# University of Pennsylvania College of Arts and Sciences

#### Africana Studies

The Africana Studies major is designed to provide students with an integrated understanding and appreciation for the African, African American, Caribbean, and other African Diaspora experiences in their diverse dimensions. Courses in the major provide students with a broad, interdisciplinary understanding of the field, as well as the opportunity for regional and/or disciplinary concentrations.

## Ancient History

The Ancient History major encourages a comparative approach to the study of pre-modern cultures.

## Anthropology

Anthropology is the global social science. It not only studies the human condition everywhere, it also studies its biological as well as its cultural and semiotic diversity, and how that diversity evolved and developed from the past into the present. Students can study all these topics with a general anthropology concentration, or concentrate in archaeology, cultural and linguistic anthropology, human biology, or medical anthropology and global health.

## Biochemistry

Biochemistry is an interdisciplinary major. Students learn that cellular processes can be understood in terms of concepts from physics and chemistry. The specificity and diversity of biological molecules, organisms, and ecosystems have their origins in chemistry and physics. Students understand that experimental observations and findings has limitations dependent on the methods used for collecting and analyzing data. Students understand elements of the mathematics and physical science necessary to design and interpret experimental and computational studies.

## Biology

The Biology major introduces students to the many ways of studying and understanding the function and diversity of living organisms.

#### Biophysics

Biophysics is a major designed for students who are planning a career in biological or medical research and who desire depth in the physical and mathematical aspects of the biosciences.

#### Chemistry

Chemistry is concerned with the study of matter and the changes matter can undergo.

## Cinema and Media Studies

Cinema Studies is an interdisciplinary program designed to acquaint students with the history and interpretation of cinema and to allow them to combine knowledge of the field with the traditional aims of an undergraduate liberal arts education.

## Classical Studies

Classical Studies encompasses the civilization of the ancient Greeks and Romans from prehistory to the Middle Ages, with emphasis on the literature, philosophy and history of the classical Greek and Roman periods.

#### Cognitive Science

Cognitive Science is the empirical study of intelligent systems. Areas of specialization can include: Computational Neuroscience, Logic and Computation, Planning and Reasoning, Language Acquisition, Language Processing, and Learning and Development.

## Comparative Literature

The undergraduate program in Comparative Literature welcomes students interested in the study of more than one national literature viewed within the context of criticism and theory, interdisciplinary and multicultural perspectives, and philosophic modes of thought. The program fosters the study of literature and culture from a crossnational and global perspective.

## Criminology

The major in Criminology enables students to acquire a theoretical and methodological framework for generating and assessing knowledge about crime and social control. The program draws upon disciplines from statistics to neuroscience to develop a liberal arts approach to the subject of crime.

## Design

The major in Design innovatively explores the expansive nature of contemporary design and its relationship to the humanities, the sciences, and emerging technologies. The major's curriculum emphasizes an integrated understanding of design that brings together different disciplinary approaches that respond to complex social, cultural, and environmental challenges.

## Earth Science

At completion of the program (part of the Earth and Environmental Science Department), graduates know the basic physical and chemical processes that operate in and on the planet and understand how direct and indirect methods are used to examine and understand the structure, composition and dynamics of Earth. Graduates appreciate how humans and ecosystems interact with the dynamic Earth, and have an in-depth knowledge of the atmosphere and climate change, the rock cycle, natural hazards and the hydrologic and biogeochemical cycles. The major introduces students to the core concepts of Earth Science and then allows students to focus in one of the three concentrations: Geology, Environmental Science and Paleobiology.

#### East Asian Languages and Civilizations

The Department of East Asian Languages and Civilizations offers majors in Chinese and Japanese and minors in Chinese, Japanese, and Korean. In accordance with the name of our department, our programs emphasize the humanistic study of the languages and civilizations of East Asia.

#### Economics

Economics studies the allocation of scarce resources. At the core of economics are theories of how individuals, firms and other organizations make choices and interact, taking into account constraints on their behaviors. A major in economics gives training in economic principles and in the application of economic modeling techniques to understanding a variety of economic and social phenomena. The study of economics provides a useful background for students planning to enter any profession.

## English

Majors in English take a great variety of courses in English, American and other English-language literatures including courses that emphasize critical approaches, literary theory, cultural studies, anglophone postcolonial literature and culture, and film narrative.

#### Environmental Studies

The Environmental Studies program (part of the Earth and Environmental Science Department) is designed to provide students with the skills to understand and address contemporary environmental issues. The major integrates studies in the natural sciences, humanities, social sciences, policy and management in order to study complex issues of the environment and humans' interaction with it. Core courses cover environmental and earth science, data analysis, economics and policy, and provide

students with the skills and breadth of understanding they need for purposeful study in a concentration.

