Curriculum and Courses

Course Requirements
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 (http://bulletin.columbia.edu/general-studies/postbaccalaureate-premedical-program/curriculum-courses/sample-schedule/traditional-program-sequence), part-time (http://bulletin.columbia.edu/general-studies/postbaccalaureate-premedical-program/curriculum-courses/sample-schedule/part-time-sequence), or accelerated (http://bulletin.columbia.edu/general-studies/postbaccalaureate-premedical-program/curriculum-courses/sample-schedule/accelerated-sequence).

While enrolled in the program, students must fulfill all requirements with courses offered by Columbia’s Faculty of Arts & Sciences and they 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 (http://gs.columbia.edu/postbac/clinical-and-research-opportunities).

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.

Mathematics Courses (http://bulletin.columbia.edu/general-studies/postbaccalaureate-premedical-program/curriculum-courses/course-offerings/#math)

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.

Biology courses (http://bulletin.columbia.edu/general-studies/postbaccalaureate-premedical-program/curriculum-courses/course-offerings/#biology)

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

Biochemistry Courses (http://bulletin.columbia.edu/general-studies/postbaccalaureate-premedical-program/curriculum-courses/course-offerings/#biochemistry)

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 Biology or Organic Chemistry. 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 may begin in the fall or spring term. Students who enroll in Chemistry I in the spring should plan to take the 12-week Chemistry II course in the summer.

Chemistry Courses (http://bulletin.columbia.edu/general-studies/postbaccalaureate-premedical-program/curriculum-courses/course-offerings/#chemistry)

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 linkage applicants, students may take a 3-point lab over a six-week summer session after completing the lecture sequence.

Organic Chemistry Courses (http://bulletin.columbia.edu/general-studies/postbaccalaureate-premedical-program/curriculum-courses/course-offerings/#orgo)

Physics
Students are required to complete one year (6 points) of general physics and one year (2 points) of general physics laboratory. Physics is a course sequence that students may begin in the fall or spring term. Students who enroll in Physics I in the spring should plan to take the twelve-week Physics II course in the summer as it is not offered in the fall. Calculus is a corequisite for Physics I; however, students who have never taken calculus before are advised to complete it before undertaking Physics.

Physics Courses (http://bulletin.columbia.edu/general-studies/postbaccalaureate-premedical-program/curriculum-courses/course-offerings/#physics)

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.

Psychology Courses (http://bulletin.columbia.edu/general-studies/postbaccalaureate-premedical-program/curriculum-courses/course-offerings/#psychology)

Sociology (Recommended)
Given the MCAT Exam’s increased emphasis on social sciences, students who have not previously taken a college-level sociology course are
encouraged to prepare for the exam through self-study. The completion of a sociology course is not a prerequisite for medical school.