

Lecture Day Online Lectures – July 2020

Popular Lecture Websites

[Aeon Video 'Essays'](#) – videos across a range subjects with quite a modern vibe. Search by subject under 'Menu' (top left).

[Cambridge University's Public Lectures](#) – a directory of public lectures arranged by collections, departments and colleges.

[Gresham College Lectures](#) - founded in 1597, it has been providing free lectures for over 400 years. Wide range of lectures across various degree subjects from top university academics.

[King's College London Lectures](#) - also check out their super snappy lecture series: [Three Minute Lectures](#).

[MIT Lectures](#) – many lecture courses across a wide range of science and social sciences from one of the world's top universities.

[TED Talks](#) are well known, but also check [TED-Ed](#) – these TED talks are focused on students and many are only five minutes long! Fantastic for quickly dipping your toe in a topic before deciding whether to explore further.

LECTURES BY SUBJECT

Accounting and Finance

MOOCs (*choose from one or more seminars from these free online university courses*)

[EdX's List of Finance Courses](#) – many of these are from the best business schools worldwide.

[Wharton's Introduction to Financial Account](#) - a free introduction by one of the world's top business schools.

Also see Business and Economics.

Anthropology

MOOCs (*choose one or more seminars from these free online university courses*)

[Queensland University's Anthropology of Current World Issues](#) – instant access, introduction to social and cultural anthropology.

[Kyoto University's Origins of the Human Mind](#) – a more biological anthropology-focused course, comparing our cognitive features to chimpanzees, our closest living relative.

Lectures

[A list of anthropology podcasts from a variety of highly regarded](#) - anthropological institutions including American Anthropological Association and The Anthropology Departments of Oxford and Cambridge Universities.

See sections of related disciplines such as Archaeology, Liberal Arts, Sociology and Biology.

Archaeology

MOOCs (*choose one or more seminars from these free online university courses*)

[Open Culture's List of Archaeology Courses](#) – scroll down to the Archaeology section.

[Penn's Wonders of Ancient Egypt](#) – a very highly rated instant access course from this leading university.

Lectures

[Cambridge University's Annual McDonald Lectures in Archaeology](#)

[UCL's Ancient Iron, Experimental Archaeology in Sudan](#) - Since 2012, under the auspices of the National Corporation for Antiquities and Museums in Sudan, UCL Qatar has been conducting a large-scale systematic investigation of the iron production remains at Meroe and at the Meroitic site of Hamadab.

Also see sections of related disciplines such as Anthropology, Classics and History.

Architecture

MOOCs (*choose one or more seminars from these free online university courses*)

[Harvard University's The Architectural Imagination](#) - free introduction from Harvard enabling you to gain insight into the degree and profession, self-paced and free. Free access to your progress ends after a period of time.

[Open Culture Free Online Courses](#)- see Architecture listing for MOOCs and other resources.

[Top 10 Online Architecture Courses](#) – including courses from top universities like MIT and Cornell.

Lectures

[King's College London's Three Minute Lectures](#) – ‘Is London the Cultural Capital of Germany?’ A three-minute lecture with a lot of German influence on London architecture.

Art and Art History

MOOCs (*choose one or more seminars from these free online university courses*)

[Open Culture's Free Online Courses](#) – scroll down to Art History listing. A great range of courses covering different periods of art.

[Coursera's List of Art Courses](#) - many courses, often from US institutions such as MOMA.

[EdX's List of Design Courses](#) - many courses, including many with a more design leaning such as graphic or web design.

[Madrid University's European Paintings: From Leonardo to Rembrandt to Goya](#) - uncover the meaning behind the art of the great painters from 1400 – 1800. Rolling start, approx. 15 hrs. **Mrs Parsons**

recommends this as a great overview of some of the most famous paintings as well as some lesser known artists.

[MOMA's Modern Art and Ideas](#) – a highly rated free instant access course from New York's Museum of Modern Art.

[MOMA's Fashion as Design](#)

[MOMA's Seeing Through Photographs](#)

Lectures

[Gresham College's Art Lectures](#) - from top academics at this London-based institution that has delivered free lectures for over 400 years.

[Rembrandt: the Early Years](#) - Oxford University talk exploring Rembrandt's background, his influences and the challenges he came across before emerging as a great master.

TV

[Civilisation](#) – a classic television series from 1969 tracing Western history, philosophy and art from the tenth century to the near present. Fantastic in its scope and analysis.

[BBC Arts](#) - lots of TV programmes, documentaries, podcasts etc. Including theatre, fashion, photography, art and dance.

Biology

MOOCs (*choose one or more seminars from these free online university courses*)

[EdX's List of Biology Courses](#) - extensive list of biology and life sciences MOOCs, particularly from top US universities.

[Duke University's Introduction to Genetics and Evolution](#) - highly rated from a top US university. Approx. 20 hours, free, open access.

[Harvard's Fundamentals of Neuroscience](#) - in order for free instant access, click the courses in this programme section and click the individual courses and select the 'audit this course' option. You won't get a certificate, but that doesn't matter. Parts one and two are suited to Year 13 only as they require understanding of how a neurone works. Part three would be accessible to both Years 12 and 13, but is still stretching. Also useful for biomedical scientists. **Recommended by Ms Daniels.**

[Howard Hughes Medical Institute's Ecology: Ecosystem Dynamics and Conservation](#) - highly rated course. Instant access, free.

