

UCL Arts and Sciences (BASc)

Module selection for Affiliates



Students staying for one semester must take:

- 2 BASc Core courses (all 0.5 units each) i.e., any two from the list below.

Plus

- 1 discipline-specific course unit (either 1 x 1.0 unit course or 2 x 0.5 unit courses)

Students staying for two semesters/one year must take:

- 1.5 BASc Core courses (all 0.5 units each) i.e., any three from the list below.

Plus

- 2.5 discipline-specific course units (as either 1.0 unit or 0.5 unit courses).

BASc Core Courses

BASC1001 - Approaches to Knowledge: Introduction to Interdisciplinarity (0.5 units)

Availability: Fall Term

This course focuses on the role of interdisciplinarity in breaking down old boundaries of knowledge and its role in creating new ways of thinking about knowledge. You will study the history of knowledge, how it came to be divided into disciplines and what is happening to disciplines today under pressure from the web and the knowledge revolution. You will also study *Superconcepts* which bridge older disciplines in order to unify areas of thought and to create productive new links.

BASC1002 - Interdisciplinary Research Methods (0.5 units)

Availability: Spring Term

A great deal of research in politics, sociology, journalism, health etc. depends on qualitative techniques. This course teaches you how to produce reliable data using questionnaire and survey design. You will practise interview techniques on UCL academic staff and make video diaries of your reflections. Working in groups on an interdisciplinary project, you will learn ethnography and project management techniques.

BASC1003 - Quantitative Methods: Exploring Complexity (0.5 units)

Availability: Spring Term

Quantitative methods are essential in almost every job and every walk of life. You will learn how to understand, analyse and resolve complex problems using a range of quantitative techniques. In an era of Big Data and algorithms, some understanding of the science and techniques behind these ideas is necessary for engagement with the modern world. In this course you will tackle estimation problems, learn coding with Python, explore statistics and game theory.

BASC2001 - Object Lessons: Communicating Knowledge Through Collections (0.5 units)

Availability: Spring Term

Working with objects from UCL's unique collections in the Grant Museum of Zoology, the Petrie Museum of Egyptian Archaeology, and Art Collections, you will and examining them from interdisciplinary perspectives, build your own virtual exhibition. Themes explored in lectures and practical sessions include: the role of materiality in culture and human cognition, scientific approaches to the analysis of materials, the social and economic contexts of manufacturing and trade, approaches to studying the aesthetic qualities of artefacts, exhibition design, developing virtual media and web content, researching collections, principles of curation, and ethics and digital communication.

BASC2003 - Making Value Judgments: Qualitative Thinking (0.5 units)

Availability: Fall Term

In this course, you will take a broad look at qualitative thinking, value judgements and subjective thinking. Among the themes are aesthetics, gifts, subjective experience and Bourdieu's idea of cultural capital. You will consider questions such as, why are some works of art considered more 'valuable' than others? How has the meaning of forms of work changed as a result of social and technological transformations since the industrial revolution? You will also consider qualitative judgments in science and engineering: qualities such as beauty, social effectiveness and cultural appropriateness are often decisive in engineering and technology decisions.

BASC2012 - Science Meets Religion in the Global Community (0.5 units)

Availability: Autumn Term

In this course, you will study the relationship between science, religion and progress. Topics include the Church and the Copernican Revolution; Descartes, Hobbes and Newton; catholic and protestant science throughout Europe; science and religion in the ancient world, in Islam and China; the role of Christianity in Europe's "scientific revolution" of the seventeenth century; Darwin and Evolution; cosmology and religion; and Scientism and Militant Atheism.

BASC2022 - Data Literacy and Visualisation (0.5 units)

Availability: Spring Term

You will study the use of visualisation and analysis to understand data. Through lectures, discussion of key readings and Python-based workshops, you will cover the critical processes necessary to find and assess online resources, the analytical and visualization tools necessary to explore them further, and the techniques used to present the results of these explorations to the online world.

BASC2032 - Evolution and The Human Condition (0.5 units)

Availability: Spring Term

The course will introduce you to the basics of evolutionary thought, including a limited number of the underlying theoretical analyses and empirical observations. You will look with an evolutionary 'lens' at a variety of different topics, analysing what understanding can be provided by such a perspective, as well as how the resulting views can change our concept of evolution.

BASC2042 - Understanding Cities and their Spatial Cultures (0.5 units)

Availability: Spring Term

In this course, you will consider the broader implications of life in cities from historical and contemporary perspectives while looking ahead to a range of possible urban futures. The course is structured around three distinctive modes: 'networked people', 'networked cities' and 'global networks' that approximate to different network scales at which urban questions can be approached. It will link well with other modules with a broad built environment or material culture perspective.

BASC2052 - Migration and Health (0.5 units)

Availability: Autumn Term

In this course, you will analyse the interplay between migration and health, i.e. the physical, mental and social well-being of migrants. The ability of a migrant to integrate into a host society is based upon combined mental, physical, cultural, and social well-being. Absence of physical ill-health is not by itself sufficient for successful integration in a host society. However, the structural inequalities experienced by migrants have a significant impact on overall health and well-being.

