HGHSGHAA SUPER **BUR**RI BB SURBITON

HIGH SCHOOL

CONTENTS

ALL SUBJECT RESOURCES

Portals and other activities that help you explore any subject

SUBJECT SPECIFIC RESOURCES

| Accounting and Finance | |
|---|--|
| Anthropology | |
| Archaeology | |
| Architecture | |
| Art and Art History | |
| Biology | |
| Biochemistry | |
| Business | |
| Chemistry | |
| Classics and The Ancient World | |
| Computer Science and Information Technology | |
| Drama | |
| Economics | |
| Education | |
| Engineering | |
| English Literature | |
| Geography | |
| History | |

| Languages (Modern Foreign Languages) | 18 |
|--|----|
| Law | 19 |
| Liberal Arts and Multidisciplinary Studies | 19 |
| Linguistics | 20 |
| Maths | 20 |
| Media Communications | 21 |
| Medicine and Health | 21 |
| Music | 22 |
| Philosophy, Theology and Religion* | 22 |
| Physics | 23 |
| Politics and International Relations | 23 |
| Psychology | 24 |
| Sport, Food and Nutrition | 25 |
| Sociology | 25 |
| Veterinary Medicine | 26 |
| | |
| *Religion – see Philosophy section | 22 |
| *Theology – see Philosophy section | 22 |
| | |

WELCOME

Dear Student/Parent

This booklet is a bible of all things super-curricular (those academic activities that go beyond your curriculum studies). If you are anything like me in lockdown, you will now be experiencing Netflix fatigue and hopefully this booklet will inspire you to do some things that are both fun and useful.

We hope that it will encourage students to explore their subjects in more depth and breadth than they might have done otherwise, and also explore subjects that are not offered in School. In so doing, it will help students to make more informed choices about their university subject and develop the independent study skills so valued by universities. In due course, it will help students to find the content that will help them write their UCAS personal statements.

Please follow the Career Department's new YouTube Channel for tips on exploring and using super-curricular resources.

PARTICULAR USES FOR YEAR 13

Although many Year 13s will have made their degree choice, while School is closed, this document will also serve the following important purposes:

- Help you engage with your degree subject, helping you bridge the gap between School and university.
- Act as a resource for your Year 13 online super-curricular small group supervisions that take place in Summer Term during school closure.
- Help you test your interests within your degree and thereby help with picking modules when you go to university.
- While your A-level resources from your teacher will be your main guide to what is required in case you do undertake any autumn exams, the super-curricular activities you undertake could complement your A-level studies and thereby strengthen your knowledge and understanding for these exams.
- Because you will be engaging with your degree subject in some depth, this
 engagement may even give a few students cause to reflect whether the degree
 you have chosen is right for you or perhaps you might want to combine your
 chosen subject with something new that has grabbed your interest in these
 super-curricular studies. Historically, many top universities have places
 available through Clearing or may be able to switch your course before or after
 Results Day.
- In the hopefully unlikely event you narrowly miss your university offer, these super-curricular studies could help you to convince a university admission tutor of your passion for their subject and why they should still take you.

WHAT IS A MOOC AND DO I HAVE TO PAY FOR THEM?

You will see MOOCs referenced throughout this booklet. These are short online university courses that vary from a few to 20+ hours to complete and comprise reading, lectures and tasks. They are offered by many universities worldwide, including many of the most famous.

While often there is an option to 'certificate' them for a fee, many are offered free. There is no need to get these courses certificated unless you want to (you will get most, if not all, the same learning benefits, and be able to include them on your CV or UCAS university application even if they are not certificated).

In case it is not clear whether they are free, look out for options to 'audit' the course (this means the same thing). Also check any time limitations on access to the course and any work you produce.

WE WANT YOUR FEEDBACK FOR FUTURE GENERATIONS OF SURBITON STUDENTS!

If you undertake any MOOCs, lectures or reading using this document, please do get in touch and tell us what you thought (good or bad). This is a new but dynamic document and we hope over time it can improve to reflect feedback. MOOCs or podcasts you rate, we can add, ones you don't, we can remove. We will happily credit your review. Once you have completed an activity (in whole or part), please complete this two-minute Super-Curricular Feedback Survey.

READING SMART

Before you get started, have a look at this one page from Cambridge University which gives you handy tips on how to 'read' 10 books in an hour (the same principle could be applied to many of the online resources mentioned below such as lectures and MOOCs).

