Satisfies one semester of the Division III requirement.

HSCI 101(F)  Science, Technology, and Human Values (Same as SCST 101)
A study of the natures and roles of science and technology in today’s society, and of the problems which technical advances pose for human values. An introduction to science-technology studies. Topics include: scientific creativity, the Two Cultures, the norms and values of science, the Manhattan Project and Big Science, the ethics and social responsibility of science, appropriate technology, technology assessment, and various problems which spring from dependencies engendered by living in a technological society, e.g., computers and privacy, automation and dehumanization, biomedical engineering.
Format: lecture/discussion. Evaluation will be based on five problem sets, four short papers (3-5 pages), and two hour exams.
No prerequisites.
Enrollment limit: 30.
Preference to seniors and sophomores.
Satisfies one semester of the Division II requirement.
Hour: 10:00-10:50 MW
D. BEAVER

HSCI 110(F)  History of Medicine (Same as HIST 293)
A study of the growth and development of medical thought and practice, together with consideration of its interaction with science and social forces and institutions. The course aims at an appreciation of the socio-historical construction of Western medicine, from prehistory to the twentieth century. The course begins with paleomedical reconstructions, and moves to Babylonian, Egyptian and Greek [not only Hippocratic] medicine, Greek and Roman anatomy and physiology, Arabic medical thought, Renaissance medicine, and the gradual professionalization and specialization of medicine from the sixteenth century. Attention is paid to theories of health and disease, ideas about anatomy and physiology, in addition to achievements such as anesthesia and internal surgery, and advances in instruments such as obstetrical forceps and the stethoscope.
Format: seminar. Requirements: class discussion, six short reports (2-3 pages), and two hour exams.
No prerequisites.
Enrollment limit: 15.
Open to first-year students.
Satisfies one semester of the Division II requirement.
Hour: 11:10-12:25
D. BEAVER

HSCI 224(S)  Scientific Revolutions: 1543-1927 (Same as HIST 294)
How much does science create the sensibilities and values of the modern world? How much, if any, technical detail is it necessary to know in order to understand the difference between propaganda and fact?
This course investigates four major changes of world view, associated with Copernicus (1543); Newton (1687); Darwin (1859); and Planck (1900) and Einstein (1905). It also treats briefly the emergence of modern cosmogony, geology, and chemistry as additional reorganizations of belief about our origins, our past, and our material structure. We first acquire a basic familiarity with the scientific use and meaning of the new paradigms, as they emerged in historical context. We then ask how those ideas fit together to form a new framework, and ask what their trans-scientific legacy has been, that is, how they have affected ideas and values in other sciences, other fields of thought, and in society. Knowledge of high-school algebra is presupposed.
Format: lecture/discussion. Evaluation will be based on five problem sets, four short papers (3-5 pages), and two hour exams.
No prerequisites.
Enrollment limit: 20.
Preference to first-years and sophomores.
Satisfies one semester of the Division III requirement.
Hour: 10:00-10:50
D. BEAVER

HSCI 240(S)  Technology and Science in American Culture (Same as HIST 295)
Although technologically dependent, the American colonies slowly built a network of native scientists and inventors whose skills helped shape the United States’ response to the Industrial Revolution. The interaction of science, technology, and society in the nineteenth century did much to form American identity: the machine in the garden, through the “American System of Manufactures” helped America rise to technological prominence; the professionalization and specialization of science and engineering led to their becoming vital national resources. Understanding these developments, as well as the heroic age of American invention (1865-1914), forms the focus of this course: how science and technology have helped shape modern American life.
Format: seminar. Requirements: class discussion, six short reports (2-3 pages), and two hour exams.
No prerequisites.
Enrollment limit: 15.
Open to first-year students.
Satisfies one semester of the Division II requirement.
Hour: 10:00-10:50
D. BEAVER

HSCI 309  Environmental Policy (Same as ENVI 309, PSCI 301 and SCST 309) (Not offered 2012-2013)
(See under ENVI 309 for full description.)
LYNN

HSCI 320  History of Medicine (Same as HIST 293) (Not offered 2012-2013)
A study of the growth and development of medical thought and practice, together with consideration of its interaction with science and social forces and institutions. The course aims at an appreciation of the socio-historical construction of Western medicine, from prehistory to the twentieth century. The course begins with paleomedical reconstructions, and moves to Babylonian, Egyptian and Greek [not only Hippocratic] medicine, Greek and Roman anatomy and physiology, Arabic medical thought, Renaissance medicine, and the gradual professionalization and specialization of medicine from the sixteenth century. Attention is paid to theories of health and disease, ideas about anatomy and physiology, in addition to achievements such as anesthesia and internal surgery, and advances in instruments such as obstetrical forceps and the stethoscope.
Format: seminar. Requirements: six short papers (3 pages), midterm, final hour exam.
No prerequisites.
Enrollment limit: 15.
Open to first-year students.
Satisfies one semester of the Division II requirement.
D. BEAVER

HSCI 336(S)  Science, Pseudoscience, and the Two Cultures (Same as ASTR 336) (W)
(See under ASTR 336 for full description.)
J. PASACHOFF

HSCI 338  The Progress of Astronomy: Galileo through the Hubble Space Telescope (Same as ASTR 338 and LEAD 338) (Not offered 2012-2013) (W)
(See under ASTR 338 for full description.)
J. PASACHOFF

HSCI 497  Independent Study

COURSES OF RELATED INTEREST
PHIL 209  Philosophy of Science
SOC 368  Technology and Modern Society