

# LIBERAL STUDIES IN THE REMOVE

## WITH JAGS

Fill in top sheet,  
tear off and hand  
in to your form  
tutor

In addition to your A levels and A level Plus courses in the Remove, you will take two Liberal Studies courses during Year 12. These courses, each of which will last a period of 10 weeks (a 'semester') 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, being unexamined, will give you and your group the freedom to develop areas of interest alongside your course teacher. Courses will run in co-operation with JAGS, with girls and boys in each class; some of the courses will be based at JAGS and others at DC.

The courses will run on **Thursday 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 indicate it below, and ensure you do not select courses which run at JAGS.

Please read the course descriptions in this booklet carefully, and make **four** choices of courses which you are interested in studying. Make them in order of preference, but be aware that you may not receive your first choice; you need to ensure you would be happy to do any of your four choices.

The courses have been arranged into six categories, but you may select your choices from any category.

- *Category A: Community Enrichment*
- *Category B: Skills & Wellbeing*
- *Category C: Creative*
- *Category D: Culture*
- *Category E: The Humanities*
- *Category F: Science, Technology and Mathematics*

**Name:** ..... **Form:** .....

**Commitments on a Thursday lunchtime/afternoon?** *(Please specify)*

.....

Choice no.	Course no.	Title of course
Choice 1		
Choice 2		
Choice 3		
Choice 4		

**I. CITY HEIGHTS: TEACHING ASSISTANCE**

DC

This option gives the opportunity for year 12 students from DC and JAGS to help out in classrooms at City Heights E-ACT Academy in Tulse Hill. City Heights is a local secondary school with pupils in years 7 – 11 and you will be working in pairs as classroom assistants with pupils who would benefit from extra support. The exact lessons and age groups will depend on your interests and expertise, but previous projects have included:

- Using your Spanish skills to support a small group of pupils to develop their conversational skills
- Working with gifted and talented pupils in English lessons
- Helping develop the confidence of pupils in Maths

Pupils will meet the DC member of staff at City Heights to register at 2.25pm, and are free to make their own way home at the end of the afternoon.

**Course length: one semester**

## **2. TECHNICAL THEATRE**

DC

Technical work in the theatre requires clear communications, expert planning and a cool head. Throughout the course we would like students to practise their new-found practical skill by working on shows and events within the schools' theatres. We will visit one show during the course and examine it from a technical perspective, and the course will also have visiting professional speakers to talk to students. The course will be bespoke to the students' interests, backgrounds and ambitions, but areas to be covered are:

### **Lighting**

- The basics - lanterns, rigging, maintenance, focusing, design, operating the board, H&S
- The basic theory of lighting
- Making decisions about lighting plays
- Programming (ETC Board)
- Moving lights

### **Sound**

- Sourcing and editing for underscore, specific effects, mood and ambience, enhancing and reinforcing sound and using radio mics, live sound and the work of the foley artist.
- QLab (programme), cueing

### **Stage Management**

- Production manager skills
- Running a props table
- Communicating
- Creating a book, H&S

### **Set design and construction**

- From text to design
- Creating a model box, working to scale
- Budgeting, ordering, construction and supply chains

### **Production skills**

- How to put on a show at school, university and beyond
- Rehearsal scheduling
- Publicity and marketing, capital
- An insight into Arts administration

Both schools currently have several former pupils studying technical theatre and design - and they may follow careers in broadcast media, theatre, live events and film.

**Course length: one semester**

**3. FRENCH IN THE WORKPLACE**

DC

How much of your hard-earned French have you forgotten since you did (I)GCSE in year 10 or 11? Need to get it back up to scratch again to help your job prospects in the future? We know that your future competitors for the best jobs in Europe will have continued studying English and probably another European language up to baccalaureate level at their schools on the continent. This is your opportunity to replenish that skills gap with a 10-week course of French for the workplace. Learn how to rent accommodation, place orders, make presentations, use social media, make travel arrangements, make useful contacts, complain effectively and generally be able to use your old French skills in new and challenging environments. Use this course to increase your worth in the job market!

Open to students who have studied French up to GCSE or IGCSE (but not beyond) and who gained an A or A\*.

**Overview of topics:**

1. *Presenting yourself and addressing others, form-filling and obtaining important documents. Entering into conversations with others.*
2. *Simple telephone etiquette, leaving answerphone messages, email and text etiquette.*
3. *Booking transport and reserving hotels. Finding your way around.*
4. *Keeping your diary/schedule, making appointments, giving clear instructions.*
5. *Ordering food, shopping on line, finding somewhere to live.*
6. *Create a CV, job applications, communications about interviews, job offers and acceptances.*
7. *Describing your company/organisation. Explaining a production schedule. Understanding work restrictions.*
8. *Simple work conversations, minutes of meetings and action points.*
9. *Understanding banking forms, how to complain, explaining events, making declarations to the police.*
10. *Language for meetings, putting forward action plans, explaining progress/excuses for lack of progress.*
11. *Asking for quotes, confirming prices, giving the go-ahead for work required.*

**Course length: one semester**

N.b. this course will only run for the first of the two semesters

**4. BEGINNERS' CHINESE LEADING TO HSK LEVEL I QUALIFICATION** DC

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.

This is a **two-semester** beginners' Chinese Mandarin course which takes students to Level I of the Chinese language qualification HSK (*Hanyu Shuiping Kaoshi*) in Listening and Reading. Candidates who pass HSK Level I 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 I 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*

This course provides a stepping-stone to wider opportunities and to developing a language skill-set of the future. However, students 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.

**Course length: two semesters**

## **5. CONTINUERS' CHINESE LEADING TO HSK LEVEL 2 QUALIFICATION** DC

The Continuers' Chinese course is for students who have acquired GCSE Chinese and wish to progress their language further alongside their A level subjects. The course will suit those who are keen to build on their existing Chinese and develop more conversational vocabulary. For candidates who wish to apply at a later stage for a Chinese scholarship to study in China, success in HSK qualifications is part of the requirements.

This is a two-semester Chinese Mandarin course which takes students to Level 2 of the Chinese language qualification HSK (*Hanyu Shuiping Kaoshi*). Candidates who pass Level 2 can communicate on simple and routine tasks and hold a simple and direct exchange of information on familiar and routine matters. It also provides a stepping stone to higher levels of the HSK examination series.