If something is not appealing to you, there's no requirement you continue with it. However, ask yourself: why is it not appealing to you? Is it an interesting topic but just not very well taught? Or is it that it is well taught, but you don't find it interesting? If the latter, reflect does this mean it is a part of a subject you could avoid at university? Or does it suggest you reflect on your course choice?

THANK YOU TO:

- Paula Parsons who helped me compile this document;
- Sophie Harwin for her fantastic graphic design;
- Polly McConnell for her wonderful proofing;
- Ann Pudney for her excellent STEM booklet (which is referenced in various sections);
- Garnette Watts for her help with some social science sections;
- Nicola Buckel for final checks;
- Various other members of staff who have recommended resources (we have credited these staff where appropriate); and
- Guildford High, a fellow United Learning School, whose super-curricular booklet inspired parts of this document

Happy exploring...

Best wishes

Terry McDermott

Director of Careers & Head of Oxbridge



ALL SUBJECT RESOURCES

MOOCS (MINI UNIVERSITY COURSES ONLINE)



PORTALS:

Coursera and EdX - US portals with university courses from around the world. Many free, many instant access.

Future Learn – UK portal with university courses from around the world. Many free, many instant access.

Open Culture Free Online Courses - a one-page list of free online courses arranged by subject.

Selected Universities offering MOOCs:

MIT's Online Courses – an absolutely huge range of courses, particularly in the sciences, from one of the world's most elite universities. See their most popular courses here.

Nottingham University's Courses – a list of their free MOOCs that are currently on offer. This updates from time to time.

Edinburgh University's Free Online Courses

Southampton University's Free Online Courses, MOOCs and podcasts

Top 50 Most Popular MOOCs of all Time – weighted towards the sciences, business and economics and mainly US universities, but many outstanding courses from the very best universities. Not all are currently live, but many are.

Learning How to Learn – rated as the world's most popular MOOC focused at helping you learn better across subjects. Relevant whatever subject you plan to study. *Recommended by Mr Salisbury*.

Open University's Skills for studying social sciences

A range of courses that would suit students from a wide range of subjects such as Psychology, Politics and Sociology:

Reading evidence • Reading and note-taking • Note-taking in relation to the social sciences (intermediate) • Developing reading skills in relation to social sciences (intermediate) • Reading visual images • Getting started with SPSS (statistical data) • How arguments are constructed and used in the social sciences



LECTURES

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.



READING

Aeon Essays - short essays (newspaper article length) covering all subjects. Quite a modern vibe and high quality. Search by subject under 'Menu' (top left). *Highly recommended.*

JSTOR – an extensive bank of academic articles. This is fantastic, particularly when exploring a specific area of a subject after your initial engagement at a broader level. To access: log in (top left) with username: surbitonhs and password: research

Open Culture's Free eBooks Free Audio Books - 800+ free academic e- and audio books. Arranged by subject on one page.

Oxford University Press - A Very Short Introduction To... - over 500 titles, each circa 100 pages, across a huge range of subjects. Available as eBooks from your provider. Highly recommended as they give you a quality but quick introduction to a subject (some broad, like law, or some detailed, like environmental law).

Oxford University Press - A

Oxford University Reading List for Each Subject – not just for Oxbridge students! they are running with the Covid-19 situation, if some are, they are a great way to Lots of reading grouped by subject area.

Royal Institution's Science Lectures - a selection of Science masterclasses, short Downing College, Cambridge – Discover Downing and University College, Oxford courses and lectures.

Surbiton High's Digital Library – before buying an eBook, check whether the book is available in Surbiton's own digital space. Instructions on how to access are provided at the link.



OTHER USEFUL RESOURCES

field. The topics provide guided activities, questions to think the STEM booklet in conjunction.

about and suggestions for further reading. *Highly recommended*.

universities, Oxbridge colleges and companies. Please see section four of the is an online event search facility. SHS Careers Newsletter (latest version) for a list. While you may need to check if

explore a subject and set your university application apart.

- Staircase 12 - great search facilities where you can explore super-curricular resources by subject. DO NOT be put off that these are Oxbridge resources! They are excellent, with lots of different, fun resources pitched at varied levels and using all sorts of media.

Oxford University List of Podcasts by Subject - almost all the Departments of Oxford University have their own podcast section.

