

# CSG SIXTH FORM MASTERCLASSES



# Autumn/Winter 2022 Programme

# CSG Sixth Form Masterclasses

No exams.

No grades.

Just interesting speakers and stimulating discussions.

- Masterclasses are extra-curricular lessons delivered by teachers from CSG or visiting experts in various fields.
- Each masterclass will either provide an introduction to a subject which is not taught at A Level or explore a new aspect of a subject you are familiar with taking you beyond the confines of the A Level syllabus.
- Most sessions should be accessible and of interest to students who study the subject in question, as well as those who do not. We hope that a student who is studying sciences would still be interested in poetry and music, and a student of the arts would be interested in scientific questions.
- Hopefully attendance will encourage students to read further and perhaps inspire some to pursue a subject at university.
- Aim to arrive at S5 (Sixth Form Hall) soon after 3.30pm usually there will be tea, coffee and biscuits the session will begin at about 3.40pm and finish by 5pm at the latest but watch out for occasional exceptions.

Unfortunately, due to government cuts to the funding of state education since 2010 (and particularly of post-16 state education), it is with regret that we feel we have to make a charge for certain extra-curricular opportunities such as these.

- Attendance is free for students on bursaries or free school meals.
- For students who are not on free school meals or a bursary the cost is £10 for a 'season ticket' to attend as many masterclasses as you like in one term so if you come to all 10 that is less than £1 per session!
- Parents/guardians will be sent an invitation to pay through ParentPay by email.

We hope that you will find something of interest in these masterclasses - and that you enjoy them as much as we enjoy preparing and delivering them.

### Jon Stubbings

### **CSG Masterclass Programme Co-ordinator**

Thursday 3rd November - 3.30pm - S5

## The Tower of Babel with Jon Stubbings

Why do humans speak different languages? Why are we divided into tribes and nations that so frequently come into conflict with each other?

An answer to these questions was condensed into less than 200 words by the Hebrew scribes who wrote and edited the book of *Genesis* around 2500 years ago - but many questions still remain. Was there a real tower? What message did the Hebrew scribes intend their original audience to draw from the story? How has the story inspired many artists and writers since that time - and what is its relevance today? Come to this masterclass to find out more.



#### Monday 7th November - 3.30pm - S5

## Freedom of Thought – and How to Defend It with Susie Alegre



"Without freedom of thought there can be no such thing as wisdom and no such thing as public liberty without freedom of speech."

So said Benjamin Franklin and, in her new book, human rights lawyer Susie Alegre charts the history and fragility of our most important human right: freedom of thought. With case-studies drawn from politics, criminal justice, and everyday life, she will show how our mental freedom is under threat like never before and that we urgently need to recast our human rights for the digital age in order to safeguard our future.



#### Thursday 10th November - 3.30pm - S5

## Map of the Invisible – A Journey into Particle Physics

## with Jon Butterworth

In this talk Jon Butterworth will explore our current state of knowledge of particle physics, the so-called standard model, which was completed by the discovery of the Higgs boson in 2012. This gives us a map of the invisible world of subatomic physics. But what does the map reveal, what lies beyond its limits and what are the latest experiments telling us? Jon is a physics professor at University College London who also works on the Atlas experiment at CERN's Large Hadron Collider.

#### Monday 14th November - 3.30pm - S5

## What Makes a Killer? - An Introduction to Forensic Psychiatry

## with Richard Taylor

#### Why do people kill?

Does committing a monstrous act make someone a monster? Could any of us, in the wrong circumstances, become a killer?

In this masterclass Richard Taylor will tell us about his long experience working as a Forensic Psychiatrist and what he has learnt from some of the tragic and horrifying cases he has worked on. He will explain what he believes lies inside the mind of those charged with murder and present the important challenge that faces us all; how to to comprehend the terrible and dark deeds that some of our fellow human beings are capable of.



Thursday 17th November - 3.30pm - S5

# Jazz Music and Dance: A People's History with Alan Gregan

In this masterclass Alan Gregan will tell the story of jazz and blues, the music and dance that became the first new art form to emerge from the racial and cultural melting pot of North America; from the Civil War to Civil Rights, from brothels to ballrooms and from jook joints to juke boxes. He might even demonstrate a few moves!



Thursday 24th November - 3.30pm - S5

# RETHINKING POLITICAL ECONOMY AND INTERNATIONAL DEVELOPMENT (part of the Rethinking Economics series)



## with Alfredo Saad-Filho

Alfredo Saad-Filho is Professor of Political Economy and International Development at King's College London. His writings range across critiques of the (Post-)Washington consensus; International Monetary Fund (IMF) and World Bank policies and pro-poor policy alternatives. They include concrete analyses of fiscal, monetary, financial, balance of payments and employment policies, as well as inflation targeting, resource use and policy-making in sub-Saharan Africa, Latin America (especially Brazil) and the Middle East. Come to this masterclass to hear his Marxist perspective on the 'crisis of Neoliberalism'.

#### Monday 28th November - 3.30pm - S5

# Using Mathematics in Healthcare Planning with Christina Pagel

Christina Pagel, who has degrees in both Maths and Physics, is a professor of operational research at University College London. She has been using mathematics to support the NHS for over 15 years. Since 2020 she has written numerous articles for national newspapers and appeared on national and international TV news media and various podcasts discussing the UK's response to the pandemic. In this talk she will give a whistlestop tour into some of the ways in which mathematics is crucial for improving care for patients, using real world examples from her own and other's work, from children's heart surgery to the Covid pandemic.



#### Thursday 1st December - 3.30pm - S5

# An Introduction to German-Jewish Literature

## with George Prochnik

Jewish involvement in the art, literature and music of German speaking culture blossomed in the 19th and early 20th Centuries but was tragically cut short by the Holocaust. George Prochnik is a writer, and a world renowned expert on the distinctive and exceptional contribution to German Literature made by writers of Jewish heritage. He is the author of books on Heinrich Heine, Gershom Scholem, Sigmund Freud, and Stefan Zweig, as well as recent articles on Franz Kafka and Joseph Roth. In this masterclass he will introduce the life and work of some of these writers and discuss the reasons why they are still worth reading today.



## Timbuktu and the Empire of Mali with Gus Casely-Hayford



Gus Casely-Hayford is a curator and cultural historian. He is the writer and presenter of the BBC series Lost Kingdoms of Africa, and now director of the new V&A Museum East. soon to open in Stratford. In this masterclass he will talk about the rise of the largest empire in West Africa and what made Timbuktu the most significant Saharan desert-port of the age. The Mali Empire in its golden age was famed for its riches, scholars and trade, with a history steeped in magicians, epic wars, story-tellers and missing ships. Come along to find out what made Timbuktu so notorious and irresistible to Europe, and why centuries later it still enchants with its beauty, wealth, mystery, intellectual excellence and legacy.

#### Thursday 8th December - 3.30pm - S5

## Gödel's Incompleteness Theorem with Alex Dias

Gödel's incompleteness theorems are two theorems of mathematical logic that are concerned with the limits of provability in formal axiomatic theories. These results, published by Kurt Gödel in 1931, are important both in mathematical logic and in the philosophy of mathematics. Come to this masterclass to hear Alex Dias, Associate Professor in Applied Mathematics at UCL, make sense of this - as well as talk about some examples of how Gödel's ideas have been used to inspire works of fiction.

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