#### Fine Arts

The major in Fine Arts is based upon the premise that an education in liberal studies should include the challenge of learning to see, and that the education of the artist is dramatically improved by liberal studies. Areas of study include drawing, painting, sculpture, printmaking, ceramics, photography, animation, film/video, graphic design and multi-media.

## French and Francophone Studies

This major is designed to give students both an excellent grounding in the French language and a thorough knowledge of the history, culture, civilization and literature of metropolitan France and other regions of the world where the French language is primary.

## Gender, Sexuality and Women's Studies

Gender, Sexuality and Women's Studies is an interdisciplinary major and minor within the Program in Gender, Sexuality and Women's Studies at Penn that offers opportunities to study the role of gender and sexuality in human societies. There are four (optional) concentrations within the major: Feminist Studies, Global Gender and Sexuality Studies, Health and Disability, and LGBTQ Studies.

#### German

The German major and minor programs provide deep understanding of the language and culture of the German-speaking countries. Building from basic language competency to synthesizing significant literary works, historical context, current media and politics, and issues in environmental humanities the German program offers a comprehensive education preparing students to critically face today's global challenges and issues.

## Health and Societies

This major is designed to provide students with the skills necessary to work successfully in the interdisciplinary, global world of modern health care and decisionmaking. Students in the HSOC major become familiar with the foundations of three core health-related anthropology, disciplines: medical history science/technology/medicine, and medical sociology. Methods, ideas, and courses from and fields—including epidemiology, political business/economics, law, environmental studies, nursing, English, and bioethics (among others!)—supplement these core disciplines and provide majors with the variety of skills necessary to grasp the forces that have shaped our contemporary health landscapes, institutions, policies, and experiences.

## Hispanic Studies

The knowledge of Spanish and Hispanic culture gives students much more than the ability to communicate in the world's third-most spoken language. It prepares them to account for an entirely different national, continental and global reality with all its complexity.

#### History

The Department of History offers a variety of courses dealing with political, social, economic and intellectual life in Europe, America and the rest of the world, from the medieval period to the present.

# History of Art

The Major in the History of Art seeks to deepen students' knowledge of artistic production and practice over the scope of human history, as well as to broaden awareness of the critical and interpretive aims of the discipline itself. Students develop skills in the analysis of works of art, sharpen their understanding of the social, cultural, and personal values embodied by works, and explore the relation of art history to other

disciplines. The Department particularly encourages a broad geographic understanding of art production and encourages students to consider the relations and distinctions among different visual cultures.

#### International Relations

International Relations is a multi-disciplinary course of study on the ways in which governments, private groups and individuals relate to each other in the global political and economic systems.

#### Italian Studies

Italian Studies presents an opportunity to study the Italian language and related topics in literature, film, linguistics, culture and civilization.

## Jewish Studies

Jewish Studies relates Jewish life and culture to the surrounding world, from the biblical period to modern Israel. The program also offers studies in Hebrew and Yiddish.

#### Latin American and Latinx Studies

Penn's combined program in Latin American and Latinx Studies undertakes to introduce students to scholarly research on Latin American and Latinx cultures in all their diversity of expression-not only "high culture" but also folk and other forms, from pre-Columbian times to the present, from Tierra del Fuego to New York and beyond.

#### Law and Society

The Law and Society Major will provide students with an understanding of the place of law in economic, cultural, political, and social life. The major includes courses relating to a wide array of areas of study, including the criminal justice system; immigration law and policy; housing and residential segregation by race and social class; reproductive and marital rights; religious freedom; public welfare systems; and other historical and contemporary complexities at the intersection of law and society.

## Linguistics

The major in linguistics is intended to acquaint the student with the methods and findings of the scientific study of human language and its relationships to cognition, society, and history. It serves as a preparation for graduate training in linguistics or related areas, and as part of a rigorous general education. Linguistic training is relevant to work in anthropology, philosophy, psychology, and language and literature, as well as to careers in such fields as education, computer science, and law.

## Logic, Information and Computation

This program draws on faculty and courses in computer and information science, linguistics, mathematics and philosophy to offer students a systematic and integrative approach to the study of pure and applied logic, including the applied mathematics of information and computation. The program will provide students with a strong background to pursue computational aspects of the natural, biological, and social sciences, as well as prepare them for careers in information technology.

## Mathematical Economics

Economics studies the allocation of scarce resources. At the core of economics are theories of how individuals, firms and other organizations make choices and interact, taking into account constraints on their behaviors. The Mathematical Economics major introduces undergraduate students to rigorous theoretical-quantitative and empirical-quantitative approaches to the analysis of economic problems. It is intended for students with a strong intellectual interest in both mathematics and economics.

