

PRE-SUMMER 2012 CORE

For Students Who Started Before Summer 2012

The Core provides the foundation for a traditional liberal arts education, assuring that students develop critical skills in writing and quantitative reasoning while exposing them to a range of knowledge and disciplines. Flexibility within the Core allows students to choose from several different departments to fulfill specified core requirements in science, literature, humanities, foreign language, and social sciences, thereby encouraging students to explore new areas of inquiry and develop their intellectual interests.

Continuing GS students who have not met the cultural diversity requirement will have until the start of the Spring 2013 semester to decide whether to opt for the new GS core requirements academic policy (Post-Summer 2012) or complete the existing cultural diversity requirement.

General Rules

1. Only courses of 3 or more points taken for a letter grade can fulfill core requirements.
2. Courses used to satisfy a core requirement must be completed with a letter grade of D or above; courses graded "Pass" do not fulfill core requirements.
3. Independent study cannot be used to fulfill a core requirement.
4. AP credit cannot be used to fulfill a core requirement, except for foreign languages.
5. GS advisors determine whether a transfer course satisfies a core requirement.
6. GS advisors must approve all courses, including summer-term courses, used to fulfill a core requirement.
7. No single course may be used to satisfy more than one core requirement, with the following exceptions:
 - the cultural diversity requirement; applies only to students who started before Summer 2012.
 - Frontiers of Science (Science CC1000)
 - Symbolic Logic (PHIL UN3411);
 - courses in computer science, mathematics, and statistics, which may be used to fulfill both the Science and Quantitative Reasoning requirements.
8. Students may count two courses from their major department toward the fulfillment of core requirements; the limit on overlap is two, even if a student is a double major. Courses counted toward a departmental concentration may simultaneously fulfill core requirements, but only if no courses from the major have been used to do the same. A student may also use one course from a concentration to fulfill a core requirement and one course from a major to fulfill a core requirement, as long as the total number of overlapping classes from the major and/or concentration counted to the GS core does not exceed two.
(Since the premedical concentration is not considered a departmental concentration, it is exempt from this policy.)
9. No more than two courses from any one department may be used to fulfill core requirements.
10. Students must take at least one course toward fulfillment of core requirements each semester until the core requirements are completed.
11. Students may not drop the University Writing, Contemporary Civilization, Literature, Art, or Music Humanities courses after the end of the Change of Program Period without a special petition to the GS Committee on Academic Standing. Students who wish to discuss the petition process should consult their GS advisors. Students will be billed for courses dropped after the Change of Program Period deadline—the second Friday of each semester—at the full tuition rate.

WRITING PRE-SUMMER 2012

University Writing ([ENGL GS1010](#)), required of all GS students in their first semester, facilitates students' entry into the intellectual life of Columbia by helping them to become more capable and independent academic readers and writers. With its small section size and emphasis on the writing process, revision, critical analysis, collaboration, and research, the course provides an occasion for students to develop academic habits and skills important to their success in future courses. In planning their first semesters of study at Columbia, GS students should start by choosing a section of English GS1010 that fits their schedules.

Non-native English speakers must reach level 10 in the American Language Program prior to registering for English GS1010.

In exceptional cases, a student may be permitted to enroll in University Writing during their second semester of study at GS.

[Undergraduate Writing Program website](#)

FOREIGN LANGUAGE PRE-SUMMER 2012

The study of a foreign language often opens up a whole new way of seeing, understanding, and describing the world. Today's students should not be limited by a single language, but should be able to think and communicate in a language other than their native tongues. GS requires that all candidates for the bachelor's degree demonstrate competence in a second language at or beyond intermediate level. In order to achieve this level of fluency and encourage more advanced language study, students are expected to reach intermediate-level proficiency by the time they have reached junior standing. Intermediate-level proficiency in a foreign language is assessed in one of the following ways:

- An appropriate score on the SAT II subject test or Advanced Placement test, taken before matriculation to GS, as determined by relevant departments for specific languages;
- Demonstrating intermediate-level competence on the language placement test administered by relevant departments or programs. Language placement tests must be taken within the first two semesters of study at GS, or, in cases where a student undertakes language study as part of a Columbia-approved study abroad program, at the beginning of the next term of enrollment after returning from study abroad;
- Approved transfer credits in foreign language study showing intermediate-level proficiency (usually two years of study);
- The satisfactory completion of an intermediate level of a language sequence at Columbia, as determined by the relevant department (the fourth term of a language, usually denoted as course number "1202");
- Completing secondary education in another country in a language other than English.

