Liberal Studies

2024-25

JAGS

DC

Liberal Studies in the Sixth Form with JAGS

In addition to your A Levels, you have the opportunity to take two Liberal Studies courses created and taught by teachers from both JAGS and the College, and which take place on both sites. These courses are designed to broaden your horizons, to pique your curiosity, to allow you to explore areas of knowledge which either complement your examined courses or cover topics in unrelated areas which may interest, intrigue or fascinate you. The courses will be rigorous but, for the most part, unexamined. This should give you and your group the freedom to develop areas of interest alongside your course teacher.

You may assume the following, unless specifically told otherwise in the *Course description* in this booklet:

- Courses in categories A – C are **academic** in nature, and their style is similar to what undergraduates experience at university. That is, the courses are *seminar-based*, with plenty of opportunity for discussion.
- Courses in categories D – F are more **practical** and **hands-on**.
- The *Maximum* for most courses is **14** students. If the *Maximum* is lower, that will clearly be stated in the *Course description*.
- Most courses are repeated: they are offered in both the Michaelmas and Lent terms. Other courses are offered in **one** term only; others still require a commitment through **both** terms.

Courses will run on **Monday afternoons**, so if, at this stage, you know that you will have a regular commitment on that lunchtime or after school next academic year, please ensure you do not select courses which run at JAGS. (*It takes 20 minutes to walk there!)*

Please read the descriptions in this booklet carefully, and consider which courses you would like to study. **You will have been told how to make your choices in the assembly on Thursday June 13th. Choices will need to be made online between at the very beginning of next term by going to a link which will be emailed to you.** You have five choices, which are ranked. But choose wisely, as it may be that we are unable to give you your first choice. Make sure that you are happy to do *any* of your choices.

Some students at DC will be asked to take certain courses, e.g. Liberal Studies for Medics. Please check the booklet carefully for more information.

You can click on the course title on the contents page to take you directly to that course's description.

On the next page there is a code of conduct, which you should read.

Liberal Studies Code of Conduct

- Be helpful, tolerant and respectful towards all teachers and students in the JAGS and College community

- Avoid behaviour or comments which could lead to distress, including comments regarding appearance

- Particularly in groups where there is an imbalance in the number of people from each of the schools, ensure that all feel welcome and included

- Speak up whenever you witness instances of misconduct or when you believe someone has been made to feel uncomfortable

- Appreciate and respect the opportunity we have been given to participate in collaborative activities

- Show consistency and common sense when following this code of conduct

Film, Art and Culture

1. Spanish and Latin America Film Studies: an appreciation of popular culture and cinema
2. The Philosophy of Literature
3. Art House Film Club
4. The Films of Alfred Hitchcock
5. Zine Activism: No-Filter
6. Best Bible Bits!

Politics, Philosophy and the Humanities

7. The American Civil War 1861-5
8. Enjoying the Archives
9. Maritime Matriarchs: female entrepreneurs of 18th-century dockland London
10. India: Nationalism and the search for identity, c. 1830-2024
11. Equality, Fairness and Freedom
12. Postmodernism
13. Insights into Italy
14. Visualizing History: Japan 1853 – 1920s
15. Practical Archaeology
16. A History of Mental Health
17. What exactly is a 'Religious Fundamentalist'?

Science and Technology

18. Everyday Pharmacology
19. Computer Programming for beginners
20. Liberal Studies for Medics
21. Biology in Context – Parasitology in the 21st century
22. Structure and synthesis of organic compounds
23. Beyond Further Mathematics
24. Curating Science

Exploring Creativity

25. How to find your inner writer
26. Introduction to Analogue Photography
27. Pots: a classical and contemporary approach to ceramics
28. Master the Art of Portraiture
29. On Films and Filmmaking
30. Cross stitching
31. Fine Art Printmaking

Mentoring and community

32. Teaching Maths and Science at City Heights
33. Academic mentoring (Primary and Junior Schools)
34. Impact 500 (i500) – Social & Environmental Action
35. MentGames
36. Making Maths Fun
37. Silver Surfers (Volunteering with Linkage Southwark)

Practical Skills

38. Food provenance and environmental sustainability
39. Stock Market Investment
40. Beginners' Chinese leading to HSK Level 1 Qualification
41. Salsa Dancing for Beginners
42. Sewing

FILM, ART AND CULTURE

1. Spanish and Latin America Film Studies: an appreciation of popular culture and cinema

Course description

This course will include a brief history of Spain, and an introduction to film studies. Each session we will discuss and analyse films in terms of their historical context and their themes. There will be active discussion about the role film and popular culture has had in moulding modern Spanish and Latin American society.

Academic area

This course is open to all, and would particularly beneficial to those studying languages, English and History at A level. Although this course is of particular interest to those students studying Spanish, it is definitely not a requirement. We will be looking specifically at Spanish and Latin American cinema and the important cultural role it has played. Students will also be encouraged to analyse film clips both cinematographically and in relation to their cultural background. There is also an element of student presentation.

Style

This is a seminar-based course, delivered by the teacher but with plenty of opportunity for class discussion and pupil presentation.

Location	*Maximum*
DC	14

2. The Philosophy of Literature

Course description

We will explore fundamental questions of literature: what is the link between literary art and morality? Is the meaning of a work fixed or does it change depending on the social and historical context? Can we feel genuine emotional responses to characters and events that we know are not real? We will also interrogate issues regarding authorial intent and literary value: what is the relationship between writer and reader, and can literature offer any distinctive knowledge or insight? To explore these questions, students will examine works from Aristotle, Plato, Sartre, Woolf and Percy Shelley to name a few.