Cambridge University's MyHEPlus - each topic is produced by Surbiton STEM Booklet - a fantastic booklet of science links and activities put Cambridge academics at the cutting edge of research in their together by Ms Pudney. Anyone interested in science should use this booklet and

Unitaster Days – a search facility for university open days and Q&A sessions. Some **Competitions** – please see a list of essays and other competitions run by various universities have started doing these online during the Covid-19 period and there





RESOURCES BY SUBJECT



ACCOUNTING AND FINANCE

MOOCs

EdX's List of Finance Courses – many of these are from the best business schools worldwide.

Wharton's Introduction to Financial Accounting - a free introduction by one of the world's top business schools.

Reading

A Very Short Introduction to Accounting – 100-page eBook is a high quality introduction to main areas of accounting work, from bookkeeping and financial reporting to auditing and management accounting.

Also see Business and Economics

ANTHROPOLOGY

M00Cs

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 focussed 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.

Reading

Indonesia, the

A Very Short Introduction to Social and Cultural Anthropology – 100-page eBook providing an introduction to the main issues in social anthropology often told through a number of studies of small scale societies, particularly in Mexico and authors' main research destinations. *Mr McDermott read this and said it was a highly informative and entertaining read.*

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



ARCHAEOLOGY

M00Cs

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

Reading

Archaeology Related Very Short Introductions to – 100-page eBooks are a high quality introduction to Archaeology with more broad and specific areas, including: A Very Short Introduction to Archaeology • A Very Short Introduction to Ancient Egypt • A Very Short Introduction to The Ancient Near East • A Very Short Introduction to Ancient Assyria

Activities

A Day of Archaeology – lots of articles, blogs and podcasts laid out in a tile format all about archaeology. Good teasers that might inspire further research into the digs various archaeologists are working on.

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



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 EdX's List of Design Courses - many courses, including many with a more design resources.

MIT and Cornell.

Books

Architecture Related Very Short Introductions to – 100-page eBooks are a high quality introduction to Architecture with more broad and specific areas, including: A Very Short Introduction to Architecture • Modern Architecture: A Very Short Introduction

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**

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.



leaning such as graphic or web-design.

Top 10 Online Architecture Courses - including courses from top universities like 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.

Reading

Art Related Very Short Introductions to - 100-page eBooks are a high quality introduction to art with more broad and specific areas, including: Art History • Art Theory • Contemporary Art • Modern Art

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

M00Cs



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.

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.

Reading

Biological Sciences Related Very Short Introductions to – 100-page eBooks are a high quality introduction to biological sciences with more broad and specific areas, including: of AI in the Molecular BioSciences'. Bacteria • Viruses • Molecular Biology • Synthetic Biology

Reading List for Oxbridge Biological Sciences from Learning Space – many books and definitely NOT just for prospective Oxbridge students

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.

Activities

Cambridge University's Biology MyHEPlus Section - the topics provide guided activities, questions to think about and suggestions for further reading.

REMEMBER: don't forget the Science Department's STEM Booklet put together by Ms Pudney and the Oxbridge Biological Sciences page on the Learning Space which is definitely NOT just for Oxbridge students.

Also see Biochemistry, Chemistry and Medicine sections.



BIOCHEMISTRY

M00Cs

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, Yale University's Principles of Evolution, Ecology and Behaviour - a fantastic a question in chemistry. Now, gene sequences and a better understanding of cell growth under extreme conditions are giving insights from biology.

Reading

The Biochemist Publication's Featured Articles - a wide selection of articles published in the 'The Biochemist' magazine including 'A Genetic Perspective on Human Origins', 'Seasonal Rhythms of Energy Metabolism' and 'The Applications

REMEMBER: don't forget the Science Department's STEM Booklet put together by Ms Pudney and the Oxbridge Biological Sciences page on the Learning Space which is definitely NOT just for Oxbridge students.

Also see Biology, Chemistry and Medicine sections.



BUSINESS

M00Cs

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.

business schools in the world such as Stanford, Yale and Wharton.

Wharton's Entrepreneurship Courses – highly rated course from a top business Mixed Level and Advanced Chemistry* 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.

Reading

Business Related Very Short Introductions to - 100-page eBooks that provide quality introductions to broad business areas and specific areas, such as advertising

Also see Accounting and Finance, Economics sections.



M00Cs

EdX's List of Chemistry Courses

Introductory Level Chemistry*

Duke University's Introductions to Chemistry - Reactions and Ratios and Open Culture's list of free online business courses - including many from the top Structures and Solutions Free, instant access chemistry courses from one of the US' best universities.