[Penn State University's Epidemics - Dynamics of Infectious Disease](#) - topical course from a well-regarded university. Instant access, free.

[Yale University's Principles of Evolution, Ecology and Behaviour](#) - a fantastic biology course from one of the world's best universities that, in the words of Ms Daniels, every student aspiring to a top Biology course should study. **Recommended by Ms Daniels.**

Lectures

[Animal Behaviour Lecture](#) – fascinating standalone lecture on different categories of animal behaviour from Dora Biro of Oxford University. **Recommended by Ms Daniels.**

[Oxford University's Botanic Gardens Lectures](#) – accessible botany lectures. **Recommended by Ms Daniels.**

[UCL's The Planet, Economy and Ourselves post-Covid: Health Trends in Rich Countries](#) – Professor Brunner discusses that COVID-19 reminds us of our deep vulnerability to environmental threats. Climate change is the biggest threat of all, and rich countries must seize this moment to build a truly sustainable future. This brief lecture reflects on a major obstacle to such transformation: the widespread assumption that economic growth is obligatory in the interest of our well-being and health.

REMEMBER: don't forget the Science Department's [STEM Booklet](#) put together by Ms Pudney and also see the fantastic [Oxbridge Chemical Sciences page](#) (not just for Oxbridge students) Password: silvergreen.

Also see Biochemistry, Chemistry and Medicine sections.

Biochemistry

MOOCs (choose one or more seminars from these free online university courses)

[Harvard University's Principles of Biochemistry](#) - free, instant access from this top US university.

[University of East Anglia's Biochemistry: The Molecules of Life](#) - explore the impact of biochemistry on bioenergy and health, discovering why graduates are in demand; with the Biochemical Society.

Lecture

[Gresham College's Energy and Matter at the Origin of Life](#) - the origin of life is one of the biggest questions in science, but until recently it was, experimentally, a question in chemistry. Now, gene sequences and a better understanding of cell growth under extreme conditions are giving insights from biology.

REMEMBER: don't forget the Science Department's [STEM Booklet](#) put together by Ms Pudney and also see the fantastic [Oxbridge Chemical Sciences page](#) (not just for Oxbridge students) Password: silvergreen.

Also see Biology, Chemistry and Medicine sections.

Business

MOOCs (choose one or more seminars from these free online university courses)

[Coursera's List of Business Courses](#)

[Over 400 business related courses on EdX website from top universities worldwide](#) – many are free and can be joined anytime.

[Open Culture's list of free online business courses](#) - including many from the top business schools in the world such as Stanford, Yale and Wharton.

[Wharton's Entrepreneurship Courses](#) – highly rated course from a top business school in four parts: developing the opportunity, launching your start-up, growth strategies and financing and profitability.

[Cape Western's Inspiring Leadership through Emotional Intelligence](#) – rated as one of the top 50 most popular MOOCs of all time.

[Royal Holloway's Survival Statistics: Secrets for Demystifying Numbers](#) - learn to evaluate risk, make useful approximations and more rational decisions with this online course on statistics.

[Rice University's Introduction to Data Analysis Using Excel](#) - highly rated course, approx. nine hours, rolling start date.

Lectures

[Gresham College's Business Lectures](#) - from top academics at this London-based institution that has delivered free lectures for over 400 years.

Also see Accounting and Finance, Economics sections.

Chemistry

MOOCs (*choose one or more seminars from these free online university courses*)

[EdX's List of Chemistry Courses](#)

Introductory Level Chemistry*

Duke University's Introductions to Chemistry – [Reactions and Ratios](#) and [Structures and Solutions](#)
Free, instant access Chemistry courses from one of the US's best universities.

Mixed Level and Advanced Chemistry*

Kentucky University's [Mixed Level](#) and [Advanced Level](#) Chemistry Courses

*We would welcome feedback on how introductory or advanced these and other courses in fact are!
Are they better for GCSE, Year 12, Year 13 or beyond?

REMEMBER: don't forget the Science Department's [STEM Booklet](#) put together by Ms Pudney and also see the fantastic [Oxbridge Chemical Sciences page](#) (not just for Oxbridge students) Password: silvergreen.

Also see Biochemistry.

Classics/Ancient World

MOOCs (*choose one or more seminars from these free online university courses*)

[Penn University's Greek and Roman Mythology Course](#) – very highly rated, exploring classical myths, 'The Odyssey' and 'Hesiod's Theogony'. Rolling start date.

[Penn University's Introduction to Ancient Egypt and its Civilisation](#) - highly rated course from a top university that is only five hours long.

[Wesleyan University's The Ancient Greeks](#) – very highly rated course from one of the US's top women's colleges.

Lectures

[Gresham College Classics Lectures](#) - from top academics at this London-based institution that has delivered free lectures for over 400 years.

[Massolit](#) – the School has a subscription to the Classics section of this website with extensive classics related lectures. Use Surbiton High School email to access.

[University College Berkeley's Ancient Philosophy Course](#) – rolling access podcast lectures from one of world's top universities.

[Stanford University's 'Virgil's Aeneid'](#) - one of the classical world's most important epics from one of the world's top universities. Rolling free access.

