

University Honors Program

Course Listing

PHILOSOPHY

HSPH 101 – The Desire to Know

Freshman Learning Community Course

This course discusses the nature and function of logic in philosophical and non-philosophical context. It teaches students the basic skills requisite for the appreciation of Aristotle's philosophy. It progresses through Aristotle's "Organon" presenting syllogistic and scientific reasoning. Exercises require evaluation and application of course materials in the contexts of philosophy, science, politics, and literature.

PHIL 211 – The Classical Mind (UH)

Freshman Learning Community Course – Equivalent to HSPH 101

An introduction to philosophy, using the original writings of several philosophers from the ancient and medieval periods, with a more general consideration of the history of philosophy.

HSPH 102 - Human Action and Government

Freshman Learning Community Course

An introduction to moral and political philosophy with emphasis on the concepts of right reason and right action as developed in Aristotle's *Nicomachean Ethics* and *Politics*. This course focuses on the perfection of the soul through intellectual and moral virtues and the function of these virtues in the larger human context, along with an explanation of Aristotle's praxis.

PHIL 212 - The Modern Mind (UH)

Freshman Learning Community Course – Equivalent to HSPH 102

This introduction to modern philosophy traces the development of Western philosophical thought from the seventeenth to the twentieth century. The intent of the course and its prerequisite is to use history and the texts of great philosophers to establish the structure and methodology of philosophical thinking. (Prerequisite: PHIL 211 or equivalent).

HSPH 203 – Nature and Human Nature

The key concept of the first part of the course is nature in the sense of *physis* or *natura*. Comparisons to mathematical explanations are offered by the founders of modern physics and chemistry. Psyche or *anima* is the focus of the second part of the course. There will be an exploration of parallels with explanatory principles in biology, psychology, and cognitive science.

HSPH 204 - Ultimate Questions

Aristotle's *Metaphysics* and Aquinas' *Summa Theologiae* provide the basis for the examination of the transition from the study of being as being to a natural theology and the subsequent modern embrace of rationalism. "Ultimates" to be questioned include: Being, Truth, and the Good. Readings complemented by texts of David Hume and Immanuel Kant.

HUMANITIES

HSHU 101 – Jesus to Muhammad: The Early Christians in the Mediterranean World

This course discusses the formative years of the Christian tradition, from its roots in the Hellenistic World through its establishment in the second century to the rise of Islam. There is special consideration of regional developments in the Christian community. Students read influential documents of this period and view and discuss early Christian art.

HSHU 102 - Charlemagne to Chaucer: Christian Life in the Middle Ages

This course is the second of four courses in the Honors Humanities Sequence which aims to provide basic knowledge of major topics, figures, problems and developments of medieval Europe. Designed in a thematic rather than chronological format, the course explores the role and influence of medieval Christian institutions, thought, spirituality and religious practices within the context of social, political and economic institutions. In addition to weekly lectures, our discussions analyze primary sources drawn from a wide variety of genres and historical circumstances, which aid each participant to develop the critical skills for analysis. In addition to looking at pivotal figures such as St. Francis, Dante, Abelard and Heloise, topics include: church and state; war and peace; varieties of Christian experience; Jews, Christians, and Muslims; the Crusades; and the built environment.

HSHU 203 – The Age of Discovery

A survey of Renaissance intellectual history taught through primary texts. Topics will include humanism, Protestant and Catholic Reformations, the impact of the New World, and scientific advances. Authors will include Petrarch, Pope Pius II, Machiavelli, Erasmus, Luther, Calvin, Montaigne, Bellarmine, Bacon, and Galileo.

HSHU 204 - Christian Culture: The Secular Age

This course traces the collision of Christian culture with the secular age inaugurated by the French Revolution. The course is linear to the degree that it follows a distinct chronology, starting with John Locke in the late seventeenth century and concluding with the reflections of Benedict XVI in the twenty-first. "Christian Culture: The Secular Age" is non-linear in another sense: it details a vigorous back-and-forth over the French Revolution and over the prospect of a secular modern society. This back-and-forth is construed, in this course, as the lifeblood of modern culture in Europe and the United States. The long debate over Christianity and its antitheses will be examined in light of key historical turning points: the French Revolution, the spread of democracy and socialism in the nineteenth century, the rise of an industrial (modern) society in the twentieth century, the travesties of the 1930s and 1940s and of the Holocaust in particular – culminating in the hunger for liberation and search for order that characterize the secular-religious energies of the postwar period.