Native speakers of languages other than English must take a language placement test within two semesters of matriculating at GS to demonstrate their language proficiency. If a placement test in a particular language is not available at Columbia, students should speak with their GS advisors about alternative testing arrangements. Students diagnosed with a language learning disability must register with the [Office of Disability Services](#) in order to be considered for an accommodation for the foreign language requirement. Students should speak with their respective GS advisors soon after matriculating at GS to discuss how they will satisfy the foreign language requirement. The foreign language requirement may take four semesters to fulfill, as such students who have not met the requirement by placement test, AP score, or transfer credit are required to begin their language study no later than their second year at GS, and to continue enrollment in language courses each semester until the requirement has been met.

Students interested in [study abroad](#) may also begin or complete their core foreign language study in numerous summer study abroad foreign language immersion programs.

LITERATURE PRE-SUMMER 2012

Literature courses expose students to writers recognized for their ability to convey ideas, feelings, and images through the power and play of words. The study of literature provides students with an opportunity to deepen their critical reading and writing skills.

The literature requirement is fulfilled by the completion of two literature courses, one of which must be taken at Columbia. In addition to the rich variety of courses offered by the Department of English and Comparative Literature, students may choose from among the many literature courses found in Columbia's foreign language and literature departments as well as from the list of special GS colloquia.

Courses on literature in translation, as well as literature courses in foreign languages at the 3000 level or above, may satisfy the literature requirement. Students may also elect to take the two-semester course Masterpieces of Western Literature and Philosophy, [HUMA GS1001-HUMA GS1002](#), to fulfill the literature or [humanities requirement](#). The course is particularly recommended for students who are planning to major in English literature or Philosophy.

To fulfill the literature requirement, the course must focus exclusively on the formal study of poetry, fiction, drama, or related literary genres. Courses that focus primarily on literary theory, film, music, creative writing, or other non-literary interdisciplinary topics may not count for the literature requirement, even though they may be taught within the Department of English and Comparative Literature.

HUMANITIES PRE-SUMMER 2012

Humanities courses offer ways to understand the development of cultures and how the human experience is expressed in art, music, literature, architecture, drama, and religion. Students are required to take two courses selected from the humanities offerings.

Students must select two humanities courses from the following departments or interdisciplinary programs to count toward the humanities requirement. In foreign language departments, only courses at the 3000 level or above, excluding courses focused on language instruction, may count to the humanities requirement.

- Archaeology
- Architecture
- Art History and Archaeology
- Classics
- English and Comparative Literature
- Film and Media Studies
- French and Francophone Studies
- Germanic Languages
- History*
- Italian
- Music
- Philosophy
- Religion
- Slavic Languages
- Spanish and Portuguese

*Courses from the Department of History may be counted toward the social science or the humanities requirement, but in no case may more than two courses from one department be used to fulfill Core requirements.

GS students may elect to take the two-semester course Masterpieces of European Literature and Philosophy, [HUMA GS1001-HUMA GS1002](#) (commonly known as "Lit Hum"), to fulfill the humanities or [literature requirement](#). This year-long course is highly recommended for students considering a major in English literature or philosophy.

GS students may also elect to take the two-semester course Contemporary Civilization, [COCI GS1101-COCI GS1102](#), to fulfill one [social science](#) and one humanities requirement. This year-long course is highly recommended for students planning to major in political science.

Interdisciplinary Programs

The following interdisciplinary programs offer courses in both humanities and social sciences. GS advisors must determine the appropriate category for a course when taken to satisfy a core requirement.

