UCL YEAR 12 SUMMER SCHOOLS 2016

Summer School Information for Year 12 Students
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### Residential Summer Schools

- **Archaeology**
  The Bones of London: What Human Remains can tell us about our Ancestors and Disease

- **Arts & Sciences**
  The UCL Arts & Sciences Programme

- **Applied Medical Sciences & Nutrition**
  Hungry for Change

- **The Bartlett School of Architecture**
  Reimagining the Architecture of London

- **Biosciences**
  Exploring Biosciences

- **Chemical Engineering**
  Exploring Sustainable Energy

- **Geography**
  Biodiversity: Our Place on the Planet

- **History**
  Making History

### Non-residential Summer Schools

- **Natural Sciences**
  Exploring Natural Sciences

- **Philosophy, Politics & Economics**
  Global Poverty and Inequality: A PPE Approach to Policy

- **Population Health**
  Eager for Equality: What is Population Health and how do we measure it?

- **Modern Languages (SELCS)**
  Languages and Cultures: What are they for?

- **Slade School of Fine Art**
  Introduction to Studio Practice

- **Statistical Sciences**
  How to Become an Internet Sensation (Statistically Speaking)
**What are UCL summer schools?**

The summer schools are intensive programmes that last up to five days, and offer students the opportunity to experience what university life is like. The programmes are designed to give a real taste of university teaching and provide a deeper insight into the subject area of your choice.

The summer schools are held in late June-August, to allow students to attend after the AS Level exams are over. Students are expected to attend each day of the summer school. All courses run in classrooms on the UCL Bloomsbury campus and, where applicable, will make use of the laboratory facilities available to our undergraduate students.

There are courses to choose from in science, engineering, arts, humanities and social sciences disciplines. Every course is developed and taught by UCL postgraduates and academics, with classroom assistance from UCL undergraduate students.

The residential summer schools give students the opportunity to experience life as an undergraduate student at UCL: you will live in student halls, eat in the student canteens and attend lectures and seminars as a student would.

There will be up to 40 Year 12 students from different schools on each course, giving you a chance to meet new people who share your intellectual interests. All summer schools are designed to be interactive, enjoyable and challenging, with a focus on group work, problem solving, debates and discussions. We hope that summer school students will choose to apply to UCL in Year 13, for whichever degree programme is right for them.

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**The deadline for UCL Summer School applications is** 5pm on Thursday 29th April 2016

**The deadline for UCL Sutton Trust Summer School applications is** 5pm on Friday 11th March 2016
**Why should I attend a summer school?**

By attending a UCL summer school you will:

- Learn more about UCL’s wide range of degree programmes and explore which ones are right for you
- Meet new people who share your interests
- Be taught by experts and learn about a subject that interests you in depth
- Develop study skills essential for high achievement in Year 13 and the first year of university: academic writing and referencing, critical analysis, independent research, and presentation skills
- Increase your confidence and ability to articulate ideas and opinions
- Gain an impressive academic achievement for your UCAS personal statement

All of our Summer Schools are free for you to attend! This includes:

- Your travel to and from UCL
- Accommodation & food
- Any travel during the week (while at the Summer School)
- Any evening/social activities we have arranged

We also provide you with any equipment and resources you will need during the week. **We welcome applications from students who live outside London.**

During the day you will be taught by leading academics and experts, and will experience a full range of lectures and seminars to give you an idea of the style of learning at UCL.

Evenings will be packed full of activities designed to show you how exciting living in London can be.

You will be assigned to a student leader who is a current undergraduate student in the subject area you are interested in: they will be on hand to provide support and guidance, and will be able to share their experiences with you.

Once you have read the information on the summer schools and are ready to apply, please visit the summer school webpage: [www.ucl.ac.uk/wp/post16/summerschools](http://www.ucl.ac.uk/wp/post16/summerschools)

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**Residential:** Students stay in halls of residence near the UCL campus.

**Non-residential:** students make their way to and from UCL each day.
Arts / Humanities / Social Sciences

Archaeology: The Bones of London: What Human Remains Can tell us about our Ancestors & Disease

UCL Institute of Archaeology
22nd-26th August 2016. Residential

Suitable for students studying the following subjects: Biology, History, Geography, Anthropology, Archaeology, English, Classics

The Bones of London will explore our history and ancestry through the human remains found under the streets, and along the Thames, of modern-day London. The course will incorporate both practical study in the classroom, through investigation of the collection of bones in the Institute of Archaeology lab, and looking at what the bones can tell us about our ancestors and disease.

There will be various trips to museums for behind the scenes tours of their departments led by specialists in the fields of human remains and archaeology. This will include visits to the Museum of London human remains store with their head osteo-archaeologist, the UCL Pathology Museum, the Wellcome Collection, and the Hunterian Museum.

The course will also incorporate a visit to the Thames foreshore at low tide to work with the Thames Discovery Programme in recording a site and collecting artefacts (primarily animal bones) for analysis back at the Institute of Archaeology. The culmination of the course will be a group presentation about one of a number of Archaeology case studies looking at famous burial sites across London. You will not only learn about the human skeleton but also what the human skeleton, especially in the Archaeology record, can help you learn about yourselves.

