HISTORY OF SCIENCE (HSTS)

HSTS 403. THESIS. (1-16 Credits)
This course is repeatable for 16 credits.

HSTS 405. READING AND CONFERENCE. (1-16 Credits)
This course is repeatable for 16 credits.

HSTS 407. SEMINAR. (1-16 Credits)
This course is repeatable for 16 credits.

HSTS 411. *HISTORY OF SCIENCE. (4 Credits)
Stresses the interaction of scientific ideas within their social and cultural contexts. Scientific thought from ancient civilizations to the post-Roman era. Not offered every year. HSTS 411/HSTS 511, HSTS 412/HSTS 512, HSTS 413/HSTS 513 need not be taken in sequence. (H) (SS) (Bacc Core Course)
Attributes: CSST – Core, Synthesis, Science/Technology/Society; LACH – Liberal Arts Humanities Core; LACS – Liberal Arts Social Core
Recommended: Upper-division standing and at least one science sequence.

HSTS 412. *HISTORY OF SCIENCE. (4 Credits)
Stresses the interaction of scientific ideas within their social and cultural context. Origin of modern science in the 16th and 17th centuries. HSTS 411/HSTS 511, HSTS 412/HSTS 512, HSTS 413/HSTS 513 need not be taken in sequence. (Bacc Core Course)
Attributes: CSST – Core, Synthesis, Science/Technology/Society
Recommended: Upper-division standing and at least one science sequence.

HSTS 413. *HISTORY OF SCIENCE. (4 Credits)
Stresses the interaction of scientific ideas with their social and cultural context. Development of modern science in the 18th and 19th centuries and to the present. HSTS 411/HSTS 511, HSTS 412/HSTS 512, HSTS 413/HSTS 513 need not be taken in sequence. (Bacc Core Course)
Attributes: CSST – Core, Synthesis, Science/Technology/Society
Recommended: Upper-division standing and at least one science sequence.

HSTS 414. *HISTORY OF TWENTIETH-CENTURY SCIENCE. (4 Credits)
Focuses on the organization, practice, and theories of the natural sciences in the twentieth century, with emphasis primarily on the European and American scientific traditions from the 1890s to the present. (H) (SS) (Bacc Core Course)
Attributes: CSST – Core, Synthesis, Science/Technology/Society; LACH – Liberal Arts Humanities Core; LACS – Liberal Arts Social Core

HSTS 415. **THEORY OF EVOLUTION AND FOUNDATION OF MODERN BIOLOGY. (4 Credits)
Origin and development of Darwin's theory of evolution. Reception of theory and history of evolution to the present. (H) (SS) (Bacc Core Course) (Writing Intensive Course)
Attributes: CSST – Core, Synthesis, Science/Technology/Society; CWIC – Core, Skills, WIC; HNRS – Honors Course Designator; LACH – Liberal Arts Humanities Core; LACS – Liberal Arts Social Core
Equivalent to: HSTS 415H
Recommended: Upper-division standing.

HSTS 415H. **THEORY OF EVOLUTION AND FOUNDATION OF MODERN BIOLOGY. (4 Credits)
Origin and development of Darwin’s theory of evolution. Reception of theory and history of evolution to the present. (H) (SS) (Bacc Core Course) (Writing Intensive Course)
Attributes: CSST – Core, Synthesis, Science/Technology/Society; CWIC – Core, Skills, WIC; HNRS – Honors Course Designator; LACH – Liberal Arts Humanities Core; LACS – Liberal Arts Social Core

HSTS 416. *HISTORY OF MEDICINE PRE-1800. (4 Credits)
History of medical theory and the changing role of the physician; internal development of medicine as a discipline as well as a profession; relationship of medicine’s development to general changes in science and culture, to 1800. (Bacc Core Course)
Attributes: CSST – Core, Synthesis, Science/Technology/Society

HSTS 417. **HISTORY OF MEDICINE. (4 Credits)
History of medical theory and the changing role of the physician; internal development of medicine as a discipline as well as a profession; relationship of medicine’s development to general changes in science and culture. (H) (SS) (Bacc Core Course) (Writing Intensive Course)
Attributes: CSST – Core, Synthesis, Science/Technology/Society; CWIC – Core, Skills, WIC; LACH – Liberal Arts Humanities Core; LACS – Liberal Arts Social Core

HSTS 418. *SCIENCE AND SOCIETY. (4 Credits)
Historical study of the interaction of science and society. Case studies are used from the 18th through 20th centuries. Topics vary by term. (Bacc Core Course)
Attributes: CSST – Core, Synthesis, Science/Technology/Society