- African Studies
- African-American Studies
- American Studies
- Asian American Studies
- Comparative Ethnic Studies
- Comparative Literature and Society
- East Asian Languages and Cultures
- Hispanic Studies
- Human Rights
- Middle East, South Asian, and African Studies
- Women's and Gender Studies

ART HUMANITIES PRE-SUMMER 2012

The art humanities core courses are designed to awaken and encourage in students an appreciation of art, to help them learn to respond intelligently to a variety of artistic genres by developing analytical skills and a conceptual framework for interpretation, and to engage students in debates about the character and purpose of art throughout human history. GS students must fulfill the art humanities requirement by taking one of the following:

- [HUMA UN1121](#) Masterpieces of Western Art
Note: If the art humanities requirement is fulfilled with [HUMA UN1121](#) or an approved, equivalent transfer course, students should not take Barnard Art History 1001 or 1002, as this constitutes a duplication of coursework and thus would not count toward the GS degree.
- [AHUM UN2604](#) Art In China, Japan, and Korea
- [AHUM UN2901](#) Masterpieces of Indian Art and Architecture
- [AHUM V3343](#) Masterpieces of Islamic Art and Architecture

Exemption from the Art Humanities Requirement

Although all Columbia students are expected to fulfill the art humanities core requirement, there are some students who may obtain an exemption by filing a course substitution request.

Students who have passed a similar art course with a grade of B or higher at another college or university may submit a course exemption request. Exemption is given only for courses substantially equivalent to Masterpieces of Western Art (seminar-style classes, with an emphasis on analytical viewing and historical-cultural context), not for lecture courses. While exemption is rarely granted, in the past students petitioning on the basis of similar courses taken at Emory University, New York University, CUNY-Baruch College, Hampshire College, and Sarah Lawrence College have been granted an exemption.

Students who wish to request exemption based on course substitution must obtain an Art Humanities Exemption Request form from the Core Curriculum Office (202 Hamilton) or the GS Dean of Students Office. Exemption must be requested during the student's first semester at Columbia.

MUSIC HUMANITIES PRE-SUMMER 2012

The music humanities core courses are designed to awaken and encourage in students an appreciation of music; to help them learn to respond intelligently to a variety of musical idioms by developing analytical skills and a conceptual framework for interpretation; and to engage students in debates about the character and purpose of music throughout human history.

GS students must fulfill a music humanities requirement by taking one of the following:

- [HUMA UN1123](#) Masterpieces of Western Music
- [AHMM UN3320](#) Introduction To the Musics of East Asia and Southeast Asia
- [AHMM UN3321](#) Introduction To the Musics of India and West Asia

Exemption from the Music Humanities Requirement

Although all Columbia students are expected to fulfill the music humanities core requirement, there are some students who enter with exceptional musical backgrounds that may qualify them for exemption. Exemption from the music humanities requirement may be obtained by passing an exemption exam. In the case of transfer students, exemption may also be obtained by filing a course substitution request.

Exemption Exam

The exemption exam is offered on the first Friday of the fall semester by the Music Department (621 Dodge Hall). Students who matriculate in the spring semester should take the exam in the following fall term. Students may take the exam only once during their first year at Columbia. If they do not pass the exam, students must enroll in a section of Music Humanities.

Course Substitution

In addition to the music exemption exam, students with approved transfer credit have the option of requesting exemption on the basis of a similar music course passed with a grade of B or higher at another college or university. This exemption must be requested during the student's first semester at Columbia.