Number of places available: 15

Academic entry requirements:
Applicants must be likely to achieve a minimum of ABB at A Level; and have achieved at least five A*-B grades at GCSE.

Deadline for applications: 29th April 2016

Related UCL degree programmes:
Archaeology BA, Archaeology BSc, Archaeology and Anthropology, Anthropology, Biomedical sciences, Medicine, Ancient History, History, Geography

Contact
For applications: summerschool@ucl.ac.uk
For course content: Charlotte Frearson (c.frearson@ucl.ac.uk)
The UCL Arts and Science Programme

Faculty of Arts and Sciences
22nd – 26th August 2016. Residential

Suitable for students studying the following subjects: English, Maths, Chemistry, Biology, Physics, History, Geography, Modern Languages, Philosophy, Sociology, Psychology

If you are a dynamic thinker who loves challenge and enjoys a wide range of academic interests, the UCL Arts and Sciences (BASc) degree is for you.

Delivered by current staff and students from the degree programme, our residential Summer School will provide an exploration of this exciting degree which gives you the opportunity to shape your studies towards your academic strengths without having to drop subjects you enjoy.

After an overview of the different pathway routes available on the programme, you will learn about the Core courses which will help you to make connections across different subjects, allowing you to build your own interdisciplinary programme and teaching you the skills and techniques required by present day employers. You will also be shown how the modern language element fits into the degree and why this is also important for your employability.

We will explain how our internship scheme works and the many careers to which the BASc can lead.

The week will culminate in an ‘Apprentice’-style event where you will play the role of advisory consultants bidding for a job and carrying out a consultancy project.

Number of places available: 25

Academic entry requirements:
Applicants must be studying a mixture of arts/humanities/sciences/social sciences/maths; be likely to achieve a minimum of AAB at A Level; and have achieved at least five A*-B grades at GCSE.

Deadline for applications: 29th April 2016

Related UCL degree programmes:
Arts and Sciences, Arts and Sciences with Study Abroad

Contact
For applications: summerschool@ucl.ac.uk
For course content: Amanda Cater (a.cater@ucl.ac.uk)
Discovering the Ancient World

Department of Greek & Latin
4th – 7th July 2016. Non-Residential

Suitable for students studying the following subjects: Greek, Latin, Classics, English, Modern Languages, History, Film Studies, Media, Drama, Theatre Studies

Discover the Ancient World in this four-day summer school. We will explore many elements of the ancient world from history and archaeology to literature and language, covering such fascinating topics as Egyptian archaeology, the ancient Near East, ancient literacy and papyrology, the figure of Augustus in Roman poetry, Greek colonisation, ancient Greek song. We will look at how the ancient world has influenced modern culture (more than you could ever imagine!)

The week will include museum visits, taster lectures and seminar discussions to give you a taste of what studying the ancient world at university involves.

Number of places available: 30

Academic entry requirements:
Applicants must be likely to achieve a minimum of ABB at A Level; and have achieved at least five A*-B grades at GCSE.

Deadline for applications: 29th April 2016

Related UCL degree programmes:
Ancient World, Ancient Languages, Greek and English, Greek with Latin, Latin and English, Latin with Greek

Contact
For applications: summerschool@ucl.ac.uk
For course content: Prof. Miriam Leonard (m.leonard@ucl.ac.uk)
The UCL English Summer School

UCL Department of English
18th – 22nd July 2016. Non-Residential

Suitable for students studying the following subjects: English Literature, English Literature and Language

What is English Literature? What makes some texts ‘literature’ and others not? How has literature in English developed over time? What do we mean when we talk about ‘narrative’? This course will start by opening up some key debates about what literature is, how our definition of literature has changed, and how we define narrative. The course then follows the first year undergraduate Narrative Texts course and looks at three key ‘canonical’ texts in detail to try and understand the role they play in the development of narrative in English.

“One of the people that I met on the summer school is now my housemate!”

Number of places available: 40

Academic entry requirements:
Applicants must be studying English Literature or combined English Literature and Language; be likely to achieve a minimum of AAB at A Level; and have achieved at least five A*-B grades at GCSE.

Deadline for applications: 29th April 2016

Related UCL degree programmes:
English

Contact:
For applications: summerschool@ucl.ac.uk
For course content: Matthew Holman (matthew.holman.15@ucl.ac.uk)
Introduction to Studio Practice

Slade School of Fine Art
1st – 5th August 2016. Residential

Suitable for students studying the following subjects: Fine Art, Art, Art and Design

An Introduction to Studio Practice offers 15 places for a week-long course in Fine Art, involving drawing, sculpture, photography, painting and contextual studies. Each day we will explore aspects of these disciplines and their interconnectedness through practical studio sessions, both led and independent. This course will give you the unique opportunity to gain some expert tuition in art and experience working in a world class art school studio environment. You will get an insight into the studio culture and tutorial approaches you might experience at degree level study in Fine Art and gain confidence in working independently. Take the chance to experiment, to extend your drawing and making skills, and to engage in dialogue with your peers and mentors about your work.

“I really enjoyed the academic sessions because we got to choose the language we studied, but there was no pressure and it was fun learning for the love of the subject rather than to pass exams.”

Number of places available: 15

Academic entry requirements:
Applicants must be likely to achieve a minimum of ABB at A Level; and have achieved at least five A*-B grades at GCSE.

