Kakos School of Arts and Sciences

Dr. Marcy Kelly

Dean of the Kakos School of Arts and Sciences

Historical Note

Since its founding, Manhattan College has sought to broaden the intellectual horizons of its students while preparing them for the various professions. The Kakos School of Arts and Sciences supports Manhattan College's tradition of liberal and critical inquiry, reflection on faith in relation to reason, emphasis on ethical conduct and commitment to social justice by offering diverse foundation courses for all students, no matter their school or major. In addition, the Kakos School of Arts and Sciences furthers Manhattan's emphasis on high academic standards by offering challenging majors in the humanities, social sciences, sciences, mathematics, education and health. Because of our School's broad disciplinary scope, we have had opportunities to develop innovative interdisciplinary majors, as well. Our courses are taught by outstanding teacher-scholars committed to the advancement of knowledge in their classrooms and in their disciplines. Courses and majors emphasize the skills of analysis and criticism that are central to an understanding of the contemporary world, providing students with the informational and ethical base for that understanding and the written and oral skills necessary for its critique and communication. Our faculty seek to provide the broad, flexible, and thoughtful education essential for students to develop professionally, live successful and rewarding lives, and contribute effectively to a rapidly changing society. This tradition is reflected in the success of Manhattan's Liberal Arts and Science graduates and the position of Manhattan among a select number of colleges which are recognized as important sources of the nation's professionals.

Vision Statement

The Kakos School of Arts and Sciences is a vibrant, interdisciplinary community of student and faculty scholars working together to advance excellence in research, teaching, and learning. We combine LaSallian values with a person-centered approach to education to cultivate transferable critical thinking and scientific inquiry skills. Our students have the unique opportunity to scaffold their disciplinary passions on a strong foundation of the liberal arts and sciences to help them become successful, ethical professionals and community-engaged stewards of the future.

To these ends, each of our programs includes a core curriculum with courses in humanities, natural science, mathematics, behavioral and social science. Class size is kept small, so students get individual attention from our expert faculty members.

Curriculum and Programs

The faculty of the Kakos School of Arts and Sciences offers programs that provide students with unique opportunities to not only focus on their disciplinary passions but to develop a deep understanding and appreciation for the breadth of the liberal arts and

sciences and the importance of lifelong learning. Our shared core curriculum includes a first year experience course and foundation courses in composition, modern language, religious studies, science, and mathematics. The core curriculum also includes a series of courses focused on The Roots of Learning. The development of The Roots of Learning component of our core curriculum was supported by a generous grant from the National Endowment for the Humanities.

The Roots of Learning represents a commitment to an educational program that judiciously combines content and process. The program seeks to:

- Equip students with the intellectual skills essential to a productive professional life of learning and leadership
- Immerse students in the traditions of humanism, the sciences, and the social sciences
- Provide the global perspective essential to living and growing in our ever smaller, but increasingly complex, world
- Develop critical reasoning and analytical skills through an intensive study of fundamental texts

Kakos School of Arts and Sciences Core Curriculum Requirements

All first-year students in the Kakos School of Arts and Sciences are required to participate in our First Year Experience Program. Liberal arts and science majors take one First Year Seminar Course in Fall semester and one in the Spring semester of their first year. Science and mathematics majors will enroll in SCI 100 and SCI 101 in the Fall and Spring, respectively. Liberal arts majors will enroll in one seminar course in the humanities and one seminar course in the social sciences. These seminars, which are designated by the number 151, are small discussion-based, writing-intensive courses that also satisfy The Roots of Learning core requirements. Education and health majors address the outcomes of the first year experience program in courses weaved throughout their first year.

All majors in the Kakos School of Arts and Sciences are required to enroll in the following courses:

ENGL 110	First Year Composition	3
RELS 110	The Nature and Experience of Religion	3
or RELS 152	Nature & Experience of Religion-FYS	
A RELS Course in Ca	atholic Studies	3
A RELS Course in GI	obal Studies or Contemporary Issues	3

Additionally, students majoring in liberal arts and science majors are required to take one year of foreign language (6 credits), LLRN 102 or LLRN 105 (see below), at least one mathematics course, at least three science courses and courses in the Roots of Learning subject areas (https://nextcatalog.manhattan.edu/undergraduate/artsandscience/liberallearningllrn/index.html). Refer to individual degree plans for the majors for more information.

LLRN 102 Classical Origins: West Culture is required of all continuing liberal arts majors and some continuing science majors in the Kakos School of Arts and Sciences.