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? Complete the Super-Curricular Feedback Survey.

Reading

Chemistry Related Very Short Introductions to - 100-page eBooks are quality introductions to chemistry with more broad and specific areas.

Activities

Cambridge University's Chemistry Challenge - a series of online monthly challenges for keen chemists to try from their computer at home as well as an annual competition with prizes.

Cambridge University's Chemistry Section of the NRICH Website – lots of chemistry puzzles aimed at students of different ages.

Cambridge University's myHEPlus chemistry page - the topics provide guided activities, questions to think about and suggestions for further reading.

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).

Also see Biochemistry.



CLASSICS/ANCIENT WORLD

MOOCs

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' 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.

Activities

Cambridge University's The Greeks, The Romans and Us - resources for exploring the art, philosophy, literature and history of the classical world.

Also see Archaeology, History and Philosophy sections.



COMPUTER SCIENCE AND IT

MOOCs

access courses from top universities and organisations performance anxiety.

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 these things? 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.



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:

FutureLearn's Computing Courses - many free and instant Stage Fright and Optimal Performance - an overview of the causes and cures of

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

Reading

Performing Arts Based Very Short Introductions to - 100-page eBooks are a high quality introduction to performing arts with more broad and specific areas, including: Theatre • Modern Drama • Shakespeare's Comedies

Activities

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

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.

Reading

Economics Based Very Short Introductions to - 100-page eBooks are a high quality introduction to literature with more broad and specific areas, including: Economics • Behavioural Economics • Microeconomics • Capitalism • Global **Economic History**

Activities

Cambridge University's MyHEplus Economics Section the topics provide guided activities, questions to think about and suggestions for further reading.

See Accounting and Finance, Business and Maths sections.



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

Reading

Education Related Very Short Introductions to - 100-page eBooks are a high quality introduction to Education with more broad and specific areas, including: Education • Learning • Universities and Colleges • Child Psychology

Activities

Cambridge University's MyHEPlus: The Sociology of Knowledge - the topics provide guided activities, questions to think about and suggestions for further reading.

See Psychology section.



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' best science universities.

Material Science and Engineering

Books

Engineering Related Very Short Introductions to – 100-page eBooks are a high quality introduction to literature with more broad and specific areas, including: Engineering • Civil engineering • Structural Engineering

Activities

Cambridge University's MyHEPlus Engineering Section - the topics provide guided activities, questions to think about

and suggestions for further reading. Activities look at topics such as nanotechnology and nanoscience and molecular modelling.

> Zooniverse's Citizen Science Projects - the Zooniverse enables everyone to take part

in real cutting-edge research in many fields across the sciences, humanities, look at topics such as TS Eliot, Dickens, and Virginia Woolf. and more. The Zooniverse creates opportunities for you to unlock answers and See Languages, Liberal Arts and Linguistics sections. contribute to real discoveries.

I Want To Study Engineering - Mathematical activities for engineers.

The Royal Academy of Engineers' Tomorrow's Engineers Resources

REMEMBER: don't forget the Science Department's STEM Booklet put together by Ms Pudney.



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 Londonbased institution that has delivered free lectures for over 400 years.

King's College London's Comparative Literature Lecture - the era of national literature if 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.

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 to13 section.

Very Short Introductions to Literature - 100-page eBooks are a high quality introduction to literature with more broad and specific areas, including: Chaucer, CS Lewis, Comedy, Contemporary Fiction and much, much more...

Activities

Cambridge University's MyHEPlus English Section - the topics provide guided activities, questions to think about and suggestions for further reading. Activities





GEOGRAPHY

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.

Reading

Geography Related Very Short Introductions to - 100-page eBooks are a high quality introduction to geography, with more broad and specific areas, including: Geography • Climate Change • Geopolitics • Plate Tectonics

Activities

Cambridge University's MyHEPlus Geography Section - the topics provide guided activities, questions to think about and suggestions for further reading. Activities look at topics such as overpopulation, biodiversity and volcanology.

MOOCs

HISTORY

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

Reading

History Related Very Short Introductions to - 100page eBooks are a high quality introductions to history with more broad and specific areas, including: History • African History • American History • American Political History • The British Empire • The Cold War • The French Revolution • World War II

Activities

Cambridge University's MyHEPlus History Section - the topics provide guided activities, questions to think about and suggestions for further reading. Activities look at slavery, racism, The British Empire and English literature and history.