Deadline for applications: 29th April 2016

Related UCL degree programmes:
Fine Art, History of Art, History of Art with Material Studies

Contact:
For applications: summerschool@ucl.ac.uk
For course content: Sandra Smith (sandra.smith@ucl.ac.uk)
Biodiversity: Our Place on the Planet

UCL Department of Geography
8th – 12th August 2016. Residential

Suitable for students studying the following subjects: Geography, Geology, Biology, Physics, Chemistry, Maths, Anthropology, Environmental Studies

Humans are just one of 8.7 million species on our planet, Earth. Yet, our ability to communicate, problem-solve and build tools has allowed us to dominate almost every continent. With this capability comes responsibility. The impact made by us, humans, on the planet has caused the extinction rate of all other species to increase to between 1,000 and 10,000 times higher than that which would naturally occur. So what on earth are we going to do about it?

Governments know that addressing both the direct and underlying drivers of biodiversity loss will ultimately require behavioural change by individuals, organizations and governments. This is why the Aichi Biodiversity Target 1, which is part of the international Strategic Plan for Biodiversity 2011-2020, suggests that we should create an understanding, awareness and appreciation of the diverse values of biodiversity.

This course will provide students with an overview of what biodiversity is, and how an understanding of the Earth’s past and its systems will allow us to learn to be better guardians in the future. We will take on the challenge laid down in Aichi and the week will culminate with the generation of ideas for actions and change needed to halt biodiversity loss on planet Earth.

Number of places available: 20

Academic entry requirements:
Applicants must be studying Geography, be likely to achieve a minimum of ABB at A Level; and have achieved at least five A*-B grades at GCSE.

Deadline for applications: 11th March 2016

Related UCL degree programmes: BSc Geography, BA Geography, Environmental Geography, Environmental Geoscience, Biological Sciences, Natural Sciences, Earth Sciences, Geology, Economics and Geography, Geophysics

Contact:
For applications: summerschool@ucl.ac.uk
For course content: Helen Greaves (helen.greaves.11@ucl.ac.uk)
Making History

UCL Department of History
1st – 5th August 2016. Residential

Suitable for students studying the following subjects: History, Classics, Anthropology, English, Sociology

‘Making History’ will draw on the rich historical resources afforded by UCL’s central London location. We’ll introduce you to some new kinds of historical sources, and new ways of thinking about the work that historians do in reconstructing the past. You’ll hear great lectures from experts on a variety of historical topics and work closely with some of our finest historians to put together a group presentation and two short written reports.

It is possible that we will make offers of undergraduate places on the basis of work conducted over the course of the week.

Number of places available: 25

Academic entry requirements:
Applicants must be studying History; be likely to achieve a minimum of AAB at A Level; and have achieved at least five A*-B grades at GCSE.

Deadline for applications: 29th April 2016

Related UCL degree programmes:
History, Ancient History, History with a European Language, History with a Year Abroad, Ancient History & Egyptology, German and History, History and Philosophy of Science, History, Politics and Economics

Contact:
For applications: summerschool@ucl.ac.uk
For course content: Tim Gibbs
(t.gibbs@ucl.ac.uk)
Exploring Law and Legal London

Faculty of Laws
11th – 15th July 2016. Non-Residential

Suitable for students studying the following subjects: Law, English, Modern Languages, History, Sociology, Psychology, Government and Politics, Geography, Anthropology, Archaeology

This summer school will introduce you to the study of law at university through introductory sessions on law and legal studies, as well as sessions on substantive law in areas such as Criminal, Contract, Family and Employment Law. Teaching and learning will be via a combination of lectures, small group teaching and interactive workshops. You will also have the opportunity to visit one of the Inns of Court and a law firm, and talk to practitioners about their work and career. By the end of the summer school you will have a greater understanding of the legal profession and the paths to becoming a lawyer.

Number of places available: 40

Academic entry requirements:
Applicants must be likely to achieve a minimum of AAA at A Level; and have achieved at least five A*-B grades at GCSE.

Deadline for applications: 29th April 2016

Related UCL degree programmes: Law, Law with French Law, Law with German Law, Law with Hispanic Law, English and German Law

Contact:
For applications: summerschool@ucl.ac.uk
For course content: Karen Scott (k-scott@ucl.ac.uk)
Languages and Cultures: What are they for?

Modern Languages, School of European Languages, Culture & Society
1st – 5th August 2016. Residential

Suitable for students studying the following subjects: Spanish, French, German, other modern foreign languages.

Already learning a language (or two)! Interested in how languages and cultures are connected, and how learning a language helps us understand new cultures? Then come to UCL to develop your language skills, explore intercultural communication in the heart of London, and find out what studying languages and cultures at a university is like! In this summer school we’ll develop our languages, and explore the cultures connected to those languages. Each morning will be dedicated to practising and expanding language skills: the first two in languages you already know (e.g. French or Spanish), while the last will be given over to trying one or two new languages! During the afternoons we will ask “What is culture?” by exploring nearby London on foot, watching films, reading some literature - and having lots of discussion!

During the week you will also work on a group project, using everything you encounter during the week to come up with your own take on what languages and cultures are, and how they help us to understand the world.