### **The course will cover:**

- *revision of character writing techniques (stroke order, component characters which re-appear in other characters)*
- *pronunciation and role of stress and intonation*
- *review of Chinese radicals occurring in common characters*
- *acquisition of vocabulary (300 words)*
- *development of listening and reading skills*
- *Chinese cultural topics*

This course provides a stepping-stone to wider opportunities and to developing a language skill-set of the future. However, students 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.

**Course length: two semesters**

**6. SPANISH FOR THE WORKPLACE**

DC

How much of your hard-earned Spanish have you had the chance to use? Perhaps you're thinking about using it but are realising there are a million and one things that it would be rather handy to know? In 2017 and beyond, a second language is becoming more and more important, but talking about going *al parque para jugar al fútbol con tus amigos* isn't going to cut it in the boardroom, especially if it is a boardroom in Berlin filled with multilingual Europeans. This course is your opportunity to keep your Spanish topped up with the language that will help you put your best foot forward in the workplace.

**Learn how to:**

- *rent accommodation*
- *place accurate orders*
- *make memorable presentations*
- *use social media effectively*
- *make travel arrangements*
- *maintain useful contacts*
- *complain effectively*

This course is suitable for anyone with an A or A\* at IGCSE level and wants to use their Spanish in new and challenging environments.

**Course length: one semester**

**7. MINDFULNESS – A PRACTICAL INTRODUCTION**

DC

This is a ten-week introduction to mindfulness specifically designed for schools. The course is structured into a set of ten lessons, each teaching a distinct mindfulness skill, and designed to do so in a way which engages young minds. The lessons typically include images and animations which bring these skills to life and most importantly, practical exercises which teach the core skills and make them relevant to the pupils' lives.

**Topics covered include:**

1. *Playing with attention*
2. *Cultivating curiosity and kindness*
3. *Recognizing how the mind plays tricks on us*
4. *Being here now – from reacting to responding*
5. *Moving Mindfully*
6. *Stepping Back – watching the thought traffic of the mind*
7. *Befriending the difficult*
8. *Putting it all together*

The course intends to help the young people who experience it to overcome difficulties, thrive and flourish – and the research that has taken place into its effectiveness suggests it does indeed have the potential to meet these more ambitious goals, including

- To experience greater well-being (e.g. feel happier, calmer, more fulfilled)
- To fulfil their potential and pursue their own goals e.g. be more creative, more relaxed, academically, personally
- To improve their concentration and focus, in classes, in exams and tests, on the sports field, when playing games, when paying attention and listening to others
- To work with difficult mental states such as depressive, ruminative and anxious thoughts and low moods
- To cope with the everyday stresses and strains of adolescent life such as exams, relationships, sleep problems, family issues

**Course length: one semester**

**8. BEGINNERS' RUSSIAN**

JAGS

Russian is an increasingly important language for business and trade as Russia begins to integrate more within the global economy. Russia stands out in today's world as a major market, a trading and diplomatic partner, a source of news stories, and a challenging language with a logic all of its own! This is a unique chance to begin learning a language unlike any other, a language with a fascinating literature, history and culture waiting to be discovered.

The aim of this one-year course would be to take the students up to approximately GCSE level in terms of grammar and vocabulary, and for this we would use the Colloquial Russian course, designed for adult learners of the language.

**Topics:**

The course is intended for complete beginners and covers all language skills:

- *Listening*
- *Reading*
- *Analysis of grammar and syntax*
- *Writing*
- *Speaking*

**Course length:** two semesters

**9. BEGINNERS' JAPANESE**

JAGS

Travelling around our world is becoming easier and easier and it may be that in years to come you will visit Japan or indeed work there. Learning some basics of the language will give you a better understanding of this “exotic” culture and if you are considering taking languages at university, talking about your experiences in studying Japanese could be a bit of a wow factor!

You will need to be motivated and determined to do well as we will try to reach a level 5 competency of JLPT (Japanese Language Proficiency Test) at the end of the year. It is not compulsory to take the examination but we would encourage it.

**Topics:**

This is a course designed for those who have not had the opportunity to study Japanese before and covers all language skills (listening, reading, analysis of grammar and syntax, writing and speaking). Learning three sets of characters (hiragana, katakana and kanji) is also an important part of this course.

**Course length: two semesters.**

**10. BEGINNERS' ITALIAN***JAGS*

The course would be structured and organised to attain the “Certificato di Conoscenza della Lingua Italiana” or CELI, that is an internationally recognised qualification, based on the Common European Framework of Reference for Languages (CEFR).

The London Italian Institute of Culture is one of the official examination centres in the UK.

**Topics:** The course is intended for complete beginners and covers all language skills:

- *Listening*
- *Reading*
- *Analysis of grammar and syntax*
- *Writing*
- *Speaking*

**Course length:** two semesters.

## II. BUSINESS ITALIAN

JAGS

Italy is one of the world's top ten economies and doing business with Italians requires a lot of personal contact. In addition, many Italian companies are small to medium family companies and many Italian businessmen can speak only Italian. Being able to speak the language can help to deal directly with Italian businesses and to enjoy better business relations.

The course aims to teach the students to understand small authentic texts in their general meanings, write communicative sentences such as memos and signs, and write formal letters or emails with technical lexicon. It also teaches students to understand texts or conversations, gathering important information such as a price, and role-play some typical work situations such as negotiating. We are hoping to develop links with UniCredit, an Italian banking and financial services company.

*Depending on the level of the students who take part, the course could be for complete beginners or those more advanced with the language.*

Topics: In addition to Italian grammar and syntax, by using authentic business situations the course teaches the Italian needed for:

- *telephoning, meeting customers and visitors, travelling for work, negotiating;*
- *handling business correspondence, reports and summaries, memos, e-mails, faxes*
- *money matters, figures and graphs, commercial papers*
- *marketing and sales, import export, delivery and after sales.*

**Course length: two semesters.**

**I2. IMPROVE YOUR COMPUTER GRAPHICS**

JAGS

This course is aimed at those who would like to improve their skills in using graphics. This course is aimed at those with little experience of graphical programs, but those with an interest to create original and eye-catching graphics. We will be using Adobe Illustrator and Adobe Photoshop.

