We have had another busy week within the Sixth Form.

On Tuesday we held our Sixth Form Open Evening. It was such a pleasure to see so many prospective students, as well as our Year 11 cohort. A huge thank you to all the staff and students that supported the event and led such fantastic taster sessions. We will hold our next steps interviews in November for our Year 11 students so I hope that the taster sessions will help you in your planning. Please note that the general and subject specific entrance requirements are online. Applications are live now!

On Thursday our Year 12 Applied Science and Professional Pathways students attended an ARK wide student conference. Thank you to Ms Clarke and Mr Cranwell for organising the trip. The Applied Science students also visited the Bodyworld exhibition. This is one of the many real life learning experiences offered to students who chose the Professional Pathway offer.

We have also had a very busy week for our Year 13 students who have sat exams this week. As ever, I am impressed by the BRIDGES habits used by students to manage challenging periods such as these. I want to also congratulate the students who are not only managing the Year 13 exams but also are finalising their Oxbridge and Dentistry Medicine & Veterinary Science applications. You have shown resilience, perseverance and a level of reflectiveness that I really admire. These skills will serve you greatly in the future.

Finally, can I remind you all that the Year 12 parents and carers of students who are looking to apply to Oxbridge or DMV in 2020 and the Year 12 students who are taking the Applied Sciences or Business course should attend the Sixth Form Information Evening on Wednesday. We will be sharing key information, dates and it is imperative that you are fully informed and are able to support your son or daughter with their learning at home.

With best wishes,

Ms Alibhai, Vice Principal and Head of Sixth Form
Dates for the diary

• Oxbridge/DMV deadline: 15th October
• Year 13 Reports: by 15th November
• School internal UCAS deadline: 6th December
• UCAS deadline: 15th January
• Final Year 13 Mocks: 10th February- 28th February
• A levels start: provisionally 11th May

• A level results day: 13th August 2020

Good Personal Statements

• Show a real passion for studying the subject
• Have tangible examples of where the candidate has shown an interest in the subject beyond the standard curriculum
• Show that the student has researched the courses that they applying for and can reference this
• About 10-20% can be about extra curricular, but the vast majority should be referencing super curricular
• Getting the grade is not enough!
Join Sir Richard Evans at ‘Democracy and Dictatorship in Germany’ this autumn for a fascinating talk on coercion and consent in Nazi Germany. Richard is President of Wolfson College, Cambridge. He has published widely, including a large-scale history of the Third Reich.

In this thought-provoking lecture, he will grapple with a series of key questions mainly in relation to the period 1933-1939. How far did Adolf Hitler and the Nazi State use terror and violence to impose their policies and ideology on the German people? How popular really was the Third Reich? Was it a totalitarian state or a ‘dictatorship by consent’?

Book now

Richard will be joined by four other eminent historians on the day, each of whom brings a wealth of expertise to the day. With plenty of time for questions too, students are guaranteed to leave informed and inspired. Don't miss out!

Find out more

Forced Internal Displacement Triggered by Organised Crime in Central Mexico

23 October 2019, 6:00pm–8:00pm

Morna Macleod’s presentation analyses individual forced displacement in Central Mexico triggered by the current context of violence and organised crime. The presentation is based on ongoing research from an anthropological perspective. It draws on in-depth interviews, existing research and investigative journalism, and explores the triggers and impact that forced displacement is having on people from different socioeconomic and cultural backgrounds. Through the lens of diverse internally displaced persons (IDP), Macleod pieces together the dynamics of organised crime and (non)state actors operating locally in different areas of Central Mexico. She argues that organised crime and its combat by the state does not fall easily into existing UN categories of Internally Displaced Persons’ (IDP). By tracing individual IDP trajectories, it is possible to reach a clearer understanding of this arguably new modality of conflict in Mexico and the Northern Triangle of Central America (El Salvador, Honduras and Guatemala). This differs from Latin America’s dictatorships in the Southern Cone and internal armed conflicts in Central America, though shares certain communalities with Colombia. In contrast to Colombia, where the government has recognised the issue through a law and reparation programs, in Mexico forced internal displacement triggered by violence remains an invisibilised, silenced and widespread human rights violation.