Number of places available: 25

Academic entry requirements:
Applicants must be studying French, Spanish or German; be likely to achieve a minimum of ABB at A Level; and have achieved at least five A*-B grades at GCSE. (If you are not studying a language at A Level but you have a strong interest in pursuing a subject such as Scandinavian studies or Dutch, you are also welcome to make an application to this summer school).

Deadline for applications: 29th April 2016

Related UCL degree programmes:
Modern Languages, Modern Language Plus, French, German, Icelandic, Dutch, Scandinavian Studies, French and an Asian or African Language, Spanish and Latin American Studies

Contact:
For applications: summerschool@ucl.ac.uk
For course content: Annika Lindskog (a.lindskog@ucl.ac.uk)
Global Poverty and Inequality: A PPE Approach to Policy

Philosophy, Politics and Economics, Department of Political Science
1st – 5th August 2016. Residential

Suitable for students studying the following subjects: Philosophy, Politics, Economics, Maths, Sociology, History

How do we define and understand poverty and inequality? What policy problems do we choose to address? What are the moral/ethical, political and economic consequences of our policy choices?

This summer school offers an opportunity to look at global poverty and inequality from the perspective of the three disciplines—philosophy, politics and economics. We will think about poverty and inequality both domestically and globally and consider how all three disciplines contribute to policy making.

Number of places available: 30

Academic entry requirements:
Applicants must be likely to achieve a minimum of AAB at A Level; and have achieved at least five A*-B grades at GCSE.

Deadline for applications: 31st March 2016

Related UCL degree programmes:
PPE, Economics, Philosophy, Philosophy and Economics, Politics with Eastern European Studies, European Social and Political Studies, Economics and Statistics, Economics and Geography

Contact:
For applications: summerschool@ucl.ac.uk
For course content: Paolo Morini
(p.morini.11@ucl.ac.uk)

“We were all in it together with the same goals in mind – there was a real sense of camaraderie.”
Hungry for Change

Applied Medical Sciences & Nutrition,
UCL Division of Medicine
22nd – 26th August 2016. Residential

Suitable for students studying the following subjects: Chemistry, Biology, Physics, Maths, Psychology

Obesity is a common problem, estimated to affect around one in every four adults and around one in every five children aged 10 to 11 in the UK. Given that the condition is very common and often in the news, it is likely that all the participants will have experience of obesity and possibly some of its complications.

Using nutrition and obesity as a theme, throughout the week we will debate the concept of obesity as a disease, exploring this idea by following the journey of a theoretical patient. The week will feature talks from research scientists and doctors, tutorials, hands-on practicals, and our own cutting-edge interactive online lectures. We will glimpse inside the human body on a bespoke tour of the Royal Free Hospital’s very own Pathology Collection, and have a go at performing surgery in the Simulation Centre. By the end of the week, you will have met a supertaster and found out about a day in the life of your digestive system. You will also get to know about what career opportunities are out there for science graduates who have a good knowledge of medicine.

Number of places available: 30

Academic entry requirements:
Applicants must be studying Chemistry and Biology; be likely to achieve a minimum of AAB at A Level; and have achieved at least five A*-B grades at GCSE.

Deadline for applications: 29th April 2016

Related UCL degree programmes:
Applied Medical Sciences, Biomedical Sciences, Nutrition

Contact:
For applications: summerschool@ucl.ac.uk
For course content: Dr David Spratt (d.spratt@ucl.ac.uk)
Exploring Biosciences

Faculty of Life Sciences
8th – 12th August 2016. Residential

Suitable for students studying the following subjects: Biology, Chemistry, Physics, Maths, Psychology, Anthropology

This summer school provides a real taste of first year life studying biosciences at university. Activities are structured to enable you to experience lectures and laboratory sessions in several subjects in the life sciences, including biological sciences, microbiology, biochemistry, molecular biology, neuroscience and physiology. The laboratory sessions are designed to mirror the first year university experience, and you will have the opportunity to talk to senior academic staff and to visit research facilities around the faculty.

Staff and undergraduate students will guide you through this exciting environment and will also help you to prepare for university life by providing advice and guidance on degree choices, applications, careers and the transition into university. You will become part of the UCL Biosciences family for a week, experience degree specific specialisations and the type of work expected from first year students. You also get a real flavour of the multi-disciplinary nature of the Life Sciences. This summer school is full-on, hands-on and great fun.

Number of places available: 30

Academic entry requirements:
Applicants must be studying Chemistry or Biology plus one from Biology, Chemistry, Maths or Physics; be likely to achieve a minimum of AAB at A Level; and have achieved at least five A*-B grades at GCSE.

Deadline for applications: 11th March 2016

Related UCL degree programmes:
Biochemistry, Biotechnology, Neuroscience, Biological Sciences, Biomedical Sciences, Pharmacology, Human Sciences

Contact:
For applications: summerschool@ucl.ac.uk
For course content: Dr Chris Taylorson (c.taylorson@ucl.ac.uk)

“It was great preparation for my degree as we are expected to do a lot of independent studying, so it’s important we learn how to manage our workload.”
Eager for Equality: What is Population Health and how do we measure it?

