# **ACADEMIC ENRICHMENT PROGRAMME**



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# 66

According to a cluster of recent behavioral science studies, autonomous motivation promotes greater conceptual understanding, better grades, enhanced persistence at school and in sporting activities, higher productivity, less burnout, and greater levels of psychological well-being..."

"...The science shows that the secret to high performance isn't our biological drive or our reward-and-punishment drive, but our third drive — our deep-seated desire to direct our own lives, to extend and expand our abilities, and to make a contribution."

#### Daniel H. Pink

Drive: The Surprising Truth About What Motivates Us

### INTRODUCTION

The Academic Enrichment Programme (AEP) at Dubai College is designed to provide a stimulating and exciting range of experiences for our highly capable students. These experiences are designed to stretch and challenge students beyond their classroom learning, while simultaneously catering for the wide variety of interests that our students typically have.

Our AEP is wholly inclusive, allowing students to pursue their passions across all year levels and subject areas. By offering such a wide variety of choice, it appeals to the intrinsic motivation of students and allows them to apply this to their favourite passions. We invite you and your child to preview the Academic Enrichment map on the next page, and then browse the different sections of the brochure. This will give an overview of the AEP and allow your child to explore the many exciting experiences that await him or her throughout their journey at Dubai College.

Your sincerely,

Shawn Pernasilici Academic Enrichment Coordinator



# LOWER SCHOOL (YEARS 7 – 9)

# ACADEMIC ENRICHMENT ACTIVITIES

#### ART, CRAFT AND DESIGN

#### YEARS 7 – 9 • TERMS ONE & TWO

Introduction for aspiring artists to experience traditional crafts with a contemporary/modern/funky twist.

#### ASTRONOMY CLUB

#### YEARS 7 – 9 • TERMS ONE & TWO

An opportunity to learn more about Astronomy and Astrophysics than is covered in GCSE Physics. If you have a special interest in space, this is the club for you. We will be using the department's telescopes and learn all about what can be seen in the sky in Dubai.

# ELECTRONIC KIT CONSTRUCTION YEAR 9 – 13 • TERMS ONE & TWO

Students will learn the basic techniques of circuit construction. They will learn how to clean a circuit board, use a soldering iron correctly and also the role of flux. All materials will be provided and students can keep the finished items.

#### **BOOK CLUB**

#### YEARS 7 – 9 • ALL TERMS

A club where we set reading challenges, write reviews for the library, collectively read the same book at times, discuss and recommend books for KS3 and, perhaps, influence the book choices on the KS3 curriculum.

#### CAD (COMPUTER AIDED DESIGN) CLUB

YEARS 7 – 9 • TERMS ONE & TWO

Computer aided design using fusion 360 software.

# COMPUTER SCIENCE AND ROBOTICS SOCIETY YEARS 7 – 9 • TERMS ONE & TWO

Mini robotics projects and competitions using a range of devices such as MicroBits, Arduino and Raspberry Pi.

#### **CRYPTOLOGY CLUB**

#### YEARS 7 - 9 • TERMS ONE & TWO

To explain Cryptology basics and then teach different types of ciphers, including the encryption, decryption and cracking for each one. Students will then encrypt their own messages under the guidelines of ciphers and exchange them with each other to decode or crack. If there is time, they will create their own cipher.

#### (JUNIOR) DEBATING

#### YEARS 8 – 9 • ALL TERMS

Develop your debating skills and prepare for local and international competitions

#### **DRAMA CLUB**

#### YEARS 7 - 9 • TERMS ONE & TWO

This club is a chance for students to learn new drama skills, gain confidence and improve their performance technique.

#### (YOUTH) ECONOMY SOCIETY

#### YEARS 7 – 9 • TERMS ONE & TWO

This society is open to Year 7-9s who are interested in, or want to find out more, about economics and business. The society's weekly sessions will involve simulations and games related to economics (and business) that will introduce them to the course and subject before GCSE level, hopefully getting the lower school involved with economics!

# ENGINEERS' CLUB YEAR 7 • TERMS ONE & TWO

Explaining how pencils and leather wallets are made using the *How Its Made* You Tube channel – getting interested in how even simple things are manufactured. Exploring different types of engineering - civil, mechanical, electrical - and how they are all used in industry.

# (JUNIOR) HISTORY SOCIETY YEARS 7 – 9 • ALL TERMS

If you are passionate about the past, this club is for you! This is a chance to extend your knowledge and discussion of history beyond the curriculum, and to get involved with quiz competitions, student-run talks, and a student magazine.

# (JUNIOR) LAW SOCIETY

#### YEARS 9 - 10 • TERMS ONE & TWO

This activity gives students a broad outline of the subject of law and pursuing law as a potential career. Students are introduced to various questions linking with ethics and philosophy within the branch of law.

#### MATHEMATICS SOCIETY/PUZZLE CLUB

#### YEARS 7 – 9 • ALL TERMS

This is a mathematics puzzle club for all students, of all ages and abilities. Once every half term this will become the Maths Society meeting for the members of the Society at Dubai College.

#### (JUNIOR) MEDICAL SOCIETY

#### YEARS 8 – 9 • ALL TERMS

The Junior Medical Society is a student led activity that introduces students to the world of medicine. There are presentations, discussions, guest speakers and a wide range of activities led by Year 12 and 13 students. This is a great opportunity for all budding medics.