Morna Macleod is a professor and researcher at the Autonomous University of the State of Morelos in Mexico. She has a doctorate in Latin American Studies from the National Autonomous University of Mexico (UNAM), Mexico City. Currently working on the impact of organized crime and the triggers of forced individual and family displacement in Central Mexico.
Dark Matter Day 2019: The theory behind dark matter

The Universe is over thirteen billion years old and consists of hundreds of billions of galaxies each containing hundreds of billions of stars. Over the past 2000 years our understanding of the Universe has greatly improved: from having the Earth at its centre to having no centre at all! However, in the last 80 years it has become apparent that we understand less than 5% of the Universe – the other 95% being made up of the mysterious dark matter and dark energy.

In this lecture, Professor West will discuss the evolution of our Universe model and why we believe dark matter exists.

Admission free but booking is essential.
Registration (opens in September).

The climate emergency: do desperate times call for desperate measures?

Sir James Bevan joined the Environment Agency as Chief Executive in 2015, following a long career in government. Previous roles included the UK High Commissioner to India, Chief Operating Officer of the UK Foreign Office, and Visiting Fellow at the Center for International Affairs, Harvard.

The Environment Agency is focused on creating a better place for people and wildlife, protecting communities from flooding and responding to environmental incidents. In this, the 27th Gordon Manley Lecture, Sir James will speak on the current climate emergency, reflecting on where we are, and on how the government, the public and industry can respond together. A reception in the Queen’s Building foyer will follow the lecture.

Admission free but booking is essential.
Royal Society Rosalind Franklin Lecture – Professor Nguyễn Thị Kim Thanh

29th October, 6:00pm–7:30pm

Professor Nguyễn Thị Kim Thanh, winner of the Royal Society Rosalind Franklin Medal, will give her prize lecture on ‘Nanomaterials from bench to bedside’ on 29th October 2019.

Michael Faraday synthesised gold nanoparticles back in 1856, so what is new? How could rust, which is magnetic, be used to diagnose and treat diseases such as cancer? How can different shapes of gold nanoparticle such as rods or stars help with killing bacteria on surfaces?

Come to find out about Professor Nguyễn’s interdisciplinary and innovative research on the design, synthesis, characterisation, and biofunctionalisation of plasmonic and magnetic nanomaterials for biomedical applications.

The prize lecture will be webcast live and the video recording of the event will be available shortly after the event.

Learning and memory in the brain

06 Nov 2019, 17:30–18:30

Gaining a better understanding of the brain is an urgent challenge in our society, due to an aging population, which has led to a higher incidence of neurological diseases, such as Alzheimer’s and Parkinson’s disease. Neuroscience can be studied under different angles, either experimentally, by measuring different aspects of the brain, or theoretically, by constructing models that mimic the brain. These two approaches can work hand-in-hand, where experimental findings influence theoretical models, models allow a broader and more concise understanding, predicting new phenomena, in-turn influencing new experiments. Our lab is on the modelling side, working in tight collaboration with experimental labs. We are especially interested in the field of learning and memory, which is thought to happen when connections between neurons change, a process called synaptic plasticity. This research has two main types of applications: medical applications leading to translational research and engineering applications helping for example to design machines that approach human-like learning capabilities.

Professor Claudia Clopath is based in the Bioengineering Department at Imperial College London. She is heading the Computational Neuroscience Laboratory.

Her research interests are in the field of neuroscience, especially insofar as it addresses the questions of learning and memory. She uses mathematical and computational tools to model synaptic plasticity, and to study its functional implications in artificial neural networks.
History Taster Day
23 October 2019, 13:00–17:30

If you are a Year 12 or Year 13 student and are considering studying History next September 2020, join us for our History Taster Day.