SOCIAL SCIENCE

HSSS 101 – The Concept of the Person in the Social Sciences

The first in the four course sequence of the honors social science track, HSSS 101 offers an intensive introduction to the basic principles and approaches to the social sciences. The course mixes readings from 19th century classics in social science literature along with more recent applications, case studies, and even novels. The course is organized around a consideration of the idea of the human person, a foundational concept for all the social sciences.

HSSS 102 – Economic Reasoning and Social Issues

This course is intended to introduce the student to the discipline of economics, the economic way of thinking, and the tools of economic analysis. It will show the student that economic theory and how economists view the world have important, practical, and problem-solving uses in a world of scarcity and are not an empty academic exercises. Using a mixture of algebra and graphs, it will introduce the student to the basic economic theory necessary to explore systematically a variety of real world social/policy issues/problems from an economist's perspective.

HSSS 203 – Social Data Analysis and the Study of Uncertainty

This course is an introduction to the analysis of data from the social sciences. A particular focus of the course examines the rules that govern uncertainty, the study of things whose truth or falsity is not known. In addition to being introduced to basic statistical concepts and computer applications, the student will study how uncertainty is measured and how it is used for everyday decision-making. Throughout the course, the emphasis is on critical interpretation of social science data and on effective writing on topics that deal with uncertain situations and quantitative information.

HSSS 204 – Families, Markets, Cities,: Social and Scientific Perspectives

Using perspectives from a variety of social sciences, this course examines two of the major institutions of modern society: the market and the family. Issues explored include the changing size, shape, and role of the family; the cultural prerequisites and cultural effects of the market; the uses and limits of economic forms of explanation; and the nature of debates in the social sciences

ENVIRONMENTAL STUDIES

HSEV 101 – Environmental Science and Engineering (bound with CHEM 317)

This course covers the basic sciences of the environment, with a particular focus on the concept of sustainability. The course describes the structure and operation of natural systems and the implications of the study of such systems to sustainability in human societies. It analyzes ecosystem services, their critical role, the human impact, and the methodology of conservation, preservation, and restoration. It addresses the transition to renewable energy sources and issues of clean water availability and food production.

HSEV 102 – Religion, Ethics, and Ecology

This course examines a number of interrelated issues on religion, ethics and the environment. Topics include religious views of nature; theologies of creation; religious perspectives on consumerism, sustainability, animal concerns, bio-technology and environmental justice; the role of religion in promoting new forms of community; and paradigms of ecological spirituality.

HSEV 203 – THE ECONOMICS OF ENERGY AND THE ENVIRONMENT

This course examines why markets "fail" in the presence of pollution and how the "optimal" level of environmental quality can be achieved at the least cost to society. It focuses on energy where there are significant environmental costs of production and/or consumption. Topics include benefit/cost analysis, marketable emission permits, and carbon taxes.

HSEV 204 – Environmental Politics and Policy

An introduction to environmental ideology, politics and public policy. Emphasizes the political and social implications of competing approaches to environmental and energy policy, and how policy preferences are pursued through politics, law and the administrative process.

THEOLOGY

HSTR 101 – God’s Word in Human Words

Freshman Learning Community Course

This course is an examination of the concept of God's self-revelation as disclosed in the story of Israel, Jesus, and the Church. The course will consider the nature of Sacred Scripture and study select texts from the Old and New Testaments that reveal how God's Word is disclosed in human words.

HSTR 102 - Liturgy and the Christian Life

This course is an examination of the relationship between liturgy and the Christian life. The course engages students in doing liturgical theology and considers such topics as the ecclesial and ritual nature of liturgy, the sacramental roots of the Christian life, the role of scripture in the liturgy, and liturgy as a cultural reality.

HSTR 203 – The Church: Community and Institution

Why is the Christian life essentially one of community, and what kind of institutional organization is appropriate for this particular community? These were central questions addressed by Vatican II in its constitution on the Church, *Lumen Gentium*, and they remain central questions in ecumenical dialogue seeking the unity of the Church today. This course will consider the life and shape of the Church at various points in its history, and the flourishing of study of the Church or 'ecclesiology' in the 20th century. It will closely examine the teaching of the Council itself and issues that have arisen in ecumenical discussion in recent decades on this topic.

HSTR 204 – The Church in Dialogue with Contemporary Culture

This course is an examination of the Church in light of its dialogue with the contemporary world in which believers live. The course will consider questions of spirituality, social ethics, and interreligious dialogue.

ADDITIONAL HONORS COURSES

HSLs 201: The Virtues

This course, taught by President Garvey, explores the rich tradition of the virtues and vices using a multidisciplinary approach. Course materials will survey the presentation of virtues across a number of media, including art, music, literature, theology, philosophy, film, and television. Much of the course will be structured around the classical division of the virtues into the cardinal virtues (prudence, justice, fortitude, and temperance) and theological virtues (faith, hope, and charity).