LLRN 105 Interdisciplinary Liberal Arts Seminar will replace LLRN 102 and be required of all liberal arts majors and some science majors in the Kakos School of Arts and Sciences, beginning with students entering Fall 2024 and thereafter.

Major Undergraduate and Graduate Fields of Study

The Kakos School of Arts and Sciences offers 29 undergraduate majors and six graduate degree programs. We also offer six combined degree bachelors/masters degree programs, 20 minors and several concentration options within our majors.

Our undergraduate majors include: biochemistry, biology, chemistry, communication, computer science, criminology, digital media arts, education (childhood, adolescent and dual childhood/adolescent with special education), English, environmental science, exercise science, history, game design and production, international studies, mathematics, organizational leadership, peace and justice studies, physical education, physics, political science, psychology, public health, radiation therapy technology, sociology, sound studies and Spanish.

The science and mathematics majors offer each of majors in a Bachelor of Science track as well as a Bachelor of Arts track. Although program differences will vary from major to major, the Bachelor of Arts track is generally less restrictive allowing greater flexibility for students pursuing a second major or minors.

Double majors are possible with careful planning, but students are encouraged to take as many elective courses as possible. A maximum of six (6) credits may be shared between majors in support of respective double majors.

Students may obtain Masters degrees in computer science, dual childhood/special education, dual adolescent/special education, marriage and family counseling, mental health counseling or school counseling. Academically qualified undergraduate students can take up to two graduate courses in their senior year upon approval by the Department Chair. It may then be possible to obtain a Master's degree with only an additional year of study. Please consult the Graduate Catalog (http://catalog.manhattan.edu/graduate/artsandscience/) for more information.

We also offer five year Bachelors/Masters degree programs in computer science (BS/MS), dual childhood/special education (BA or BS/MSEd), dual adolescent/special education (BA or BS/MSEd), psychology (BA) and family counseling (MS), psychology (BA) and mental health counseling (MS) or psychology (BA) and school counseling (MS). Finally, we offer a five year liberal arts BA/MBA option with our O'Malley School of Business.

Normally, a minimum grade of C is necessary in any course used to satisfy Kakos School of Arts and Sciences major or minor requirements.

Five Year BA/MBA

Graduates of the five year liberal arts BA/MBA program enter the workforce with the benefits of intensive study in the liberal arts and the specific industry and financial skills that an MBA delivers.

The liberal arts BA/MBA program offers students in liberal arts majors an option to complete a five-year multiple award program. The successful completion of the five-year program leads to two awards: a BA in one of twelve liberal arts majors (see below) and an MBA. Students interested in pursuing this dual-degree program must satisfactorily complete six prerequisite business courses as part of their undergraduate coursework, which qualify the student for the minor in business and provide the foundational material required for the MBA degree:

- ECON 150
- ECON 204
- ACCT 201
- MGMT 201
- BUAN 227 or one of the following courses (MATH 230, MATH 336, MATH 432, PSYC 314*)
- MKTG 201 or MBA 637

Students considering this program are encouraged to notify their advisors as early as possible to allow for maximum flexibility in course scheduling. The program consists of a total of 150 hours in undergraduate and graduate credits, planned over a five-year period, including coursework during ten semesters and one summer session. The program is designed for students who are academically competitive.

Please consult the Graduate Catalog (http://catalog.manhattan.edu/graduate/artsandscience/) for more information.

Any undergraduate Kakos School of Arts and Science student majoring in one of the following liberal arts majors is eligible to join the program:

- Communication
- Criminology
- Digital Media Art
- English
- Game Design (BA)
- History
- International Studies
- Peace Studies
- Political Science
- Psychology
- Sociology
- Spanish

Second or Double Majors

By carefully constructing their plan of study, students can pursue a second or double major either within the Kakos School of Arts and Sciences or in any discipline in the other schools in Manhattan College. Students wishing to complete a second major must complete the requirements for both majors. Pursuing a second major might require taking courses during the summer and/or additional expense. A maximum of six (6) credits may be shared between majors in support of respective double majors.