**Objectives:** To become adept at producing a wide range of creative graphic images.

In doing this course you will learn to:

- *Use Adobe Illustrator*
- *Organise graphics and text together to produce original posters and booklets*
- *Learn elements of desktop publishing*
- *Use Photoshop*
- *Use a range of tools to manipulate graphical images and photos*
- *Crop, clip, cut out parts of photo and set in another background*
- *Create original and eye-catching text*

**Course length: one semester**

**I3. PERSONAL TRAINING**

JAGS

A strength and conditioning/personal training course for students of JAGS and Dulwich College. A programme for Y12 students at JAGS and DC who are interested in furthering their knowledge and understanding of the principles of fitness and training, both practically and theoretically. This should appeal to top squad players/performers and to individuals with a keen interest in safely maintaining their own healthy body.

**Objectives:** Students will be able to offer personal training / strength and conditioning sessions to others, having a solid, safe understanding of all the principles of fitness. Underpins the A level PE course and foundations set in top squad training sessions and GCSE classes from Y10.

Topics covered:

- *Principles of training (FITT and SPOR)*
- *Training methods*
- *Core and Olympic lifts*
- *Training zones*
- *Track conditioning work*
- *Programme design*
- *Diet and nutrition (possibility of external lecture)*
- *Sport psychology (possibility of external lecture)*

**Course length: one semester**

**I4. INTRODUCTION TO PHOTOGRAPHY**

DC

During this course students will develop their technical and creative skills via 35mm 'analogue' photography.

Stages of the course include:

- *reading an image*
- *mastering the camera*
- *imposing and composing images*
- *creating a negative*
- *printing a silver halide photograph.*

Lessons will take place in the classroom, the Science Laboratory, the gallery, the street, and in the dark room. As a culmination pupils will have a four-hour introduction to dark room printing at the Photofusion studios in Brixton.

Although the chosen medium on this course is 35mm black and white analogue film, we will also explore alternative photographic processes, while the main concepts of this course will also be highly relevant to those wishing to pursue an interest in digital photography.

**Course length: one semester**

**I5. DANCE AND BODY LANGUAGE**

DC

Dance is, above all, a form of art, but one which requires considerable physical fitness. It is thanks to this duality that this course could have a double purpose: to offer artistic students who do not always enjoy sport the chance to keep fit through a creative medium, but also to give those who are keen on expanding their fitness an opportunity to do this by exploring new artistic ways to get in shape.

Some of the topics that we would cover are:

1. *Rhythm, beat, movement.*
2. *Self-expression without words.*
3. *What does the way you stand/walk/move say about you?*
4. *Body language to convey emotions.*
5. *Feeling music – turning it into movement.*
6. *Pop culture and dance moves.*
7. *World dances – looking at (and learning from) other cultures.*
8. *Using dance to build your identity.*

This course is open to students who do not find sport appealing and are looking for an alternative way to keep fit, as well as to all those who are keen to explore the arts further.

**Course length: one semester**

N.b. this course will only run for the second of the two semesters

## 16. EXPLORING SCULPTURE

DC

The course aims to challenge your perception of sculpture. Through weekly workshops lessons, you will experiment with processes such as clay, plaster, casting, mixed media and assemblage. You will identify your own themes and suitable media to generate your own outcomes throughout the ten week course. The course will start with a museum visit to research sculpture and generate initial ideas.

This course is suitable to anyone who enjoys creative thinking and experimenting with materials and processes. The course would be particularly suitable for anyone who enjoyed Art in the Middle School and would like to further experiment and develop a personal project. The course would also be suitable for Art and DT students who might want to try new techniques that might feed back into subject coursework.

### Course content

- **Identifying themes and research**  
*Weeks 1 – 2. Kick-start the course with Gallery visit to Tate Modern. The group will identify key works in the Tate collection to inspire ideas for the term. On return to the studio, we will discuss artists work further and identify themes and concepts to explore throughout term. You will create your own starting point to explore over the term.*
- **Experimentation with materials**  
*Weeks 3 - 6. Weekly workshops exploring your chosen theme in a variety of different outcomes. These will include simple plaster casting of hands and objects, relief moulds in clay and experimentation with found objects.*
- **Visiting artist workshop**  
*Week 7. A visiting sculptor will talk about his own work and explain processes and themes in his or her own work, the artist will also run a mini workshop.*
- **Making and doing**  
*Weeks 8 – 10*
- **Independent-led enquiry** – *a chance to develop your own sculpture.*

**Course length: one semester**

**17. WRITING FOR STAGE AND TELEVISION**

JAGS

This course will look at the way in which scripts for TV and Theatre are created. Royal Court Young Writer, Holly McKinlay, will take students through the entire process, from the conception of an idea to the table read.

Students will engage with topics through a mixture of teacher-led discussion, group work, and interaction with stimulus items and examples, working towards creating a final piece of writing (a full-length play or pilot episode).

Students will also attend workshops and hear external speakers from the industry talk about their own work.

**Topics**

- *Development of character*
- *Structure*
- *Writing cinematography*
- *Genre*
- *Writing believable dialogue*
- *Pitching your idea*

**Course length: two semesters**

**18. UNTIL STAR WARS RUINED EVERYTHING: A FILM STUDIES COURSE ON THE GOLDEN ERA OF LATE '60S AND '70S AMERICAN CINEMA** DC

Combining extended viewing from five major U.S. films from the 'New Hollywood' era, and some introductory film theory, this course will take the student through five different examples of American 'auteur' film-makers, including:

- Coppola (*The Godfather*)
- Mike Nicholls (*The Graduate*)
- John Schlesinger (*Midnight Cowboy*)
- Peter Bogdanovich (*The Last Picture Show*)
- Stanley Kubrick (the infamous *A Clockwork Orange*).

**Course length: one semester**

**19. ART IN BRITAIN: A COURSE IN ART HISTORY**

DC

This course aims to provide an overview of the rich artistic traditions of Great Britain through discussions of theory and history. You will have the opportunity to view artworks first hand, developing and enriching your understanding of national collections. Students will be encouraged to debate and express personal opinion on specific developments in visual culture and artistic production. History of Art is an interdisciplinary subject, and will therefore require the exploration of other connected areas of knowledge such as philosophy, politics, psychology and gender studies.

This course would be suitable to those wanting to supplement studies in humanities or arts subjects, as well as students hoping to broaden their cultural understanding ahead of university applications. An interest in attending exhibitions is essential.

