

College of Engineering and
Computer Science
Courses Available to First-
Year Students

Fall 2020

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Course Prefixes

AAS - AFRICAN AMERICAN STUDIES

ANT- ANTHROPOLOGY

BIO - BIOLOGY

CHE - CHEMISTRY

ECN - ECONOMICS

ENG - ENGLISH & TEXTUAL STUDIES

GEO - GEOGRAPHY

HOA - FINE ARTS

HOM - FINE ARTS (MUSIC)

HST - HISTORY

JSP - JUDAISM

LLA - LAW

LIN - LINGUISTICS

LIT - LITERATURE

MAX - MAXWELL

NAT - NATIVE AMERICAN STUDIES

PHI - PHILOSOPHY

PHY - PHYSICS

PSC - POLITICAL SCIENCE

PST - PUBLIC AFFAIRS

PSY - PSYCHOLOGY

OSX - QUEER SEXUALITY

REL - RELIGION

SOC - SOCIOLOGY

WRT - WRITING

WGS - WOMEN AND GENDER STUDIES

Humanities

AAS 231 - African American Literature to 1900: An Introduction (3) African American literature and folklore from colonial days to 1900. Autobiographies, fiction, and poetry, including works by Wheatley, Douglass, Jacobs, Brown, Webb, Hopkins, Dunbar, Chesnut, Dubois, Johnson, Washington.

ANT 185 - Global Encounters: Comparing World Views & Values Cross-Culturally (3) Predominant views of reality and values in the cultures of Asia, Africa, and the Americas. Humanistic study of cultures and nature of cross-cultural understanding.

ENG 107 - Living Writers (3) Introduction to visiting writers and their work. Lectures and small group sections emphasize dynamic and plastic nature of writing. Opportunity to question the authors directly on content, influences, and technique.

ENG 114 - British Literature, 1789 to Present (3) British literature since 1789.

ENG 119 - Topics in U.S. Literary History: U.S. Fiction 1940-2015 (3) This lecture course offers a survey of U.S. fiction written from the late 1940s to the early 2000s. We will interpret the fiction through a sociohistorical lens, and place particular emphasis on investigating the interconnections between literary form and social change. After an initial survey of fiction written in direct response to World War II and its aftermath, we will read texts associated with or influenced by the counterculture, the Vietnam War, the Civil Rights, Black Power and Black Arts Movements, Second Wave Feminism, the 1965 Immigration and Nationality Act, and late twentieth-century U.S. consumerism.

ENG 121 - Introduction to Shakespeare (3) Selected plays of Shakespeare read in conjunction with performances on video.

ENG 122 - Introduction to the Novel (3) Critical study of the history and development of the novel as literary form. Selected British, American, and postcolonial novels from the 18th century to the present.

ENG 151 – Interpretation of Poetry (3) Critical study of poetry from various historic period. Formal, theoretical, and interpretive issues.

ENG 153 - Interpretation of Fiction (3) Critical study of fiction from more than one historical period. Formal, theoretical, and interpretive issues.

ENG 154 – Interpretation of Film (3) Critical study of film from various historical periods. Formal, theoretical, and interpretive issues.

ENG 155 - Interpretation of Nonfiction (3) Critical study of nonfiction from more than one historical period and geographic locale. Formal, theoretical, and interpretive issues.

ENG 156 - Interpretation of Games (3) This course will explore the evolving form of digital games, tracing their historical roots in traditional board games and other associated cultural modes of play to current and possible future iterations of video games. We will employ a range of critical approaches to gaming; games will be “read” and critically interrogated as texts, and the relationships between game, player, design, software, interface, and structures of play will be discussed.

ETS 181 - Class and Literary Texts (3) Construction and representation of "class," especially as it affects the production and reception of literary and other cultural texts.

ETS 182 - Race and Literary Texts (3) Construction and representation of "race," especially as it affects the production and reception of literary and other cultural texts.

ETS 184 - Ethnicity and Literary Texts (3) Ethnicity in literary and theoretical texts. Emphasizing conceptual paradigms, social issues, and aesthetic considerations in the practice of reading texts from ethnically differentiated literary traditions.

