

SCIENCE AND TECHNOLOGY STUDIES (STS)

STS 300 Intro to Sci & Technol Studies 3 Credit Hours

An examination of the social contexts and consequences of science and technology, with special attention to the impacts of the automobile and automobile industry on American society. Topics include the automobile's role in the history of manufacturing; the impact of various production techniques on work and workers; the effects of the automobile on the natural environment, the design of cities and development of suburbs, and ways of life; the iconic status of the car in American culture and the relationship between automobile design and aesthetics. (YR).

STS 301 Concepts of Environmentalism 3 Credit Hours

Designed to identify the underlying concepts of any environmental issue. The course will demonstrate the interdisciplinary nature of environmental problem-solving through current readings, classical monographs, and films. Students will conduct a systems analysis of a household and a local community. A major research paper on an environmental topic will be required. The course will not be open to students who take ENST 105. (YR).

STS 305 Social Issues in Auto Design 3 Credit Hours

An examination of the impact of four contemporary social issues - vehicle safety, energy consumption, environmental impact, and a changing workforce - on the design and engineering of automobiles in the context of globalization and rapid technological change. Using a series of case studies, the course will focus on the ways social concerns, government regulation, and professional ethics, as well as industry standards and technical considerations, affect the decision-making processes of automobile designers and engineers. (OC).

Prerequisite(s): COMP 105 or COMP 110 or Composition Placement Score with a score of 30 or Composition Placement Score with a score of 107

STS 308 Urban Geography 3 Credit Hours

The geography of human settlement and urbanization. Particular emphasis is placed on human transformation of the physical environment, and resource use throughout history from ancient civilizations to modern megalopolises. Universal urban challenges, such as sprawl, pollution, congestion, crime, poverty, etc., are addressed. (F,W).

STS 309 Economic Geography 3 Credit Hours

Spatial aspects of the ways people make their living. Discussion of the spatial distribution of resources and wealth at various scales. Introduction of site selection and location analysis. (F).

STS 310 Digital Media and Society 3 Credit Hours

Online platforms like Twitter, Facebook, and Snapchat have impacted social interaction so rapidly and dramatically that this period in history has been called a digital revolution. This class explores the digital revolution from a sociological perspective. We examine the effects of new and rapidly evolving means of communication on the self, groups, and society. Applying sociological theory, the class explores topics such as digital identity, cyber crime, and virtual social movements. Questions addressed include: How does communicating on social media impact ourselves and our relationships? Are social media exclusionary or democratic? and How do social movements function on social media? In addition to critically evaluating digital media, students will gain basic practical skills: understanding the virtual landscape, learning "best practices," and exploring how to use digital technologies in more critical and more powerful ways. (W, YR).

Prerequisite(s): SOC 200

STS 312 Environmental Ethics 3 Credit Hours

The relationship of human beings to the non-human environment raises pressing moral and political issues. This course will use the theories and concepts of philosophical ethics to explore such questions as human obligations to non-human animals; the preservation of wilderness; balancing economic, aesthetic, and spiritual values; and the problems of pollution, urban sprawl, and ecological justice. Prerequisite or permission of instructor. (YR).

Prerequisite(s): PHIL 100 or PHIL 233 or PHIL 240* or CRJ 240 or ENST 105 or ENST 301

STS 321 Labor in the American Economy 3 Credit Hours

An analysis of the nature and underlying causes of the problems facing the worker in modern economic society. Includes an examination of wages, unemployment, economic insecurity, the trade union movement, collective bargaining, and labor legislation. (F).

Prerequisite(s): ECON 201 and ECON 202

STS 325 Environmental Politics 3 Credit Hours

An examination of policy making about problems affecting the environment, at a global, national, and local scale.

STS 326 Gender, Science & Engineering 3 Credit Hours

Explores some of the history of women in science and engineering, the current status of women in science and engineering, and feminist theory in research. Topics include cultural influences on women in science and engineering, careers and life balance, and a feminist approach to scientific and engineering teaching and research.