During the course of the afternoon you’ll have the opportunity to sample a taster lecture, take part in a small-group seminar, tour our Strand Campus, and chat with our current students and friendly lecturers.

Additional Information

Our History Taster Day is open to Year 12 and Year 13 students or anyone who is considering starting their undergraduate studies in September 2020. This event is also open to any current History BA offer holders.

Numbers for this event are limited, so places will be allocated on a first come first served basis.

Year 12 & 13 History Masterclass
5 November 2019, 10:00am

Decolonisation and the post-war world: approaching the Cold War from a non-western perspective

This masterclass will allow students to explore two important A-level themes - the end of World War II and the Cold War - from a distinctly non-western perspective. Focusing on the second half of the twentieth century, the class will explore how peoples outside Europe, in Britain’s colonial territories, witnessed World War II and its aftermath.

Examining the impact of the war on economic and political structures, as well as on understandings of identity and morality, students will consider whether decolonisation was the result of colonial powers willingly giving up their empires or due to pressure from anti-colonial resistance. They will explore how the Cold War affected these dynamics, and what this relationship means for how we understand the term ‘decolonisation’ and ‘post-imperial’.

To apply to attend the masterclass please complete the Individual Student Application form (if you are in Year 12 or 13 and want to attend on your own).
If people cannot identity themselves digitally then the digital society does not work.

How do biometrics help reduce crime and is it possible to have a biometric system yet not broadcast even more personal information than we do now? There are hosts of biometric systems but which ones work and which are little more than guessing?

Richard Harvey is IT Livery Company Professor of Information Technology at Gresham College and Professor at the School of Computing Sciences at the University of East Anglia.

He also holds several posts in the Vice-Chancellor’s Office at University of East Anglia, including Academic Director for Admissions and Academic Director of Internationalisation. Before joining UEA in 1993, Professor Harvey was a mathematician at first Plessey Naval Systems and then Marconi Underwater Systems.

Professor Harvey holds a PhD in the application of statistical estimation theory to the passive synthetic aperture problem. In his early career, he focused on problems in signal processing, acoustics and vibration.

His research now focuses on artificial intelligence and computer vision. Recently he has been working in the field of artificial lip-reading which fascinates him because of the scientific challenge and allows him to debunk false claims and misunderstandings.

He routinely speaks at schools and conferences around the country both on technical topics related to Computer Science but also on matters relating to admissions policy and widening participation.

Professor Harvey has also acted as a consultant for international companies and as Executive and Non-Executive Director for several spin-outs and start-ups.

Algorithmic Human Development: what is it and why do we need it now?

24 Oct 2019, 17:30–18:30

In the face of the seemingly intractable existential problems we currently encounter on this planet, I argue, we need to systematically develop protocols to enhance emotional and social intelligence and creativity in the human individual. These non-invasive protocols would be based on neuroplasticity and long-term potentiation, and aim at neural retraining for emotion self-regulation and optimal development in the individual regarded as a biological cybernetic system. Algorithmic Human development seeks to aid individual human beings to trade their instinctual or learned traits of destructive aggression for individual and social creativity. Supported by several computational models, including a Hebbian artificial network and the Free Energy Principle, our Self-Attachment protocol, based on the interaction of a rational (Adult) and an emotional (Child) internal agent, has parallels with Machine Learning as it employs the three basic paradigms of “substitution”, “iteration” and “prior updating” in the human individual. I will give the results of a long-term pilot project on the subject and then describe a laughter protocol which directly challenges old and entrenched beliefs of the Bayesian brain about past misfortunes and tragedies. I will finally explain how, during my detention and confinement for eight months last year, I succeeded to extend the domain of this protocol to “existing conditions” and turn a very difficult situation into a highly productive opportunity.