SOCIAL SCIENCES PRE-SUMMER 2012

Courses in the social sciences provide students with a basis for understanding social systems and the interactions of individuals and societies. Students are required to take two courses selected from the social sciences offerings listed below or from appropriate interdisciplinary programs to fulfill the social sciences requirement:

- Anthropology
- Economics
- History*
- Political Science
- Psychology
 - Columbia psychology courses at the 2600-, 3600-, or 4600- level.
 - Any of the following Barnard psychology courses:

CODE	TITLE	POINTS
<u>PSYC BC1001</u>	Introduction to Psychology	
<u>PSYC BC1123</u>	Psychology of Personality	
<u>PSYC BC1125</u>	Psychology of Personality	
<u>PSYC BC1136</u>	Social Psychology	
<u>PSYC BC1138</u>	Social Psychology	
<u>PSYC BC2134</u>	Educational Psychology	
<u>PSYC BC2141</u>	Abnormal Psychology	
<u>PSYC BC2151</u>	Organizational Psychology	
<u>PSYC BC2156</u>	Clinical Psychology	
<u>PSYC BC2177</u>	Psychology of Drug Use and Abuse (formerly PSYC BC3177)	
<u>PSYC BC3152</u>	Psychological Aspects of Human Sexuality	
<u>PSYC BC3153</u>	Psychology and Women	
<u>PSYC BC3155</u>	Psychology and Law	
<u>PSYC BC3158</u>	Human Motivation (formerly PSYC BC2158)	
<u>PSYC BC3162</u>	Introduction to Cultural Psychology	
<u>PSYC BC3165</u>	The Social Self	
<u>PSYC BC3166</u>	Social Conflict	
<u>PSYC BC3170</u>	Introduction to Psychoanalysis	
<u>PSYC BC3373</u>	Health Psychology	
<u>PSYC BC3379</u>	Psychology of Stereotyping and Prejudice	
<u>PSYC BC3382</u>	Adolescent Psychology	
<u>PSYC BC3465</u>	Field Work and Research Seminar: The Barnard Toddler Center	

CODE	TITLE	POINTS
PSYC BC3466	Field Work and Research Seminar: The Barnard Toddler Center	
PSYC BC3473	Clinical Field Practicum	
Course List		

- Sociology
- Challenges of Sustainable Development ([SDEV UN2300](#)); check with your advisor about other courses listed under this interdisciplinary program that may fulfill the social sciences requirement

GS students may also elect to take the two-semester course Contemporary Civilization, [COCI GS1101-COCI GS1102](#), to fulfill one social science and one [humanities requirement](#). This year-long course is highly recommended for students planning to major in political science.

* Courses from the Department of History may be counted toward the social science or the humanities requirement, but in no case may more than two courses from one department be used to fulfill core requirements.

Interdisciplinary Programs

The following interdisciplinary programs offer courses in both humanities and social sciences. GS advisors must determine the appropriate category for a course when taken to satisfy a core requirement.

- African-American Studies
- American Studies
- Ethnicity and Race Studies
- Comparative Literature and Society
- East Asian Languages and Cultures
- Hispanic Studies
- Human Rights
- Jewish Studies
- Latin American and Caribbean Studies
- Medicine, Literature, and Society
- Middle Eastern, South Asian, and African Studies
- Women's and Gender Studies

QUANTITATIVE REASONING PRE-SUMMER 2012

Courses that fulfill the quantitative reasoning (QR) requirement aim to develop skills in quantitative analysis and deductive reasoning, which are particularly relevant to the study of science and the social sciences.

The quantitative reasoning requirement can be fulfilled through the following means:

- Scoring a minimum of 600 on the Math SAT or 27 on the math subsection of the ACT within the last eight years prior to matriculation;
- Earning a passing score on the [Quantitative Reasoning Exam](#);
- Earning a passing letter grade in a course from the [list of approved courses](#);

- Approved transfer credit for computer science, mathematics, or statistics courses that are 1) taken within the last eight years prior to matriculation and 2) equivalent to those on the list of approved courses below, as determined by the Dean of Students Office.

Students who have not fulfilled the quantitative reasoning requirement through standardized scores or transfer credit are required to take the Quantitative Reasoning Exam during or prior to Orientation Week.

Based on the QR test results, GS advisors will help students choose a course from the GS-approved list of quantitative reasoning courses. When choosing a QR course, students must make sure that they have reviewed and met the specified prerequisites for the course prior to enrollment.