Also see Archaeology, History and Philosophy sections.

Computer Science and IT

MOOCs (*choose one or more seminars from these free online university courses*)

[FutureLearn's Computing Courses](#) – many free and instant access courses from top universities and organisations such as Raspberry Pi on topics including programming in various languages, cybersecurity, video game design and much more.

[Coursera's Computing Courses](#) – many top computing courses particularly from leading US universities.

[Michigan University's Programming for Everyone \(Getting Started with Python\)](#) - highly rated course from a top US university with more advanced follow-up courses in various areas of programming.

[Harvard University's Introduction to Computer Science](#) – rated in the top 50 MOOCs of all time from this world leading university.

Lectures

[Gresham College's Computing Lectures](#) - from top academics at this London-based institution that has delivered free lectures for over 400 years.

[Oxford University's Ada Lovelace Symposium - Celebrating 200 Years of a Computer Visionary Lecture Series](#)– This series of 18 lectures marks the 200th anniversary of the birth of Ada Lovelace, chiefly known for her work on Charles Babbage's unbuilt mechanical general-purpose computer, the Analytical Engine. The Symposium is aimed at a broad audience of those interested in the history and culture of mathematics and computer science, presenting new discoveries for the Oxford archives, and other current scholarship on Lovelace's life and work, and linking her ideas to contemporary thinking about mathematics, computing and artificial intelligence.

Drama

MOOCs (*choose one or more seminars from these free online university courses*)

[Munich University's Theatre and Globalisation](#) - learn about how theatre has become globalised in the last century with mobilisation, global actors, agents and hubs.

Lectures

Gresham College's Lecture Series on 'The Psychology of The Performing Arts', by Professor Glenn D. Wilson, including:

[Stage Fright and Optimal Performance](#) - an overview of the causes and cures of performance anxiety.

[Theatre and Human Expression](#) - what benefits do we derive from theatre (including film and TV)? Is it excitement, vicarious experience, education, catharsis, or all of these things?

[University of Bristol's Theatre Collection](#) - a fascinating video about the University's theatre collection which is one of the world's largest archives of British theatre history and live art.

Also see English Section.

Economics

MOOCs (*choose one or more seminars from these free online university courses*)

[EdX's Economics and Finance Course List](#)

[Eramus University Rotterdam's Introduction to Economic Theories](#)

[Michigan University's Model Thinking](#) – a course on the use of models to predict economic and other phenomena.

[Nottingham University's The Politics of Economics and the Economics of Politicians](#) – a MOOC from Sir Vince Cable.

University of California's [The Power of Microeconomics](#) and [Macroeconomics](#) courses.

Lectures

[Gresham College Economics Lecture Series](#) - a broad selection of world-class lectures available online.

[UCL's The Planet, Economy and Ourselves post-Covid: Health Trends in Rich Countries](#) – Professor Brunner discusses that COVID-19 reminds us of our deep vulnerability to environmental threats. Climate change is the biggest threat of all, and rich countries must seize this moment to build a truly sustainable future. This brief lecture reflects on a major obstacle to such transformation: the widespread assumption that economic growth is obligatory in the interest of our well-being and health.

[UCL's Planetary Economics: Getting to a Stable Climate with a Healthy Economy](#) – Professor Grubb Why has it been so hard to get to grips with climate change? Answer: because it transcends the normal boundaries of our thinking. A scientific problem, yet also deeply moral. Psychologically distant, yet caused by local actions. Solutions are partly technological, yet involve politically loaded transformations across multiple sectors. Above all, solutions require economic policy which must transcend the boundaries of normal economic theories. This talk offers a way to get our heads around a problem of unprecedented dimensions - and suggests that we can, indeed, crack it.

[UCL Lancet Lecture: Economic Growth and Women's Health Outcomes](#) - One of the most surprising features of the recent rapid income growth in emerging economies is how it has not been associated with significant improvements in women's health outcomes. Professor Ghosh uses indicators (such as the infant mortality rate, the maternal mortality rate and the child sex ratio) to explore the specific experience of India over the past two decades.

See Accounting and Finance, Business and Maths sections.

Education

MOOCs (*choose one or more seminars from these free online university courses*)

[Coursera's List of Education Courses](#)

[Queensland University's Introduction to Developmental Psychology](#) - learn how we develop over our lifetime, including our ability to think, communicate, and form social attachments.

Lectures

[Cambridge University's Faculty of Education Lectures](#)

See Psychology section.

Engineering

MOOCs (*choose one or more seminars from these free online university courses*)

[Coursera's List of Engineering Courses](#)

[Duke University's Nanotechnology: A Maker's Course](#)

[Georgia Tech's Introduction to Engineering Mechanics](#) - An introduction to learning and applying the principles required to solve engineering mechanics problems from one of the US's best Science universities.

[Material Science and Engineering](#)

REMEMBER: don't forget the Science Department's [STEM Booklet](#) put together by Ms Pudney and also see the fantastic [Oxbridge Chemical Sciences page](#) (not just for Oxbridge students) Password: silvergreen.

English Literature

MOOCs (*choose one or more seminars from these free online university courses*)

[Edx's huge range of English literature MOOCs from a range of globally leading universities](#)

[FutureLearn's list of English literature MOOCs predominantly from a group of UK universities](#)

[Southampton University's Jane Austen: Myth, Reality and Global Celebrity](#)

Lectures

[Gresham College's English Lecture Series](#) - from top academics at this London-based institution that has delivered free lectures for over 400 years.