Academic area

This course will be useful for anyone with a keen interest in literature, students of English and/or Philosophy, or anyone curious about philosophical enquiry.

Style

This is a seminar-based course, delivered by the teacher but with plenty of opportunity for class discussion and pupil presentation.

Location	*Maximum*
DC	14

3. Art House Film Club

Course description

Love film, enjoy discussion, want to know more about the independent, or low budget, then this is the club for you! Break free from the algorithms and content crafted target markets and prepare for a journey of discovery!

The course will introduce you to many films and genres to intrigue, beguile and entertain. We will watch directors from Alfred Hitchcock, Korean Bong Joon-ho, Wes Anderson to Sophia Coppola and look to discuss techniques, messages and production values. No previous knowledge needed just a love for the unexpected. Don't forget to bring the popcorn.

Academic area

This will suit anyone interested in watching films, popular culture and cinematic technique.

Style

Initial PowerPoint to introduce Art House Film. Student poll to select top three films from curated list. Watching and then discussion of films watched.

Location	*Maximum*
JAGS	14

4. The films of Alfred Hitchcock

Course description

British-American film director Alfred Hitchcock (1899 - 1980) is still considered the master of suspense with a canon of over 50 stylish, and ground-breaking feature films starting in England and culminating in big budget Hollywood features in the second half of his life.

Films like Psycho, The Birds, Rear Window or Vertigo have become synonymous for masterclasses in excitement and clever audience manipulation. We will watch some of Hitchcock's most famous films and look behind the scenes at recurring themes, techniques and production and on-set anecdotes.

Don't forget the popcorn!

Academic area

Anyone interested in popular culture, history of cinema and cinematic techniques.

Style

Initial Powerpoint to introduce Hitchcock and then discussion based on watching 2 of his films.

Location	*Maximum*
JAGS	14

5. Zine activism: no-filter

Course description

Zines can be difficult to define. The word "zine" is a shortened form of the term fanzine. Fanzines emerged as early as the 1930s among fans of science fiction. Zines also have roots in the informal, underground publications that focused on social and political activism in the '60s. By the '70s, zines were popular on the punk rock circuit. In the '90s, the feminist punk scene propelled the medium and included such artists as Kathleen Hanna, who produced Riot Grrrl.

A zine is most commonly a small circulation publication of original or appropriated texts and images. More broadly, the term encompasses any self-published unique work of minority interest, usually reproduced via photocopier. This course will explore the history of the zines, they're social and political importance and allow students to create their own zine around a subject of their interests. Exploring DIY and punk means of productions and image curation.

Academic area

This will suit anyone with an interest in the Creative Arts, politics and activism.

Style

Taught though demonstration, discussion and research.

Location	*Maximum*
JAGS	10

6. Best Bible bits!

Course description

Dipping into the world's most read book: be prepared for some surprises! Who wrote what- and when? Divinely revealed – or divinely inspired? History or legend? The timeline: what happened when. Did you hear the one about the hero who lost his sword in the flesh of his obese enemy before scarpering out of the window? Or the one about what happened when a king popped into a cave he was passing to relieve himself? And perhaps it might not be the best idea to taunt a prophet by shouting "Baldy!" at him? Three quarters of the Bible is what Christians have called 'the Old Testament', so this will be reflected in this session, although of course we won't forget the New Testament. Contextual answers to all those Bible references in art, literature and history are to be found within this course.

Academic area

General knowledge for anyone who is interested, but especially for students of literature, the arts, history… and of course theology!

Style

Bibles at the ready, Powerpoints, TV and chat.

Location	*Maximum*	*Length and availability*
JAGS	14	Michaelmas (term 1) only

POLITICS, PHILOSOPHY AND THE HUMANITIES

7. The American Civil War 1861-5

Course description

The course will focus on The American Civil War 1861-5. It will begin with a brief overview of the causes but the focus will be on the key aspects of the war. We will look at the strengths and weaknesses of the two sides at the start of the war, the strategies followed by the two sides, the nature of the fighting and generalship, key campaigns and battles, political developments (including the issue of foreign intervention), reasons why the North was victorious and the overall impact of the war. There will be video extracts to accompany the course (for example from Burns' iconic documentary of the American Civil War).

Academic area

The course is appropriate for anyone interested in History/Social Sciences.

Location	*Maximum*
DC	12

8. Enjoying the Archives

Course description

This is definitely intended not to be a dusty and dry course – it aims to provide an opportunity for students to examine and learn about a wide ranging selection of books and documents up to 800 years old, many of which are rare and of significance and housed in the College Archives; topics covered will include our Shakespeare era world famous theatre material, early medicine and science, exploration, history, languages, economics, as well as items of great artistry and human interest. These have been assembled since the College started and the process continues today. A London trip explores behind the scenes of Christies auction house and the Society of Antiquaries to give further background to the rare book world.

Style

It is a seminar-based course based on a 'show-and-tell' technique furthering your experience in guided handling and exploring the material, encouraging discussion.

Academic area

The course is suitable for all of an enquiring mind, no previous experience necessary, and because of the wide range of material surveyed provides background for a broad range of subjects studied at university; as well as those intending to work directly with books/documents , or just for interest; many students have found it impacted across the spectrum of their future studies/careers in humanities, sciences, economics, DT, Art, medicine et al.

