

Science - General Information

Historical Note

Since its establishment as a separate school of Manhattan College in 1993, the School of Science has maintained its traditional ties with the School of Liberal Arts while striving to assure the continuation of Manhattan's tradition of excellence in Science education. This tradition is reflected in the success of Manhattan's Science graduates and the position of Manhattan among a select number of colleges which are recognized as important sources of the nation's professional scientists.

Curriculum

Undergraduate studies in the Sciences are most challenging but provide an almost unique opportunity to learn and develop problem-solving and analytical skills while gaining a deeper understanding and appreciation of physical laws and their applications. The choice of a Science major is based upon the individual's interests, educational and career goals, and abilities. Majors may be chosen from several areas: biology, biochemistry, chemistry, computer science, environmental science, mathematics, and physics. Elective components of the major curricula provide the opportunity to explore other areas of interest, enhance knowledge in a specialized area of the major, or to construct minor sequences in other disciplines. Minors may be earned in all of the departments of the School of Science. At Manhattan, our Science curricula contain a strong core component in the Liberal Arts to provide a foundation for our graduates to contend with the humanistic and ethical issues they will face after graduation. Once a student is admitted to Manhattan College, all major, minor, and Core courses must be taken at Manhattan College. Certain non-resident courses, with the approval of the Dean and major department Chair, may be exceptions to this requirement. Under unusual circumstances, and with the approval of the Dean after consultation with the Chair of the student's major department, courses may be taken at another College.

School of Science Curriculum

Arts Core

LLRN 102	Classical Origins: West Culture	3
or PHIL 213	Introduction to Logic	
HIST 150	Roots: History	3
ENGL 150	Roots: Literature	3
PHIL 150	Roots: Philosophy	3
MUSC 150	Roots: Music	3
or ART 150	Roots: Art	
Two of the following social sciences:		6
ECON 150	Roots: Economics	3
GOVT 150	Roots: Government	
SOC 150	Roots: Sociology	

PSYC 150	Roots: Psychology	
RELS (three courses) ⁺⁺		9
College Writing (ENGL 110)		3
MLL [*]		6

⁺⁺ *RELS 110 The Nature and Experience of Religion, a 200 level course in Catholic Studies, an upper level course in Global Studies or Contemporary issues.*

^{*} *A full-year requirement*

Honor Societies and Research Opportunities

A number of national honor societies have been established on campus in order to encourage and recognize the achievements of Manhattan College students.

Phi Beta Kappa, founded in 1776, is dedicated to the idea of excellence in the liberal arts and sciences. The Manhattan College chapter, the Upsilon of New York was established in 1971. Election to Phi Beta Kappa is generally regarded as a mark of the highest distinction.

Sigma Xi is a national honor society founded in 1896 to encourage research in the sciences. Students are elected to membership on the basis of their accomplishments in research and their enthusiasm for continued scientific investigation.

Departments of the School of Science sponsor local chapters of national honor societies in their disciplines; Beta Beta Beta (Biology), Gamma Sigma Epsilon (Chemistry), Pi Mu Epsilon (Mathematics), Sigma Pi Sigma (Physics).

The Science faculty are dedicated to encouraging student research efforts. Manhattan's small classes and close student-faculty interactions generate an atmosphere which has produced many important student-faculty research collaborations.

Professional and Career Development

Prelegal Advisory Committee

Students interested in entering law school may receive information and guidance through the Prelegal Advisory Committee. In addition to personal interviews, the Committee conducts group meetings to advise students on specialized fields of law. The Committee makes information available on requirements for admission to law schools, the availability of scholarships, and special opportunities in the legal profession

Health Professions Advisory Committee

The Health Professions Advisory Committee is a body of faculty members who give guidance to students interested in preparing for careers in medicine, dentistry, and allied fields. Students are advised of the requirements established by the Association of American Medical Colleges, the American Dental Association, and other professional associations in the health field.

Preparation for Medicine and Dentistry

Students preparing for professional school admission may major in any discipline in the College. Their preparation must include, at a minimum, the following courses.