[King's College London's Comparative Literature Lecture](#) – the era of national literature is over; now is the epoch of world literature.

[Southampton University's English Lectures](#) – podcast lecture series including monsters in literature and Shakespeare. Scroll down to relevant title.

[UCL's The Orwell Lecture 2016: Ian Hislop - The Right to Dissent \(and the Left too\)](#) – an amusing lecture by Ian Hislop discussing the chaos of politics in Orwell's time compared with recent times - President Trump's election and Brexit.

Reading

[Open Culture Free eBooks](#) – 800+ titles, many works of literature.

[Open Culture's Free Audio Books](#)

[Surbiton High Library's Book Recommendations](#) – see the Year 11 to 13 section.

See Languages, Liberal Arts and Linguistics sections.

Geography

MOOCs (*choose one or more seminars from these free online university courses*)

[Coursera's List of Geography Courses](#)

Lectures

[Southampton University's The Social and Historical Impact of Climate Change](#) – scroll down to relevant title, a series of podcast lectures on climate change

[Royal Geographical Society's Ask the Geographer Podcasts](#) - a selection of short podcasts covering current issues including Australian bushfires and hurricanes.

[UCL's Earth Observation for Planning Sustainable Cities](#) - Urban areas are expected to triple by 2030 to accommodate 60% of the global population. We present a data-driven planning process for urban monitoring and heat mitigation that will enhance the future sustainability of our cities to align with current global development agendas.

[UCL's Our Planet, Our Health](#) – Professor Kate Jones discusses the links between ecological health and human health

[UCL's Planetary Economics: Getting to a Stable Climate with a Healthy Economy](#) – Professor Grubb
Why has it been so hard to get to grips with climate change? Answer: because it transcends the normal boundaries of our thinking. A scientific problem, yet also deeply moral. Psychologically distant, yet caused by local actions. Solutions are partly technological, yet involve politically loaded transformations across multiple sectors. Above all, solutions require economic policy which must transcend the boundaries of normal economic theories. This talk offers a way to get our heads around a problem of unprecedented dimensions - and suggests that we can, indeed, crack it.

[Oxford University's Demographic Trends and Problems of the Modern World Lecture Series](#) - The study of populations and demographics is explained in detail in this introductory series of 11 lectures by Professor David Coleman, Professor of Demography.

History

MOOCs (*choose one or more seminars from these free online university courses*)

[Coursera's List of History Courses](#)

[Virginia University's Modern World History 1760-1910 \(Part 1\)](#) and [Modern World History from 1910 \(Part 2\)](#)

Lectures

[Gresham College's History Lectures](#) - from top academics at this London-based institution that has delivered free lectures for over 400 years.

[Southampton University's History Lectures](#) – a wide variety of podcast lectures including gay and lesbian history, Richard III, Henry V and the Tudors and Stuarts. Scroll down to relevant title.

[Civilisation](#) – a classic television series from 1969 tracing Western history, philosophy and art from the tenth century to the near present. Fantastic in its scope and analysis.

[UCL's Nazi Persecution and the Quest for Justice](#) – Professor Mary Fulbrook will discuss approaches taken by post-war states, societies and individuals to the persecution of European Jews and other victim groups.

[UCL's Women Against Pit Closures: Women in the miners' strike of 1984-5](#) – Dr Sutcliffe-Braithwaite discusses how The miners' strike of 1984-5 was able to continue for as long as it did because of the development of a network of support groups run by women in mining communities. This lecture examines the politics of the women involved, and their interactions with feminist supporters.

See other related subjects such as Archaeology, Classics, Liberal Arts, Philosophy and Politics.

Languages

MOOCs (*choose one or more seminars from these free online university courses*)

[EdX's List of Language Courses](#)

[FutureLearn's List of Language Courses](#)

[European University Institute's Exploring \(European\) Culture and Heritage](#) - what is European culture and heritage? This also looks at European business. Good for anyone considering language, but also combinations of language and history or business.

Lectures

[Houston University's Latin American History Through Its Novels](#) - 24 lectures! Great if you're really interested in Latin American history, culture and literature.

[King's College London's Comparative Literature](#) - one lecture – ‘The era of national literature is over; now is the epoch of world literature’.

[Oxford University's Latin American Institute Lectures](#) - podcast lectures related to Latin America, particularly its history and politics.

[Oxford University's MFL Department Podcast Lectures](#) - plenty of foreign literature and language podcast lectures.

[UCL's Swearing as a Second Language - "Bad Language" and Language Learners](#) – Dr Horan looks at the role and function of swearing in different languages and whether we could or should teach the art of swearing

See Liberal Arts, English literature sections.

Law

MOOCs (*choose one or more seminars from these free online university courses*)

[Coursera's List of Law Courses](#)

[London University's Introduction to the English Common Law](#) - there are two main families of law in the world: the first is the civil law systems, such as those in much of continental Europe, with their routes in ancient Roman law. The second is the common law found in many ex-British colonies such as the USA, Australia and Canada that grew out of the English legal system. This course is a great introduction to the basics of English law.