**Topics covered:**

- **Weeks 1/2:** *The course will begin with a gallery visit to the Tate Britain and a relevant lecture at the Courtauld Institute of Art. We will then discuss how art can be analysed formally (visually) and using theoretical frameworks*
- **Weeks 3/4:** *William Hogarth and the modern moral subject: the growing fame of British artists*
- **Weeks 5/6:** *Victorian Britain: industrialisation, gender negotiation and the city-as-concept*
- **Week 7:** *Britain at War: war artists and photographers*
- **Week 8:** *Britain in the 1980s and 1990s: the emergence of the YBAs*
- **Weeks 9/10:** *Contemporary Practice: examining contemporary artists' use of new media (potentially including a private gallery exhibition with studio tour)*

**Course length: one semester**

## 20. THE POWER OF THE ICON: POPULAR MUSIC IN POPULAR CULTURE DC

This course will spark discussion and debate about the definition of the 'Music Icon' and how this definition has changed over the last 70 years. We will broaden our discussion to look at iconic film music comparing the soundtrack with the 'original song'. Finally, we will analyse the use of music in advertising, debating whether the adverts have become iconic as a result of pertinent music choice. In addition, each student will present on a music icon of your choice at the beginning of our sessions.

It will cover the following areas:

### *What is an Icon?*

Define what it is to be Iconic in Music and discuss:

- Lyrics/Album
- Style/Fashion
- Performance/Concert

### *The Power of Iconic Film Music*

Discuss the elements of music in Film

- Case study (Bond music)
- Oscar-winning film music

### *The Power of Music in Advertising*

- How it is used?
- The varied effects created
- Director's Chair  
(create an ad to go with the music)

### *Presentations*

Every week a student to present on an Icon of their choice

- Background/influences
- Styles
- Why are they iconic?
- Analyse a clip of their choice

**Course length: one semester**

## 21. NOTES FROM THE UNDERGROUND: CULT, PULP, AND SUBVERSIVE FICTIONS THAT THEY WOULDN'T LET YOU READ FOR A-LEVEL

DC

This course aims to explore writing that lies outside the 'canon' of 'great' English literature and will focus on the experimental, offbeat and avant-garde. The aim is to read and explore the work of a number of novelists and short story writers and by doing so discover more about the forms fiction can take, as well as considering the influence of film adaptations.

The course is aimed primarily at those studying A level English who would like to read more widely and have the opportunity to discuss what they have discovered. English is not essential, though, and anyone interested is welcome. Extracts will be used to introduce different writers and reading the whole work will be optional; however, an appetite for reading will be an advantage.

The course will begin with a discussion about popularity, rebellion and subversion. Thereafter, focus will move to some of the writers and works on the list below, depending on the preferences of the class, who will be able to shape the direction of the course and any outcomes.

- Anthony Burgess - *A Clockwork Orange*
- Vladimir Nabokov - *Lolita*
- Margaret Atwood - *The Edible Woman*
- Philip K Dick - *Do Androids Dream of Electric Sheep?*
- JG Ballard - *Myths of the Near Future*
- Sylvia Plath - *The Bell Jar*
- Samuel Beckett - *Murphy*
- Mikhail Bulgakov - *The Master and Margarita*
- Thomas Pynchon - *The Crying of Lot 49*
- John Fowles - *The French Lieutenant's Woman*
- Dashiell Hammett - *The Thin Man*

**Course length: one semester**

## 22. EXILES AND EXPLORERS

JAGS

This course will invite students to experience some of the most daring feats of the European imagination from medieval Dante's descent into Hell in *The Divine Comedy* to Dostoevsky's vision of the criminal mind in *Crime and Punishment*. All the writers were exiles, in one sense or another. The course will explore the connection between exile and the discovery of a unique vision of the world. Students will begin by reading and discussing selected passages in translation. They will then have the freedom to choose which texts they want to read in more depth.

The aim of the course is to broaden students' cultural awareness and provide a literary framework of reference outside England (it might be of particular interest to those considering Oxbridge), and to give students intellectual confidence in discussing and presenting ideas about unfamiliar or 'foreign' visions of the world.

### Topics:

- Dante, *The Divine Comedy* and Faith
- Zola, *Terese Raquin* and Atheism
- Dostoevsky, *Crime and Punishment* and Criminality
- Lampedusa, *The Leopard*, Aristocracy and the Bourgeoisie
- Lermontov, *A Hero Of Our Time* and the Romantic Cynic
- Grossman, *Life and Fate* and Totalitarianism
- Nemirovsky, *Suite Francaise* and Occupied France

**Course length: one semester**

## **23. SO MANY BOOKS, SO LITTLE TIME**

JAGS

*What do medical students read and why? A survey of medical students in Newcastle-upon-Tyne, England* (by K. Hodgson and R. Thomson [*Med Educ.* 2000 Aug;34(8)]) found that “Medical students read widely beyond their course and articulate a range of benefits from this, including: increasing awareness of life outside their experience; introspection or inspiration; emotional responses; and stimulation of an interest in reading or literature.”

This course is intended to offer such benefits, particularly to those students who had to stop the study of literature after GCSE, but who wish to continue, increase and widen their interest in and enjoyment of literature, history and culture. Students will respond to the material covered through presentations and some writing - either critical or creative, individual or group.

### **Topics:**

- *The Seven Basic Plots: how we tell stories.*
- *Reading the Past: historical, social and cultural contexts.*
- *Ways of Reading: critical, theoretical and analytical.*
- *Landmarks in Literature: A Bluffer’s Guide.*
- *Reading & Writing the City: Literary London.*
- *From Page to Stage; from Script to Screen.*
- *How writers write: Creative Writing.*

### **Objectives:**

- ✓ broaden knowledge of literature and related matters / contexts
- ✓ make connections between different cultural and historical contexts
- ✓ develop an understanding of the relations between language, literature and culture
- ✓ develop skills and modes of reading and analysis
- ✓ learn how to think critically about what they have read
- ✓ read some key texts.
- ✓ visit some literary sites.

**Course length: one semester**

**24. THE BIBLE FOR ENGLISH, ART AND THEOLOGY**

JAGS

Now that biblical study has all but disappeared from public exam specifications, this course, looking at key passages and theological ideas that underpin great works of literature and art, should enable students interested in any of English Literature/Art/Art History/RT to reach an understanding of what the Bible is all about and a greater appreciation of the traditions that underpin what they might either currently be studying for A level/Pre-U or might study at undergraduate level – and also to strengthen Oxbridge applications in these areas.