Computer Science, Economics, Mathematics, and Statistics Courses

Any course selected from the following departments fulfills the GS quantitative reasoning requirement when passed with a satisfactory letter grade:

- Computer Science (except S1021D, S1022Q)
- Economics (Columbia department only)
- Mathematics
- Statistics

Approved Columbia courses in computer science, mathematics, and statistics may count toward both the QR requirement and the science requirement. Approved transfer credit for a course in computer science, mathematics, or statistics may count toward both the QR and science requirements as well; however, the course must have been taken within the last eight years prior to matriculation to satisfy the QR requirement.

College Algebra and Analytic Geometry ([MATH UN1003](#)) (or the equivalent) may count toward the QR requirement only.

Frontiers of Science

[Frontiers of Science \(Science C1000\)](#) satisfies both the QR requirement and one course of the science requirement when passed with a letter-grade of C or above. Students must score at least 16 on the Quantitative Reasoning Exam in the last three years prior to enrolling in Frontiers of Science.

List of Approved QR Courses

The following courses have been approved as satisfying the quantitative reasoning requirement if completed with a satisfactory letter grade. (BC indicates a Barnard College course.) This list is updated annually. If a particular quantitative reasoning course does not appear on the list, students should ask their GS advisor about its appropriateness for the requirement.

CODE	TITLE	POINTS
ECON BC2411	Statistics for Economics	
PHIL UN1401	Introduction to Logic	
PHIL UN3411	Symbolic Logic	
POLS BC3345 Intro-Statistical Analysis-Politics		

CODE	TITLE	POINTS
POLS GU4730	Game Theory and Political Theory	
POLS GU4760	Math Methods for Political Scientists	
POLS GU4710	Principles of Quantitative Political Research	
PSYC BC1101	Statistics	
PSYC UN1610	Introductory Statistics for Behavioral Scientists	
SOCI W2220	Evaluation of Evidence	
SOCI BC3211	Quantitative Methods	
SOCI UN3212	Methods of Social Research	
URBS UN3200	Spatial Analysis: GIS Methods and Urban Case Studies	
Course List		

Barnard Courses

Note that Barnard students are given preference for enrollment in Barnard courses that may fulfill the GS QR requirement. Barnard courses that fulfill a core requirement will not necessarily count toward a major at Columbia if a student chooses to major or concentrate in one of these fields. (See individual departments concerning courses approved and required for the major.)

SCIENCE PRE-SUMMER 2012

The science requirement aims to develop critical awareness of the methods and limits of scientific inquiry, while fostering observational and analytical skills, particularly in reference to the natural and physical world. When choosing a science course, students should make sure they have reviewed and have met the specified prerequisites for the course prior to enrollment.

Students who are considering careers in science-related fields, including health-related professions, are urged to begin their study of science within the first two semesters after matriculation at GS.

To fulfill the science requirement, students must successfully complete three courses selected from two of the following Columbia departments or from [the list of approved courses](#) below, no more than two of which should be taken from the same department:

- Astronomy
- Biological Sciences

- Chemistry
- Earth and Environmental Sciences (Columbia department only)
- Ecology, Evolution, and Environmental Biology
- Physics
- Psychology (Columbia courses The Science of Psychology ([PSYC UN1001](#)), Mind, Brain and Behavior ([PSYC UN1010](#)), and any 2200- or 2400-level course)

List of Approved Science Courses

The list of approved courses that fulfill the science requirement includes recommended sequences, science courses for non-science majors, and approved courses from departments not listed above and Barnard.

- Frontiers of Science ([SCNC CC1000](#)) satisfies both the QR requirement and one course of the science requirement when passed with a letter-grade of C or above.

The principal objectives of Frontiers of Science are to engage students in the process of discovery by exploring topics at the forefront of science and to inculcate or reinforce the specific habits of mind that inform a scientific perspective on the world. Sample topics include the evolution of human language, brain dynamics, global climate change, the nanoworld, and biodiversity, among others.