Population Health Sciences, Institute of Epidemiology & Public Health
1st – 5th August 2016. Residential

Suitable for students studying the following subjects: Maths, Statistics, Economics, Chemistry, Biology, History, Sociology

Did you know that if you travel on the London Underground from Westminster to Canning Town the life expectancy of those living at each stop falls by one year for every station that you pass? Does this bother you?

Find out how we identify these and other inequalities in health on the Population Health Summer School. You will learn about what we mean by population health, how to measure it and what the social factors are that determine our health. Working in small groups, you will use data from London and the rest of the world to show how health varies by place and socioeconomic background.

In addition to lectures and seminars, you will have the chance to visit museums that tell the story of our health today and in the past, including the Wellcome Collection and Grant Museum of Zoology. Tours of significant sites will showcase London’s unique history and setting when it comes to public health and the improved health of its inhabitants over time.

You will leave the summer school with practical transferable skills in data analysis that are highly sought after by graduate employers.

The summer school will especially be of interest to those currently studying geography, government and politics, economics and sociology as well as those studying physical sciences interested in studying a social science degree.

Number of places available: 15

Academic entry requirements:
Applicants must be likely to achieve a minimum of ABB at A Level; and have achieved at least five A*-B grades at GCSE.

Deadline for applications: 29th April 2016

Related UCL degree programmes:
Population Health

Contact:
For applications: summerschool@ucl.ac.uk
For course content: Dr Stephen Jivraj (stephen.jivraj@ucl.ac.uk)
GENES Week

Life Sciences
25th – 29th July 2016. Non-Residential

Suitable for students studying the following subjects: Biology, Chemistry, Physics, Maths, Psychology, Anthropology

This summer school is designed to give you a real flavour of the research based teaching that UCL Life Sciences degrees provide.

Activities are structured to enable participants to experience lectures and laboratory sessions in several subjects in the life sciences to include: biological sciences, microbiology, biochemistry, molecular biology, neuroscience and physiology. You will have the opportunity to talk to senior academic staff and to visit research facilities around the faculty. Advice will be provided to help in the application process and to give insight into what makes a successful applicant and undergraduate student.

You will become part of the UCL Biosciences family for a week, experience degree specific specialisations and the type of work expected from first year students. You also get a real flavour of the multi-disciplinary nature of the Life Sciences. This summer school is full-on, hands-on and great fun.

Number of places available: 40

Academic entry requirements:
Applicants must be studying Chemistry or Biology plus one from Biology, Chemistry, Maths or Physics; be likely to achieve a minimum of AAB at A Level; and have achieved at least five A*-B grades at GCSE.

Deadline for applications: 29th April 2016

Related UCL degree programmes:
Biochemistry, Biotechnology, Neuroscience, Biological Sciences, Biomedical Sciences, Pharmacology, Human Sciences

Contact
For applications: summerschool@ucl.ac.uk
For course content: Dr Chris Taylorson (c.taylorson@ucl.ac.uk)
Psychology & Language Sciences

Psychology & Language Sciences, Faculty of Brain Sciences
4th – 8th July. Non-Residential

Suitable for students studying the following subjects: Psychology, Biology, Chemistry, Physics, Mathematics

This summer school will give you a taste of what it is like to study Psychology and Language Sciences at university through a series of lectures, workshops and small group work. Each day will have a theme that centres around core areas of Psychology and Language Sciences, such as visual perception, social and clinical psychology individual differences and cognition and language.

You will work in small groups with support from current UCL students to research a topic that interests them in the area of Psychology and Language sciences. On the last day, you will give presentations on your topic in a mini-conference. This is a unique opportunity to learn about the different subject areas in Psychology and Language Sciences and find out whether this would be something you want to study at university.

Number of places available: 30

Academic entry requirements:
Applicants must be studying at least one subject from Biology, Chemistry, Mathematics, Physics and Psychology; be likely to achieve a minimum of AAB at A Level; and have achieved at least five A*-B grades at GCSE.

Deadline for applications: 29th April 2016

Related UCL degree programmes:
Psychology, Psychology and Language Sciences, Linguistics

Contact
For applications: summerschool@ucl.ac.uk
For course content: Julie Evans (julie.evans@ucl.ac.uk)

“When I came as a student I felt like I had a bit of an advantage – I wasn’t lost and felt comfortable being in London.”
Exploring Natural Sciences

Faculty of Mathematical and Physical Sciences. 8th – 12th August 2016. Residential

Suitable for students studying the following subjects: Biology, Chemistry, Physics, Geology, Mathematics, Further Mathematics, Pure Mathematics

The Natural Sciences degree at UCL draws together elements from a range of science subjects. Students taking this course combine two areas of specialism chosen from physics/astrophysics, mathematics, chemistry, earth sciences, life sciences, maths/statistics, and science and technology studies. This summer school offers an opportunity for you to find out more about the UCL Natural Sciences degree, and to experience classes in chemistry, physics and biosciences, which are the three subject areas with the largest numbers of Natural Sciences students.

You will attend lectures and laboratory sessions, for a practical hands-on introduction to the course, and you will work in groups on a mini-project with support from staff and current students. All of the activities are designed to be similar to the first year university academic experience. There will also be opportunities throughout the week to find out more about university life in general, and to get some advice about your university applications and the wide range of careers available.