Minor Fields of Study

In order to provide an opportunity for students to broaden their educational experiences, students in Manhattan College are able to declare minors. Minors may be earned in a vast majority of the major disciplines offered by the Kakos School of Arts and Sciences. Additionally, students may select from specialized minors in Astronomy, Pre-Health or Music. Students interested in pursuing careers in the health-related professions can learn more at this link (http://catalog.manhattan.edu/undergraduate/science/prehealth/). (https://inside.manhattan.edu/student-life/career-pathways/gsfa/pre-professional.php)

Our minors consist of a minimum of fifteen credits in the discipline. Details of our minor programs may be found under the separate headings for each department in the Kakos School of Arts and Sciences. A maximum of three (3) credits may be shared between a single major and a single minor in support of a respective major.

Students who are interested in pursuing a minor outside the Kakos School of Arts and Sciences must contact the Chair of the respective department for further information.

Program Concentrations in Health, the Sciences and Mathematics

In addition to the regular course of study, specific programs of study in health, the sciences and mathematics deliver focused instruction in subjects of contemporary interest such as:

- · Biochemistry and chemistry majors may concentrate in nanoscience
- Computer science majors may concentrate in machine learning and artificial intelligence
- Mathematics majors may concentrate in applied mathematics
- · Physics majors may concentrate in
- Public health majors may concentrate in community health or healthcare administration
- Physics majors may concentrate in theoretical physics

Concentrations in Education

Education majors are required to select disciplinary concentrations of 30 credits. They may select disciplinary concentrations in biology, chemistry, English, general science, mathematics, physics, psychology, social studies and Spanish.

Electives for Liberal Arts Programs

Most programs in the Liberal Arts disciplines include space in their degree programs for a student to select particular electives to meet individual needs and interests. Often elective courses are selected on the basis of their relationship to the student's major field of study; they also enable students to develop a minor field of study, to structure a second major, or to explore new areas of knowledge. Electives should not be selected without serious consideration. Students are advised to consult regularly with their advisors concerning their electives.

Students generally take no more than fifteen credits in Business or Engineering. Any courses taken in these programs must be approved by the appropriate Chair. Students interested in exercising any of these options must consult with their advisors.

Please note: Credits earned in Aerospace Studies may not be used for any degree program in Liberal Arts. Students may not take more than three credits total in health and physical education courses.

Student Course Load

In the Kakos School of Arts and Sciences, a student's course load is determined by the major selected. Full-time status is considered 12 credits or higher. Loads vary from semester to semester however, students may not take more than 18 credits in the Fall or the Spring semester without the written approval of the Department Chair of the student's major. Students should consult the Program of Study for their selected major to determine the number of credits they are required to take each semester. Enrolling in more credits than the prescribed major could incur over credit charges.

Credit for Off-Campus Courses

A maximum of **12** credits may be taken at other institutions by matriculated students of Manhattan College under the following conditions:

- All major and minor courses should be taken at Manhattan College. Under unusual circumstances, and with the approval of the Dean after consultation with the Chair of the student's major department, courses may be approved to be taken at another institution.
- 2. The required nine (9) credits of religious studies courses (RELS 110, a 200-level course in Catholic studies, and a 300-level course from global studies and contemporary issues) are at the core of the Lasallian heritage of the College and, as such, these courses should be taken on-campus. Any exceptions will only be permitted for **one** of the three-credit RELS courses and as part of the overall 12 credits permitted. Any RELS course taken off-campus to meet the nine credit hour requirement will require review for equivalency or substitutability as described below by the Dean or Associate Dean of the Kakos School of Arts and Sciences. Students who are not majors in Arts and Sciences must seek approval from the Arts and Sciences Dean or Associate Dean before seeking approval from the student's Dean.
- Only courses from accredited two- and four-year colleges and from accredited universities will be considered.

- 4. Permission to take a course at another institution must be granted *prior to* enrolling in the course at the other institution. To obtain permission, students should work with an advisor from Centralized Advising to complete the requird forms from the Registrar's office. If the course the student wishes to take is not a major or minor requirement, the advisor will check to see if the Department Chair for that course has already reviewed the course for Manhattan College equivalency. If the course has not been reviewed, the student will obtain the course description for the course they wish to take and present that course description and the Registrar's form to the Department Chair who is responsible for the discipline in which the course is housed. The Department Chair will perform their review of the course description and, if they deem the course as equivalent to the courses their Department offers, the Chair will complete their portion of the Registrar's form. The student will then obtain approval from the Dean or Associate Dean on the form. The form will then be forwarded to the Registrar's office for final approval and recordkeeping. On-line courses are acceptable, if approved.
- 5. The required fee is paid to the Bursar.