HSL 328: Undergraduate Research Journal Production – *Inventio* (bound with UGS 328)

This course will produce the Undergraduate journal *Inventio*. The journal will publish original research by CUA undergraduates, in both print and digital form. Students must be accepted into the *Inventio* student board in order to

register. Contact Dr. Taryn Okuma for details (Okuma@cua.edu).

HSCP 490- Honors Capstone Seminar

In this seminar, taught by the Director of the Honors Program, seniors will engage and analyze complex cultural artifacts—works of art, architecture, literature, and music, as well as texts from theology, philosophy, history, and politics—in ways that draw on but are not limited to the methods of their own academic disciplines. Students will develop their critical and imaginative faculties more fully as they encounter works that bring together the familiar and the alien, what is comforting with what is disquieting. Through class discussion and writing assignments, students will explore the perspectives that the works encourage, testing and expanding their own understanding of the world.

Honors Internship

HSIN 495

Internships can be taken for honors credit. Day and time to be arranged with instructor.

Chemistry

CHEM 103H – General Chemistry I

The first half of a two-semester modern introductory chemistry course designed to fulfill the chemistry requirements for science students and to lay the foundation for further course work in chemistry. Topics include atomic theory, periodic properties, stoichiometry, nomenclature, bonding, physical properties of states of matter, solutions, kinetics, equilibrium, acid-base reactions, metathesis reactions, redox reactions, thermodynamics, electrochemistry, and chemical properties of selected classes of compounds. Corequisite: CHEM 113.

CHEM 104H – General Chemistry II

The second half of a two-semester modern introductory chemistry course designed to fulfill the chemistry requirements for science students and to lay the foundation for further course work in chemistry. Topics include atomic theory, periodic properties, stoichiometry, nomenclature, bonding, physical properties of states of matter, solutions, kinetics, equilibrium, acid-base reactions, metathesis reactions, redox reactions, thermodynamics, electrochemistry, and chemical properties of selected classes of compounds. Corequisite: CHEM 114.

Physics

PHYS 215H – University Physics I

An intensive calculus-based course in mechanics, heat and sound. Although intended primarily for mathematics, science, and engineering students, open to all qualified students.

PHYS 216H – University Physics II

An intensive calculus-based course in electricity, magnetism, and light. Intended for mathematics, science, and engineering students but open to all qualified students. Prerequisites: PHYS 215 & MATH 122

Non-track Social Science

SSS 302H - 01 Social Welfare Policy I

An introduction to the understanding and appraisal of social welfare policies and programs in the United States and the historical and contemporary forces--primarily political, social, and economic--that have shaped their development. The social work profession's value commitments, its role in the formulation of social policy, and its tradition of social action/social reform. Social justice for all needy Americans is a dominant theme of this survey course. Prerequisites: SSS 101, SSS 223, SSS 225.

Computer Science

CSC 113- Introduction to Computer Programming with MATLAB

This course intended for engineering students and others who want a comprehensive introduction to fundamental programming concepts using a block-structured language. General problem-solving techniques, including the concept of step-wise refinement applied to the development of algorithms. Programming style, structure, documentation, and testing. Prerequisites: None.

Economics

ECON 103 – Principles of Economics I

This course is an introduction to the study of open economy macroeconomic principles. It is concerned with the behavior of the economy as a whole. The course focuses on three major goals. First: to help students understand the nature of certain macroeconomic problems and institutions. Second: to help students master certain tools of macroeconomic analysis; and third: to help students develop an ability to apply these tools to the macroeconomic problems that our society confronts. It is useful for students concentrating in other fields. This course is open only to students in the University Honors Program.

ECON 104 – Principles of Economics II

This course is an introduction to microeconomic principles. Students are introduced to the analytical tools of microeconomics used to examine the behavior of consumers and producers and how they interact in various types of market structures to determine prices and outputs. Students are also introduced to market failures and to alternative policies that may be implemented to deal with them. The analyses of some topics, however, are conducted at a more advanced level in this course due to its honors level status. This course is open only to students in the University Honors Program.

Music

MUS 325H – History of Music I (Bound with MUS 325)

This course is a survey of European music, beginning with ancient Greek traditions and the early Christian Church and continuing through the mid-Baroque (around 1680). Students are required to take 325, 326, 327 in the sequence listed. Prerequisites: MUS 123, MUS 124.

World Capitals Course

Every fall the honors program offers a course on the history, art, and architecture of an important world city. The honors program also hosts a weeklong trip during the following spring break. Past cities include London, Berlin, and Jerusalem.