern experimental chemistry, including quantitative procedures and chemical analysis. Students must register for a Lab Lecture section for this course (CHEM UN1501). Please check the Directory of Classes for details. Please note that CHEM UN1500 is offered in the fall and spring semesters. Mandatory lab check-in will be held during the first week of classes in both the fall and spring semesters. You may be asked to serve as research subjects in studies under direction of the faculty while enrolled in this course (CHEM UN1500 Sec 1, 2, 5, 7 and CHEM UN1501 Sec 1). Participation in voluntary

#### Spring 2024: CHEM UN1500

Course Number	Section/Call Number	Times/Location	Instructor	Points	Enrollment
CHEM 1500	001/11142	M 2:10pm - 5:50pm 302 Havemeyer Hall	Sarah Hansen	3.00	25/24
CHEM 1500	002/11143	T 1:10pm - 4:50pm 302 Havemeyer Hall	Sarah Hansen	3.00	29/46
CHEM 1500	003/11144	T 6:10pm - 9:50pm 302 Havemeyer Hall	Joseph Ulichny	3.00	50/46
CHEM 1500	004/11145	W 8:40am - 12:25pm 302 Havemeyer Hall	Sarah Hansen	3.00	23/46
CHEM 1500	005/11146	W 1:10pm - 4:50pm 302 Havemeyer Hall	Joseph Ulichny	3.00	50/46
CHEM 1500	006/11147	Th 1:10pm - 4:50pm 302 Havemeyer Hall	Sarah Hansen	3.00	26/46
CHEM 1500	007/11148	Th 6:10pm - 9:50pm 302 Havemeyer Hall	Joseph Ulichny	3.00	49/46
CHEM 1500	008/11149	F 1:10pm - 4:50pm 302 Havemeyer Hall	Joseph Ulichny	3.00	23/24

#### Fall 2024: CHEM UN1500

Course Number	Section/Call Number	Times/Location	Instructor	Points	Enrollment
CHEM 1500	001/11157	T 1:10pm - 4:50pm 302 Havemeyer Hall	Sarah Hansen	3.00	0/46
CHEM 1500	002/11158	T 6:10pm - 9:50pm 302 Havemeyer Hall	Joseph Ulichny	3.00	0/46
CHEM 1500	003/11159	W 1:10pm - 4:50pm 302 Havemeyer Hall	Joseph Ulichny	3.00	0/46
CHEM 1500	004/11160	Th 1:10pm - 4:50pm 302 Havemeyer Hall	Sarah Hansen	3.00	0/46

**CHEM UN1404 GENERAL CHEMISTRY II-LECTURES. 4.00 points.**

CC/GS: Partial Fulfillment of Science Requirement

Prerequisites: CHEM UN1403

Prerequisites: CHEM UN1403 Although CHEM UN1403 and CHEM UN1404 are separate courses, students are expected to take both terms sequentially. Topics include gases, kinetic theory of gases, states of matter: liquids and solids, chemical equilibria, applications of equilibria, acids and bases, chemical thermodynamics, energy, enthalpy, entropy, free energy, periodic properties, chemical kinetics, and electrochemistry. The order of presentation of topics may differ from the order presented here, and from year to year. Students must ensure they register for the recitation that corresponds to the lecture section. Please check the Directory of Classes for details

**Spring 2024: CHEM UN1404**

Course Number	Section/Call Number	Times/Location	Instructor	Points	Enrollment
CHEM 1404	001/11174	T Th 10:10am - 11:25am 309 Havemeyer Hall	Christopher Eckdahl	4.00	200/190
CHEM 1404	002/11175	M W 8:40am - 9:55am 309 Havemeyer Hall	Angelo Cacciuto	4.00	71/170
CHEM 1404	003/11176	M W 6:10pm - 7:25pm 428 Pupin Laboratories	Robert Beer	4.00	37/120
CHEM 1404	AU1/18947	M W 6:10pm - 7:25pm Othr Other	Robert Beer	4.00	4/10

**Fall 2024: CHEM UN1404**

Course Number	Section/Call Number	Times/Location	Instructor	Points	Enrollment
CHEM 1404	001/11139	T Th 10:10am - 11:25am Room TBA	Christopher Eckdahl	4.00	0/50

## Organic Chemistry

Students are required to complete one year (8 points) of organic chemistry. Organic chemistry lecture courses have corresponding, mandatory recitations. Students are also required to take 1.5 points of organic chemistry lab along with a one-hour mandatory laboratory lecture in both fall and spring semesters (for a total of 3 points). Alternatively, with the exception of most linkage applicants, students may take a 3-point lab over a six-week summer session after completing the lecture sequence.