Prof Abbas Edalat did his PhD in Dynamical Systems at University of Warwick. For the past 25 years, he has developed connections between Domain Theory, a mathematical and logical theory of programming languages, with several areas of mathematical computation including exact computation, computational geometry, measure and integration theory, differential calculus, solution of ODE’s, hybrid systems and optimisation.
Chirality and the future of electronics
A Friends of Imperial College lecture

19 November, 19:00–20:30

Under the right circumstances, carbon-based (organic) small molecules and polymers can act as semiconductors, which we are using to make novel electronic devices: solar panels, light emitting diodes, biological sensors, stretchable screens, conductive thread and stick-on glucose sensors.

Professor Wade is well known for her passionate support for women in science, technology, engineering and mathematics and her campaign to tackle gender bias on Wikipedia.

This is a Friends of Imperial event, therefore if you want a free ticket you need to let Ms Joy know as soon as possible.

Imperial College
London

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Geography Opportunities

A Level Study Day

2 December 2019, 10.45am-3.30pm

Please arrive for registration at 10.15am

Royal Geographical Society (with IBG), 1 Kensington Gore, London, SW7 2AR

From £20.00 per person Packed lunch provided for teachers and students.

For more information, go to https://www.rgs.org/events/autumn-2019/a-level-study-day/

GIS Day in partnership with Esri UK

19 November 2019, 11.00am-3.00pm

Doors open at 10.30am

Royal Geographical Society (with IBG), 1 Kensington Gore, London, SW7 2AR

From £5.00 per person

For more information go to:
Professor Macrory will outline important aspects of the draft Environment (Principles and Governance) Bill which sets out how the government will maintain environmental standards as we leave the EU. The Draft Bill also details the Government’s vision of the 25 Year Environment Plan.

This includes creating an independent body - the Office for Environmental Protection – which will:

- scrutinise environmental law and the government’s environmental improvement plan
- investigate complaints on environmental law
- take enforcement action on environmental law

The broader Environment Bill will also include measures on air quality, nature recovery, waste and resource efficiency and water management.

The new Bill is likely to be one of the most important pieces of environmental legislation. It will help to shape the post-Brexit Government’s approach to the environment.

Sailesh Mehta will discuss sentencing in environmental cases and recent case law. Since the Sentencing Council produced definitive guidelines on sentencing environmental crime, the sentencing landscape has changed markedly. There has been a significant increase in the sentences imposed by Courts. However, the increase in average fines has been accompanied by a greater certainty in predicting the likely sentence.

Sailesh will discuss and analyse the trend and look ahead to what the Courts will do in the future.

Sailesh has recently appeared in the Court of Appeal in a number of sentencing cases. He will discuss the trends and give focused guidance on how best to negotiate with the prosecution as well as the Court to achieve the best result.

Sailesh will also discuss the particular difficulties in sentencing very large companies, having successfully prosecuted some of Europe’s largest companies in regulatory offences.
Black holes, entropy and strings
14 Oct 2019, 19:00–20:30
Professor Jerome Gauntlett, Chair in Theoretical Physics, Department of Physics

Summary
They are predictions of Einstein’s theory of General Relativity, our best theory of gravity, and they have recently been directly observed using gravitational waves.

By incorporating quantum theory we know that black holes have entropy, a concept that was first introduced to understand the properties of heat.

This remarkable fact is considered to be a key clue for elucidating the fundamental laws of physics, which may well involve string theory.

This event is organised by Friends of Imperial. If you wish to attend, let Ms Joy know as soon as possible and she should be able to arrange free tickets for you.

Imperial College London

Developing an effective HIV vaccine: what do we need and when will we get there?
24 October, 17:00–18:15

Format: 60-minute discussion with 15 minutes of Q&A
Have a question for the panel? Register for the webinar now.
Ask your question in the registration form before 18 October 2019.

EAVI2020 researchers will tackle these challenging questions in a roundtable discussion. This webinar, on the challenges of HIV vaccine development will take place on 24 October and we welcome anyone interested in vaccine development to register.