ETS 192 - Gender and Literary Texts (3) Construction and representation of "gender," especially as it affects the production and reception of literary and other cultural texts.

ETS 200.2 - Selected Topics: Science Fiction (3) The origins and definition of Science Fiction or speculative fiction are debated by fans and scholars all over the world. Likewise, scholars continue to debate the value of the genre as Literature with a capital L. In this course, we will take the genre and its capacities for profound social commentary seriously as we explore possible beginnings, movements, subgenres and shifts within Science Fiction short stories and novels, as well as some television and film. We will look primarily at U.S. American and British texts, but we will expand beyond the West somewhat. This course features time in our library's Special Collections and opportunities for creative work, as well as critical reading and writing.

HOA 105 - Arts and Ideas I (3) Visual arts in relation to broader cultural, historical, and intellectual contexts. HOA 105 surveys the ancient world to the High Renaissance. HOA 106 proceeds from the late Renaissance to the present. Either course may be taken first or independently.

HOM 125 - Intro to Music Theory (3) Elementary harmony, form and counterpoint through writing and listening. For non-majors and music theatre majors only.

HOM 165 - Understanding Music I (3) Introduction to the art of music. Development of musical styles in the West from ancient Greece through the Middle Ages and Renaissance. Assumes no prior musical knowledge.

HST 111 - Early Modern Europe, 1350-1815 (3) Major characteristics of European political, social, and cultural life from Middle Ages to advent of democratic revolutions.

HST 210 - The Ancient World (3) The Ancient Mediterranean emphasizing major political, cultural, religious, and social developments. The Near East, Classical Greece, Hellenistic Civilization, Roman Republic, Roman Empire up to the fourth century A.D. May not be repeated for credit.

JSP 114 - The Bible in History, Culture and Religion (3) Jewish and Christian scriptures in their ancient Near Eastern and Hellenistic contexts, with particular attention to their literary forms, the history of their composition, and their role in the development of Western religions and cultures. Credit is not given for REL/JSP 114 and either REL/JSP 215 or REL 217.

JSP 135 - Judaism (3) Survey of Judaic ideas, values, and cultural expressions as found in biblical, talmudic, medieval, mystical, and modern texts.

LIN 201 - The Nature and Study of Language (3) Introduction to the study of human language. Language change and diversity, usage, meaning, phonetics, grammatical description, and language learning.

LIT 226 - Dostoevsky and Tolstoy (3) Lectures, readings, discussions, and reports on Dostoevsky's and Tolstoy's major novels.

PHI 107 - Theories of Knowledge and Reality (3) An introduction to some major questions about knowledge and reality, such as the existence of God, the mind-body problem, free will and the nature and limits of knowledge. Historical and contemporary readings.

PHI 125 - Political Theory (3) Introduction to theories of major modern political philosophers (Locke, Rousseau, Hume, J.S. Mill, Marx). Contemporary theories of liberty, justice, and equality.

PHI 175 - Introduction to Social and Political Philosophy (3) Classical and contemporary readings on basic topics in social and political philosophy; political obligation and authority, justice and basic rights, liberty and equality, the justification of democracy.

PHI 192 - Introduction to Moral Theory (3) Major philosophical theories about moral rightness, virtue, and the good life, such as utilitarian, Kantian, and Aristotelian theories. Historical and contemporary sources. Credit cannot be received for both PHI 192 and PHI 209.

PHI 197 - Human Nature (3) Philosophical theories of human nature, their underlying metaphysical claims, and their ethical consequences.

PHI 251 - Logic (3) Logic as a formal language, as a component of natural language, and as a basis of a programming language. Varieties of logical systems and techniques. Syntax, semantics and pragmatics.

REL 156 - Christianity (3) Christianity's institutional forms, sacred writings, ideas and beliefs, worship practices, cultural and creative expressions, ethical and political roles in society, from antiquity to the present. How Christianity addresses human needs, concerns, and desires.

REL 191 - Religion, Meaning and Knowledge (3) Exploration of the age-old quest for meaning, knowledge and faith in the face of suffering and loss through art, philosophy, music and literature.