**Notes about Barnard College's organic chemistry courses:** Students considering taking the organic chemistry course sequence at Barnard College (CHEM X3230-3231) are advised that enrollment in it is subject to the availability of space. Further, enrollment in Barnard's organic chemistry courses disqualifies postbacs for linkage. The content corresponding to Columbia's fall semester course is offered at Barnard in the spring; and content corresponding to Columbia's spring semester course is offered at Barnard in the fall. Students planning to take the Barnard course sequence must begin it in the spring. Columbia students are not permitted to enroll in Barnard's organic chemistry lab course; they must fulfill this requirement at Columbia.

## Courses

**CHEM UN2443 ORGANIC CHEMISTRY I-LECTURES. 4.00 points.**

Prerequisites: (CHEM UN1403 and CHEM UN1404) or CHEM UN1604

Prerequisites: (CHEM UN1403 and CHEM UN1404) or CHEM UN1604

The principles of organic chemistry. The structure and reactivity of organic molecules are examined from the standpoint of modern theories of chemistry. Topics include stereochemistry, reactions of organic molecules, mechanisms of organic reactions, syntheses and degradations of organic molecules, and spectroscopic techniques of structure determination. Although CHEM UN2443 and CHEM UN2444 are separate courses, students are expected to take both terms sequentially. Students must ensure they register for the recitation which corresponds to the lecture section. Please check the Directory of Classes for details

**Fall 2024: CHEM UN2443**

Course Number	Section/Call Number	Times/Location	Instructor	Points	Enrollment
CHEM 2443	001/12538	M W 11:40am - 12:55pm Room TBA	James Leighton	4.00	0/120
CHEM 2443	002/11239	T Th 1:10pm - 2:25pm Room TBA	Neel Shah	4.00	0/120
CHEM 2443	003/11168	M W 6:10pm - 7:25pm Room TBA	Charles Doubleday	4.00	0/120

**CHEM UN2444 ORGANIC CHEMISTRY II-LECTURES. 4.00 points.**

Prerequisites: CHEM UN1404 or CHEM UN1604 and CHEM UN1500 and CHEM UN2443

Prerequisites: CHEM UN1404 or CHEM UN1604, CHEM UN1500 and CHEM UN2443. The principles of organic chemistry. The structure and reactivity of organic molecules are examined from the standpoint of modern theories of chemistry. Topics include stereochemistry, reactions of organic molecules, mechanisms of organic reactions, syntheses and degradations of organic molecules, and spectroscopic techniques of structure determination. Although CHEM UN2443 and CHEM UN2444 are separate courses, students are expected to take both terms sequentially. Students must ensure they register for the recitation which corresponds to the lecture section. Please check the Directory of Classes for details

**Spring 2024: CHEM UN2444**

Course Number	Section/Call Number	Times/Location	Instructor	Points	Enrollment
CHEM 2444	001/11189	M W 11:40am - 12:55pm 309 Havemeyer Hall	Christopher Eckdahl	4.00	146/150
CHEM 2444	002/11190	M W 6:10pm - 7:25pm 309 Havemeyer Hall	Charles Doubleday	4.00	70/120
CHEM 2444	003/11287	T Th 11:40am - 12:55pm 309 Havemeyer Hall	James Leighton	4.00	63/65
CHEM 2444	AU1/18948	M W 6:10pm - 7:25pm Othr Other	Charles Doubleday	4.00	1/10

**CHEM UN2493 ORGANIC CHEM. LAB I TECHNIQUES. 0.00 points.**

Lab Fee: \$63.00

Prerequisites: (CHEM UN1403 and CHEM UN1404) or (CHEM UN1604) and (CHEM UN1500 or CHEM UN1507)

Corequisites: CHEM UN2443

Prerequisites: (CHEM UN1403 and CHEM UN1404) or (CHEM UN1604) and (CHEM UN1500 or CHEM UN1507) Corequisites: CHEM UN2443  
Techniques of experimental organic chemistry, with emphasis on understanding fundamental principles underlying the experiments in methodology of solving laboratory problems involving organic molecules. Attendance at the first lab lecture and laboratory session is mandatory. Please note that CHEM UN2493 is the first part of a full year organic chemistry laboratory course. Students must register for the lab lecture section (CHEM UN2495) which corresponds to their lab section. Students must attend ONE lab lecture and ONE lab section every other week. Please contact your advisers for further information