[Leiden University's International Humanitarian Law](#) – for those interested in international human rights, this is the course for you.

Lectures

[Gresham College Law Lectures](#) - from top academics at this London-based institution that has delivered free lectures for over 400 years.

[UCL's Knowledge and Law: "Landscape" in the Context of Wind Energy](#) – Professor Lee explores how ‘Landscape’ is a complex, rich phenomenon. Landscape is not just physical or aesthetic, but also filled with symbolic, social and cultural attachments. This lecture will examine the ways in which the legal process governing the consenting of large (‘nationally significant’) wind farms receives and shapes our knowledge of current and predicted landscapes.

[UCL's Can We Ever Have a Crime free World?](#) – Professor Bowers will discuss how crime rates have dropped over the past few decades, and what we need to do to keep them down. Some research on crime control challenges our assumptions about blame and responsibility, the role of the police, and our own impact.

See Philosophy Section.

Liberal Arts/Multidisciplinary

Many universities allow you to study more than one subject, recognising the interdisciplinary nature of many subjects. Many subjects, such as Religion and Theology, History and Politics often draw on

other subjects too, such as Philosophy and Sociology. A number of universities (e.g. [Durham](#)) offer Liberal Arts degrees, where you can put together a degree from a range of subjects. Sometimes, it is even possible to combine sciences and arts and humanities subjects. [UCL's BAsc](#) is a good example. Note that Natural Sciences (on offer at several universities) is a little like a version of Liberal Arts in the Sciences.

MOOCs (*choose one or more seminars from these free online university courses*)

[Wesleyan University's The Modern and the Postmodern \(Part 1\)](#) - highly rated multidisciplinary course from a top US liberal arts college, **relevant to those studying philosophy, languages, literature and art**. Approx. 12 hours, self-paced, free.

[Wesleyan University's The Modern and the Postmodern \(Part 2\)](#) – Approx. 17 hours, self-paced, free.

TV

[Civilisation](#) – a classic television series from 1969 tracing Western history, philosophy and art from the tenth century to the near present. Fantastic in its scope and analysis.

Linguistics

MOOCs (*choose one or more seminars from these free online university courses*)

[Leiden University's Miracles of Human Language: Introduction to Linguistics](#) – Approx. six-hour course enabling you to gain insight into the degree, self-paced, free.

[Southampton University's Understanding Language: Learning and Teaching](#) - An introduction to some key concepts in the effective teaching and learning of languages.

Lectures

[Gresham College's Linguistics Lectures](#) - a selection of world-class Linguistics lectures, including 'Talking with Beasts: Human and Animal Languages', 'Documenting the Voices of Vanishing Worlds' and 'I + Thou = Dialogue'.

[UCL's Swearing as a Second Language - "Bad Language" and Language Learners](#) – Dr Horan looks at the role and function of swearing in different languages and whether we could or should teach the art of swearing

See English and Languages section.

Maths

MOOCs (*choose one or more seminars from these free online university courses*)

Note that these courses are differing levels of difficulty, so you may need to experiment with a few courses to find your level.

[FutureLearn's Maths Related Courses](#) – lots of courses, particularly from leading UK universities.

[Edx's Maths Related Courses](#) and [Coursera's Maths Related Courses](#) – loads of courses, including from many of the US' leading universities such as Harvard and MIT.

[Open Culture's List of Maths Courses](#) – scroll down to the Sciences section and find the Maths courses.

[Weizmann's Institute's Recreational Maths: Fun, Games and Puzzles](#) – a Maths course with an emphasis on the fun.

[Royal Holloway's Survival Statistics: Secrets for Demystifying Numbers](#) - learn to evaluate risk, make useful approximations and more rational decisions with this online course on statistics.

[Rice University's Introduction to Data Analysis Using Excel](#) – a highly rated course, approx. nice hours, rolling start date.

Lectures

[London Mathematical Society's Lecture Series](#) - watch the past series of lectures online, including 'Maths Greatest Unsolved Puzzles' and 'The Mathematics of Randomness'.

[Maths Centre](#) – mixture of lectures, podcasts and activities arranged by topic from A-Z; algebra to vectors.

[Adventures in the 7th Dimension](#) – Dr Lotay discusses that in 7 dimensions there exist special shapes that may give us the tools to unlock the mysteries of the universe. Looking for this unique geometry is challenging but a possible solution takes inspiration from nature: specifically, bubbles and thermodynamics. Jason Lotay takes us on a mathematical journey across multiple dimensions, whilst exploring their role in art, science and popular culture.

[Oxford University's Ada Lovelace Symposium - Celebrating 200 Years of a Computer Visionary Lecture Series](#)– This series of 18 lectures marks the 200th anniversary of the birth of Ada Lovelace, chiefly known for her work on Charles Babbage's unbuilt mechanical general-purpose computer, the Analytical Engine. The Symposium is aimed at a broad audience of those interested in the history and culture of mathematics and computer science, presenting new discoveries for the Oxford archives, and other current scholarship on Lovelace's life and work, and linking her ideas to contemporary thinking about mathematics, computing and artificial intelligence.

Medicine and Health

MOOCs (*choose one or more seminars from these free online university courses*)

[EdX's Medicine Course List](#) - hundreds of medicine related courses particularly from leading US universities.

