Requirements towards satisfying the major in Interdisciplinary Science in the General track or one of the areas of focus: Biology of Health, Science of the Environment, History & Philosophy of Science

GENERAL INTERDISCIPLINARY SCIENCE TRACK
(Course may count only once towards satisfying a requirement)

Required Courses
LSCI 2661 Energy and Sustainability
LMTH 2155 Math Models in Nature
LSCI 3009 Methods of Scientific Inquiry

Four Foundation Courses
Required:
Genes, Environment & Behavior
Constructing the Laws of Nature
Chemistry of Life

Select one from the list below
Biology of Beauty, Sex & Death
Science & Politics of Infectious Diseases
Quantum Universe
Ecology I

One Additional Math Course - Select one from the list below
Ethnomathematics
Game Theory
Statistics with SPSS
Discrete Math
Math Tools for Natural and Social Sciences
Calculus

One Laboratory Course - Select one from the list below
Water Quality Lab
Ecologies of the Urban: A Lab
Biodiversity Achieved Lab

Two Intermediate/Advanced Level Courses - Select two from the list below
Science & Politics of The Human Genome
Space, Time & Einstein
Chemistry of the Atmosphere
Ecology II: Urban Ecosystems
Discrete Math
Math Tools for Social and Natural Sciences
Science & Politics of Cancer
What is Science?
Nanotechnology
Epidemics and International Responses

One Additional Advanced Level Course - Select one from the list below
Science & Politics of Cancer
Science & Politics of The Human Genome
What is Science?
Nanotechnology
Epidemics and International Responses

One Elective Course
Any LSCI or LMTH course that has not applied towards satisfying a requirement above.
Note: The following courses do not satisfy this elective requirement: Brain, Biology & Behavior, From the Rainforest, Quantitative Reasoning, Algebra, Statistics (3 credits)

BIOLOGY OF HEALTH TRACK
(Course may count only once towards satisfying a requirement)

This track focuses on the biology of health and emphasizes the importance of research in the natural sciences in understanding health issues and in the development of policies and solutions. After completing courses in the natural sciences (genetics, chemistry, cell biology) and social sciences (ethics, psychology, history, writing, and anthropology) students will be positioned to pursue: graduate study in health education, public health, medical anthropology, science journalism, history and philosophy of science, health economics; work at a scholarly institute focused on policy making or bioethics research; or work for NGOS/ NPOs interested in promoting health as a human right. By completing traditional natural science and mathematics courses at other institutions, students can pursue training for more specialized programs. For instance students interested in medical school or genetic counseling can complete the Biology of Health track and apply to post-bac programs or, as sophomores, complete premed requirements through Mount Sinai's early admission into medical school program designed for students in the humanities.
http://www.mountsinai.net/theschool/eap.shtml

The courses listed below satisfy the minimal requirements, and students are encouraged to complete a wide range of electives beyond these requirements and to consult with their Interdisciplinary Science academic advisor to be assured that the appropriate sequence of elective courses, internships, and senior work project are chosen for their desired post-graduate experiences.

Requirements:
LSCI 2661 Energy and Sustainability
LSCI 3009 Methods of Scientific Inquiry
LMTH 2155 Math Models in Nature

Required Mathematics
LMTH 2525 Statistics with SPSS

Required Laboratory Course
LSCI 3211 Biodiversity Achieved

Required Four Foundation Courses (*Science & Politics of Infectious Diseases may count in some instances)*
LSCI 2040 Genes, Environment, and Behavior
LSCI 2838 Biology of Beauty Sex and Death
LSCI 2006 Chemistry of Life
LSCI 2000 Constructing Laws of Nature

Three Intermediate/Advanced Courses (one must be 4000 level)
LSCI 4050 Science & Politics of Cancer
LSCI 4000 Science & Politics of Genomes
LSCI 4005 Nanotechnology
LSCI 4000 What is Science?