First attempts to develop a vaccine against HIV started in the 1980s. Thirty years on and we still do not have a viable vaccine. Why has it been so difficult? What is needed to realise the goal of an effective vaccine? Is the development of a vaccine still a priority?

Facilitator, Dr Roger Tatoud - International AIDS Society
Prof Robin Shattock - Imperial College London
Dr Roger le Grand - Commissariat à l’ énergie atomique et aux énergies alternatives (CEA)
Work Experience in Law

at Ashurst
Starting on 27 July 2020

Who is Ashurst?
Ashurst is a leading global law firm with a history spanning almost 200 years. Our London office is based closed to Liverpool Street Station, in Spitalfields. Check out our website: www.ashurst.com

What’s on offer?
A two-week placement at the start of the summer holidays and a mentoring programme throughout Year 13.

Week 1 (27 – 30 July 2020): The first week will be spent at Ashurst’s London office, providing you with an insight into life at the firm, as well as introducing the type of work encountered as a lawyer at Ashurst.

Week 2: (3 – 7 August 2020): The second week will expand your knowledge of the legal and business sectors and will be spent at five different organisations as part of the Social Mobility Business Partnership (SMBP.org.uk).

Year 13: You will be provided with mentor to help guide you through your university or job applications.

Who are we looking for?
- Be in Year 12 wanting to have a career in Law
- Have achieved an average score of 5.5 over 5 GCSE subjects including English and Maths
- Be the first in your household to go to university

How can you apply?
- Research Ashurst to make sure you know exactly what we do. Do you think you’ll enjoy your time with us?
- Speak to the teacher who sent you this poster and ask them to support your application
- Apply via this link
- When completing the application form, please state that you heard about this opportunity through Teach First.

Deadline for applications is 5:00pm on Friday 31 January 2020.
THE POLITICS OF THE POLICE - Book Launch
16 October 2019, 18:00–20:30

‘This revised, enlarged and updated edition of a classic in criminology offers an insightful analysis of the most critical issues in contemporary law enforcement. Bringing together several disciplines and resolutely adopting a global perspective, the book is an indispensable resource for social scientists interested in this contentious topic.’ (Didier Fassin, Professor of Social Science at the Institute for Advanced Study, Princeton)

‘The Politics of the Police is a classic. This edition adds a sophisticated analysis of global issues to reveal the critical importance of political and socioeconomic context to democratic policing and the challenges posed by neoliberalism. This is essential reading for anyone interested in why politics matters to policing.’ (Michelle D. Bonner, Professor, Department of Political Science, University of Victoria)

To celebrate the publication of the fifth edition of The Politics of the Police, King’s College London (in collaboration the LSE Mannheim Centre and the British Society of Criminology) will host a book launch and symposium.

The event will be chaired by Professor Betsy Stanko (former director of research for the MPS) with commentaries from Dr Alison Wakefield (Portsmouth), Professor Jenny Fleming (Southampton, editor of Policing and Society) and Professor Ben Bradford (UCL). The event will be followed by a drinks reception.

REGISTER WITH EVENTBRITE TO ATTEND

Frederick Mostert’s Inaugural Lecture - Free Speech and Internet Regulation
15 October 2019, 18:30–20:00

Free speech has always been dependent on the healthy exchange of opinions on public forums, but shaping these forums to the challenging contours of today’s online world presents unique challenges. Social media platforms serve as the prime source of knowledge and human thought for many users and have taken on the identity of ‘the modern public square’, as noted by the US Federal Supreme Court. Governments have presented new regulatory proposals for privately-controlled platforms virtually overnight in contrast to their traditional hands-off approach to platform regulation. The Internet Safety Report in the UK, the EU Directive on Copyright in the Digital Single Market and the US President’s Memorandum on Combating Trafficking in Counterfeit and Pirated Goods, and a slew of other regulatory proposals were produced within an extraordinarily short space of time. The lecture will suggest solutions to the inherent conflict between free speech and regulation on the internet by analysing digital due process in cyberspace.