**Topics:**

- *A selection from the Old and New Testaments, possibly directed by interests of students.*
- *The following links contain suggestions*

[https://web.cn.edu/kwheeler/documents/Bible\\_Cheatsheet3.pdf](https://web.cn.edu/kwheeler/documents/Bible_Cheatsheet3.pdf)

<http://www.artbible.info/art/>

**Course length: one semester**

N.b. this course will only run for the second of the two semesters

## 25. AN INTRODUCTION TO FILM STUDIES

JAGS

Cinema is arguably the most influential art form of the last hundred years. Starting in the silent era of black and white, closing the twentieth century with technological wonders such as *The Matrix*, and now moving into the world of 3D, the movies have certainly come a long way. However, there are lots of questions to be asked about this fascinating medium. Is it really an art form or is it just an industry? When film production can involve hundreds of people, can you really say anybody 'authored' a film? Is it worth analysing films with the same rigour as literature or painting? Theoretical questions aside, you might also like to know how the Hollywood 'star' system developed or, indeed, just how Tinseltown managed to take over the movie world.

Taking a whistle-stop tour of celluloid history, we look at sequences from a range of films, focusing on examples of the thriller, horror & melodrama genres and touching on the development of avant-garde cinema. Featured movies include *Metropolis*, *Un Chien Andalou*, *Citizen Kane*, *The Birds*, *Halloween* and *2001 A Space Odyssey*. Each week we will discuss film clips in groups and work on developing a 'jargon-light' frame of reference for analysing the movies. As the term progresses you will undertake research on a film, actor or director of personal interest and produce a presentation (a talk, PowerPoint or even a short film) on your chosen topic. We can't promise popcorn and comfy seats but if mental stimulation is what you're looking for, it's worth getting a ticket.

### Objectives

- Gain a working knowledge of cinema history, classic films and key directors
- Practise team working skills
- Learn how to use the language of film
- Develop researching and presenting skills

### Topics

- Genres of film such as horror and sci-fi
- The significance of directors, designers, writers, cinematographers and actors
- The language of film (shots, edits, sound etc.)
- Film history: the silent era, the switch to sound and colour, the studio, digital film

The course will include class discussions, some homework tasks and will also include student presentation.

**Course length: two semesters.**

**26. LITERATURA ESPAÑOLA Y LATINOAMERICANA PARA ESTUDIANTES BILINGÜES DE ESPAÑOL:**

**SPANISH AND LATIN AMERICAN LITERATURE FOR SPANISH BILINGUAL STUDENTS**

JAGS

This course aims to offer an overview of Spanish and Latin-American literature to native Spanish speakers. The course will be taught in Spanish only. No GCSE or A level qualifications are required but students need to feel confident reading texts from different literary periods and genres in their original versions. This course is suitable for native speakers who are interested in the study of literature and would like to expand their knowledge of Spanish/Latin American authors, and for those taking A-level Spanish but would like to go beyond the syllabus.

Students will be exposed to a selection of texts from the Spanish language literary canon. The texts will include poetry, drama and novel. During lessons authors will be introduced and some text commentaries will be carried out. Each student will be expected to read at least 2 titles from the set list of texts to broaden her/his knowledge of the proposed authors at a deeper level. Students will also be expected to do some oral presentations.

The course aims to improve reading, writing and presentation skills of native speakers through the study of key texts in Spanish and Latin American literature from all times, including some contemporary authors. At the end of the course students will gain an overview of the main authors and themes in Spanish and Latin-American literature.

Reading list: students signing up for the course will receive a reading list in the Autumn term.

**Course length: one semester**

N.b. this course will only run for the second of the two semesters

**27. PSYCHOLOGY AND THE PHILOSOPHY OF MIND**

DC

Topics considered from a philosophical point of view (with some of the philosophers consulted):

- *the nature of personal identity (Parfit, Wiggins et al.);*
- *the problem of consciousness (Chalmers, Churchland, Dennett, Nagel, Williams);*
- *the problem of free will (Nietzsche, Galen Strawson, Peter Strawson, Williams.)*

Psychology experiments considered that may affect our understanding of the free will problem:

- *Pavlov and classical conditioning;*
- *Skinner and Behaviourism;*
- *Asch on conformity;*
- *Harlow on love;*
- *cognitive dissonance;*
- *Milgram and obedience;*
- *authority;*
- *Libet and free will.*

If there is time, we will also investigate the origins of Freud's psychoanalytic theories, particularly in relation to free will and the tripartite definition of the self.

The course will be of interest to anyone wishing to read anything to do with psychology or philosophy. The course should also be of interest to anyone trying to understand what it means to be human.

**Course length: one semester**

## 28. INTERNATIONAL DEVELOPMENT

DC

Any responsible global citizen will have asked themselves a simple question – why are some people richer than others? Many believe the differences in the economic conditions of people within our own society are too great, but the reality is that within the global community, the differences in material living standards between citizens of different countries are even starker. In this course we will first examine the facts: how much richer the richest societies are in relation to the poorest societies. We will then go on to look at *why* some countries are vastly better off than others. Finally, we will look at what can be done and what is being done to address global inequality.

During the course we will look at the following topics:

- *Differences in living standards by data*
- *Causes of global income and wealth inequality*
- *Barriers to development*
- *Every country is different: a close look at Nigeria, Chad, Argentina & China*
- *So how did we do it? A history of the UK's development*
- *What do rich country governments need to do to promote the development of poorer countries?*
- *What do governments of poorer countries need to do to help their own citizens?*

**Course length: one semester**

## 29. THE FUTURE

DC

Through Brexit and Trump, and as seen in the futuristic stories of *Westworld*, *The Handmaid's Tale* and *Black Mirror*, the world is becoming increasingly 'VUCA': volatile, uncertain, complex and ambiguous.

*The Future* will look at how disruptive trends in technology, economics and politics might shape human experience and culture in the decades ahead. No prior knowledge of economics, politics, literature, philosophy, psychology or geography is needed; the course is open to students of these subjects or anyone with an interest in how the ways we live, learn, interact and work are likely to be transformed.

Enthusiasm, imagination and creativity are essential; this is a course where interaction is expected and the exact content will depend on the particular interests of students.

We will look at the how changes in economics, business, politics and technology will influence, amongst other things:

- *what we buy and how we work*
- *the point of schools and universities when 'Google knows everything'*
- *the meaning of national borders in a changing world*
- *implications and opportunities for the global population as life expectancy rises*
- *whether there is a case for a universal basic income*
- *what it means to be 'human' as we live in increasingly virtual worlds and intelligent machines and robots surpass human capability*
- *reasons to be cheerful: patterns of change and disruption in the context of history*

**Course length: one semester**

### **30. MILITARY HISTORY**

DC

In this course we will look at the military history of the nineteenth and twentieth centuries. Besides studying particular campaigns in detail, we will consider thematic aspects including how new weapons influenced strategy and tactics, the importance of logistics, and the factors which made a good military leader. Discussions will centre on the use of maps and there will be occasional videos. You do not need to be taking history at A level but it would be useful to have studied it for GCSE.