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.

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



LANGUAGES

Remember that many universities allow you to study one or more languages ab initio, i.e. from scratch. This is particularly true of languages not typically taught in schools, such as Chinese, Japanese, Portuguese, Arabic, Italian, etc.

M00Cs

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.

Reading

HELLO

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HALL

Languages Related Very Short Introductions to - 100-page eBooks are a high quality introduction to languages with more broad and specific

HOLA

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areas, including: A Very Short Introduction to Languages • A Very Short Introduction to Chinese Literature • A Very Short Introduction to French Literature • A Very Short Introduction to German Literature • A Very Short Introduction to

Italian Literature

Lectures

Houston University's Latin American History Through Its Novels - 24 lectures! BONJOUR

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.

Activities

Cambridge University's MyHEPlus Languages Section - the topics provide guided activities, questions to think about and suggestions for further reading. Activities include 'German Fairy Stories', 'French and Belgian Comics' and 'Cinecitta and Italian Cinema'.

See Liberal Arts, English literature sections.

LAW



M00Cs

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 origin 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.

Defending Dignity: the Universal Declaration of Human Rights Human Rights and International Law - An Introduction

Open University Law Courses

Starting with Law – An Overview of the Law

Starting with Law

The Law-Making Process in England and Wales

Judges and The Law

Europe and The Law



Lectures

Gresham College Law Lectures - from top academics at this London-based institution that has delivered free lectures for over 400

Reading

Law Based Very Short Introductions to -

100-page eBooks are a high quality introduction to Law with more broad and specific areas, including: Law • International Law • Human Rights

Some books recommended for prospective law students: Glanville Williams: Learning the Law • Letters to a Law Student • Is it Wrong to Eat People?

Activities

Cambridge University's MyHEPlus Law Section - the topics provide guided activities, questions to think about and suggestions for further reading. Activities look at topics such as Criminal, Family and Land Law.

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

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

M00Cs

Leiden University's Miracles of Human Language: Introduction to Linguistics – Approx. six-hour course enabling you to gain

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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'.

Reading

Languages Related A Very Short Introduction to – 100-page eBooks are a quality introduction to Linguistics with more broad and specific areas. Titles include Linguistics and Languages.

Cambridge University's Linguistics Blog - this blog is run by graduate students in the Department of Theoretical and Applied Linguistics (catchily known as DTAL) at Cambridge.

Activities

Cambridge University's

MyHEPlus Meet the Linguist in You Section - activities to help you learn more about Linguistics and it sub-disciplines.

See English, Languages and Media and Communications sections.



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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. nine hours, rolling start date.

Reading

A Very Short Introduction to Maths – 100-page eBooks that provides a quality introduction to various areas of maths (see 'customers who viewed this book section' for titles on game theory, logic, algebra, applied mathematics and quantum theory).

Lectures

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

Activities

Cambridge University's myHEPlus Maths Section – the topics provide guided activities, questions to think about and suggestions for further reading. Activities look at topics such as proofs, dodgy proofs and provide more links to many other maths resources (right hand side).

NRICH's Maths Problems – lots of fun maths problems and activities at various levels.

Underground Mathematics – maths problems outlined in the form of an underground map making connections between different areas.

Advanced Maths Support Programme's List of Sources of Maths Activities for Further Mathematicians – fabulous list of comprehensive resources from the UK and US.

+Plus Magazine – lots of maths articles and problems, particularly connecting maths to real-world issues ranging from coronavirus to election results. Lots of interesting short articles, so called 'Maths in a Minute'.

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



MEDIA AND COMMUNICATIONS

MOOCs

University of Houston Communications Research Methods UCLA Journalistic Ethics

Gender Representation in The Media

Making Sense of Data in The Media

Social Change: How Can Marketing Help?

Understanding the Media – The Celebrity in the Text (intermediate)

The Power of Social Media

Politics, Media and War - 9/11 and its Aftermath

MEDICINE AND HEALTH MOOCS

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 - eight hours, 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.

Reading

Medicine Related Very Short Introductions to – 100-page eBooks that are high quality introductions to medicine and related areas, including: Medical Ethics • Medical Law • The History of Medicine • Psychiatry

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 Londonbased 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.

Activities

Cambridge University's MyHEPlus Medicine Activities - guided activities, questions to think about and suggestions for further reading. Activities include 'Bats, Bat Viruses and One Health in Africa', 'Neurodegeneration' and 'Genetic Variation and Evolution'.