Fall 2024: CHEM UN2493

Course Number	Section/Call Number	Times/Location	Instructor	Points	Enrollment
CHEM 2493	001/11169	M 1:10pm - 4:50pm 202a Havemeyer Hall	Talha Siddiqui	0.00	0/24
CHEM 2493	002/11170	T 12:10pm - 3:50pm 202a Havemeyer Hall	Talha Siddiqui	0.00	0/24
CHEM 2493	003/11171	T 6:10pm - 9:50pm 202a Havemeyer Hall	Talha Siddiqui	0.00	0/34
CHEM 2493	004/11172	W 1:10pm - 4:50pm 202a Havemeyer Hall	Anna Ghurbanyan	0.00	0/34
CHEM 2493	005/11173	Th 12:10pm - 3:50pm 202a Havemeyer Hall	Anna Ghurbanyan	0.00	0/34
CHEM 2493	006/11180	F 11:10am - 2:50pm 202a Havemeyer Hall	Anna Ghurbanyan	0.00	0/34
CHEM 2493	007/11181	M 1:10pm - 4:50pm 202a Havemeyer Hall	Talha Siddiqui	0.00	0/24
CHEM 2493	008/11182	T 12:10pm - 3:50pm 202a Havemeyer Hall	Talha Siddiqui	0.00	0/24
CHEM 2493	009/11183	T 6:10pm - 9:50pm 202a Havemeyer Hall	Talha Siddiqui	0.00	0/34
CHEM 2493	010/11184	W 1:10pm - 4:50pm 202a Havemeyer Hall	Anna Ghurbanyan	0.00	0/34
CHEM 2493	011/11185	Th 12:10pm - 3:50pm 202a Havemeyer Hall	Anna Ghurbanyan	0.00	0/34
CHEM 2493	012/11186	F 11:10am - 2:50pm 202a Havemeyer Hall	Anna Ghurbanyan	0.00	0/34

**CHEM UN2494 ORGANIC CHEM. LAB II SYNTHESIS. 0.00 points.**

Lab Fee: \$62.00

Prerequisites: (CHEM UN1403 and CHEM UN1404) and CHEM UN1500 and CHEM UN2493

Corequisites: CHEM UN2444

Prerequisites: CHEM W1403-CHEM W1404; CHEM W1500; CHEM W2493. Corequisites: CHEM W2444. Please note that you must complete CHEM W2493 before you register for CHEM W2494. This lab introduces students to experimental design and trains students in the execution and evaluation of scientific data. The technique experiments in the first half of the course (CHEM W2493) teach students to develop and master the required experimental skills to perform the challenging synthesis experiments in the second semester. The learning outcomes for this lab are the knowledge and experimental skills associated with the most important synthetic routes widely used in industrial and research environments. Attendance at the first lab lecture and laboratory session is mandatory. Please note that CHEM W2494 is the second part of a full year organic chemistry laboratory course. Students must register for the lab lecture section (CHEM W2496) which corresponds to their lab section. Students must attend ONE lab lecture and ONE lab section every other week. Please contact your advisors for further information

Spring 2024: CHEM UN2494

Course Number	Section/Call Number	Times/Location	Instructor	Points	Enrollment
CHEM 2494	001/11157	M 1:10pm - 5:00pm 202a Havemeyer Hall	Talha Siddiqui	0.00	18/24
CHEM 2494	002/11158	T 12:00pm - 3:50pm 202a Havemeyer Hall	Talha Siddiqui	0.00	15/24
CHEM 2494	003/11159	T 6:10pm - 10:00pm 202a Havemeyer Hall	Talha Siddiqui	0.00	23/34
CHEM 2494	004/11160	W 1:10pm - 5:00pm 202a Havemeyer Hall	Anna Ghurbanyan	0.00	33/34
CHEM 2494	005/11161	Th 12:00pm - 3:50pm 202a Havemeyer Hall	Anna Ghurbanyan	0.00	19/34
CHEM 2494	006/11162	F 11:00am - 2:50pm 202a Havemeyer Hall	Anna Ghurbanyan	0.00	18/34
CHEM 2494	007/11163	M 1:10pm - 5:00pm 202a Havemeyer Hall	Talha Siddiqui	0.00	13/24
CHEM 2494	008/11164	T 12:00pm - 3:50pm 202a Havemeyer Hall	Talha Siddiqui	0.00	7/24
CHEM 2494	009/11165	T 6:10pm - 10:00pm 202a Havemeyer Hall	Talha Siddiqui	0.00	29/34
CHEM 2494	010/11166	W 1:10pm - 5:00pm 202a Havemeyer Hall	Anna Ghurbanyan	0.00	26/34
CHEM 2494	011/11167	Th 12:00pm - 3:50pm 202a Havemeyer Hall	Anna Ghurbanyan	0.00	8/34
CHEM 2494	012/11168	F 11:00am - 2:50pm 202a Havemeyer Hall	Anna Ghurbanyan	0.00	13/34