Frontiers of Science satisfies one of the three required courses of the science requirement.

GS students interested in taking this course should have received a minimum score of 16 on the GS Quantitative Reasoning Test within three years of enrolling in the course and should also read the first chapter of the electronic textbook *Scientific Habits of Mind* and take the self-test prior to the first class.

Courses Designed For Nonscience Majors

CODE	TITLE	POINTS
Astronomy ^{ASTR}		
ASTR UN1234	The Universal Timekeeper: Reconstructing History Atom by Atom (formerly ASTR C1234 /W1234)	
ASTR C1235 The Universal Timekeeper: an Introduction to the Scientific Habits of Mind		
ASTR UN1403	Earth, Moon and Planets (Lecture)	
ASTR UN1404	Stars, Galaxies and Cosmology (Lecture)	

CODE	TITLE	POINTS
<u>ASTR UN1420</u>	Galaxies and Cosmology	
<u>ASTR UN1610</u>	Theories of the Universe: From Babylon to the Big Bang	
<u>ASTR BC1753</u>	Life in the Universe	
<u>ASTR BC1754</u>	Stars, Galaxies, and Cosmology	
<u>ASTR UN1836</u>	Stars and Atoms	
Recommended Sequences:		
<u>ASTR C1234</u> - ASTR C1235 The Universal Timekeeper: An Introduction to Scientific Habits of Mind	Astronomy-Physics- Geology, The Universal Timekeeper: An Introduction to Scientific Habits of Mind and	
<u>ASTR UN1403</u> - <u>ASTR UN1404</u>	Earth, Moon and Planets (Lecture) and Stars, Galaxies and Cosmology (Lecture)	
<u>ASTR UN1403</u> - <u>ASTR UN1420</u>	Earth, Moon and Planets (Lecture) and Galaxies and Cosmology	
<u>ASTR UN1403</u> - <u>ASTR BC1754</u>	Earth, Moon and Planets (Lecture) and Stars, Galaxies, and Cosmology	

CODE	TITLE	POINTS
ASTR UN1403 - ASTR UN1836	Earth, Moon and Planets (Lecture) and Stars and Atoms	
ASTR BC1753 - ASTR UN1404	Life in the Universe and Stars, Galaxies and Cosmology (Lecture)	
ASTR BC1753 - ASTR BC1754	Life in the Universe and Stars, Galaxies, and Cosmology	
Biology ^{BIOL}		
BIOL C1002	Theory and Practice of Science: Biology	
BIOL W1015 Molecular Biology and Evolution for Nonscientists		
BIOL UN1130	Genes and Development	
Computer Science ^{COMS}		
COMS W1001	Introduction to Information Science	
Earth and Environmental Engineering ^{EAE}		
EAE E2100	A better planet by design ((previously offered as EAE E1100))	
Earth and Environmental Sciences ^{EESC}		
EESC UN1001	Dinosaurs and the History of Life: Lectures and Lab	
EESC UN1003	Climate and Society: Case Studies	

CODE	TITLE	POINTS
<u>EESC UN1011</u>	Earth: Origin, Evolution, Processes, Future	
EESC V1012 Introduction to Earth Science II		
<u>EESC UN1030</u>	Oceanography	
<u>EESC UN1053</u>	Planet Earth	
<u>EESC UN1201</u>	Environmental Risks and Disasters	
<u>EESC UN1401</u>	Dinosaurs and the History of Life: Lectures	
<u>EESC UN1411</u>	Earth: Origin, Evolution, Processes, Future: Lectures	
EESC V1412 Introduction to Earth Sciences II- Lecture		
<u>EESC UN2330</u>	Science for Sustainable Development	
Recommended Sequences:		
<u>EESC UN1011</u> - EESC V1012 Intro to Earth Sciences II	Earth: Origin, Evolution, Processes, Future and	
<u>EESC UN1011</u> - EESC V1412: Introduction to Earth Sciences: Lecture	Earth: Origin, Evolution, Processes, Future and	
Sequence B:		
<u>EESC UN1411</u> - EESC V1012: Introduction to Earth Sciences II	Earth: Origin, Evolution, Processes,	