Location	*Maximum*
DC, with a London trip included in the course (if possible).	14

9. Maritime Matriarchs: female entrepreneurs of 18th-century dockland London

Course description

Eighteenth-century London was at the centre of British and European trade and provided the necessary finance networks to help develop Britain's burgeoning global economy. The Royal navy, merchant navy, and their mariners, have been rightly recognised as key to this process. However, maritime women have gained less historical attention.

In this course we will seek to show that women were key in the development of, and engagement with, Britain's maritime economy. We will investigate the economic lives of the women living in London's maritime parishes and gain a unique insight into their financial transactions, engagement with material culture, and the legal and social powers afforded to them both while men were away at sea and upon their return to land.

We will utilise real archival material and associated printed sources to trace where these women lived, the diversity and extent of their economic activities and the fabric of their lives. The geographical focus of this survey will be the seven key maritime parishes North and South of the Thames: Wapping, Shadwell, Ratcliff, Limehouse, Bermondsey, Rotherhithe and Deptford, abutting the bustling thoroughfare of the Port of London. There will be opportunities to visit these locations as we track the activities and networks of these women across their work-life cycle.

Academic area

The course is appropriate for anyone interested in History, Politics or the Social Sciences more broadly.

Location	*Maximum*
DC	12

10. India: Nationalism and the search for identity c. 1830-2024

Course description

This course aims to examine perceptions of Indian identity and nationhood over the past 200 years. In the era of the British empire – during both the East India Company's tenure in India and that of the 'Raj' that followed it – complex and frequently contradictory identity descriptions were evolved by the British in their search to understand and categorise Indian people; Indians' responses to these descriptions, and their own perceptions of their identities, were no less varied or complex. We will explore the ways in which ensuing Indian nationalist movements were heavily imbued with a need to define Indian identity, both separately and in relation to these pre-existing narratives. By looking at key moments in Indian history, such as the 1857 Rebellion ('Mutiny'), the formation of Congress and the All-India Muslim League, Indian responses to WW1 and critical events in 1919 as well as independence and Partition in 1947, we will also investigate the extent to which Indian nationalism constituted a direct response to British imperialism. Finally, we will explore India's current political landscape following many years of Modi's Hindu nationalist regime, seeking to understand it – and challenges to it – within a contemporary and historical context.

Academic area

This course is helpful for anyone interested in studying the Humanities at university - especially the disciplines of History and degree courses that include Asian Studies.

Location	*Maximum*
DC	14

11. Equality, Fairness and Freedom

Course description

Most political thinkers accept that there is a trade-off between freedom, on the one hand, and equality, on the other. John Rawls, an American philosopher whose views and arguments are best collected in *A Theory of Justice* and *Justice as Fairness*, disagrees. He argues, on the basis of moral reasoning, that it is possible to produce a society that is just *because* it is both free and equal. In the course, we will first look at Rawls' theory, that is, the principles that underlie freedom and equality: what are the basic liberties? What makes them basic? How can equality of opportunity be realized? What is the difference principle – and the veil of ignorance? We will also investigate criticisms of Rawls – from communitarians, libertarians and Marxists.

We will then consider some practical, Rawlsian proposals, including the following:

- reforms to the voting system, to the funding of political parties and media organizations;
- changes to the education system;
- anti-discrimination and affirmative action legislation;
- predistribution;
- universal basic income and minimum inheritance;
- wealth taxes;
- workplace democracy.

Academic area

This will be of interest to anyone interested in Economcis, Philosophy, Politics, PPE; it may appeal to those with a concern for justice in society.

Style

This is a seminar-based course.

Location	*Maximum*	*Availability*
DC	14	Michaelmas (term 1) only

12. Postmodernism

Course description

This course will investigate the way (some think) Pop Culture – whatever that is – has hijacked the interest of even supposedly serious people. What is highbrow? What is lowbrow? What (if anything) does postmodernism mean? We will investigate postmodernism as an aesthetic, as a style of critical discourse, and as a characteristic of an era. We will also explore some more recent critical alternatives, such as metamodernism. The course will take us on an unpredictable journey through conceptual art, strange-looking buildings, critical theory that wants to be gossip and – no doubt – some fairly odd-sounding music.

Academic area

This course will be of interest to anyone studying (in no particular order) Architecture, Art, Art History, Classics, Cultural Studies, Literary Studies, Philosophy, Politics, Social Sciences.

Style
This is a seminar-based course.

Location	*Maximum*	*Length and availability*
DC	14	Lent (term 2) only

13. Insights Into Italy

Course description
We will explore some of the crucial moments in Italy's history. They are:

1. Unification – Cavour or Garibaldi?
2. Mafia and myths
3. The rise and fall of Mussolini
4. The Economic boom years and societal change
5. Migration
6. Religion and family
7. Political Extremism and Red Brigades
8. The State and Corruption
9. Berlusconi, Soccer and television
10. The new century and the challenges that remain

Academic area
This course is suitable for anyone studying Italian (or planning to study Italian) who wants to know more about the social and cultural context in which Italian is spoken. The course will also appeal to historians and those more generally interested in European popular culture.

Style
This is a seminar-based course.