WGS 101 - Introduction to Women's and Gender Studies (3) Introduces the interdisciplinary field of women's and gender studies; gender as a social construct shaped by race, class, sexuality, disability, and nation; and feminist theories of oppression, power, and resistance.

WRT 114 - Writing Culture (3) Nonacademic writing; creative nonfiction, memoir, the essay. Students write texts experimenting with style, genre, and subject; read contemporary nonfiction texts by varied authors; attend lectures/readings of visiting writers.

WRT 115 - Writing, Rhetoric, and the Environment (3) Rhetorical study and practice of critical, research-based writing in response to environmental issues and their material and discursive contexts. Emphasizes audience and genre-awareness to produce persuasive, culturally situated interventions in environmental debates.

WRT 116 - Writing, Rhetoric, and Social Action (3) Examination of persuasive strategies of written arguments and genres intended to support and promote social action.

Social Science

AAS 112 - Introduction to African American Studies (3) Historical and sociopolitical materials. Approaches to studying the African American experience, antecedents from African past, and special problems.

ANT 111 - Introduction to Cultural Anthropology (3) Economics, politics, religion, symbolism, rites of passage, developmental cycle, and expressive culture. Required for Anthropology majors.

ANT 121 - Peoples and Cultures of the World (3) Case studies of global cultural diversity. Exploration of daily life, rites of passage, marriage, family, work, politics, social life, religion, ritual, and art among foraging, agricultural, and industrial societies.

ANT 141 - Introduction to Archaeology and Prehistory (3) Survey of the prehistoric past spanning the origins of humankind through the rise of complex societies. Class activities and field trips provide a hands on introduction to archaeological interpretation.

ANT 185 - Global Encounters: Comparing World Views & Values Cross-Culturally (3) Predominant views of reality and values in the cultures of Asia, Africa, and the Americas. Humanistic study of cultures and nature of cross-cultural understanding.

ECN 101 - Principles of Microeconomics (3) Consumer demand, theory of production, markets and prices, social welfare, and related topics.

ECN 102 – Principles of Macroeconomics (3) Introduction to concepts and methods of economic analysis. Emphasis on such macroeconomic topics as gross domestic product, unemployment, money, and theory of national income.

GEO 103 - Environment and Society (3) Relationship between society and the environment. Natural resource use, climate change politics, food and agriculture, energy, water, and sustainability.

GEO 105 - World Urban Geography (3) Survey of world, urban geography. Major concepts of human geography for non-specialists.

GEO 171 - Human Geographies (3) An integrative overview to human geography. Topics include human-environmental relations, demographic change, cultural landscape; urban and agricultural land use and economic restructuring.

GEO 215 - Global Env Change (3) Focusing on physical processes and patterns of environmental change, changes occurring as a result of human activities, and the social consequences of environmental change.

GEO 272 - World Cultures (3) The globalization of culture and the persistence of local cultures around the world. Case studies from different regions of the world examine geographical processes that shape ways of life.

HST 101 - American History to 1865 (3) Founding and development of institutions. The Revolution and the new nation. Problems of growth and sectionalism. Challenge to the union.

HST 121 - Global History to 1750 (3) The development of global society up to 1750. Exchanges, connections and interactions between Africa, Asia and the Pacific, India, Latin America and the Caribbean, and the Middle East. The relations between these regions, the Americas and Europe.

HST 213 - Africa: Ancient Times to 1800 (3) This course is a survey of African history from ancient times to 1800. It focuses on political, social, economic, and environmental history of the continent. Themes include, but are not limited to state formation, technology, production, trade, religion, migration, labor, slave trade, and biological exchanges between Africa and other continents

LLA 201 - Elements of Law (3) Provides an introduction to law and legal institutions. The course is designed to prepare lower-division undergraduates for the further study of legal topics in departments across the College of Arts and Sciences.

MAX 123 - Critical Issues for the United States (3) Interdisciplinary focus on critical issues facing America. Perspectives of social science disciplines on the meaning of the American Dream, its past and its future.

NAT 105 - Introduction to Native American Studies (3) Overview of critical issues in Native American Studies: colonization, religious freedom, environment, sovereignty, and politics of identity, interdisciplinary, comparative, and indigenous perspectives in relation to histories, societies, and cultures.