CODE	TITLE	POINTS
	Future: Lectures and	
EESC UN1411 - EESC V1412 Introduction- Earth Sciences II-: Lecture	Earth: Origin, Evolution, Processes, Future: Lectures and	
Ecology, Evolution, and Environmental Biology ^{EEEB}		
EEEB UN1001	Biodiversity	
EEEB UN1010	Human Origins and Evolution	
EEEB UN1011	Behavioral Biology of the Living Primates	
Recommended Sequences:		
EEEB UN1001 - EEEB UN3087	Biodiversity and Conservation Biology	
EEEB UN1010 - EEEB UN1011	Human Origins and Evolution and Behavioral Biology of the Living Primates	
Electrical Engineering ^{ELEN}		
ELEN E1101	The digital information age	
Philosophy ^{PHIL}		
PHIL UN3411	Symbolic Logic	
PHIL GU4431	INTRODUCTION TO SET THEOR	
PHIL GU4424	Modal Logic	

CODE	TITLE	POINTS
Physics ^{PHYS}		
<u>PHYS UN1001</u>	Physics for Poets	
<u>PHYS C1002</u>	Physics for Poets	
<u>PHYS UN1018</u>	Weapons of Mass Destruction (formerly EESC W3018)	
Recommended Sequence:		
<u>PHYS UN1001</u> - <u>PHYS C1002</u>	Physics for Poets and Physics for Poets	
Psychology ^{PSYC ***}		
<u>PSYC UN1001</u>	The Science of Psychology	
<u>PSYC UN1010</u>	Mind, Brain and Behavior	
Select one of the following:		
<u>PSYC UN1001</u> - <u>PSYC UN1010</u>	The Science of Psychology and Mind, Brain and Behavior	
<u>PSYC UN1001</u>	The Science of Psychology (or any PSYC course numbered 22xx or 24xx)	
Recommended Sequence:		
<u>PSYC UN1001</u> - <u>PSYC UN1010</u>	The Science of Psychology and Mind, Brain and Behavior	

CODE	TITLE	POINTS
<u>PSYC UN1001</u>	The Science of Psychology (or any PSYC course numbered 22xx or 24xx)	
Science ^{SCNC}		
<u>SCNC UN1800</u>	Energy and Energy Conservation	
Statistics ^{STAT}		
<u>STAT UN1101</u>	Introduction to Statistics	
1100	(This course "A Better Planet by Design" was offered in spring 2014)	
Course List		

* **Note:** Students electing to take Earth: Origin, Evolution, Processes, Future (EESC UN1011) and (EESC V1012) as a sequence may begin the sequence with either course.

** **Note:** Students electing to take Earth: Origin, Evolution, Processes, Future: Lectures (EESC UN1411) and (EESC V1412) as a sequence may begin the sequence with either course.

*** **Note:** 2600, 3600 and 4,600-level psychology courses may not be used to fulfill the science requirement.

**** **Note:** The Science of Psychology (PSYC UN1001) or Mind, Brain and Behavior (PSYC UN1010) must be taken as a prerequisite to any psychology course numbered 22xx or 24xx.

Additional Courses Approved for the Science Requirement

Most of the following courses have required prerequisites and/or require instructor approval. Prerequisite and instructor approval requirements can be found in the course descriptions for each course or on the department website.