Location	*Maximum*
DC	14

14. Visualizing History: Japan 1853-1920s

Course description
This course aims to examine how visuals – photographs and paintings – can be used to study History. Visuals are often used as illustrations - as ornaments - to what is being studied, but they should be used as historical sources in themselves as they often add a new perspective to what contemporary texts suggest. In particular, contemporary visuals help us understand the perspectives of the people living through these times. Visuals are also incredibly illuminating in showing levels of change over time, and similarities and differences across cultures. We will use these images to study one of the key turning-points of Japan – the arrival of the American "Black Ships" and the forced opening up of Japan to Western imperialism. We will look at both Japanese and American visuals to see if the traditional narrative of hostility holds up to scrutiny.

Academic area
This course is helpful for anyone interested in studying the Humanities or Arts at university- especially the disciplines of History and History of Art.

Style
This is a seminar-based course.

Location	*Maximum*
DC	14

15. Practical archaeology

Course description
This course aspires to be as indispensable to an archaeology student as a trowel and a pint of beer… and is designed to provide anyone with a strong inquisitiveness about the world around them, with a practical means of understanding how to seek answers to some of the fundamental questions about the history of humankind. This course takes an interdisciplinary approach, beginning with an overview of the emergence of archaeology as a discipline from wall-paintings and the poignant residues of everyday life. Opening with a history of human curiosity about the past, the discipline of archaeology will be examined through the age of antiquarian inquiry and conclude with a focus upon the importance and relevance of archaeological remains. Students will familiarise themselves with the practical components of identifying archaeological sites, digging, (one session will be in the field with trowels!) and dating methods and archiving. On average, the course alternates each week between taught versus practical lessons, including an archaeological tour of Dulwich Village, artefact identification, field techniques (digging and recording), and artefact cataloguing. The course concludes with a trip to either The British Museum or The Victoria and Albert Museum. The discipline of archaeology is perpetually in a state of change, and this course hopes to capture and to represent where it is now.

Academic area
The course is appropriate for anyone interested in Archaeology, History, Ancient History or Classics (either as an amateur or as a potential undergraduate). The course should also be of interest to anyone interested in studying any of the Social Sciences (e.g. Anthropology or Sociology).

Style
This is a seminar-based course with practical components, delivered by the teacher with plenty of opportunity for discussion.

Location	*Maximum*
DC	10

16. A History of Mental Health

Course description
This course will aim to explore the perception, diagnosis and treatment of mental illness from the ancient world to the modern era. Students will examine the impact of religion, science and government on ideas around mental illness. Students will look at literature, art, film, media reporting

and patients' notes to build a picture of the changes (and continuities) in the perception of, and treatment of, mental health. Topics will include:

'Possessed by demons' – Classical and Medieval ideas on the mentally ill.
Foucault's History of Madness
"Mind Forged Manacles."
Eugenics
The Bethlem Hospital ('Bedlam')
The Rise and Fall of the Asylum
Restraint versus 'moral management'
General Paralysis of the Insane – Syphilis and madness
'Mad Axemen' – the persistence of the idea the mentally ill are a threat
The impact of Freudian and Jungian ideas

Academic area

Historians will like this, as will any medics interested in the history of this troubled part of their discipline.

Style

To encourage collaborative working through discussion and group work; to explore a sometimes neglected area of the human condition; to improve students' presentation skills; to examine a broad chronological sweep of history; to examine a range of philosophical and scientific ideas and their application to mental health.

Location	*Maximum*
JAGS	12

17. What exactly is a 'religious fundamentalist'?

Course description

Is a religious extremist or a religious radical the same thing as a religious fundamentalist? This course will explore the nature and generic features of religious fundamentalism from its reactionary roots within Christian Protestantism to its rise and development in the West from 19th-21st centuries and also the media application (misapplication?) of the term to religions other than Christianity, (especially Islam). The course will span continents and explore how events in world history, from the Reformation to the 20th century 'Swinging Sixties', Islamic Revolution and the publication of Rushdie's 'The Satanic Verses' have contributed to the rise of religious fundamentalism. Case studies might include the Amish, the Exclusive Brethren, 'Bible Belt' Southern Baptists, Hassidic Jews, Jewish settlers on the West Bank, the Taliban, the Muslim Brotherhood, Khomeini's Iran.

Academic area

This course would suit anyone who is interested in religio-political history!

Style
Powerpoints, documentaries and chat .

Location	*Maximum*	*Length and availability*
JAGS	14	Lent (term 2) only

SCIENCE AND TECHNOLOGY

18. Everyday Pharmacology

Course description
In a world that increasingly relies on medications to cure disease, but which also blames drugs for society's problems, what can be learnt about the effects substances have on human physiology and perception? This course will focus on media representations, the mechanisms of drug action and pharmaceutical innovations past, present and future. During the course we will look at drug trials and consider what happens when they don't go to plan, the use and abuse of illicit drugs, addiction, legalisation versus taxation of substances, as well as testing whether the top-priced branded face wash is any more effective than bog-standard hand soap. We will look at the story of Viagra, developed as a treatment for a very different condition to the one it is used for now. We will ask why EPO made Lance Armstrong SO good, and what impact the legalisation of marijuana in some US states has had so far. And, would allowing the use of all drugs in sport create the level playing field the World Anti-Doping Agency just can't achieve?

There are a number of practical sessions, a mock drug trial, testing the effects of caffeine, ethanol and aspirin on the heart rate of invertebrates' heart rate and looking at the antimicrobial properties of plants that can be found in the kitchen cupboard and testing which Orange juice has the most Vitamin C.

Academic area
The course is appropriate for anyone interested in Biology, Psychology, and Chemistry. The course should also be of interest to anyone interested in studying any of the Social Sciences.