[Coursera's Health Related Course List](#) - more than medicine related health based MOOCs.

[Imperial College London's Let's Talk About Covid-19](#) – hear directly from world-class experts about the theory behind the analyses of COVID-19 and its spread, while learning how to interpret new information using core principles of public health, epidemiology, medicine, health economics, and social science. 18 hours, rolling access.

[Aberdeen University's How Does the Body use DNA as a Blueprint?](#) - an introduction to the basics of molecular biology and how DNA code works. 12 hours, rolling access.

[Aberdeen University's What Drives the Body?](#) - an introduction to the different components and systems in the body that keep us alive and healthy. 12 hours, starts 11 May.

[Bath University's Inside Cancer](#) - How genes influence cancer development.

[Exeter University's Genomic Medicine: Transforming Patient Care in Diabetes](#) - 8 hrs, starts 18 May.

[UCL's Airway Matters](#) - although this is focused at medical professionals, this may be of interest to budding medics interested in respiratory medicine during the coronavirus pandemic.

[Sheffield University's Discover Dentistry](#) - an entertaining and illuminating course for everyone to explore the impact dentistry has on our lives.

Lectures

[King's College London's Global Health and Social Medicine](#) - university taster day lecture – ‘Medicine cannot be understood without understanding its social context’.

[Gresham College's Medical Lectures](#) - from top academics at this London-based institution that has delivered free lectures for over 400 years. Includes a number of lectures from [Professor Chris Whitty](#), one of the chief scientific leaders in the UK's response to the coronavirus on infectious diseases, cancer and epidemics.

[Channel 4's Can Science Beat the Virus?](#) - ‘Question Time’ style panel discussion with panel of scientists talking about approaches to Covid-19 – asked and answered many of the questions we want to know.

[University College Oxford's Staircase 12 Medical Sciences Resources](#) - bringing Oxford University Medical Sciences to life – podcasts, activities, news articles, lectures and more.

[Royal College of Physicians' Medicinal Plants](#) - watch podcasts and lectures to learn about unique and bespoke collections of plants that offer living examples of the history of medicine from the era of the pyramids of Egypt to today's life-saving prescription drugs.

[UCL's The Planet, Economy and Ourselves post-Covid: Health Trends in Rich Countries](#) – Professor Brunner discusses that COVID-19 reminds us of our deep vulnerability to environmental threats. Climate change is the biggest threat of all, and rich countries must seize this moment to build a truly sustainable future. This brief lecture reflects on a major obstacle to such transformation: the widespread assumption that economic growth is obligatory in the interest of our well-being and health.

[UCL's Cooling Babies to Protect the Brain](#) – Professor Robertson discusses how cooling babies deprived of oxygen at birth improves their chances of growing up without disabilities such as cerebral palsy, blindness and epilepsy.

[UCL's The Battle Within: Mobilising our Immune System to Fight Cancer](#) – Dr. Quezada: For more than 100 years, scientists have attempted to use the immune system to control cancer. In this talk we will discuss the science that led to new therapies as well as the directions that this area of research is likely to take in the near future.

[UCL Lancet Lecture: Economic Growth and Women's Health Outcomes](#) One of the most surprising features of the recent rapid income growth in emerging economies is how it has not been associated with significant improvements in women's health outcomes. Professor Ghosh uses indicators (such as the infant mortality rate, the maternal mortality rate and the child sex ratio) to explore the specific experience of India over the past two decades.

Music

MOOCs (*choose one or more seminars from these free online university courses*)

[EDX Music Course List](#)

[FutureLearn's Music Course List](#)

Lectures

[Gresham College's Music Lectures](#) – a large selection of world-class music-based lectures.

[BBC Learn Music Resources](#) - a huge variety of activities available, including music and singing lessons, biographies, tutorials, courses and industry tips.

Philosophy, Theology and Religion

MOOCs (*choose one or more seminars from these free online university courses*)

[OpenCulture's Philosophy Course List](#) - scroll down to Philosophy section

[Coursera's List of Philosophy Courses](#)

[Open University's Global Ethics: An Introduction](#) - widespread poverty, closed borders and catastrophic climate change - be better equipped to think about and debate some of today's most complex global ethical challenges.

[MIT's Introduction to Philosophy: God, Knowledge and Consciousness](#) – rated in the top 50 MOOCs of all time from this world-leading university.

Lectures

[Gresham College's Religion Lecture Series](#) - visiting world-class professors provide a variety of free lectures including 'Jesus, Hitler and the Abolition of God', 'The Meaning, Value and Sanctity of Human Life' and 'How the English Learned to Hate Catholics'.

[King's College London's Religion, Philosophy and Ethics](#) - four mini-lectures on the topic from a philosopher, sociologist, anthropologist and political scientist.

[The Cadbury's Lectures 2019: The World as God's Home](#) – three one-hour lectures from Yale Professor Volf about the effects of migration on social and existential homelessness:

Lecture 1 – Modern Homelessness

Lecture 2 – God's Love, God's Home: A Brief Story of Everything

Lecture 3 – On Being at Home in the World

[Oxford University's General Philosophy Lecture Series](#) - A series of lectures delivered by Peter Millican to first-year Philosophy students at the University of Oxford. The lectures comprise of the 8-week General Philosophy course, delivered to first year undergraduates.