Number of places available: 30

Academic entry requirements:
Applicants must be studying any two subjects from Biology, Chemistry, Geology, Maths or Physics; be likely to achieve a minimum of AAB at A Level; and have achieved at least five A*-B grades at GCSE.

Deadline for applications: 11th March 2016

Related UCL degree programmes:
Natural Sciences, Physics, Chemistry, Biological Sciences, Geology, Mathematics, Mathematics and Physics, Geophysics, Astrophysics, Chemistry with Mathematics

Contact:
For applications: summerschool@ucl.ac.uk
For course content: Dr Steven Metcalfe (s.metcalfe@ucl.ac.uk)
Year 12 Physical Sciences Conference

Departments of Chemistry, Physics and Natural Sciences

5th – 8th April 2016. Non-Residential

Suitable for students studying the following subjects: Chemistry, Physics, Mathematics, Biology, Geology

A scientific conference is a place where researchers present their work to tell other scientists about the exciting discoveries they have made, and to expose their findings to scrutiny, challenge, and further advancement. This event will give you the opportunity to take part in your own conference.

You will prepare for the conference throughout the week, with staff and research students guiding you. You will also have the opportunity to attend lectures by science experts, get some hands-on experience in the laboratory, and talk to current university students to find out more about student life.

The conference themes are Chemistry and Physics, and so to attend you should have an interest in one or both of these subjects. Although chemists and physicists are often trained differently, many recent scientific and technological advances straddle the boundaries of these two classical subjects, ranging in scope from the quantum scale to the depths of space!

Number of places available: 90

Academic entry requirements:
Applicants must be studying any two subjects from Biology, Chemistry, Geology, Maths or Physics; be likely to achieve a minimum of AAB at A Level; and have achieved at least five A*-B grades at GCSE.

Deadline for applications: 1st March 2016

Related UCL degree programmes:
Chemistry, Physics, Natural Sciences

Contact:
For applications: summerschool@ucl.ac.uk
For course content: Steven Metcalfe (s.metcalfe@ucl.ac.uk)

“It’s always those moments when everybody comes together, whether that is for the presentations or for events in the evening, which are the memorable ones.”
Curve Sketching

Department of Mathematics
18th - 22nd July 2016. Non-Residential

Suitable for students studying the following subjects: Mathematics, Further Mathematics, Pure Mathematics, Physics, Chemistry

Curve sketching is an essential skill in the mathematician’s toolbox. Graphs reveal the behaviour of functions and are used for many purposes in mathematics, science and engineering. This summer school aims to explore different aspects of curve sketching in active sessions that develop mathematical intuition and problem solving skills through challenging problems.

This is also an opportunity to learn more about the UCL Department of Mathematics and meet the admissions tutor. Special guest lecturers will offer research talks to widen your mathematical horizon. From taboo cubics to kissing curves, this course will inspire you to take mathematics further.

Number of places available: 20

Academic entry requirements:
Applicants must be studying Maths and Further Maths; be likely to achieve a minimum of A*AA at A Level, with the A* in Maths; and have achieved at least five A*-B grades at GCSE.

Deadline for applications: 29th April 2016

Related UCL degree programmes:
Mathematics, Mathematical Computation, Mathematics and Physics, Mathematics and Statistical Science, Mathematics with Mathematical Physics, Mathematics with Economics, Mathematics with Management Studies, Mathematics with Modern Languages, Physics, Engineering (Mechanical), Engineering (Mechanical with Business Finance), Engineering (Chemical), Engineering (Biomedical), Engineering (Electronic and Electrical)

Contact:
For applications: summerschool@ucl.ac.uk
For course content: Dr Luciano Rila (l.rila@ucl.ac.uk)
How to Become an Internet Sensation (Statistically Speaking)

Department of Statistical Science
8th -12th August 2016. Residential

Suitable for students studying the following subjects: Maths, Further Maths, Statistics, Economics

The internet generation has become accustomed to having immediate access to information from around the globe, 24 hours a day. With the advent of social media, information spreads incredibly quickly around the world. With this in mind, what determines whether an item is shared via social media? Ultimately, what factors are important in predicting which items ‘go viral’? These questions can only be tackled using statistics to analyse samples of the vast quantities of social media data which is generated daily.

In this summer school, you will learn practical data skills – this includes using software to do the hard calculations and produce interesting graphics. In small groups, you will analyse recent social media data using your newly found data skills, and in doing so propose the most important determinants of items which go viral on social media.

Number of places available: 20

Academic entry requirements:
Applicants must be studying Mathematics; be likely to achieve a minimum of AAB at A Level; and have achieved at least five A*-B grades at GCSE.

Deadline for applications: 11th March 2016

Related UCL degree programmes:

Contact:
For applications: summerschool@ucl.ac.uk
For course content: Elinor Jones (elinor.jones@ucl.ac.uk)
Exploring Sustainable Energy

Department of Chemical Engineering  
22nd – 26th August Residential

Suitable for students studying the following subjects: Mathematics, Physics, Chemistry, Biology

Do you like solving problems? Are you creative? Can you think outside the box? Do you like challenges? Would you like to make a positive change in the world? Are you interested in maths, physics and chemistry - but do not necessarily see yourself as a mathematician or a scientist? If you can answer yes to most of these questions, this summer school is definitely for you. The summer school will give you with an understanding of what a career in chemical engineering might entail, which skills are required, and how a typical chemical engineering project may be approached and tackled.