**Topics covered:**

- *The campaigns of Napoleon, especially the Austerlitz and Waterloo campaigns. Napoleon's strategy and tactics.*
- *Warfare in the second half of the nineteenth century. The American Civil War, including the battles of Chancellorsville and Gettysburg and the Franco-Prussian War, in particular the battle of Gravelotte-St Privat. The effect of new weapons and the use of railways on strategy and tactics.*
- *The German invasion of France in 1914. The Schlieffen Plan and why it failed.*
- *The battle of the Somme, 1916.*
- *The battle of Jutland. The development of the dreadnought-type battleship and the gunnery revolution.*
- *The events of 1918. The German spring offensives and their new battlefield tactics. The use of tanks by the British and their final push to victory.*
- *Operation Sichelschnitt, the German invasion of France in 1940. The nature and employment of the Panzer Divisions.*
- *Operation Barbarossa, the invasion of Russia in 1941 and the reasons for its failure.*
- *The war at sea. How aircraft carriers replaced battleships as the dominant vessels. The battle of Midway as a turning point in the war in the Pacific.*
- *The battle of Kursk in 1943, the greatest tank battle of the war and the German's last chance of victory in the east.*
- *The war in the air. Bomber Command and the questions over its effectiveness.*
- *The Normandy Campaign in 1944.*
- *The fall of Germany's 'Fortress Europe' in 1945. The strategy of the western allies and its repercussions on post-war history.*

**Course length: one semester**

**31. INDIA 1885-1947: THE UNMAKING OF AN EMPIRE**

DC

India's struggle for independence is an extraordinary story. The pivotal question of this course is how a valued and seemingly permanent imperial possession – the “jewel in the crown” – came to be granted independence only sixty years after the establishment of the Indian Congress in 1885. On the face of it, decolonisation seems to have been the direct result of nationalist pressure but the reality was much more complex. We will explore the full social, political and economic context up to the transfer of power in 1947.

Central features of the course will cover:

- *India today*
- *Imperial dilemmas*
- *The East India Company*
- *Nationalism and the role of Mahatma Gandhi*
- *Handing over: was Partition inevitable?*
- *High Politics versus Subaltern Studies*
- *Responsibility for Partition*
- *The role and importance of the Princely States within Britain's Indian Empire*
- *The legacy of Empire*

This course would suit students interested in reading History or a related subject at university, including Politics.

**Course length: one semester**

## **32. A HISTORY OF MODERN EUROPE IN FIFTY OBJECTS**

DC

This course will look at a range of artefacts each week as a focal point for the study of various key events in European history from ca. 1500 to the end of the twentieth century. The course would be well-suited for any A level History students who are keen to broaden their knowledge beyond their examination syllabus, as well as any students who have not chosen History for A level but have an interest in the past and in thinking about the forces, ideas and individuals that have helped mould the continent over recent centuries.

Examples of some of the objects which will be considered, and used as a starting point, for study/discussion of the events which they help illuminate, include the following:

### **Martin Luther's Bible**

*How could one single innocuous-looking book lead to the end of over 1000 years of Christian unity in Western Europe? Why did these inked pages lead to such persecution and bloodshed whilst also inspiring so many to humanitarian acts and self-sacrifice?*

### **Spanish 'Pieces of Eight'**

*Way back in the times of the genuine 'Pirates of the Caribbean', how did the exploitation of South American silver and gold help lead to the extraordinary dominance of the Habsburg dynasty in sixteenth-century Europe and its subsequent rapid and unforeseen decline?*

### **A replica of the House of the Virgin Mary in Prague**

*What light does this shed on the Catholic Church's methods in seeking to eradicate the challenge of Protestantism in the so-called 'Counter-Reformation'?*

### **Potatoes laid regularly, still in 2017, on Frederick the Great of Prussia's grave**

*How did the humble spud lead to a revolution in agriculture and unprecedented population growth across Europe, whilst also being at the root of Irish animosity towards the British?*

### **Diderot's Encyclopaedia**

*The original, eighteenth-century version of Wikipedia; its author claimed that, in writing it, he 'aimed to change the way that people think.' Did he?*

### **The Phrygian Cap**

*Why was this peculiar piece of headgear all the rage back in 1789 for French Revolutionaries and, in wearing it, what were they trying to say about the new order they hoped to create? Did they succeed?*

### **The Flags of 1848**

*Why were new flags suddenly being flown in locations as far apart as Ireland, Hungary, Germany and Romania after revolutions broke out the length and breadth of Europe? Why weren't people instead waving copies of Marx and Engels' Communist Manifesto, published in the same year?*

### **The Maxim Gun**

*Did you know that, just down the road, in West Norwood Cemetery, lie the mortal remains of the man responsible for this 'Purveyor of Death'? Did this invention change people's lives? Er, you could say that...*

**A Suffragette-defaced penny**

*Now who would want to deface a poor, harmless one-penny piece and why....?*

**A Russian Revolutionary plate - not your average piece of crockery.**

*Was there anything to celebrate, looking back on events in Russia in November 1917, or did it all go horribly wrong long before 'Uncle Joe' Stalin was given his chance to have a go at running the great socialist ship of state?*

**Course length: one semester**

**33. RESEARCH SKILLS FOR SOCIAL SCIENTISTS**

*JAGS*

This course will cover the key qualitative and quantitative skills that social scientists use in their research. This course will appeal to students studying Geography, Politics or Economics at A Level who are considering a degree in one of these subjects or related subjects like PPE, HSPS, Anthropology, Arts & Sciences or Psychology. The course will equip students with the core skills to succeed in a practical Extended Project Qualification, in which they plan to collect primary and secondary data, and/or support those students who would like to develop their skills to support their UCAS application to a related University course.

**Objectives:** To understand all stages of a research investigation, to develop team skills, to develop an understanding of the preparation required to undertake an investigation, to improve students' presentational, statistical skills and ICT skills. Activities will include discussion of scenarios, practical work outside the classroom in the local areas of Dulwich and Peckham, use of photography and using computers.