Frederick is Professor of Practice at The Dickson Poon School of Law, King’s College, London, a Research Fellow at the Oxford Intellectual Property Research Centre, University of Oxford, and a Research Fellow at Tsinghua University, Beijing. He is the founder of the Digital Scholarship Institute and Digital Communities Lab. He was inducted into the Intellectual Property Hall of Fame in 2015, which honours those who have helped to establish intellectual property as one of the key business assets of the 21st century.

Frederick is principal author and editor of Famous and Well-known Marks – An International Analysis. He is also the author of numerous articles and other publications, including From Edison to iPod – Protect Your Ideas. His op-eds have appeared in the Financial Times and the South China Morning Post. He is consulted by news organisations and his publications have been cited by courts throughout the world.
On 15 October, join Sara Shamma; Rachel Witkin, Helen Bamber Foundation; Professor Parosha Chandran, The Dickson Poon School of Law (King’s College London); and Dr Siân Oram, Institute of Psychiatry, Psychology & Neuroscience (IoPPN) for a panel discussion as part of the Sara Shamma: Modern Slavery exhibition programme.

After becoming aware of the display and sale of women and girls in slave markets in Syria and Iraq, Shamma was moved to explore and draw attention to the psychological impact of modern slavery. Through interviews with survivors of modern slavery and professionals working in the field, the artist brings a raw and unique artistic perspective to one of today’s greatest challenges.

Women in Mind is a series of events by the Women and Mental Health Special Interest Group, Royal College of Psychiatrists, in collaboration with the Institute of Psychiatry, Psychology & Neuroscience, King’s College London, aiming to engage health professionals and the public in debate and discussion about challenges to women’s mental health across the life cycle.

TARGET MEDICINE
UCL

About Target Medicine
Target Medicine programmes are designed for students from non-selective state schools around greater London who meet selected eligibility criteria. It currently comprises of four main programmes:

Mentoring Scheme
A 12 month mentoring scheme for high achieving Year 12 students from underrepresented backgrounds aspiring to become doctors. The scheme matches over 230 sixth form pupils with 60 UCL medical students offering guided lessons and targeted support enabling students to become more competitive and well-informed medical school applicants.

Summer Challenge
Summer Challenge is a series of events over 6 weeks for Year 12 students whose parents have not been to university, and who are academically high achieving. Student explore why medical ethics is important for those who work in health care and explore different perspectives on a range of ethical issues. The programme encourages critical thinking and debate, and gives students valuable practice at crafting academic essays, which can be used during A-Level and university study.

The Summer Challenge is run in collaboration with UCL’s Widening Participation Team.

Deadline for applications: 27th October
Accountability and Transparency in Government: The Duty of Parliament to Hold the Prime Minister to Account

Annual Mishcon Lecture 2019 - Dame Margaret Hodge MP

15 October 2019, 6:15–8:15 pm

Margaret became the Labour Member of Parliament for Barking in June 1994. She has served in government, holding portfolios across education, work and pensions, business and culture. In 2010, Margaret also became the first elected Chair of the Public Accounts Committee and was also its first female Chair. Today, Margaret is the Chair of the APPG on Responsible Tax as well as the Chair for organisations in the arts and higher education.

Schedule

18:15 Reception
19:00 Lecture begins
20:00 Lecture ends
In this talk, coinciding with the UNESCO International Year of the Periodic Table, Dr Wilkins will discuss the astrophysical origins of the chemical elements, almost all of which have an origin ranging from the big bang, to exploding white dwarfs, the collapse of massive stars, and the merger of ultra-compact objects, neutron stars.

This final mechanism is responsible for many of the heaviest and rarest elements including gold, silver, and uranium, and was only recently confirmed through observations of a merger event first identified using gravitational waves.

Stephen is a Senior Lecturer in Astronomy at the University of Sussex.