BIOL 111 & BIOL 112	General Biology I and General Biology II	4-6
BIOL 113 & BIOL 114	General Biology Laboratory I and General Biology Laboratory II	4
CHEM 101 & CHEM 102	General Chemistry I and General Chemistry II	6
CHEM 319 & CHEM 320	Organic Chemistry I and Organic Chemistry II	6
CHEM 323 & CHEM 324	Organic Chemistry Laboratory I and Organic Chemistry Laboratory II	4
ENGL 110	First Year Composition	3
MATH 185 & MATH 186	Calculus I and Calculus II	6
or MATH 155 & MATH 156	Calculus for the Life Sciences I and Calculus for the Life Sciences II	
PHYS 101 & PHYS 102	Physics I and Physics II	6
PHYS 191 & PHYS 192	Physics I Lab and Physics II Laboratory	2
or PHYS 197 & PHYS 198	Introductory Physics I Lab and Introductory Physics II Lab	

At least one course each in Biochemistry, Psychology, and Sociology are highly recommended by all medical schools. Pre-professional students are expected to maintain an average of at least B in their science courses.

Alpha Epsilon Delta, the Health Preprofessional Honor Society

Alpha Epsilon Delta is dedicated to the encouragement and excellence in preprofessional health scholarship. A minimum overall average GPA of 3.2 and a Mathematics and Science GPA of 3.2 are required. Students may join after their third semester on campus.

Co-operatives with Professional Schools

New York Chiropractic College

Manhattan College and the New York Chiropractic College (NYCC) sponsor a Joint Degree Affiliation Agreement. While enrolled at Manhattan College, students will complete all prerequisite course work for entrance into the NYCC professional program, with a cumulative GPA of 3.25 and individual grades of C or higher in all science courses required for entrance into NYCC, and will complete Manhattan College's general requirements. Students will complete all additional course work which can be used,

in addition to the above, to place joint degree students in proper position to complete their Manhattan College degree requirements upon completion of the first year (three trimesters) of professional study at NYCC. The acceptance of credits via transfer or testing toward completion of degree requirements shall be governed by current policies of Manhattan College. However, no more than 20 credits of required courses, and none of the science credits required for admission to NYCC, may be earned via examination. This is a requirement of the Council on Chiropractic Education (CCE). New York Chiropractic College shall accept, for the entrance date of their choice, all students who successfully complete the Pre-Chiropractic Program with a cumulative GPA of 3.25 or higher and meet all other criteria for admission. Students who earn less than a 3.25 GPA, but at least a 2.25 GPA, will be eligible for admission to NYCC, and will receive appropriate consideration in the admission process for having completed the Manhattan College Pre-Chiropractic program, but will not receive the assurance of a seat reserved for students earning a 3.25 or higher GPA.

Students will make application to NYCC one year in advance of their desired entrance date and will complete all required application procedures thereafter in a timely manner, including submission of recommendations and a satisfactory review. Students enrolled in the “3+1” program who successfully complete all course work in the first three trimesters at New York Chiropractic College with C’s or better will be granted the Bachelor of Science degree from Manhattan College, provided they have met all other graduation requirements.

New York College of Podiatric Medicine

Manhattan College and the New York College of Podiatric Medicine (NYCPM) sponsor a joint articulation program in podiatric education. (Interested students must apply early in the fall semester of junior year and must take the MCAT no later than April of their junior year.) An overall undergraduate GPA of 3.0 at Manhattan College and official MCAT score at least equal to NYCPM’s current minimum is required. The curriculum of the combined B.S./D.P.M. program requires the completion of at least 90 credits at Manhattan College. The student enrolled at NYCPM requesting transfer credits must complete each first-year course with a grade of “B” or higher in order to be awarded a bachelors degree by Manhattan College. The D.P.M. degree will be awarded upon completion of the seventh year of study at NYCPM. Final admission to the program resides with the Admissions Office of the NYCPM.