**Topics**

- *Getting the most out of research and fieldwork*
- *Before you start: research design and preparation*
- *Ethics: positioning yourself and encountering others*
- *Reading the landscape: describing and interpreting study areas*
- *Interviewing techniques*
- *Participant observation*
- *Exploring spatial relationships*
- *Analysing data: hypothesis testing and statistics*
- *Use of ICT in research including background research, statistics & GIS*

**Course length:** two semesters

### 34. RELIGIOUS FUNDAMENTALISM

JAGS

This course looks at the nature/characteristics of religious 'fundamentalism', its origins and its rise and development from the 19<sup>th</sup>-21<sup>st</sup> centuries.

Students will learn to discern between fundamentalism and extremism/radicalism and to come to realise how the 'f word' has become re-applied and misapplied in the 21<sup>st</sup> century.

#### Likely topics:

- *What is religious fundamentalism? What features do religious fundamentalist movements share?*
- *Religion in Europe and in America*
- *The Age of Reason: reaction*
- *Fundamentalism and 20<sup>th</sup>-century history*
- *The Swinging 60's and beyond*
- *Iran 1979 and the Muslim world*
- *The Taliban, the Muslim Brotherhood, ISIL*

#### Course length: one semester

N.b. this course will only run for the first of the two semesters

**35. THOUGHT, CULTURE, AND SOCIETY**

JAGS

This course will cover the most significant moments in the cultural and intellectual history of our society, and the philosophical theorizing that underpins them. Students will engage with topics through a mixture of teacher-led discussion, group work, and interaction with relevant artistic and cultural artefacts, working towards a collaborative final project in which they research and create a film, documentary, or script based on one of the issues covered in the course.

The course aims to foster collaborative working through discussion and group work; to develop a knowledge of the philosophical background to 20th century ideas and culture; to improve students' presentational skills and confidence in discussion. Stimulus material will involve academic articles, film footage, literature, cinema, visual art, and original philosophical texts.

**Topics:**

- *Contemporary issues such as 'silencing', 'no platforming', 'safe spaces', and 'trigger warnings';*
- *Debates over social housing and brutalist architecture;*
- *The 80s-90s 'culture wars';*
- *Cultural relativism and 'colonialism';*
- *Post-modernism, 'Dada', and conceptual art;*
- *Existentialism and Marxism.*

**Course length: one semester**

**36. HISTORY OF MENTAL HEALTH**

JAGS

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.

The course aims 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.

**Topics include:**

- *“Possessed by demons” - Classical and Medieval ideas on the mentally ill.*
- *Foucault “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*

**Course length: one semester**

**37. HISTOIRE DES IDÉES. A HISTORY OF IDEAS IN FRENCH.**

JAGS

This course aims to develop students' knowledge of the French language and of western culture through the study of *texts in French*. One text and author (not necessarily a French author) will be studied in each lesson and the course will cover authors from Socrates to twentieth-century authors. Each lesson will aim to have students answer four questions: *Quoi? Comment? Pourquoi? Pour quoi?* (*What? How? Why? What for?*). This will give students an understanding of the history of western ideas, their values, and the societies in which these ideas came about. The course would be ideal for students who wish to read French at university.

The course aims to improve the students' knowledge of French and general culture through translation, text analysis and group discussions in French.

**Topics/ writers studied include:**

- Socrates
- Aristotle
- Montaigne
- Pascal
- Locke
- Montesquieu
- Voltaire
- Rousseau
- Diderot
- Freud
- Sartre
- de Beauvoir
- Camus
- Foucault

**Course length: two semesters**

**38. STATISTICS FOR ALL**

DC

There are few professions in which ignorance of Statistics is not a hindrance to competence and career progression. For example, medics are bombarded by data on which treatments appear to work best, business decisions are data-driven but made under uncertainty, policing increasingly uses 'big data' and statistical analysis to determine policy and, even in education, evidence-based teaching is guiding practice.

This course offers guidance about some basic ideas: what does a mean mean? What is standard deviation? How can we make inferences about a large set of data given only a small sample? Should we trust statistics in the news?

The aim of the course is to teach you how to use basic statistical analysis skills; it is meant to be purely practical.

- Basic statistic measures; mean and standard deviations, simple calculations (by hand) and more complicated ones with calculators.
- The ideas of regression and correlation and how to use a standard Casio calculator to find correlation and regression coefficients for data sets.
- Probability: the keystone of statistics. Basic ideas of union and intersection and the rather demanding idea on conditional probability.
- Further probability. Discrete probability distributions and using simple combinatorics leading to the idea of the binomial distribution.
- Continuous probability distributions. The Normal Distribution (looking at how male and female IQs are distributed – which gender is smarter?). Calculating probabilities from the normal distribution. The student t distribution; how we can draw statistical inferences from small data sets.
- When statistics goes wrong: the scandal of the Sally Clark conviction; OJ Simpson; is prostate cancer screening worthwhile?

**Course length: one semester**

### 39. GAME AND MOBILE APP DESIGN

DC

On this course you will have the option of either producing your own computer game or writing a mobile app. We will be using PyGame to introduce to you coding, enabling you to produce a game of your choice and design. For experienced programmers and mathematicians the world of linear programming, game theory and artificial intelligence awaits you! The mobile app design course will introduce you to web, hybrid and native app design. You will be able to produce your own mobile app using block editors, html and css and connect your app to sensors such as GPRS. You can move as quickly through the course as you wish and the design, analysis and programming skills you learn will be useful in the commercial world.

#### Skills/ topics taught:

##### Computer Gaming:

- *Produce a graphical interface*
- *Create and move objects e.g. sprites on a screen*
- *Use artificial intelligent techniques to allow the computer to make decisions*
- *Enable players to control on-screen objects*
- *Create classes with attributes*
- *Instantiate objects*
- *Create methods to manipulate attributes*
- *Use inheritance to create sub-classes*
- *Understand and implement polymorphism*

##### Mobile App Design

- *Understand the difference between a web, hybrid and native app*
- *Create a responsive website for mobile devices*
- *Design a mobile app interface*
- *Use an on-screen emulator*
- *Install app on physical device for testing*
- *Use a Blocks Editor to create code.*
- *Use Event Handlers*
- *Use Sensors in App development*
- *Use QR codes for connectivity*

**Course length: one semester**

**40. FUNDAMENTAL MOMENTS IN SCIENCE**

DC

This course will give you a whistle-stop tour of some of the most profound moments in Physics, with as little maths as possible! While this is not a course designed solely for Physicists, an interest in how past, present, and future developments are influencing the field is essential. We will look at some of the influential moments throughout Physics history and the impact they have had on our understanding of everything we know today.