First Year

- 6. The grade received at the other institution must be equivalent to or higher than the Manhattan College grade of C.
- 7. Grades earned at other institutions will not be transferred to the student's record at Manhattan College.
- 8. Study-abroad courses do not count toward the 12-credit maximum.

Bachelor of Science in General Studies

The curriculum for the degree program in General Studies is an alternative to the usual undergraduate curriculum. It features a modified core curriculum, a primary area of emphasis rather than a major (30 credits, 10 classes), a secondary concentration (15 credits, 5 classes) and a tertiary concentration or a traditional minor (15 credits, 5 classes). Consequently, there is less specialization, but an opportunity for broader and more structured general education. Each program provides core requirements in English, foreign language fine arts, history, mathematics and science, philosophy, psychology, religious studies, and sociology as a foundation for self-enrichment, appreciation, and understanding. The general education core requires 51 credits (17 classes), including nine credits (three classes) in religious studies.

Fall	Credits	Spring	Credits	
RELS 110		3 ENGL 110 or 210		3
Primary Concentration 1		3 RELS Catholic Studies		3
Secondary Concentration 1		3 Primary Concentration 2		3
COMM/ECON/POSC/PSYC/SOC	;	3 LLRN 102 (OR LLRN 105 OR		3
ELECTIVE 1		LLRN 151)		

Second Year		
	15-16	15
Math Elective	3-4 SCI Elective 1 ¹	3
ELECTIVE 1	LLRN 151)	
COMM/ECON/POSC/PSYC/SOC	3 LLRN 102 (OR LLRN 105 OR	3

Fall	Credits	Spring	Credits
ENGL 150 (OR MLL 300 LEVEL)		3 Primary Concentration 4	3

	15	15
	ELECTIVE OR THEA ELECTIVE	
Tertiary Concentration or Minor 1	3 ART ELECTIVE OR MUSC	3
Secondary Concentration 2	3 PHIL Elective	3
Primary Concentration 3	3 Secondary Concentration 3	3
RELS Global Studies or Contemporary Issues	3 Primary Concentration 5	3
DELO 01 1 10: "	0.00	_

Thi	ird	Ye	ar
-----	-----	----	----

Fall	Credits	Spring	Credits
Primary Concentration 6		3 Primary Concentration 7	3
Secondary Concentration 4		3 Primary Concentration 8	3
COMM/ECON/POSC/PSYC/SOC Elective 2		3 Tertiary Concentration or Minor 2	3
COMM/ECON/POSC/PSYC/SOC Elective 3		3 COMM/ECON/POSC/PSYC/SOC Elective 4	3
SCI Elective 2 ¹		3 SCI Elective 3 ¹	3
		15	15

Fourth Year

Fall	Credits	Spring	Credits
Primary Concentration 9 (Must be a 300 or 400 level course)		3 Primary Concentration 10	3
TWO GENERAL ELECTIVES		6 Tertiary Concentration or Minor 5	3
Secondary Concentration 5		3 Tertiary Concentration or Minor 4	3
Tertiary Concentration or Minor 3		3 HIST Elective	3
		General Elective	3
	1	15	15

Total Credits: 120-121

The following courses can satisfy the three SCI elective requirements: SCI 201 or 202 or

203 or 204 or 205 or 210 or 221 or 230 or 231 or 270 or 323 or BIOL 090 or 091 or 092 or

103 or 111 or 112 or 115 or 116 or 207 or 208 or 221 or CHEM 100 or 101 or 102 or 105 or

106 or 090 or ENSC 201 or 301 or PHYS 101

No language courses at the 100-level may count for concentration credit. No course required as part of the modified core may count for concentration credit. No more than two 200-level courses or six credits of AP may count toward any of the concentrations.

No more than 18 credits in any combination may be taken in courses offered by the Schools of Business or Engineering, including courses taken in a concentration. Credits earned in Aerospace Studies do not count toward graduation in this program.

All capstone experiences must complete an analytical essay that reflects skills gained in the primary concentration.

Faculty advisors for students enrolled in this major will come from the Primary Department of Emphasis. The faculty advisors will coordinate advising with Centralized Advising.

Academic Advising

Academic advisement for Arts and Sciences students occurs with the support from the Office of Centralized Advising in conjunction with the Department Chairs and faculty. The academic advisors in Centralized Advising counsel all students throughout their academic careers on not only policy and procedures, but any challenges - personal and academic - that may arise in a student's time at the College. Students generally rely fully on the Centralized Advising academic advisors during their first year and then transition to faculty advisors after the first year. All students should select their major by the end of their first year. Programs of study are approved each semester by the academic and major faculty advisors.