During the week, you will learn skills and gain knowledge which will help you to develop a design solution to a fuel problem. In addition to participating in practical activities, you will also meet fantastic engineering role models, and be engaged in hands-on workshops and laboratory sessions.

Number of places available: 25

Academic entry requirements:
Applicants must be studying Mathematics and Chemistry or Physics; be likely to achieve a minimum of AAB at A Level; and have achieved at least five A*-B grades at GCSE.

Deadline for applications: 29th April 2016

Related UCL degree programmes:  
Chemical Engineering, Biochemical Engineering, Mechanical Engineering, Civil Engineering

Contact:  
For applications: summerschool@ucl.ac.uk  
For course content: Folashade Akinmolayan (f.akinmolayan@ucl.ac.uk)

“When I’m on campus and I see anyone from the summer school with I have a chat to them and find out how things are going.”
Reimagining the Architecture of London

Bartlett School of Architecture
22nd – 26th August Residential

Suitable for students studying the following subjects: Architecture, Art and Design, Graphic Design, Maths, Geography, Design and Technology

This intensive Bartlett Summer School will provide you with the chance to gain hands-on experience in architecture and learn about observing, sketching, designing and making, using London as your test bed and source of inspiration. You will visit a collection of sites in London which will be brought into the studio through different representational tools and techniques that you will be introduced to throughout the week. This will culminate in a design exercise where you will be asked to reimagine a part of the city you have experienced through making models and drawings. At the end of the summer school you will leave with a series of objects and documents representative of your experience and your imagination, having been introduced to a wide variety of ways of thinking about architecture, the city and design.

Number of places available: 15

Academic entry requirements:
Applicants must be likely to achieve a minimum of ABB at A Level; and have achieved at least five A*-B grades at GCSE.

Deadline for applications: 29th April 2016

Related UCL degree programmes:
Architecture, Architectural and Interdisciplinary Studies, Urban Planning, Design and Management, Urban Studies, Planning and Real Estate

Contact:
For applications: summerschool@ucl.ac.uk
For course content: Mollie Claypool (m.claypool@ucl.ac.uk)
Other Summer Schools

UCL Investigates… Museums Summer School

30th July – 5th August 2016. Residential

UCL has four museums open to the public and owns outstanding collections of objects and specimens that cover a variety of disciplines, reflecting the range of the university’s academic work. Students select one of two strands:

UCL Investigates… Natural History

Suitable for students studying science A Levels

Using UCL’s Grant Museum of Zoology and related London collections, you will learn about the field of Natural History, through hands-on sessions and lectures facilitated by experts in the field of Natural History and related disciplines.

Related UCL degree programmes: BASc Arts & Sciences, Natural Sciences, Biological Sciences, Human Sciences.

UCL Investigates… Arts and Humanities

Suitable for students studying arts, humanities, social science A Levels

From learning about ethics of human display in UCL’s Petrie Museum of Egyptian Archaeology to understanding London’s social history at The Museum of London, this strand covers a range of topics that will be of interest to you if you are considering studying the arts, humanities, or social sciences at university.

Related UCL degree programmes: BASc Arts & Sciences, History, English, Art History, Ancient History, Philosophy, Archaeology, Anthropology

Both strands will enhance your observation and analysis skills through study in UCL’s museums, London museums, interactive sessions, and lectures. You will stay in UCL’s Ramsay Hall for four nights, which is in the heart of central London, only a short walk away from the UCL campus.

Number of places available: 40
(20 on each strand)

Entry requirements: Students must be studying 3 A Level subjects and be predicted grades ABB.

Deadline for applications: Friday 31st March

Contact: educationofficer@ucl.ac.uk
Discover UCL Summer School for D/deaf and Hard of Hearing Students

15th -17th August 2016. Residential

The Discover UCL Summer School is an award-winning summer school exclusively for D/deaf and hard of hearing students in Years 11 and 12. The summer school is a three-day residential programme that gives you the chance to find out more about UCL and stay in university halls of residence for two nights. You will have the opportunity to take part in variety of interesting lectures and will meet D/deaf graduates and undergraduates who will share their experiences of university with you and give you top tips for your future.

Number of places available: 15

Entry requirements for year 11 students: you must be on track to achieve a minimum of 5 GCSE pass grades or equivalent.

Entry requirements for year 12 students: you must have achieved a minimum of 5 GCSEs and be currently studying AS levels, BTEC, or equivalent qualifications.

Please note that if the summer school is oversubscribed the social demographic criteria outlined on a later page will be used for selection.

Deadline for applications: Friday 20th May 2016

Contact: summerschool@ucl.ac.uk or 020 3370 1214
Selection criteria

The summer schools are for Year 12 students attending state schools. For our residential summer schools you do not have to attend a school in London, or live in London, in order to apply: we encourage applications from students living outside London for these programmes. For our non-residential summer schools you must be able to travel to the UCL campus for the start of each day of the summer school.

Applications to the summer schools are highly competitive and unfortunately not every applicant will get a place. We prioritise places for students who match our academic and demographic criteria which are explained below. Please also refer to the individual summer school pages, as they will contain specific information about the entry requirements.