## Physics

Students are required to complete one year (6 points) of general physics and one year (2 points) of general physics laboratory. Lab courses are normally taken concurrently with the corresponding lecture course.

Physics is a course sequence that students are advised to begin in the fall or spring term. Students who enroll in Physics I in the spring are advised to take the twelve-week Physics II course in the summer. (Physics II is not offered in the fall.) Calculus is a corequisite for Physics I; however, students who have never taken calculus before may be advised to complete it before undertaking Physics.



## Courses

### PHYS UN1201 GENERAL PHYSICS I. **3.00 points.**

CC/GS: Partial Fulfillment of Science Requirement

Prerequisites: some basic background in calculus or be concurrently taking MATH UN1101 Calculus I.,The accompanying laboratory is PHYS UN1291-UN1292

Prerequisites: some basic background in calculus or be concurrently taking MATH UN1101 Calculus I. The accompanying laboratory is PHYS UN1291-UN1292 The course will use elementary concepts from calculus. The accompanying laboratory is PHYS UN1291 - UN1292. Basic introduction to the study of mechanics, fluids, thermodynamics, electricity, magnetism, optics, special relativity, quantum mechanics, atomic physics, and nuclear physics

Spring 2024: PHYS UN1201

Course Number	Section/Call Number	Times/Location	Instructor	Points	Enrollment
PHYS 1201	001/11291	M W 4:10pm - 5:25pm 428 Pupin Laboratories	Eric Raymer	3.00	129/145

### PHYS UN1291 GENERAL PHYSICS I LAB. **1.00 point.**

Same course as *PHYS W1291x*, but given off-sequence.

Corequisites: PHYS UN1201

Corequisites: PHYS UN1201 This course is the laboratory for the corequisite lecture course and can be taken only during the same term as the corresponding lecture

Spring 2024: PHYS UN1291

Course Number	Section/Call Number	Times/Location	Instructor	Points	Enrollment
PHYS 1291	001/11317	M 1:00pm - 4:00pm Room TBA	Giuseppina Cambareri	1.00	13/15
PHYS 1291	002/11337	M 7:30pm - 10:30pm Room TBA	Giuseppina Cambareri	1.00	9/15
PHYS 1291	003/11359	T 1:00pm - 4:00pm Room TBA	Giuseppina Cambareri, Rebecca Grossman	1.00	13/15
PHYS 1291	004/11360	T 4:10pm - 7:10pm Room TBA	Giuseppina Cambareri	1.00	12/15
PHYS 1291	005/11361	W 1:00pm - 4:00pm Room TBA	Giuseppina Cambareri, Rebecca Grossman	1.00	15/15
PHYS 1291	006/11362	W 7:30pm - 10:30pm Room TBA	Giuseppina Cambareri	1.00	8/15
PHYS 1291	007/11363	Th 1:00pm - 4:00pm Room TBA	Giuseppina Cambareri	1.00	12/15
PHYS 1291	008/11364	Th 4:10pm - 7:10pm Room TBA	Giuseppina Cambareri	1.00	10/15

### PHYS UN1292 GENERAL PHYSICS II LABORATORY. **1.00 point.**

Corequisites: PHYS UN1201,PHYS UN1202

Corequisites: PHYS UN1201,PHYS UN1202 This course is the laboratory for the corequisite lecture course (PHYS UN1201 - PHYS UN1202) and can be taken only during the same term as the corresponding lecture