Academic Standing

To be considered in good a academic standing, all students in the Kakos School of Arts and Sciences must maintain a cumulative GPA of at least 2.0 regardless of class level. Grade point averages are computed at the end of each semester or term.

Students are expected to make adequate progress towards fulfilling their degree requirements every term. Students who are not making adequate progress are subject to academic sanctions.

Study Abroad

Students interested in studying abroad should discuss their interest with their advisors by the beginning of sophomore year. In order to participate in such a program, a student must have a minimum cumulative GPA of 2.75. Students may opt to study abroad for either a full semester or on one of the College's short-term programs during the winter intersession or summer break. If planning to go abroad for a full semester, it is best to plan the semester of study abroad for the sophomore or junior year. Further information about study abroad opportunities is available through the Study Abroad Office.

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 recognizing 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.

In addition, most academic departments sponsor local chapters of national honor societies in their disciplines.

The faculty are dedicated to encouraging student research efforts and are pleased to have students join them in their own research. Manhattan's small classes and close student-faculty interactions generate an atmosphere which has produced many important student-faculty research collaborations. Every summer 30-50 students receive financial support to conduct research with faculty mentors on campus. The students' research is presented at regional and national conferences and potentially leads to published papers in professional books and journals. Of special note are the Branigan Scholars Grants and the Fenton, Kakos and Parson Endowments to the Sciences and Mathematics. The Branigan Scholars Grants were established in 1967 through the generous contributions of Edward Vincent Branigan '40 with matching gifts from major corporations and support from the National Endowment for the Humanities. The Dennis Fenton '74 and C. Lowell Parsons '66 Endowments support student-faculty mentored research in biology. The Michael J. '58 and Aimee Rusinko Kakos Endowments support student-faculty mentored research in the sciences and mathematics.

Independent study courses are available in most departments for students seeking the opportunity to perform advanced research/studies with a faculty member in an area not ordinarily covered by regular coursework during the academic year. In addition, many departments sponsor supervised internships and field-study opportunities through the department or through the Office of Career Pathways.

Professional and Career Development

Prelegal Advisory Committee

While there is no single major or minor here at Manhattan College that is a prerequisite for applying to law school, students who do well in the application process have strong analytic and problem-solving skills, critical reading skills, writing skills, communication skills, research skills, task management skills and a dedication to public service and promotion of justice, according to the American Bar Association. It is important to work with the pre-law advisors throughout the undergraduate process in order to be prepared for the law school application process. Contact the Center for Graduate and Fellowship Advisement in Thomas Hall 3.50, 718-862-7399, gsfa@manhattan.edu, for more information.

Preparation for Medicine, Dentistry and other Health Professions

Required coursework for admission into schools of the health professions are established by the Association of American Medical Colleges, the American Dental Association, and other professional associations in the health fields. The pre-professional requirements in the sciences are met within the context of a broad liberal education. Pre-professional students are expected to maintain an average of at least a B in all their courses.

Successful applicants to schools of the health professions demonstrate academic excellence, strong analytical skills, an aptitude for science, and a commitment to service. In general, there is no preferred major for any Health Profession. The requirements vary, but all require numerous courses in the Sciences and Liberal Arts, including biology,

chemistry, and mathematics. This information can be found at the Center for Graduate School and Fellowship Advisement (CGSFA) (https://inside.manhattan.edu/student-life/career-pathways/gsfa/).

Students seeking entry to health professions schools are encouraged to enroll in the P (http://catalog.manhattan.edu/undergraduate/academicsupportandresources/fellowshipadvisement/pre-health-information/)re-Health Minor (http://catalog.manhattan.edu/undergraduate/academicsupportandresources/fellowshipadvisement/pre-health-information/). Students are not required to join the minor in order to receive a Health Professions Advisory Committee (HPAC) evaluation letter, however participation is recommended in order to be included in the competitive cohort that applies to health profession schools each year.

Health Professions Advisory Committee

The Health Professions Advisory Committee (HPAC) is a body of faculty members from several schools who give guidance to students interested in preparing for careers in medicine, dentistry and other health professions. The Committee advises students on the selection of programs of study that will equip them with specialized pre-professional courses in the sciences and with a broad liberal education to prepare them for effective participation in the health-care community. Further information is available from the Chair of the HPAC. Dr. Bruce Liby of the Department of Mathematics and Physics.