Location	*Maximum*
DC	14

19. Computer Programming for Beginners

Course description
This course will endeavour to teach the basics of computer programming starting with most simple concepts such as sequence, selection and iteration before moving onto consider data structures, more advanced algorithms and object-oriented programming.

We will learn through the highly popular Python programming language. However, the concepts acquired can be applied to any language, past, present and those to come. Once the basics of the language have been understood, we will move to apply these skills to develop our own versions of classic games such as Pong, Space Invaders and even PacMan using object-oriented techniques.

Academic area

The course is appropriate for anyone interested in learning to program. It would be of particular use for those considering subjects such as Engineering, Natural Science or Mathematics. It should be noted the course is primarily aimed at those with no or limited prior programming experience, however a general interest in problem-solving and puzzles would help.

Style

This is a highly practical-based programming course delivered in a modular fashion allowing different speeds of progression or specialisation in particular areas.

Location	*Maximum*
DC	12

20. Liberal Studies for Medics

Course description

This course is for DC students who are applying for Medicine in the Michaelmas term. We use the pre-half term sessions to finalise applications, then we will look at various aspects of the selection process including both standard and MMI interviews. We will discuss medical ethics, the structure of the NHS and topical issues from the world of medicine. There will also be a number of outside speakers talking on a range of issues relevant to the medical professions, and there may be the opportunity for practical sessions.

Academic area

The course is compulsory for all (DC) Year 13 students who are applying for Medicine or Dentistry.

Location	*Maximum*	*Availability*
DC	14	Michaelmas (term 1) only

21. Biology in context - Parasitology in the 21st Century

Course description

Parasites are organisms that live on or inside other organisms. Whilst they are enumerate and an essential part of ecosystems, some present a major hazard to human and animal health and have left their mark on human history. In this course, we will explore some of the basic principles of parasitism and discuss how parasites are adapted to live in challenging environments such as the gut, blood and other tissues; how parasites manipulate animals to ensure transmission and evade their immune defences to ensure their survival. We will study the major groups of pathogenic animal parasites including protozoa (such as malaria, leishmaniasis and African trypanosomiasis), helminths (tapeworms, schistosomiasis and river blindness) and ectoparasites (bot flies, ticks, fleas and lice). We will also look at parasites from a cultural perspective, their impact on global health of humans and other animals, and discuss some of the major advancements and challenges in the treatment and control of these medically important organisms. This course will include lectures from invited speakers and there may be a practical element, including dissections.

Academic area

The course will particularly appeal to anybody considering applying to study Biology, Infectious Disease, Immunology or Molecular Biology as part of their university course, but also to any non-

specialists who want to know more about the academic research pathway, including lab based and field work. The course will be science-based so a knowledge of and interest in Biology (and to a lesser extent Chemistry) will be useful.

Location	*Maximum*	*Availability*
DC	12	Lent (term 2) only

22. Structure and Synthesis of Organic Compounds

Course description

- Stereochemistry
- Mass Spectroscopy / chromatography
- Infrared Spectroscopy
- Design and Synthesis of organic molecules using computer simulations
- Practical Work - 2 step retrosynthesis and purification of an organic compound

Academic area

This programme is suited to candidates who are interested in reading chemistry, biochemistry or medicine at university. A successful student will develop an added degree of confidence and understanding of some aspects of chemistry which they can demonstrate in an interview or examination situation.

The programme deals with fundamental principles that underpin organic synthetic pathways. It explores how organic compounds are synthesised, purified and characterised in the laboratory using modern instrumental techniques.

Location	*Maximum*
DC	14

23. Beyond Further Mathematics

Course description

The aim of the course is to introduce topics and ideas not covered at Further Mathematics but will likely be seen at undergraduate level in a Mathematics or Physics degree course.

These include:

- the Gamma and Beta functions;
- differentiation under the integral sign;
- the product function;
- theory of determinants;
- eigenvectors and eigenvalues and the Cayley-Hamilton theorem;
- Girard-Newton equations;
- the Basel problem and Bose Integral;
- Eta and Zeta functions;
- integral equations;
- summation of trigonometrical series and convergence of series.

Academic area

This course is aimed at students wishing to study Mathematics or Physics or a similar combined degree at university and **are currently studying A level Further Mathematics**. You will need to have a strong grasp of and interest in:

- Calculus: methods of integration (substitution, by parts etc.); differentiation of complicated functions;
- Algebraic manipulation including standard algebra, trigonometrical, exponential, logarithmic functions;
- Matrix algebra;
- Trigonometrical identities and their applications;
- Learning Mathematics at a higher level.

Please note: *this course is not a preparation for Oxbridge entrance papers or Olympiad Mathematics.*

Style

The ability to persevere with complex ideas and problems will be needed. Classes will require note taking of theory and then you tackling problems related to the topic in hand. You will appreciate harder Mathematics and stimulating ideas which will help with your undergraduate course.

Location	*Maximum*
DC	12

24. Curating Science

Course description

This course will delve into the background of what some consider the greatest scientific breakthroughs of all time, locating them in the wider scientific and social contexts of their day rather than merely standalone 'moments of genius', with a view to designing an exhibition to showcase the history of these ideas. Through this lens, we will look at how museums use objects to illustrate their desired narrative, at times using them as generic examples of items used at the time, such as the COVID testing kit currently on display in the Medicine Gallery at the Science Museum, while at others making the object's own history the reason it is on display, like the stuffed walrus in the Horniman Museum.