Spring 2024: PHYS UN1292

Course Number	Section/Call Number	Times/Location	Instructor	Points	Enrollment
PHYS 1292	001/11366	M 1:00pm - 4:00pm Room TBA	Giuseppina Cambareri, Rebecca Grossman	1.00	13/15
PHYS 1292	002/11367	M 1:00pm - 4:00pm Room TBA	Giuseppina Cambareri	1.00	14/15
PHYS 1292	003/11368	M 4:10pm - 7:10pm Room TBA	Giuseppina Cambareri	1.00	12/15
PHYS 1292	005/11370	M 7:30pm - 10:30pm Room TBA	Giuseppina Cambareri	1.00	13/15
PHYS 1292	007/11371	T 1:00pm - 4:00pm Room TBA	Giuseppina Cambareri	1.00	13/15
PHYS 1292	008/11372	T 1:00pm - 4:00pm Room TBA	Giuseppina Cambareri	1.00	14/15
PHYS 1292	009/11373	T 4:10pm - 7:10pm Room TBA	Giuseppina Cambareri, Rebecca Grossman	1.00	15/15
PHYS 1292	010/11374	T 4:10pm - 7:10pm Room TBA	Giuseppina Cambareri	1.00	11/15
PHYS 1292	011/11375	T 7:30pm - 10:30pm Room TBA	Giuseppina Cambareri	1.00	13/15
PHYS 1292	013/11376	W 1:00pm - 4:00pm Room TBA	Giuseppina Cambareri	1.00	15/15
PHYS 1292	014/11377	W 1:00pm - 4:00pm Room TBA	Giuseppina Cambareri	1.00	15/15
PHYS 1292	015/11378	W 4:10pm - 7:10pm Room TBA	Giuseppina Cambareri	1.00	13/15
PHYS 1292	017/11380	W 7:30pm - 10:30pm Room TBA	Giuseppina Cambareri	1.00	14/15
PHYS 1292	018/11381	Th 1:00pm - 4:00pm Room TBA	Giuseppina Cambareri	1.00	15/15
PHYS 1292	019/11382	Th 1:00pm - 4:00pm Room TBA	Giuseppina Cambareri	1.00	14/15
PHYS 1292	020/11383	Th 4:10pm - 7:10pm Room TBA	Giuseppina Cambareri	1.00	14/15
PHYS 1292	022/11385	Th 7:30pm - 10:30pm Room TBA	Giuseppina Cambareri	1.00	11/15
PHYS 1292	025/11386	F 1:00pm - 4:00pm Room TBA	Giuseppina Cambareri	1.00	10/15

## Psychology (Recommended)

Premeds who have not previously studied psychology at the college level should consider enrolling in THE SCIENCE OF PSYCHOLOGY (PSYC UN1001) in order to be fully prepared for the MCAT.

## Courses

### PSYC UN1001 THE SCIENCE OF PSYCHOLOGY. 3.00 points.

CC/GS: Partial Fulfillment of Science Requirement

Enrollment may be limited. Attendance at the first two class periods is mandatory.

Prerequisites: BLOCKED CLASS. EVERYONE MUST JOIN WAITLIST TO BE ADMITTED

Prerequisites: BLOCKED CLASS. EVERYONE MUST JOIN WAITLIST TO BE ADMITTED Broad survey of psychological science including: sensation and perception; learning, memory, intelligence, language, and cognition; emotions and motivation; development, personality, health and illness, and social behavior. Discusses relations between the brain, behavior, and experience. Emphasizes science as a process of discovering both new ideas and new empirical results. PSYC UN1001 serves as a prerequisite for further psychology courses and should be completed by the sophomore year

#### Spring 2024: PSYC UN1001

Course Number	Section/Call Number	Times/Location	Instructor	Points	Enrollment
PSYC 1001	001/11857	T Th 1:10pm - 2:25pm 501 Schermerhorn Hall	Patricia Lindemann	3.00	186/200
PSYC 1001	002/11859	M W 11:40am - 12:55pm 501 Schermerhorn Hall	Saski Giebl	3.00	182/189
PSYC 1001	AU1/18567	T Th 1:10pm - 2:25pm Othr Other	Patricia Lindemann	3.00	5/5

#### Fall 2024: PSYC UN1001

Course Number	Section/Call Number	Times/Location	Instructor	Points	Enrollment
PSYC 1001	001/10689	T Th 1:10pm - 2:25pm Room TBA	Patricia Lindemann	3.00	0/189
PSYC 1001	002/13843	M W 11:40am - 12:55pm Room TBA	Sarah DeMoya	3.00	0/189