One Elective Course
LSCI 2045 Genes and Race
LSCI 2035 Science and Politics of Infectious Diseases
LSCI 2039 Science and Politics of Stem Cells
LSCI 4510 Epidemics and International responses
LSCI 4501: Global Perspectives on Reproductive Health
LSCI 4502: Health Inequality and Development
LSCI 4503: Intro to Epidemiology: Cases Studies in Global Health
LSCI 4505: Health Policy & Advocacy

SCIENCE OF THE ENVIRONMENT TRACK

(Course may count only once towards satisfying a requirement)

This track focuses on the science of environmental issues and emphasizes the importance of research in the physical sciences in understanding environmental issues and in the development of policies and solutions. Students who choose this track will be advised to take a series of courses in the natural sciences (chemistry, biology, and physics), mathematics, economics, urban studies and policy. With this background students will be competitive for careers and graduate programs in environmental studies, policy, management, education, law, and business.

The courses listed below satisfy the minimal requirements, and students are encouraged to complete a wide range of electives beyond these requirements and to consult with their Interdisciplinary Science academic advisor to be assured that the appropriate sequence of elective courses, internships, and senior work project are chosen for their desired post-graduate experiences.

Required Courses
Energy & Sustainability
Math Models of Nature
Methods of Scientific Inquiry

Four Foundation Courses
Required:
Genes, Environment & Behavior
Constructing the Laws of Nature
Chemistry of Life

Select one from the list below
Biology of Beauty, Sex & Death
Science & Politics of Infectious Diseases
Ecology I

One Additional Math Course - Select one from the list below
Statistics with SPSS
Calculus

One Laboratory Course
Water Quality Lab

Three Intermediate/Advanced Courses (one must be 4000 level)
Chemistry of the Atmosphere
Nanotechnology
What is Science?
Biodiversity Achieved

One Elective Course
Any LSCI or LMTH course that has not applied towards satisfying a requirement above.
Note: The following courses do not satisfy this elective requirement: Brain, Biology & Behavior, From the Rainforest, Quantitative Reasoning, Algebra, Statistics (3 credits)

HISTORY & PHILOSOPHY OF SCIENCE TRACK
(Course may count only once towards satisfying a requirement)

The focus of this track is on courses that emphasize the historical development of science, the philosophical foundations of scientific thought, and the relationship between science and culture. There are many graduate programs in the history and philosophy of science - usually administered by the History or Philosophy departments rather than the science program. As a result, students seeking to pursue graduate work in this field should strive to build a broad background in history and/or philosophy courses outside of Interdisciplinary Science in addition to their required science courses. The topics emphasized in this track may also serve the needs of dual-concentrators who wish to combine their studies of science with their work in other concentrations such as Philosophy, Social and Historical Inquiry, or Writing. Students electing this track may also be interested in a program such as Cornell's graduate degree in "Science & Technology Studies." The field of "science studies" is concerned with the study of science and technology as historical and cultural products. Applicants to the program have a variety of backgrounds in the basic sciences, engineering, history, philosophy, sociology, or politics.

The courses listed below satisfy the minimal requirements, and students are encouraged to complete a wide range of electives beyond these requirements and to consult with their Interdisciplinary Science academic advisor to be assured that the appropriate sequence of elective courses, internships, and senior work project are chosen for their desired post-graduate experiences.

Required Courses
Energy & Sustainability
Math Models of Nature
Methods of Scientific Inquiry

Four Foundation Courses
Constructing Laws of Nature
Quantum Universe
Genes, Environment & Behavior
Chemistry of Life

One Additional Math Course - Select one from the list below
Ethnomathematics
Game Theory
Statistics with SPSS
Discrete Math
Math Tools for Natural and Social Sciences
Calculus

One Laboratory Course – Select one from the list below
Water Quality Lab
Ecologies of the Urban: A Lab
Biodiversity Achieved Lab

Two Intermediate/Advanced Level Courses
Space, Time & Einstein
What is Science?

One Additional Advanced Level Course - Select one from the list below
Nanotechnology
Science and Politics of Cancer

One Elective Course
Any LSCI or LMTH course that has not applied towards satisfying a requirement above.
Note: The following courses do not satisfy this elective requirement: Brain, Biology & Behavior, From the Rainforest, Quantitative Reasoning, Algebra, Statistics (3 credits)