As part of this course there will be several trips to both the Horniman and Science Museum to look at different ways galleries have used exhibits to tell these scientific stories, as well as touching on the wider role of museums in society and how their collecting habits have changed over time.

Academic area

This course is suitable for anyone studying Science, History or with an interest in Museum Studies or Social Sciences.

Location	*Maximum*
DC but with trips to the Science Museum and Horniman Museum	14

EXPLORING CREATIVITY

25. How to find your inner writer

Course description

Whether you write occasionally for pleasure, have a secret novel on the go, or simply want to find out what kind of a writer lies undiscovered within you, this course will give you the space to write, share your ideas, and receive feedback from a supportive group of peers, led by a teacher who writes for pleasure and has worked as a journalist.

The greater part of each session will be set aside for writing and sharing. Our inspiration will come from reading very short excerpts of prose fiction and poetry, and we will also draw on our own lives, and on what is going on in the wider world.

By the end of the course you should feel far more confidence in yourself as a writer, and you will have discovered the excitement of sharing your work and receiving feedback from other writers. You will have learned about the many competitions out there, some of them with significant prizes to be won, and you will have been encouraged to enter work for these.

Academic area

The course is appropriate for anyone seeking further opportunities to write creatively. There is no need to be studying any particular combination of A levels to benefit from and enjoy the course.

Style

The sessions have a supportive, collaborative and relaxed atmosphere. You will be encouraged to share your writing, but there will be no pressure to do so.

Location	*Maximum*
DC	6

26. Introduction to Analogue Photography

Course description

Via an exploration of history's most prominent photographers, students will learn how to read photographs while acquiring the technical skills necessary to expose, develop and print analogue photographs. The highlights of the course include visits to London's best contemporary photographic exhibitions and to Photofusion, a professional darkroom, minutes from Dulwich.

Style

A mixture of teacher presentation, seminar, excursion and practical.

Academic area

The course is appropriate for anyone interested in the visual grammar, history, self-expression and craft of traditional photography. It will support those keen on digital photography, but a warning - once you have made your first handmade analogue print, you may be converted!

Location	*Maximum*
DC	6

27. Pots: classical and contemporary approach to ceramics

Course description

Grayson Perry won the Turner Prize in 2003 with classic Grecian-like urns bearing friezes of car-wrecks, cell-phones, supermodels, as well as more dark and literary scenes often incorporating autobiographical references. This course gives you the chance to produce your own classical urn with richly decorated surfaces. You will be guided through coil-building, slab rolling and 'scrafitto' incising with the end product being glazed. In this point-and-click generation, working with clay can become a valued antidote to the onslaught of technology and the ability to use our hands directly becomes ever more important. Clay remains vital in providing that tactile experience that other subjects fundamentally lack.

Academic area

Creative Arts

Style

This is a practical course.

Location	*Maximum*
DC	12

28. Master the Art of Portraiture

Course description

This course equips you to capture realistic features, expressions, and textures. Learn colour theory for skin tones, hair, and clothing. Explore diverse techniques, brushwork, and light manipulation. Create a final masterpiece showcasing your newfound skills and confidence. Perfect for beginners and experienced artists.

Academic area

Creative Arts

Style

This is a practical course.

Location	*Maximum*
DC	12

29. On Films and Filmmaking

Course description

Through a mixture of practical filmmaking, film theory and film analysis, this course offers a creative overview of film foundation and its basics. This course considers many specific aspects of film as an expressive medium, asking and discussing what differentiates film from other art forms, questioning (among other things) whether we really know how to watch films. Students will be introduced to techniques of film language and expression of certain ideas through filmmaking.

Academic area

This course is suited for anyone interested in filmmaking, film studies or is considering studying and/or working in film.

Style

This course is a mixture of the theoretical and the practical. Students will have an opportunity to learn about some of main storytelling tools and how to use them creatively; they will also dive into the work of some impressive directors from the history of cinema and much more.

N.B. *There will be a specific, additional code to follow for this course.*

Location	*Maximum*
DC	10

30. Cross stitching

Course description

Unlock the timeless art of cross stitching in this introductory course. Delve into mastering fundamental techniques, from threading needles to creating flawless stitches. With expert guidance, craft a simple yet charming cross stitch design, and unleash your creativity as you learn to design your own patterns. Whether you're a novice or seeking to refine your skills, this course offers a perfect blend of tradition and innovation to ignite your passion for needlework. Join us and bring your imagination to life, one stitch at a time.

Academic area

Creative Arts

Location	*Maximum*
DC	12

31. Fine Art Printmaking

Course description

This is an opportunity to create an original fine art print using our Albion Press and etching presses. Students will first discover the process of creating a linocut print, exploring composition, colour mixing and mark making. You will be given images to work from initially in order to understand the processes, but as the course develops you are encouraged to use/bring your own as a basis for creating a series of unique prints. There may also be an opportunity for you to work collaboratively from a single inspirational starting point, such as a poem. You will leave the course with a finished series of prints.

Academic area

This will suit anyone with an interest in the Creative Arts.

Style

Taught though demonstration, discussion, research and use of tools and presses.