Our academic criteria

Summer school students should be considering applying to UCL in the future.

On your application form you will be asked to state which UCL undergraduate degree programmes you are interested in. If you haven’t yet decided what specific degree you want to apply for, you can indicate the general subject areas you are interested in. Your academic profile (your GCSE grades and your predicted A Level or IB grades) must match the minimum entry requirements for the UCL degree programme(s) you intend to apply for. Please refer to UCL’s online prospectus for guidance on minimum entry requirements for different degree courses.

www.ucl.ac.uk/prospective-students/undergraduate-study/application-and-entry/ug-requirements
GCSE requirements

You must match the minimum GCSE requirements for the UCL undergraduate degree programme that you intend to apply for. UCL’s minimum entry requirement is grade C or higher in Maths and English Language GCSE. However, for many UCL degrees the requirement will be higher. For example, UCL Psychology requires a grade B in English Language, Maths and two Science GCSEs.

A level requirements

If you are taking A Levels, you must be taking three full A Levels and a fourth AS Level (or be taking an Extended Project Qualification as an alternative to the fourth AS Level). You must be predicted grades in the range ABB to A*A*A (depending on which UCL degree you want to apply for), plus a pass or higher in the additional AS. You must also be taking A Level subjects that match the entry requirements of the UCL degree programmes you intend to apply for. For example, if you plan to apply for UCL Medicine, you must be taking Biology and Chemistry A Levels.

Refer to UCL’s list of preferred A Levels and individual course profiles for guidance. www.ucl.ac.uk/prospective-students/undergraduate-study/application-and-entry/alevel-qualifications

“When I came as a student I felt like I had a bit of an advantage – I wasn’t lost and felt comfortable being in London.”

International Baccalaureate requirements

If you are taking the IB, you must be predicted a minimum score of 34 points overall, with a combined score of 16 achieved in three higher level subjects, with no grade lower than 5. Many UCL degree programmes will require higher predicted scores for the IB, up to 39 points, and your predicted grades must match the IB requirements for your preferred UCL degree programme. For example, if you want to apply for UCL Economics, you will need a predicted score of 39 points, to include 19 points in higher level subjects, including a 7 in Maths and a 6 in Economics if taken.

BTEC requirements

We will consider summer school applications from students taking the BTEC, but it must be the Edexcel Level 3 Extended Diploma (QCF), or Edexcel Level 3 BTEC National Diploma (NQF) with a predicted grade of Distinction, Distinction, Distinction.

You must be interested in applying to a UCL degree course that accepts the BTEC: please be aware that not all UCL degree programme accept the BTEC. Please refer to the UCL website to see which degree programmes accept the BTEC.

www.ucl.ac.uk/prospective-students/undergraduate-study/application-and-entry/other-qualifications/btec

If you are a BTEC student and want to apply for a summer school, please email the contact person running the summer school for advice before applying.
### Social demographic criteria

We will only give places to students attending state schools. We will prioritise students who meet several or all of these criteria:

- Students with no family history of higher education participation (this means that neither of your parents or guardians have been to university)
- Students who were eligible for free school meals during secondary school
- Students whose parents or guardians are currently unemployed, or are in lower income or non-professional jobs
- Students who live in neighbourhoods with a lower than average rate of participation in higher education (this is assessed by looking at your postcode)
- Students who are in local authority care or have been in the past (looked-after children)

### Application process

Further information about each summer school can be found on each page. You are able to apply for more than one summer school if you are interested in the other subject areas represented. However, we cannot guarantee a place on either summer schools. You must complete a separate online application form for each summer school that you are applying to attend. Use the information in this course booklet to decide which summer schools interest you.

Discuss your application with your family and school to check that you will definitely be able to attend all the dates, and find a teacher in your school who can write an academic reference for you. They will be asked to send us your predicted grades and to give some comments about you as a student. You will be asked to give us your teacher’s name and email address so that we can contact them about the reference if needed. Please note that we will not be able to process your application without a teacher reference.

As part of the application you will be asked to write a personal statement of up to 300 words explaining why you are interested in your chosen summer school(s) and why you would be a good summer school student.

When you are ready, complete the online student application form and add your personal statement. You will need to provide your personal details, contact details, information about your education, and information about your parents’ or guardians’ employment and education history, and a name and email for
your teacher reference. Once you have submitted the form, you will receive a reply with a link to the teacher reference form. Please forward this to your nominated teacher as soon as possible.

**Attendance policy**

If you apply for a summer school, you must commit to attending all sessions each day of the summer school. We will only accept absence in case of illness or personal emergency. If you are on a non-residential summer school and are going to be absent, you must email us or call us as soon as possible to let us know the date and the reason for absence. If you are on a residential summer school and are feeling unwell or a personal emergency occurs, please let a member of staff know as soon as possible.

“The activities in the evening were great. We went on a riverboat tour, ghost bus tour, to the London Comedy Club, to London Zoo, on the London Eye and more.”
If you have any questions about UCL Summer School, please contact us:

**Summer School team**

summerschool@ucl.ac.uk

020 3370 1214

www.ucl.ac.uk/wp/post16/summerschools