HSTS 419. **STUDIES IN SCIENTIFIC CONTROVERSY: METHODS AND PRACTICES. (4 Credits)
Course focuses on accounts of scientific controversies that have been controversial, to understand the rational, psychological, and social characteristics which have defined the meaning and procedures of the natural sciences. Case studies are used from the 18th through 20th centuries. (H) (SS) (Bacc Core Course) (Writing Intensive Course)
Attributes: CSST – Core, Synthesis, Science/Technology/Society; CWIC – Core, Skills, WIC; LACH – Liberal Arts Humanities Core; LACS – Liberal Arts Social Core
Equivalent to: HSTS 419H

HSTS 419H. **STUDIES IN SCIENTIFIC CONTROVERSY: METHODS AND PRACTICES. (4 Credits)
Course focuses on accounts of scientific controversies that have been controversial, to understand the rational, psychological, and social characteristics which have defined the meaning and procedures of the natural sciences. Case studies are used from the 18th through 20th centuries. (H) (SS) (Bacc Core Course) (Writing Intensive Course)
Attributes: CSST – Core, Synthesis, Science/Technology/Society; CWIC – Core, Skills, WIC; HNRS – Honors Course Designator; LACH – Liberal Arts Humanities Core; LACS – Liberal Arts Social Core

HSTS 421. *TECHNOLOGY AND CHANGE. (4 Credits)
Current views of technology and associated cultural changes and the contexts in which these developed; the changing role of technology in modern industrial society, especially in the United States; recent efforts to predict and control technological developments and the social and cultural consequences. (H) (SS) (Bacc Core Course)
Attributes: CSST – Core, Synthesis, Science/Technology/Society; LACH – Liberal Arts Humanities Core; LACS – Liberal Arts Social Core
HSTS 422. **HISTORICAL STUDIES OF SCIENCE AND POLITICS. (4 Credits)**
The historical study of scientists, their work, their political and ethical choices mainly in the United States and Europe from the 1920s to the 1950s. (H) (Bacc Core Course) (Writing Intensive Course)
**Attributes:** CSST – Core, Synthesis, Science/Technology/Society; CWIC – Core, Skills, WIC; LACH – Liberal Arts Humanities Core

HSTS 423. *SCIENCE AND RELIGION. (4 Credits)*
A historical survey of critical issues in the relationship of Western science and religion from ancient times to the end of the twentieth century. (H) (Bacc Core Course)
**Attributes:** CSST – Core, Synthesis, Science/Technology/Society; LACH – Liberal Arts Humanities Core

HSTS 425. **HISTORY OF THE LIFE SCIENCES. (4 Credits)**
History of ideas about life from Greeks to present day. Cultural background and development of major theories of the life sciences with emphasis on natural history. (Bacc Core Course) (Writing Intensive Course)
**Attributes:** CSST – Core, Synthesis, Science/Technology/Society; CWIC – Core, Skills, WIC
**Recommended:** Upper-division standing plus one year college sciences.

HSTS 437. *HISTORY OF ANIMALS IN SCIENCE. (4 Credits)*
Using a variety of sources, this course explores the ways humans have thought about and used animals in science and medicine from the seventeenth century to the present. How has science constructed the boundaries between humans and animals, and what have the consequences been for each? (Writing Intensive Course)
**Attributes:** CWIC – Core, Skills, WIC

HSTS 440. **HISTORY OF PSYCHOTHERAPY. (4 Credits)**
The history of psychotherapy in modern Western societies, from biomedical, cultural, political, and psychosocial perspectives. Not offered every year. (H) (Bacc Core Course)
**Attributes:** CSST – Core, Synthesis, Science/Technology/Society; CWIC – Core, Skills, WIC

HSTS 440H. **HISTORY OF PSYCHOTHERAPY. (4 Credits)**
The history of psychotherapy in modern Western societies, from biomedical, cultural, political, and psychosocial perspectives. Not offered every year. (H) (Bacc Core Course)
**Attributes:** CSST – Core, Synthesis, Science/Technology/Society; HNRS – Honors Course Designator; LACH – Liberal Arts Humanities Core

HSTS 451. **THE HISTORY OF OUTER SPACE. (4 Credits)**
Advancements in technology and science have made it possible to observe, robotically explore, personally visit, and daily use outer space including an overview of what we have learned, how this endeavor has shaped human civilization and culture, and what may lie ahead. (Bacc Core Course)
**Attributes:** CSST – Core, Synthesis, Science/Technology/Society

HSTS 452. *A WOMEN'S HISTORY OF OUTER SPACE. (4 Credits)*
Since early Babylon, women have also observed the sky, performed fundamental calculations, examined astronomical plates, and made significant fundamental discoveries that changed the way we see the cosmos. At NASA, women have gone from purely secretarial positions in 1958 to commanding the International Space Station and administering the Mars Rover Program today. These advancements in opportunity and responsibility reflect a larger story of how traditional roles for women have evolved in response to changes in both technology and social norms. (Bacc Core Course)
**Attributes:** CSST – Core, Synthesis, Science/Technology/Society