STS 340 Beyond Race: Understanding Human Variation 3 Credit Hours

This course examines the concept of race from a biocultural perspective. It focuses on several intertwined themes, including: (1) the nature of human biological variation, (2) how human populations have adapted to diverse environments across the world, (3) how Western scientific thought and colonization influenced ideas about race, and (4) how the concept of race has varied both cross-culturally and over time. Students will be asked to critically evaluate current and historical concepts of race and human variation, and to apply this understanding to contemporary issues. Prerequisite ANTH 101 recommended. (YR).

Prerequisite(s): ANTH 101

Restriction(s):

Can enroll if Class is Sophomore or Junior or Senior

STS 345 Cultural Ecology & Evolution 3 Credit Hours

An introduction to the study of human ecology. This course employs the case-study method to develop an evolutionary and biocultural perspective on the relationship between human beings and their environments. (OC).

STS 349 Thomas Edison and His Era 3 Credit Hours

This course will introduce students to the life and work of Thomas Edison. Breaking with the stereotype of the lone inventor/genius, we will examine how Edison helped shape and was in turn shaped by the context of the Gilded Age America when the United States emerged as an urban, industrial nation. Lectures and discussions will be supplemented by slides, films, and visits to the Edison-related sites at the Henry Ford. Throughout the course the following themes will be explored: invention and the labor process, the significance of manufacturing and marketing, the origins of modern consumer culture. (OC).

STS 360 Philosophy of Technology 3 Credit Hours

A study of both the history of, and current issues in, the philosophy of technology. This course will examine the deeper meaning and implications of our modern technological society. Questions examined include: What is the definition and nature of technology? How did the concept originate in Western thought? What is the relationship between modern industrial technology and the 'mechanistic' worldview? How do Western religious beliefs influence our attitudes about technology? Is technological progress socially determined, or is it culturally independent? In what ways has our technological society been supportive of, or detrimental to, overall human well-being? Students will cover both classic and contemporary readings.

STS 374 Hist of Industrial Technology 3 Credit Hours

Focusing on western Europe and the United States since the Industrial Revolution, this course will examine the history of manufacturing technologies and will include the following topics: mechanization and the rise of the factory; mass production; the process of innovation; design and diffusion of new technologies; technologies; technology and the changing nature of work; discussions, and examination of artifacts (actual tools and machines), students will consider the central role played by technology in the making of modern society. (YR).

STS 386 Comparative Hist of Technology 3 Credit Hours

This course will examine the history of technology from a comparative perspective; studying the development and impact of technology in different societies during various historical eras. Topics include: irrigation control and the rise of ancient empires; technology's role in the industrial revolution; technological innovation and the pace of social change. Current issues and various analytical perspectives in the history of technology will also be examined. (OC).

STS 390 Topics in STS 3 Credit Hours

Examination of problems and issues in selected areas of Science and Technology Studies. Title as listed in the Schedule of Classes will change according to content. Course may be repeated for credit when specific topics differ. (OC).

STS 390F Topics in STS-Skin & Ink-The Science, Culture & Business of Tattoos 3 Credit Hours

Topic Title: Skin & Ink-The Science, Culture & Business of Tattoos- This course is an intersectional study of Tattoos. Tattoos-the impression of a design on skin- have been an indelible part of human history over thousands of years. This hybrid course will explore tattoo anthropology, history, economics, skin and skin tissue, skin as a canvas, skin as parchment, economics, pigments and inks, branding, safety issues and concerns, and promising uses such medical tattoos. This is hybrid course, requires a field trip and online interaction in addition to on-campus lectures and seminars. (OC).

Restriction(s):

Can enroll if Class is Junior or Senior

STS 4021 Economics of the Labor Sector 3 Credit Hours

Theoretical analysis and empirical studies of the nature and operation of labor markets. Includes theories of wage determination and income distribution, the nature of unemployment, the impact of collective bargaining on the economy, the extent and economic effects of discrimination, and the nature and effects of government wage and employment policies. ECON 321/STS 321, Labor in the American Economy, is valuable background to this course although it is not a prerequisite. This course counts as a required capstone (4000-level) course in Economics and also counts toward the Economics Honors designation.