Location	*Maximum*
JAGS	10

MENTORING AND COMMUNITY

32. Teaching Maths and Science at City Heights

Course description

This course is designed for pupils with an interest in STEM; a fantastic opportunity to mentor and teach pupils at a local school. Those working in Maths will be providing enrichment and extension tasks for KS3 pupils whilst those working in Science will be teaching and supporting GCSE pupils in the run up to their exams. Teaching Maths and Science at City Heights is chance to assist younger pupils on their journey to academic success in STEM.

Academic area

If you are not studying Maths, Chemistry, Physics or Biology at A-level, you will need at least an 8 at GCSE. Whether a current STEM advocate or an enthusiast in the past, it is excellent experience showcasing the ability to teach Science/Maths to other pupils and improve upon your scientific communication skills.

Style

Once the teaching begins in the second week, the lessons will be led entirely by you, and the teacher is there to support if needed. The teacher will help to develop ideas and provide the resources needed.

Location	*Maximum*	*Length*
City Heights Academy	20	One term. But the course is delivered in both terms, and you may sign up to both terms if you choose.

33. Academic mentoring (Primary School)

Course description

This course is for anyone who would like to extend their experience and develop their skills of engaging with young people in a learning environment. This course is ideal for anyone who is considering teaching as a possible career, but also for anyone who would like to pass on their love of academics to other, younger pupils. It is an opportunity to work at another local school, build relationships, and provide an alternative teaching environment for these pupils. The rewards are immense as you build relationships with the children and see them blossom and grow in their engagement with their studies. While details are evolving, we aim to improve their understanding by providing enrichment and extension tasks, with each sixth former mentoring a small number of students. This course will help develop a variety of skills that will prove invaluable in whatever you choose to do beyond school.

Style

Once the mentoring begins, you will be in a classroom environment, or with pupils in a one-to-one environment, always with teacher support available.

Academic area

The course is appropriate for anyone interested in teaching others or furthering their interpersonal communication skills.

Location	*Maximum*	*Length*
TBC but walkable distance	8	This course runs through both Michaelmas and Lent terms. Pupils must commit to both terms as relationships with pupils are built over time.

34. Impact 500 (i500) – Social & Environmental Action

Course description

This interesting and practical programme allows for pupil ownership, agency and personal responsibility when it comes to a response to social and environmental need. i500 was created out of a desire amongst pupils to have a platform through which social and environmental needs and inequalities in society can be tackled with pupils in the driving seat of that change.

The course is devised for those who have an active interest in making a difference in an area of social or environmental need. Pupils can have either: a charity that they are interested in, a course that they care deeply about, or a simple desire to make a positive difference. Any cause that fits within the UN Sustainability Goals is perfect!

i500 is divided into two sections:

- Empathy through education (the research)
- Engagement through enterprise (the project)

Guided by experienced staff, you will do a deep-dive research project into your area of interest (e.g.: homelessness, global warming, food insecurity, modern day slavery) before planning and undertaking a project that will raise awareness of and promote involvement with your chosen charity / area of need. For more information, please email Revd. Buckler (bucklert@dulwich.org.uk) or Mr. Llewelyn (llewelynt@dulwich.org.uk).

Style

The course is a combination of seminar-based learning (including guest speakers) and practical skills. The first taught element will be based on the case study: The Uganda School Project – a charity set up in 2016 by two Old Alleynians. The founder and CEO of this charity will lead this session. Throughout the course, staff will be present to inspire, direct, teach and encourage.

Pupils can complete both elements of this programme in small groups, or as individuals.

Besides anything else, this will look great on your personal statement!

Academic area

The course is appropriate for anyone interested in learning more about areas of social injustice and environmental concern. It will be of particular interest (and value) to those who are thinking of going

onto study courses that are directly or indirectly related to international development, Economics, Geography, Law, human rights etc. Also anyone interested in working in or with the Third Sector – which includes charities, voluntary and community organisations social enterprises and cooperatives. Whilst a staff member is always in the classroom, this option is all about pupil ownership and agency.

Location	*Maximum*	*Length*
DC	10	This course runs through both terms.

35. MentGames

Course description

Are you a keen sportsperson? Interested in acquiring mentoring skills? MentGames is a new programme launched for the Upper School to coach Games to pupils in the Middle and Junior School. This is a fantastic opportunity to showcase your abilities in the following sports:

- Term 1: Year 10 Rugby, Year 4 Football
- Term 2: Year 10 Football, Year 10 Hockey, Year 4 Rugby

After completing a term, all pupils will be awarded a *Dulwich College MentGames Certificate*; mentoring is a desirable skill in the world of work and often makes for a glowing reference.

Academic area

You will need to be familiar with the various sports offered in Terms 1 and 2. Whether you are a keen sportsperson or mildly interested in mentoring, this is excellent experience showcasing the ability to teach Games to other pupils whilst developing valuable mentor-mentee relationships.

Location	*Maximum*
DC	12

36. Making Maths Fun

Course description

Over the course of a term, you will work together to set up and organise exciting maths games and activities to stretch and challenge the more able children at a local primary school. The children you will work with will be in or year 5 or year 6.

The aim is to provide the children with an opportunity to really enjoy maths and to work together on problems and projects that they aren't able to try in the normal busy curriculum. It's a chance to go a bit off piece and really bring the subject to life.

You are able to be a part of a course that is both subject related and offers community action impact and you will have an induction session which will support you in planning fun sessions.

Academic area

This is a great opportunity for those of you who love maths and ……. love working with children!

Style

You will have the opportunity to be both 'teacher' and 'support' during the afternoon and although there is no homework associated with this course you will be expected to take some time outside the Monday afternoon slot to be responsible for and plan and lead one or two of the 'learning sessions'.