HSTS 499. SPECIAL TOPICS. (1-16 Credits)
**Attributes:** LACH – Liberal Arts Humanities Core

**HSTS 501. RESEARCH. (1-16 Credits)**
This course is repeatable for 16 credits.

**HSTS 503. THESIS. (1-16 Credits)**
This course is repeatable for 999 credits.

**HSTS 505. READING AND CONFERENCE. (1-16 Credits)**
This course is repeatable for 16 credits.

**HSTS 511. HISTORY OF SCIENCE. (4 Credits)**
Stresses the interaction of scientific ideas within their social and cultural context. Scientific thought from ancient civilizations to the post-Roman era. Not offered every year. HSTS 411/HSTS 511, HSTS 412/HSTS 512, HSTS 413/HSTS 513 need not be taken in sequence.
**Recommended:** At least one science sequence

**HSTS 512. HISTORY OF SCIENCE. (4 Credits)**
Stresses the interaction of scientific ideas with their social and cultural context. Origin of modern science in the 16th and 17th centuries. HSTS 411/HSTS 511, HSTS 412/HSTS 512, HSTS 413/HSTS 513 need not be taken in sequence.
**Recommended:** At least one science sequence

**HSTS 513. HISTORY OF SCIENCE. (4 Credits)**
Stresses the interaction of scientific ideas with their social and cultural context. Development of modern science in the 18th and 19th centuries and to the present. HSTS 411/HSTS 511, HSTS 412/HSTS 512, HSTS 413/HSTS 513 need not be taken in sequence.
**Recommended:** At least one science sequence

**HSTS 514. HISTORY OF TWENTIETH-CENTURY SCIENCE. (4 Credits)**
Focuses on the organization, practice, and theories of the natural sciences in the twentieth century, with emphasis primarily on the European and American scientific traditions from the 1890s to the present.

**HSTS 515. THEORY OF EVOLUTION AND FOUNDATION OF MODERN BIOLOGY. (4 Credits)**
Origin and development of Darwin's theory of evolution. Reception of theory and history of evolution to the present.

**HSTS 516. HISTORY OF MEDICINE PRE-1800. (4 Credits)**
History of medical theory and the changing role of the physician; internal development of medicine as a discipline as well as a profession; relationship of medicine's development to general changes in science and culture, to 1800.
HSTS 517. HISTORY OF MEDICINE. (4 Credits)
History of medical theory and the changing role of the physician; internal development of medicine as a discipline as well as a profession; relationship of medicine’s development to general changes in science and culture.

HSTS 518. SCIENCE AND SOCIETY. (4 Credits)
Historical study of the interaction of science and society. Case studies are used from the 18th through 20th centuries. Topics vary by term.

HSTS 519. STUDIES IN SCIENTIFIC CONTROVERSY: METHOD AND PRACTICE OF. (4 Credits)
Course focuses on accounts of scientific discoveries that have been controversial, to understand the rational, psychological, and social characteristics which have defined the meaning and procedures of the natural sciences. Case studies are used from the 18th through 20th centuries.

HSTS 521. TECHNOLOGY AND CHANGE. (4 Credits)
Current views of technology and associated cultural changes and the contexts in which these developed; the changing role of technology in modern industrial society, especially in the United States; recent efforts to predict and control technological developments and the social and cultural consequences.

HSTS 522. HISTORICAL STUDIES OF SCIENCE AND POLITICS. (4 Credits)
The historical study of scientists, their work, their political and ethical choices mainly in the United States and Europe from the 1920s to the 1950s.

HSTS 523. SCIENCE AND RELIGION. (4 Credits)
A historical survey of critical issues in the relationship of Western science and religion from ancient times to the end of the twentieth century.

HSTS 525. HISTORY OF THE LIFE SCIENCES. (4 Credits)
History of ideas about life from Greeks to present day. Cultural background and development of major theories of the life sciences with emphasis on natural history.
Recommended: One year of college sciences

HSTS 537. HISTORY OF ANIMALS IN SCIENCE. (4 Credits)
Using a variety of sources, this course explores the ways humans have thought about and used animals in science and medicine from the seventeenth century to the present. How has science constructed the boundaries between humans and animals, and what have the consequences been for each?

HSTS 540. HISTORY OF PSYCHOTHERAPY. (4 Credits)
The history of psychotherapy in modern Western societies, from biomedical, cultural, political, and psychosocial perspectives. Not offered every year.

HSTS 599. SPECIAL TOPICS. (1-16 Credits)
This course is repeatable for 36 credits.

HSTS 603. THESIS. (1-16 Credits)
This course is repeatable for 999 credits.