Prerequisite(s): ECON 302

STS 409 Human Body, Growth & Health 3 Credit Hours

This course provides an advanced undergraduate introduction to the topic of human growth and shows how human growth can be a reliable measure of the psychological, social, economic and moral conditions of a society. A major theme will be the interplay of biology and culture in shaping the patterns of human growth and, consequently, the health of populations and individuals. (OC).

STS 410 Darwinism and Philosophy 3 Credit Hours

Darwinism represents a challenge to the traditional view of human life as radically separate from the rest of the natural world. This course will examine the philosophical implications of this world view. It will address questions such as these: Is Darwinism compatible with traditional religion? Does Darwinism imply that human life and the cosmos are without purpose? Can human life be meaningful if it is the result of evolution and natural selection? Does Darwinism require us to change our view of nature? What are the ethical implications of a Darwinian view of life and the universe?

Prerequisite(s): PHIL 100 or PHIL 120 or PHIL 233 or PHIL 234 or PHIL 240 or PHIL 253 or PHIL 301 or PHIL 302 or PHIL 303 or PHIL 304 or PHIL 305 or PHIL 315 or PHIL 320 or PHIL 335 or PHIL 340 or PHIL 350 or PHIL 365 or PHIL 369 or PHIL 370 or PHIL 371 or PHIL 375 or PHIL 380 or PHIL 390 or PHIL 441 or PHIL 442 or PHIL 445 or PHIL 485 or PHIL 490

Restriction(s):

Cannot enroll if Class is

STS 430 Medical Anthropology 3 Credit Hours

A comprehensive examination of how culture mediates processes of illness and healing. Comparative materials examined, which provide a context for an anthropological analysis of modern biomedicine. (YR).

Restriction(s):

Can enroll if Class is Sophomore or Junior or Senior

STS 442 Sociology of Work 3 Credit Hours

The study of work roles in modern society. The impact of industrialization, professionalization, and unionization on the conditions of work, worker motivation, and job satisfaction. Career choice processes and career patterns, occupational status and prestige, and occupations associations are among the topics to be considered. (YR).

Prerequisite(s): SOC 200 or SOC 201

STS 464 Applied Cognitive Psychology 3 Credit Hours

The focus will be on the application of principles of cognitive psychology (defined broadly to include sensation and perception) to benefit the student in real-life settings. Specific areas might include human factors, retention, recall, attention, reasoning, problem-solving, decision making, reading, comprehension, learning, and language. (YR).

Prerequisite(s): PSYC 170 or PSYC 171 or PSYC 101

STS 485 Philosophy of Science 3 Credit Hours

A critical study of the foundations of the sciences, natural and social, with emphasis on the following topics: the nature of scientific method, theories and explanation, probability and determinism, the unity of the sciences. Students electing this course must have successfully completed a previous course in philosophy or have permission of instructor.

Prerequisite(s): PHIL 100 or PHIL 120 or PHIL 233 or PHIL 234 or PHIL 240 or PHIL 253 or PHIL 301 or PHIL 302 or PHIL 303 or PHIL 304 or PHIL 305 or PHIL 310 or PHIL 315 or PHIL 320 or PHIL 335 or PHIL 340 or PHIL 350 or PHIL 365 or PHIL 369 or PHIL 370 or PHIL 371 or PHIL 375 or PHIL 380 or PHIL 390 or PHIL 441 or PHIL 442 or PHIL 445 or PHIL 490

STS 488 Env Lit & Reps of Nature 3 Credit Hours

An interdisciplinary study of the ways in which the relationship between "nature" and humankind has been represented in literature and other forms of cultural expression. Emphasis on American and British texts of the 19th centuries, but assigned materials may include readings from other cultures and historical periods.

Prerequisite(s): (COMP 106 or Composition Placement Score with a score of 40 or Composition Placement Score with a score of 107 or COMP 220 or COMP 280 or COMP 270) and (ENGL 230 or ENGL 200 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239 or ENGL 205 or ENGL 206 or ENGL 238)

*An asterisk denotes that a course may be taken concurrently.

Frequency of Offering

The following abbreviations are used to denote the frequency of offering: (F) fall term; (W) winter term; (S) summer term; (F, W) fall and winter terms; (YR) once a year; (AY) alternating years; (OC) offered occasionally