Location	*Maximum*
JAGS/Judith Kerr Primary School (Half Moon Lane)	8

37. Silver Surfers (Volunteering with Linkage Southwark)

Course description

Older people often need support in the use of technology, whether it be phones, computers or tablet devices etc. They also value the opportunity to socialise and engage with young people.

Academic area

You will have the ability to demonstrate leadership, coaching, empathy, resilience and commitment to a rewarding volunteering opportunity whilst engaging with the local community. The course will be of particular interest to students wishing to share their technological knowledge and those considering a career pathway in a caring role, where an understanding of the needs of different community sectors would be advantageous.

Style

Working with Link Age Southwark, to gain experience in working with and supporting older people in the local community.

Location	*Maximum*
JAGS	6

PRACTICAL SKILLS

38. Food Provenance and Environmental Sustainability

Course description

This is a practical course which aims to be as hands-on as possible. We will learn about food provenance and grow our own fruit and vegetables to gain an understanding of seasonality. In support of this we will look at developing a healthy local ecosystem, planting for insects and biodiversity.

Woven into the practical element will be discussions on environmental sustainability. Thinking about one's own environmental impact and how action at the local level can bring about positive change for the wider world.

Academic area

Open to anyone interested.

Style

The sessions will be mostly practical along with discussion. You will be working in teams and will require a degree of independence and resilience!

Location	*Maximum*
DC senior boarding houses.	12

39. Stock Market Investment

Course description

The aim of this course is to show you how to invest money in the Stock Market. The focus will be on the ways in which we can use company reports to identify excellent companies. In addition, we will discuss the nuts and bolts of investing (choice of a stockbroker, how prices are determined etc.), portfolio management (how many companies to invest in, when to buy and sell etc.) and how to tell if shares are good value.

Academic area

The course is appropriate for anyone interested in making money on the stock Market. You will be expected to do quite a lot of work for yourself on 'your' company and to make simple calculations such as working out percentage changes. If you are not comfortable with this, then the course is not for you.

Style

This is a seminar-based course, delivered by the teacher with plenty of opportunity for discussion. We will work our way through a set of company accounts and you will learn how to do simple calculations to obtain financial information such as profit margins, indebtedness, free cash flow etc. You will then be given the accounts of another company (a different company for each student) and will carry out the same calculations. At the end of the course, you will be expected to give a short presentation about 'your' company, outlining your findings and saying whether or not in your opinion it was a good investment opportunity. We will then look at the historical share price chart to see if you were correct!

Location	*Maximum*
DC	12

40. Beginners' Chinese leading to HSK Level 1 Qualification

Course description

This is a two-term beginner's Chinese Mandarin course which takes students to Level 1 of the Chinese language qualification HSK (Hanyu Shuiping Kaoshi) in Listening and Reading. Candidates who pass HSK Level 1 can understand and use basic Chinese words and sentences for everyday use and have a sound foundation with which to continue Chinese further. HSK is an internationally recognised Chinese language qualification for non-native speakers of Chinese. The examinations are run world-wide by the Chinese Government and are set and assessed at differing levels of challenge to encourage progress: Level 1 for beginners, Level 6 to near-native fluency.

The course will cover:

- an introduction to spoken Chinese (the 4 tones plus the neutral tone)
- pronunciation and use of the phonetic guide (pinyin) which is used in the examination papers
- the origins of characters
- the basics of character writing (stroke order, component characters which re-appear in other characters)
- acquisition of vocabulary (150 words)
- listening and reading skills
- an introduction into Chinese culture

Academic area

The Beginners' Chinese course will suit those who are interested in languages, particularly character-based and tonal languages. It will also appeal to those who have eye to potential career opportunities presented by China's world presence and global reach if they choose to progress their Chinese language skills further.

Style

Students will practise skills in reading, writing, listening and speaking. They will be expected to prepare for lessons throughout the course, taking the initiative to study independently as well as under the guidance of the class teacher.

Location	*Maximum*	*Length*
DC	14	The course is delivered through both Michaelmas and Lent terms.

41. Salsa Dancing for Beginners

Course description

Salsa dancing is the most popular social partner style of dance globally. Its fun and interactive nature make it an enjoyable experience which you can regularly practice socially at numerous salsa events in London and abroad. This course will aim to give you the chance to master the basics of this sociable and energetic partner-dance style. We will look at understanding the fundamentals of salsa music and learn essential Salsa steps building your moves into more complex combinations. Please bring suitable footwear with a smooth sole to the course. Trainers are not suitable for salsa classes. Please note that this course is NOT suitable for those who have done Salsa dancing before – only for absolute beginners.

Style

Fun and interactive.

Academic area

Everybody welcome. Although not academic, Salsa dancing could be a great way to meet people and make new friends when you get to university.

Location	*Maximum*
JAGS	12

42. Sewing

Course description

Have you always wanted to sew your own clothes but not sure where to start? Have you watched The Great British Sewing Bee and felt inspired to have a go yourself? Through this introductory sewing course you will learn essential sewing machine skills and learn how to construct a simple garment of your choosing, such as a shirt, top, bag, skirt or pyjamas. We will explore upcycling old clothing or fabrics into new ones.

Academic area

This course is suitable for anyone, studying anything! No prior sewing skills required but welcomed.

Style

This is a practical course and will last for 1 term.

Location	*Maximum*
JAGS	10