[Oxford University's A Romp Through Ethics for Complete Beginners Lecture Series](#) - In this 7-lectures series we shall be considering the underpinnings of ethical thought. We shall consider, for example, what it is for an action to be right or wrong, whether we can have moral knowledge and whether freewill is essential to morality. We shall reflect on four key ethical theories (virtue

ethics, deontology, non-cognitivism and utilitarianism), looking at both their strengths and their weaknesses. We shall be looking at morality in the context of the individual and the context of society.

Physics

MOOCs (*choose one or more seminars from these free online university courses*)

[EdX's Course List](#) - a broad range of Physics online courses.

[Royal Holloway's Survival Statistics: Secrets for Demystifying Numbers](#) - learn to evaluate risk, make useful approximations and more rational decisions with this online course on statistics.

[Edinburgh University's AstroTech: The Science and Technology Behind Astronomical Discovery](#) - learn about some of the astonishing discoveries in modern astronomy.

[Virginia University's How Things Work: An Introduction to Physics](#) - An introduction to Physics in the context of everyday objects.

[Open University's The Science of Nuclear Energy](#) - understand the science of nuclear power and the arguments for and against it.

Lectures

[Gresham College's Mysteries of the Dark Cosmos](#) - one of a series of lectures by Professor Roberto Trotta, to be live-streamed on 27 Apr 1.00pm-2.00pm.

[TedTalk String Theory](#) - physicist Brian Greene explains superstring theory, the idea that minuscule strands of energy vibrating in 11 dimensions create every particle and force in the universe.

[Oxford University's Physics Podcasts](#) - lots of resources, including podcasts such as 'Where is my Hoverboard?', 'What is Antimatter?' and 'How do you Measure a Mars Quake?'

[UCL's Think Universe! Science and the accidental story of Humanity in Paradise](#) – Senior Teaching Fellow Francisco Diego explores the amazing scientific discoveries on the nature and development of the Universe.

[UCL's Chief NASA Scientists Lecture: NASA's Space Exploration Programme](#) - What does the future hold for human space exploration? Dr Ellen Stofan (NASA Chief Scientist) and Dr David Miler (NASA Chief Technologist) discuss the challenges and opportunities for space travel and the role of science and research over the coming years.

REMEMBER: don't forget the Science Department's [STEM Booklet](#) put together by Ms Pudney and also see the fantastic [Oxbridge Chemical Sciences page](#) (not just for Oxbridge students) Password: silvergreen.

Politics/International Relations

MOOCs (*choose one or more seminars from these free online university courses*)

[EdX's List of Politics Related Courses](#)

[Futurelearn's Politics and Society](#) - dig deeper into the issues making the news – from new technology and social media to the energy crisis inequality and the threat of new conflicts with these online political science and international relations courses.

[Foreign and Commonwealth Office's \(FCO\) Introduction to British Diplomacy](#) - gain a deeper insight into the work of the UK's Foreign and Commonwealth Office and its diverse global workforce.

[Nottingham University's The Politics of Economics and the Economics of Politicians](#) – a MOOC from Sir Vince Cable.

Lectures

[Kings College London's Political Economy](#) - the integration of political science and economics.

[Kings College London's 120 years of the Labour Party - In Conversation with Tony Blair](#) - former PM Tony Blair shares his thoughts on the Labour party's past, present and future.

[Kings College London's Britain After Brexit by Professor Anand Menon](#), Director of UK in a Changing Europe and Professor of European Politics and Foreign Affairs at King's.

[Gresham College's Politics Lecture Series](#) - visiting world-class professors provide a variety of free lectures including 'From Two-Party to Multi-Party Politics', 'Political Spending on the Internet' and 'Maths and Voting'.

[UCL's Trump, 2020 and America in a post-Covid world](#) - In this Lunch Hour Lecture, Dr Brian Klaas gives an update on the 2020 election, while also forecasting how the United States might behave post-pandemic.(note: being shown live on 2 July, then available for two weeks after on YouTube)

[UCL's The Orwell Lecture 2016: Ian Hislop - The Right to Dissent \(and the Left too\)](#) – an amusing lecture by Ian Hislop discussing the chaos of politics in Orwell's time compared with recent times - President Trump's election and Brexit.

[Sir Ivan Rogers: Where did Brexit come from and where is it going to take the UK?](#) Professor Arthur discusses the causes and consequences of Brexit.

Psychology

MOOCs (*choose one or more seminars from these free online university courses*)

[Coursera's List of Psychology Courses](#)

[Yale University's An Introduction to Psychology](#) - a highly rated course providing a comprehensive overview of the scientific study of thought and behaviour.

[Yale University's The Science of Well-Being](#) - a highly rated and very popular course in which you will engage in a series of challenges designed to increase your own happiness and build more productive habits.

[Monash University's An Introduction to Psychology](#) – 'The Psychology of Personality', starts 29 June.

[Coventry University's Managing Mental Health and Stress During the Coronavirus](#) – an introduction to psychological concepts in this area which may also be helpful during this difficult time.

[Penn University's Foundations of Positive Psychology](#) - master strategies and tools that enable individuals and organisations to thrive.

Lectures

[MIT's An Introduction to Psychology Lecture](#) - highly rated lecture from Massachusetts Institute of Technology.