PSC 121 - American National Government and Politics (3) American political institutions. Basic principles embedded in structure and practices of American government. Practical consequences of this political system for the citizen. Credit is given for PSC 121 or PSC 129, but not both.

PSC 123 - Comparative Government and Politics (3) Comparison of selected governmental institutions, individual and collective political actors, and issues across the industrialized and developing world. Particular attention to dynamics of socioeconomic and political change.

PSC 124/139 - International Relations (3) Foreign policy, decision making, comparative foreign policy, international transactions, and the international system. Credit is given for PSC 124 or PSC 139, but not both.

PSC 125 - Political Theory (3) Introduction to theories of major modern political philosophers (Locke, Rousseau, Hume, J.S. Mill, Marx). Contemporary theories of liberty, justice, and equality.

PST 101 - An Introduction to the Analysis of Public Policy (3) Develop research and problem solving skills to create government policies that address current social and economic problems facing the United States. Students study policy problems of their choice.

PST 110 - Public Service Practicum (1) Students investigate the societal issues affecting members of the Syracuse community by completing a 35 hour community service requirement, attending 4 class meetings to reflect on their experiences, and completing weekly journals and two paper assignments.

PSY 205 - Foundations of Human Behavior (3) Fundamental principles of mental life and human behavior. Significance of psychology in human relationships and self-understanding.

QSX 111 - Queer Histories, Communities, and Politics (3) Explores and analyzes lesbian, gay, bisexual, and transgender histories, communities, and politics from the ancient past to the contemporary, global present through an interdisciplinary reading of research, theory, memoir, biography, fiction, and documentary film.

SOC 101 - Introduction to Sociology (3) Principal concepts, methods, and findings in sociology. Societal structures, processes, institutions, and social roles from both macro- and microanalytic human behavior perspectives.

SOC 102 - Social Problems (3) Application of sociological theory and methods to identification, description, and analysis of contemporary social problems. Critique and analysis of alternative strategies for social change.

SOC 248 - Ethnic Inequalities and Intergroup Relations (3) Identification of individuals and groups by self and others as members of ethnic categories. Consequences of ethnic identifications for individual, group, and societal interaction. Emphasizing ethnic inequalities, group interactions, social movements and change, racism, prejudice, and discrimination.

SOC 281 - Sociology of Families (3) Families and their connections to other social and economic institutions. Diversity of family forms and experiences. Formation and dissolution of relationships. Trends and changes.

Natural Sciences

BIO 121 - General Biology I (4) First course in a survey of biological concepts ranging from the molecular level to global ecology. Units include the nature of science, life chemistry, cell structure and function, photosynthesis and respiration, genetics, and evolution.

CHE 106 - General Chemistry Lecture I (3) Fundamental principles and laws underlying chemical action, states of matter, atomic and molecular structure, chemical bonding, stoichiometry, properties of solutions, chemical equilibria, and introductory thermochemistry. Credit is given for CHE 106 or 109 or CHE 150 but not more than one of these.

CHE 107 - General Chemistry Laboratory I (1) Experimental study of basic principles and techniques of chemistry. States of matter, determination of formulas and molecular weights, simple volumetric and gravimetric analysis, heats of reaction. Equilibrium, rates of reactions, and qualitative analysis. Credit is given for CHE 107 or 129 or CHE 151 but not more than one of these.

PHY 211 - General Physics I (3) First half of a two semester introduction to classical physics including mechanics and thermal physics. Uses calculus. Knowledge of plane trigonometry required.

PHY 212 - General Physics II (3) Second half of a two semester introduction to classical physics including electricity, magnetism and light.

PHY 221 - General Physics Laboratory I (1) Techniques of laboratory work: treatment of random errors, graphical representation of data. Experimental demonstration of principles of mechanics, thermodynamics, and waves (of vector forces, conservation of momentum and energy, thermal properties of gases).

PHY 222 - General Physics Laboratory II (1) Experimental study of principles of electromagnetism and their application in electrical circuits. Use of electronic instruments, such as the oscilloscope.