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 lifesaving prescription drugs.



FutureLearn's Music Course List

Lectures

Gresham College's Music Lectures – a large selection of world-class musicbased lectures.

Books

Music Related Very Short Introductions to – 100-page eBooks are a high quality introduction to Music with more broad and specific areas, including: Music • The Psychology of Music • Early Music • Ethnomusicology

Activities

Cambridge University's MyHEPlus Music Section - the topics provide guided activities, questions to think about and suggestions for further reading. Activities look at topics such as 'Apologising Through Song', 'A Guide to Contemporary Classical Music' and 'The Opera Platform'.

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

Openculture's Philosophy Course List - scroll down to Philosophy section.

Coursera's List of Philosophy Courses

M00Cs

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.

Reading

Oxford University Press Philosophy, Theology and Religion 100-page eBooks that provide high quality introductions, including: A Very Short Introduction to Philosophy • A Very Short Introduction to Philosophy in The Islamic World • A Very Short Introduction to Theology • A Very Short Introduction to Protestantism

Activities

Cambridge University's Religious Studies - resources for exploring what studying Religious Studies involves. The topics provide guided activities, questions to think about and suggestions for further reading. Activities include 'The Dead Sea Scrolls', 'Islam and Politics in Modern Turkey' and 'The Rights of Religious Minorities and Constitutions'.

Aeon's What is the Soul if not a Better Version of Ourselves? - thought provoking idea on spirituality by Professor John Cottingham.

Southampton University's Philosophy Cafe Podcasts – scroll down to bottom of page for a selection of Philosophy-based podcasts.

PHYSICS MOOCS EdX's Cours

MOOCS

EdX's Course List - a broad range of Physics online courses.

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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.

Books

Oxford University Press Physics related 100-page eBooks that provide

quality introductions, including: A Very Short Introduction to Quantum Physics • A Very Short Introduction to the History of Physics • A Very Short Introduction to Structural Engineering

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 1.00-2.00pm.

TedTalk String Theory - physicist Brian Greens explains superstring theory, the idea that miniscule strands of energy vibrating in 11 dimensions create every particle and force in the universe.

Activities

Cambridge University's MyHEPlus Physics Section - the topics provide guided activities, questions to think about and suggestions for further reading. Activities include 'Introduction to Programming for Physicists', 'Introduction to Advanced Concepts' and 'Mechanics'.

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?'

Zooniverse's Citizen Science Projects - the Zooniverse enables everyone to take part in real cutting-edge research in many fields across the sciences, humanities, and more. The Zooniverse creates opportunities for you to unlock answers and contribute to real discoveries.

Nrich's Maths Activities for Physicists - mathematical activities for physicists.

Isaac Physics' Mastering Physics by Solving Problems - a selection of challenging problems to solve.

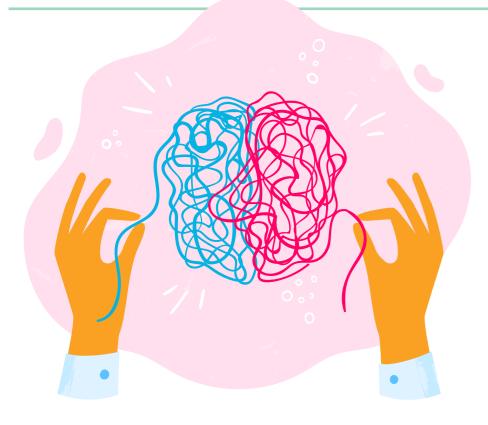
REMEMBER: don't forget the Science Department's STEM Booklet put together by Ms Pudney.

POLITICS/INTERNATIONAL RELATIONS

M00Cs

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.

Open University's Politics courses

What is Politics? (intermediate) Politics, Media and War - 9/11 and its Aftermath Political Ordering From Brexit to the Break-up of Britain? The Politics of Devolution The Politics of Racial Violence in Britain



Reading

Politics Related Very Short Introductions to 100-page eBooks that provide high quality introductions, including: A Very Short Introduction to Politics • A Very Short Introduction to Political Philosophy • A Very Short Introduction to the European Union

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, Mental Health Practice 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'.

Activities

Cambridge University MyHEPlus Politics Section - the topics provide guided activities, questions to think about and suggestions for further reading. Activities include 'Borders and the Refugee Crisis', 'British Politics and the Education Gap' and 'War in International Society'.

