

SCIENCE AND TECHNOLOGY STUDIES (STS)

Course Descriptions

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 problems solving through current readings, classical monographs and films. Students will conduct a system analysis of a household and a local community. This course will not be open to students who take ENST 105. (W).

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 310 Digital Media and Society 4 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 325 Environmental Politics 4 Credit Hours

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

STS 326 Gender, Science & Engineering 3 Credit Hours

Many of the major threats to human health are linked to environmental changes around the world. Population growth, globalization, and economic interests are creating increases in pollution, deforestation, water scarcity, urban sprawl, oil spills, and numerous other kinds of destructive environmental changes. This course explores how these environmental changes shape new illnesses and disease patterns, add to inequalities, and effects the health and wellbeing of individuals in particular communities, locations, and cultures.

STS 340 Beyond Race: Understanding Human Variation 4 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. (OC).

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 4 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.

Prerequisite(s): PHIL 100 or PHIL 233 or PHIL 240 or PHIL 301 or PHIL 302 or PHIL 306 or PHIL 335 or PHIL 365 or PHIL 375 or PHIL 441 or PHIL 442

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, 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. Students cannot receive credit for both ECON421 and ECON4021. (OC).

Prerequisite(s): ECON 302

Restriction(s):

Can enroll if Level is Undergraduate

STS 409 The Developmental Origins of Health and Disease 4 Credit Hours

This is a course about how early childhood experiences shape our growth and ultimately, our health in adulthood. 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. In this class we will tackle growth and development from a number of perspectives. First, we will explore the theoretical frameworks and concepts that are used to understand growth and development. This includes explorations of our evolutionary past and introductory concepts of biocultural approaches in biological anthropology. Second, we will review all the major milestones of human growth and development. Finally, we will connect human growth to the social and environmental conditions that shape growth and human health. This course will engage with exciting hypotheses in the biological sciences and in anthropology to help us understand how our life course shapes who we are. This course is designed to be intriguing to a broad variety of students, but particularly those interested in careers in the health-related fields. . Emphasis will be placed on critical analysis and communication skills that can be useful to students pursuing careers in any field. Required readings will be selected from a mix of older and contemporary literature and will reflect a diversity of ideas from scholars in many fields. The class is intended to be an interactive learning process with an emphasis on discussion and students are required to take a very active part in class. Students will also learn how to critically analyze research in the field. (F, AY).

STS 410 Darwinism and Philosophy 4 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 233 or PHIL 240 or PHIL 301 or PHIL 302 or PHIL 306 or PHIL 335 or PHIL 365 or PHIL 375 or PHIL 441 or PHIL 442

Restriction(s):

Cannot enroll if Class is

STS 430 Medical Anthropology 4 Credit Hours

This course is a comprehensive examination of the cultural factors that play a role in illnesses and healing. Students will explore and evaluate different perspectives concerning the causes of disease, the prevention and treatment of illness, ways of healing, modern biomedicine, and medical/healthcare systems. (YR) (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 4 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 4 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 233 or PHIL 240 or PHIL 301 or PHIL 302 or PHIL 306 or PHIL 335 or PHIL 365 or PHIL 375 or PHIL 441 or PHIL 442

STS 488 Env Lit & Reprs 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.

*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