BASC2072 - Energy Systems (0.5 units)

Availability: Autumn Term

Energy provision and use faces a range of unprecedented challenges – from the global through national and local scales – including decarbonisation and other environmental goals, security of supply, equity and access to energy, the role of competitive markets, and resource depletion. You will study the scope and challenges of energy supply and demand, key concepts in the science of energy, potential technological options, the trade-offs in market design, the role of analytical tools, and the economic and social drivers of energy use.

BASC2082 - Technology in Arts and Cultural Heritage (0.5 units)

Availability: Spring Term

In this course you will examine the role which technology plays in the development, distribution and preservation of art and material heritage. For example, you will examine how the invention of the camera spawned both a new form of artistic expression and reproduction method that put concepts of authenticity, originality and authorship into question. You will then consider how this learning relates to cultural practice in the digital world.

The course will focus on technological developments in 4 areas: reproduction techniques, colour and light theory, materials/appearance and illustration/abstraction and will draw on a range of scientific, philosophical and political text such as Goethe, Walter Benjamin and Marx. It will make use of objects from the UCL Petrie Museum collection for case studies on how technology has influenced cultural practice.

BASc Pathway Courses.

Science Pathway:

CEGE1008 - Engineering Thinking I (0.5 units)

Availability: Spring Term

This module provides a hands-on experience of engineering in defining and solving a socio-technical problem. You will work in teams to design an engineering model and build a new system to improve water efficiency on the UCL estate. In so doing, you will learn how to integrate engineering standards, practical know-how and scientific knowledge in to your decision making. The course will also teach you about the role of engineering in modern society.

MECH2022 - Engineering Design (0.5 units)

Availability: Fall Term

You will learn how to interpret a design brief, design techniques and methodologies and how to use computational design and analysis tools such as CAD and MATLAB analysis. The course also teaches you about materials selection, the use of mechanical tools and safe workshop practice. You will design and make a physical prototype and present the analysis, both technical and environmental, which demonstrates it is a solution to the design brief.

CHEM1701 - Chemistry for the Physical Sciences (0.5 units)

Availability: Fall Term

This course will teach you the main conceptual underpinnings of chemistry and the position of chemistry in relation to the other natural sciences. You will learn the fundamentals of physical and inorganic chemistry as well as some basic elements of organic chemistry. The course also covers ideas relating to atomic and molecular structure, and the theory of chemical reactions.

MATH1403 - Maths for Arts & Sciences (0.5 units)

Availability: Fall Term

This course is to bring students from a background of diverse A-level (and similar) syllabuses to a uniform level of confidence and competence in basic calculus, a subject which is of basic importance not only in most areas of mathematics, but also in science in general. It covers complex numbers, standard functions of a real variable, methods of integration and an introduction to ordinary differential equations, as well as introductions to partial differentiation and Fourier series.

Arts, Humanities and Social Science Pathways

CLAS1207 - Politics Ancient & Modern (0.5 units)

Availability: Spring Term

This course explores the many ways in which ancient Greece and Rome have had an impact on the modern world, with a focus on political and social issues. You will examine key issues facing the contemporary Western world through the investigation of central questions that concern both ancient and modern societies such as Plato's discussions of the best state, Cicero's political speeches or Greek tragedy. You will also learn how concepts expressed in those texts and artefacts, have been taken up in e.g. the French Revolution, the US Constitution or parliamentary democracies more generally.

HEBR1007 - Religion, State & Society (0.5 units)

Availability: Spring Term

This course will teach you about the history of Christianity, Judaism, and Islam in Europe and provide you with the basic analytical tools to describe religious affiliation as well as secularization, and their role in the shaping of modern

society. The field work will show you how religious identifications are mirrored in the cityscape of London and you will understand the central role of religious affiliations in the shaping of contemporary Europe as well as the complex relationship between religious identity and modernity.

LAWS1014 - Law in Action (0.5 units)

Availability: Spring Term

This course introduces you to the reality of law in modern society. You will explore this through a number of specific examples of “law in action”, including legal disputes about when life begins and ends, the prosecution of serious criminal offences, investigation of war crimes and the analysis and presentation of forensic evidence in court. The course will also address where law is going in the future: looking at the controversies that surround the increasing use of neuroscience and virtual reality in the courtroom.

ENGL1004 - Intro to English Literature (0.5 units)

Availability: Spring Term

This course offers you an introduction to the full sweep of English literature from the Anglo-Saxon period to the present day. It allows you to sample works from different periods while also showing how these works are connected, across time, by continuing narrative, generic and thematic concerns. Works studied so far include *Beowulf*, *Paradise Lost*, *The Rape of the Lock*, *The Mill on the Floss*, *The Waste Land* and J. M. Coetzee’s *Disgrace*.

ENVS1026 - Looking, Making & Communicating (0.5 units)

Availability: Full Year

This practical course will give you an introduction to casting; drawing a section through an object, building or city; sketching, diagram and model-making techniques; crafting and fabricating components; photography; surveying techniques, and visualisation software (Photoshop). Visiting professionals will run workshops demonstrating textile techniques, carpentry and concrete casting. The aim of the course is, by teaching you a variety of skills, to enable you to explore and communicate your ideas.

For those wishing to continue with a modern language or start a new one, classes in French, German, Spanish, Italian, Dutch, Arabic, Mandarin, Japanese and Russian are available as part of the BAsc Core requirement at the Centre for Languages and International Education.