CODE	TITLE	POINTS
Astronomy ^{ASTR}		
Any 3-credit course numbered 2000 or higher		
Biology ^{BIOL}		

CODE	TITLE	POINTS
Any 3-credit course numbered 2000 or higher		
Chemistry ^{CHEM}		
<u>CHEM UN1403</u>	General Chemistry I (Lecture)	
<u>CHEM UN1404</u>	General Chemistry II (Lecture)	
<u>CHEM UN1500</u>	General Chemistry Laboratory	
<u>CHEM UN1604</u>	Intensive General Chemistry (Lecture)	
<u>CHEM BC2001</u>	General Chemistry I	
<u>CHEM BC2002</u>	General Chemistry II	
<u>CHEM UN2507</u>	Intensive General Chemistry Laboratory	
Any 3-credit course numbered 3000 or higher		
Computer Science ^{COMS}		
COMS W1003	(Intro-Computer Science/ Programming in C)	
<u>COMS W1004</u>	Introduction to Computer Science and Programming in Java	
<u>COMS W1005</u>	Introduction to Computer Science and Programming in MATLAB	
<u>COMS W1007</u>	Honors Introduction to Computer Science	
COMS W1009	(Honors Intro Computer Science- JAVA)	
Any 3-credit course numbered 3000 or higher		
Computing Science - Philosophy (CSPH)		
<u>CSPH G4801</u>	Mathematical Logic I	
<u>CSPH G4802</u>	Math Logic II: Incompleteness	

CODE	TITLE	POINTS
Earth and Environmental Sciences ^{EESC}		
<u>EESC UN2100</u>	Earth's Environmental Systems: The Climate System	
<u>EESC UN2200</u>	Earth's Environmental Systems: The Solid Earth System	
<u>EESC UN2300</u>	Earth's Environmental Systems: The Life System	
Any 3-credit course numbered 3000 or higher		
Ecology, Evolution, and Environmental Biology ^{EEEB}		
<u>EEEB UN2001</u>	Environmental Biology I: Elements to Organisms	
<u>EEEB UN2002</u>	Environmental Biology II: Organisms to the Biosphere	
<u>EEEB UN3087</u>	Conservation Biology	
Any 3-credit course numbered 3000 or higher.		
Mathematics ^{MATH}		
Any 3-credit course numbered 1100 or higher		
Physics ^{PHYS}		
<u>PHYS UN1201/F1201/V1201/W1201</u>	General Physics I	
<u>PHYS UN1202/F1202/V1202/W1202</u>	General Physics II	
<u>PHYS UN1401</u>	Introduction To Mechanics and Thermodynamics	
<u>PHYS UN1402/C1402</u>	Introduction To Electricity, Magnetism, and Optics	
<u>PHYS UN1403</u>	Introduction to Classical and Quantum Waves	

CODE	TITLE	POINTS
PHYS UN1601	Physics, I: Mechanics and Relativity	
PHYS UN1602/W1602	Physics, II: Thermodynamics, Electricity, and Magnetism	
Any 3-credit course numbered 2000 or higher		
Psychology ^{PSYC}		
Any 3-credit course numbered 32xx, 34xx, 42xx, or 44xx ^{*,**}		
Statistics ^{STAT}		
Any 3-credit course except STAT C3997/W3997		
Course List		

* **Note:** 2600, 3600 and 4600-level psychology courses may not be used to fulfill the science requirement.

** **Note:** These courses may serve as a second term of a recommended sequence starting with Mind, Brain and Behavior ([PSYC UN1010](#)) or The Science of Psychology ([PSYC UN1001](#)); see above.

Special Summer Program

The following special program fulfills two of the three terms of the science requirement.

Center for Environmental Research and Conversation [CERC]

- [Summer Ecosystem Experience for Undergraduates \(SEE-U\)](#): locations change yearly. Check with the center in the spring semester for details.

CULTURAL DIVERSITY PRE-SUMMER 2012

The GS cultural diversity requirement is intended to ensure that students are exposed to cultures other than their own and expand upon the ways they view the world. To that end, students are required to take at least one course outside their own ethnic or cultural framework that focuses on a culture, society, literature, or language of a nation or region that, as a general principle, is located outside the United States, Canada, or Europe. Columbia offers an excellent range of courses that focus on Latin America, the Middle East, Africa, and various regions of Asia. Courses that focus on Native American history or culture may also fulfill the requirement. A course meeting a major requirement or another core requirement may simultaneously fulfill the cultural diversity requirement.