Also see Economics, History, Liberal Arts and Sociology sections.



PSYCHOLOGY

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.

MIT's Introduction to Psychology

UCLA's Social Psychology

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.

Open University's Psychology courses

Psychological Research – Obedience and Ethics

The Role of Diagnosis in Counselling and Psychotherapy

Psychology in the 21st Century (intermediate)

Social Psychology and Politics (intermediate)

Forensic Psychology

Reading

Psychology Related Very Short Introductions to 100-page eBooks that provide high quality introductions, including: A Very Short Introduction to Psychology • A Very Manning. Short Introduction to Forensic Psychology

Aeon's Why Depth Therapy is More Enduring Than a Quick-Fix of CBT - Linda Michael's essay exploring that quick-fix psychotherapies have been hailed as the gold standard, but depth therapies can be far more enduring and profound.

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'.

Activities

Cambridge University's MyHEPlus Psychology Section - the topics provide guided activities, questions to think about and suggestions for further reading. Activities Indian Institute of Technology's Introductory Sociology include 'Gender and Careers Choice', 'Psychology of Decision Making' and 'Neurodegeneration'.

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.

See Biology, Education and Sociology sections.

SPORT. FOOD AND NUTRITION M00Cs

dX's Food and Nutrition Course List

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.

Reading

A Very Short Introduction to Nutrition

Lectures

Rowing at University in the USA - Pangbourne College Director of Rowing, Richard Follett, talks to Princeton University Coach and Recruitment Co-ordinator, Bill

Activities

Cambridge University's MyHEPlus Physical Activity and Public Health Section - activities related to how physical activity can help with the prevention of noncommunicable diseases.



SOCIOLOGY

MOOCS

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

New York University's Introduction to Sociology Yale University's Foundations of Modern Social theory City University's Reading Marx's Capital Beyond the Ballot - Women's Rights and Suffrage from 1866 to Today Understanding Gender Inequality Understanding Gender Identity - Trans People in the Workplace Religion and Conflict Why Religion Matters – Religious Literacy, Culture and Diversity

Gender Representation in the Media

Open University's Sociology Courses

University of Colorado's The Science What do We Mean by 'Family' (intermediate) 'Problem' Populations, 'Problem' Places (intermediate) Children's Rights (intermediate) Social Problems – Who Makes Them (intermediate) Identity in Question Social Construction and Social Constructionism (intermediate) Understanding Economic Inequality

Open University's Criminology Courses

The Meaning of Crime

- Introduction to Crime and Criminology
- Critical Criminology and the Social Sciences (intermediate)
- Forensic Science and Fingerprints
- The Problem with Crime (intermediate)
- Discovering Disorder: Young People and Delinquency
- Does Prison Work? (intermediate)
- Racial Violence European Perspectives (intermediate)
- The Politics of Racial Violence in Britain
- The Technology of Crime Control (intermediate)
- Incarceration Are Prisons a Suitable Punishment?
- Forensic Psychology Witness Investigation

Books

high quality introductions, including: A Very Short Introduction to Sociology and cows. (Mr McDermott recommends this book - very readable while not dumbed down) • A Very Short Introduction to Social Constructions • A Very Short Introduction to Criminology

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 questions to think about and world through cultural glasses. By changing the glasses can change the way you interpret the world.

Activities

Cambridge University MyHEPlus Sociology Section - the topics provide guided activities, questions to think about and suggestions for further reading. Activities include 'Introduction to Feminism', 'Political Sociology' and 'Sociological Approaches to Racism in the USA'.

Also see Liberal Arts and Politics sections.

VETERINARY MEDICINE

MOOCS

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?

Books

Veterinary Related Very Short Introduction to 100-page eBooks that provide quality introductions, including: Veterinary Science Global Veterinary Medicine

Lectures

Vet Technician Education's Skeletal Anatomy: Dogs, Cats, Horses, Cows - an Sociology Related Very Short Introductions to 100-page eBooks that provide introduction to the veterinary anatomy of the skeletal system in dogs, cats, horses,

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

Activities

Cambridge University's MyHEPlus Veterinary Medicine Section - the topics provide guided activities, suggestions for further reading. Activities include 'Breathing Disorders in Short-Nosed Dogs', 'Canine and Feline Diabetes' and 'Pharmaceutical Chemistry'.





SURBITON

HIGH SCHOOL

INSPIRE | ENCOURAGE | EMPOWER