[Oxford University's Psychology Podcasts](#) - a selection of podcasts including 'A Cognitive Profile of Obesity', 'The Ethics of Early Intervention in Psychosis' and 'Autism and Brains Wired for Science'.

[Aeon's Imposter Syndrome](#) - do you feel like a fraud after a success? This video discusses the roots of this syndrome and details practical ways to fight it.

[UCL's Attachment Theory Lecture](#) – Professor Peter Fonagy will examine trust and interdependence during COVID-19 and explore attachment theory and the value of relationships. Available on YouTube from 25 June to 9 July.

[UCL and GSK's Recording from a Myriad of Neurons to Understand Behaviour Lecture](#) – Professor Matteo Carandini discusses how behaviour arises from the joint activity of millions of neurons distributed across the brain and how new technology called Neuropixels supports this analysis.

[UCL's The Neurobiology of Beauty](#) – Professor Zeki discusses the questions raised about the uses of beauty. The experience of beauty, whether derived from perceptual sources, as in visual or musical beauty, or cognitive ones, as in mathematical beauty, correlates with activity in the same part of the brain: field A1 of the medial orbito-frontal cortex.

[UCL's Why Do Some People Become Psychopaths?](#) – Professor Viding's lecture reviews behavioural problems in children, in terms of genetics, brain function and development, and considers why some children may be at an increased risk of developing psychopathy when they grow up.

[Oxford University's A Romp Through Ethics for Complete Beginners Lecture Series](#) - In this 7-lectures series we shall be considering the underpinnings of ethical thought. We shall consider, for example, what it is for an action to be right or wrong, whether we can have moral knowledge and whether freewill is essential to morality. We shall reflect on four key ethical theories (virtue ethics, deontology, non-cognitivism and utilitarianism), looking at both their strengths and their weaknesses. We shall be looking at morality in the context of the individual and the context of society.

See Biology, Education and Biology sections.

Sport, Food and Nutrition

MOOCs (*choose one or more seminars from these free online university courses*)

[EdX's Food and Nutrition Course List](#)

[University of Colorado's The Science of Exercise](#) - gain an improved physiological understanding of how your body responds to exercise, and be able to identify behaviours, choices, and environments that impact your health and training.

Lectures

[Rowing at University in the USA](#) - Pangbourne College Director of Rowing, Richard Follett, talks to Princeton University Coach and Recruitment Co-ordinator, Bill Manning.

Sociology

MOOCs (*choose one or more seminars from these free online university courses*)

[My-Moocs Sociology Course List](#) - choose from a variety of online MOOCs, including 'Understanding Violence', 'International Migrations' and 'Cities are Back in Town'.

[EdX's Gender Studies Courses](#)

Lectures

[Gresham College's Sociology Lectures](#) - a variety of world-class lectures including 'The Pursuit of Happiness', 'The Nature of Human Violence' and 'Does Society Risk My Life through Safety: The Perils of too Much Risk Aversion'.

[TedTalks How Culture Drives Behaviours](#) - Julien Bourrelle argues how we see the world through cultural glasses. By changing the glasses can change the way you interpret the world.

[UCL's Can We Ever Have a Crime free World?](#) – Professor Bowers will discuss how crime rates have dropped over the past few decades, and what we need to do to keep them down. Some research on crime control challenges our assumptions about blame and responsibility, the role of the police, and our own impact.

[UCL Lancet Lecture: Economic Growth and Women's Health Outcomes](#) One of the most surprising features of the recent rapid income growth in emerging economies is how it has not been associated with significant improvements in women's health outcomes. Professor Ghosh uses indicators (such as the infant mortality rate, the maternal mortality rate and the child sex ratio) to explore the specific experience of India over the past two decades.

[UCL's Why isn't my Professor Black?](#) A panel discussion from 2014 on what does it mean when the generation that produces knowledge is so unrepresentative of the generation that consumes it?

[Oxford University's Demographic Trends and Problems of the Modern World Lecture Series](#) - The study of populations and demographics is explained in detail in this introductory series of 11 lectures by Professor David Coleman, Professor of Demography.

[Oxford University's A Romp Through Ethics for Complete Beginners Lecture Series](#) - In this 7-lectures series we shall be considering the underpinnings of ethical thought. We shall consider, for example, what it is for an action to be right or wrong, whether we can have moral knowledge and whether free will is essential to morality. We shall reflect on four key ethical theories (virtue ethics, deontology, non-cognitivism and utilitarianism), looking at both their strengths and their weaknesses. We shall be looking at morality in the context of the individual and the context of society.

Veterinary Medicine

MOOCs (*choose one or more seminars from these free online university courses*)

[Madrid University's Animal Viruses](#) - learn how important animal viruses are transmitted between animals and humans and understand the diseases they produce.

[BSAC's Antimicrobial Stewardship in Veterinary Practice](#) - British Society for Antimicrobial Chemotherapy - How can good antimicrobial stewardship prevent antimicrobial resistance (AMR) in veterinary practices?

Lectures

[Vet Technician Education's Skeletal Anatomy: Dogs, Cats, Horses, Cows](#) - an introduction to the veterinary anatomy of the skeletal system in dogs, cats, horses, and cows.

[TedTalks What Vets Know that Doctor's Don't](#) - can a species-spanning approach to health improve medical care of the human animal.