## Mathematics

Mathematical training allows one to take a problem, abstract its essential features, and investigate them further. This ability can assist greatly in such diverse fields as economics, law, medicine, engineering, and computer science -- as well as in the more traditional activities of research and teaching. The goals of the major program are to assist students in acquiring both an understanding of mathematics and an ability to use

it. We wish to inspire the discovery of new mathematics as well as the application of mathematics to other fields.

# Middle Eastern Languages and Cultures

The department offers broad-based, culturally integrated general education courses on the civilizations of Mesopotamia/Iraq, Egypt, Israel, Syria, Arabia, Persia/Iran and Anatolia/Turkey. MELC also teaches Sumerian, Akkadian, Egyptian, Hebrew, Aramaic, Arabic, Persian and Turkish.

#### Modern Middle Eastern Studies

This interdisciplinary major is designed to allow students to specialize in the Middle East as a region of the world and human experience by combining course work using both social scientific and humanistic approaches, underpinned by relevant language skills.

#### Music

The Music curriculum exposes students to both a broad range of musical traditions from the past and present, and to the variety of approaches and practices desirable to illuminate musical subjects. As well as equipping students with a range of tools for investigating music (historical approaches, philosophical inquiry, composition, theory, performance), the curriculum is also designed so as to develop the integration of those skills.

#### Neuroscience

Neuroscience is an interdisciplinary major in which students explore the relationship between behavior (both human and animal) and its organic bases.

#### Philosophy

Philosophy seeks to illuminate fundamental aspects of the world, of our relation to, and knowledge of, the world, and of our own nature as rational, purposive and social beings.

# Philosophy, Politics and Economics

The PPE major involves faculty and courses from the Departments of Philosophy, Political Science and Economics and from the Law School. The program allows undergraduates to study the variety of analytical frameworks that have been developed to interpret and justify political and economic structures.

#### Physics

Physics deals with the most fundamental aspects of nature. Its practitioners aim to discover the basic principles that govern the workings of the world, using mathematics and experimental investigation as their tools.

## o Political Science

A degree in Political Science provides an opportunity to gain both the theoretical and practical knowledge required to understand complex political relations throughout the world. Penn Political Science majors gain both analytical depth and breadth by exploring the interaction of different levels, or subfields, of politics: International Relations (relations between states, international organizations and transnational actors); American Politics (U.S. political institutions, policymaking and behavior); Comparative Politics (institutions and political processes of other nations); and Political Theory (normative theories of politics and history of political thought).

## Psychology

Psychology is a multi-faceted discipline that weaves together both social science and natural science approaches to the mind and behavior of organisms in general and of human beings in particular.

# Religious Studies

The Department of Religious Studies offers a broad variety of introductory courses in the major religious traditions and in theories of the study of religion.

## Russian and East European Studies

The Department of Russian and East European Studies offers courses in Russian and East European languages, literatures, region-specific social sciences, arts, cinema, history, politics, and economics.

## Science, Technology and Society

Science, Technology and Society courses focus on the social and humanistic aspects of science and the professions: the growth of scientific institutions, the role of science in technology and clinical medicine, the influence of economic and political factors on research and the application of knowledge, and problems of science and technology management and public policy.

## Sociology

The study of sociology provides an understanding of how societies, communities and smaller groups are organized and maintained, and how individual behavior is related to group experiences. We help students identify and explain patterns of social life and human behavior by emphasizing how large-scale social phenomena (such as class, race and gender inequality) affect the everyday experiences of individuals, and vice versa. While doing so, our program also introduces students to the conceptual and methodological tools of social science research, including ethnography, social statistics, and demographic methods.

## South Asia Studies

South Asia Studies offers an interdisciplinary approach to the life and institutions of people of India, Pakistan, Bangladesh, Sri Lanka, Afghanistan, Nepal and other Himalayan border countries, and the South Asian diaspora.

## **Theatre Arts**

The Theatre Arts Program is an interdisciplinary major focusing on all intellectual and creative aspects of theatre and performance studies.

## Urban Studies

The Urban Studies Program is an interdisciplinary major. Courses introduce students to a variety of perspectives on the origins, development and nature of cities.

#### Visual Studies

We live in an increasingly visual culture. New technologies and philosophies of vision influence how we see ourselves and our world, and how we think about seeing itself. Students can engage these developments through a multidisciplinary course of study, connecting the theory, practice and culture of seeing. The major combines work in Art History, Fine Arts, Neuroscience, Philosophy, Psychology and Cinema Studies, among others.