**Topics covered:**

- *Models of the Universe (Ptolemy to Expanding Universe)*
- *Models of the Atom*
- *The big picture of Motion (Newtonian Mechanics)*
- *Motion on a much smaller scale (Wave-particle duality, quantum phenomena, uncertainty principle)*
- *It's all relative - Einstein and the General and Special theories of Relativity*
- *Radioactivity (discovery, elements, Marie Curie, cancer treatments, power generation)*
- *Maxwell, Faraday and the motor - Electromagnetism (Electricity generation)*
- *Optics - lenses, fibre optics, lasers, polarisation*
- *What is out there? (Looking at space, theories on dark matter and dark energy...)*
- *What are we made of? (Subatomic Particles and The 'Standard Model')*
- *What is left to discover?*

**Course length: one semester**

## 41. THE BRAIN AND EVOLUTION

DC

Not all living organisms have a brain. Some animals don't even have a central nervous system, let alone a brain. Yet they successfully manage to survive and reproduce. So what is the advantage to having a supercomplex big brain like we do? And where does communication and language come into this? Do we need one's inner dialogue to think deep thoughts? Is an awareness of one's awareness uniquely human? Does this help us survive better in anyway?

In this course we tackle the complexities of these questions and others - such as whether we will ever evolve into 'Homo SuperSapiens'. Through lectures, discussions, games and scientific documentaries we delve into the fields of Evolutionary Biology, Neo-Darwinism, Neuroscience, Psychology and Comparative Anatomy to seek some possible answers.

This fascinating course is open to all those who are curious about Biology. However, it is by nature quite academic so best suited to pupils who have a strong grasp of science in general and who are keen to ask lots of questions.

Topics explored:

- **Beginnings**  
*From Big Bang to Self-replicating RNA to prokaryotes to Eukaryotes to Neurones*
- **Base sequence**  
*Mutations, Recombination, Transposable elements, Epigenetics and Developmental complexity*
- **Big boy**  
*Neural Networks, Complexity, Specialisation, Mapping and Brain Functionality*
- **Embodiment and Survival**  
*Emotions, Neurotransmitters, Mutations, Recombination, Natural Selection and Hominid Evolution*
- **Us & Them**  
*Behaviour, Pathologies, Apes and Culture*
- **Being**  
*Consciousness: States of awareness, Language, Philosophies, Theories and Zombies*
- **Brain power**  
*Learning, Memory, Communication and Human Brain Expansion*
- **...and beyond**  
*Human Evolution and Speciation: the Future of us on Earth and within our Solar System*

**Course length: one semester**

**42. PRIMARY SCHOOL SCIENCE ROADSHOW**

DC

Do you love science? Do you like talking in front of people, or do you want to get better at it? In the Primary School Science Roadshow course, we take fun science experiments and animals to do presentations at local primary schools for younger students. The schools we visit love it, and you get a chance to play with the exciting equipment and become an expert snake charmer or chameleon whisperer. It's a lot of fun and the children really enjoy us visiting!

The course consists of the first week or two getting comfortable holding animals, finding out a bit more about each of them and learning how to do some exciting science experiments that you can demonstrate. You can plan your own experiments and test them (within reason!)

For the next 8 weeks we will visit local primary schools to give them a science roadshow.

This will consist of you demonstrating experiments such as:

- *using liquid nitrogen*
- *dry ice*
- *colour changing experiments*
- *elephants' toothpaste*
- *any others that you have devised.*

You will also tell the children information about the animals, teaching them how to hold the animals and look after them, as well as giving them a bit of background about the chameleons, snakes and tarantulas.

The children absolutely love it and often do science projects after this based on what you have done, writing back with photos so that you can see the difference that you have made to them and how you have interested them.

This is suitable for anyone with a passion for science and for communication, especially if you like the idea of working with children.

**Course length: one semester**

**43. TEENTECH AWARDS**

JAGS

The TeenTech Awards were established in 2012/3. They encourage students to develop their own ideas for making life better, simpler, safer or more fun. Participating schools are provided with a suggested structure and industry contacts and all submitted projects receive feedback and a bronze, silver or gold award. The best projects go forward to the Royal Society for judging and the winners are invited by TeenTech patron, HRH Duke of York to Buckingham Palace. There is a prize of £1000 to the winning school in each category.

**Objectives:** To apply design and science and technology applications to real world problems.

**Topics open to Years 12-13**

The Year 12 – 13 categories next year are:

- *Best Innovation – Concept*
- *Best Innovation – Model, Prototype or Product*
- *Best Research project*
- *Consumer Innovation Award which puts your innovation into production. **JAGS won this in 2015.***

**Key dates:** Register up till mid-December, submit an 'Innovation Log' by mid-March, finalists notified by start of the Summer term.

**WINNERS 2016****Best Innovation – Model, Prototype or Product category**

*Oakham School – Harry for “Gust”*

An ergonomically redesigned hairdryer that is cordless, heats using semi-conductors to minimise damage to the hair and is modular

**Best Research Project**

*Loughborough Grammar School – Sai for “Biosense”*

Research into the detection of glucose in the urine of undiagnosed type I diabetes through a toilet block that causes a colour change in the toilet bowl signifying a positive result for a disease test

**Consumer Innovation Award sponsored by Maplin**

*Oakham School – Harry for “Gust”*

An ergonomically redesigned hairdryer that is cordless, heats using semi-conductors to minimise damage to the hair and is modular

**People’s Choice Award**

*Impington Village College – Peter, Jim and Eddie for “Let’s Get Biking”* An app aimed at young children who like biking. It would have features that include parental control to monitor bike travel to allow parents to select safe routes and traffic information

**Course length:** two semesters

**44. PYTHON PROGRAMMING**

JAGS

This course offers an introduction to Python, for those with no prior experience of programming. This course will be particularly useful to those thinking of a Science related degree at University where knowledge of programming would be beneficial.

The course will begin with computational thinking and quickly progress to the development of algorithms and python programming. The taught course will be supported with use of an online teaching platform that provides practical programming challenges, with error detection tools and module feedback.

**Topics:**

- *Computational thinking*
- *Numeric and string expressions*
- *Conditional statements*
- *Logical operators*
- *Boolean Logic*
- *Loops*
- *Lists*
- *Functions*
- *File Handling*
- *Arrays*

**Course length: one semester**