#### (JUNIOR) MODEL UNITED NATIONS

#### YEARS 8 - 11 • ALL TERMS

Model United Nations is an academic simulation of the United Nations where students play the role of delegates from different countries and attempt to solve real world issues with the policies and perspectives of their assigned country. Students engage in impassioned discussions about all matters related to geopolitics and current affairs. We develop our debating and presentation skills through regular mock simulations which help prepare students for the MUN conferences, which we regularly partake in.

#### **STEM CLUB**

#### YEAR 7 • ALL TERMS

Explore Science, Technology, Engineering and Maths in a unique and hands-on way. From bridge building competitions, to explosions, to slime, this will be full of fantastically fun activities.

#### STEMTALKS

#### YEARS 7 - 13 • ALL TERMS

We invite all mad scientists, serious techies, innovative engineers, nerdy mathematicians and genius medics to brainstorm and talk about their passions.

# MIDDLE SCHOOL (YEARS 10 – 11)

ACADEMIC ENRICHMENT ACTIVITIES

### CHEMISTRY CLUB (KEY STAGE 4) YEARS 10 - 11 • TERMS ONE & TWO

This club provides students with the opportunity to further their understanding of chemistry in Y10-11 and learn more about the applications of chemistry through practical work, demonstrations and research.

# COMPUTER SCIENCE AND ROBOTICS SOCIETY

# YEARS 10 – 13 • TERMS ONE & TWO

Mini robotics projects and competitions using a range of devices such as MicroBits, Arduino and Raspberry Pi.

#### (SENIOR) DEBATING

#### YEARS 10 - 13 • ALL TERMS

Develop your debating skills and prepare for local and international competitions.

#### **ELECTRONIC KIT CONSTRUCTION**

#### YEARS 9 - 13 • TERMS ONE & TWO

Students will learn the basic techniques of circuit construction. They will learn how to clean a circuit board, use a soldering iron correctly and also the role of flux. All materials will be provided and students can keep the finished items.

#### INTRODUCTION TO MONOLOGUES

#### YEARS 10 - 13 • TERM 1

The Monologue Club is an opportunity to explore how to approach new texts using vocal and physical skills. Every week students are given a new explorative task to delve deeper into characters not just individually, but also as a group to put the page onto the stage. In the end, each student will be confident at presenting an individual monologue, which encompasses the emotions of a character, ranging from contemporary plays to classics such as Shakespeare.

# **IMPROVE YOUR LISTENING SKILLS**

#### YEAR 11 • TERMS 1 & 2

Featuring authentic websites, listening to Francophone music, focusing on phonics and phonetics as well as examination technique, this is a club where Year 11 students can hone their listening skills in a relaxed atmosphere. The

club aims to build confidence as well as enabling students to develop strategies to raise their performance in this section of the GCSE course.

# (DUBAI) KEYNES SOCIETY

# YEARS 10 - 13 • ALL TERMS

Our Society (named after economist John Maynard Keynes) provides students with a means of discussing and learning about the big challenges today's world is facing. With both student and external speakers, global issues are broken down and presented to all in a TED-style accessible manner followed by Q&A. In addition, our termly newsletter gives students a platform to hone their journalistic skills to a wider audience.

#### (JUNIOR) LAW SOCIETY

#### YEARS 9 - 10 • TERMS ONE & TWO

This activity will give students a broad outline of the subject of law and pursuing law as a potential career. Students are introduced to various questions linking to ethics and philosophy within the branch of law.

# (JUNIOR) MEDICAL SOCIETY YEARS 8 - 11 • ALL TERMS

The Junior Medical Society is a student led activity that introduces students to the world of medicine. There are presentations, discussions, guest speakers and a wide range of activities led by Year 12 and 13 students. This is a great opportunity for all budding medics.

# MATHEMATICS SOCIETY/PUZZLE CLUB YEARS 10 – 11 • ALL TERMS

This is a Mathematics puzzle club for all students, of all ages and abilities. Once every half term this will become the Maths Society meeting for the members of the Society at Dubai College.

#### **MICRO FINANCE CLUB**

#### YEARS 10 - 13 • TERMS ONE & TWO

What stops poor countries from becoming rich? What can developing country governments put in place to help their citizens flourish? What can WE do to help make the world a fairer and better place? MF Club looks at such questions and more in an open and relaxed environment. We also make microloans to real life entrepreneurs in poor countries via Kiva.org.

#### (SENIOR) MODEL UNITED NATIONS

#### YEARS 10 - 13 • ALL TERMS

Model United Nations is an academic simulation of the United Nations. Students play the role of delegates from different countries and attempt to solve real world issues with the policies and perspectives of their assigned country. Students engage in impassioned discussions about all matters related to geopolitics and current affairs. We develop our debating and presentation skills through regular mock simulations which help prepare students for the MUN conferences which we regularly participate in.

#### PHYSICS OLYMPIAD EXPERIMENT

#### YEARS 10 - 13 • TERMS ONE & TWO

The Physics Olympiad competitions are run by the University of Oxford and provide an opportunity for students to extend their physics knowledge and skills beyond the confines of the GCSE and A Level curricula. The Experimental Project runs in the first term every year and submissions are made to the BPhO in early January. Students are given a brief introduction to the physics behind the experiment and some instructions on what to do. They have to design and conduct their own experiment, taking all variables into account, and consider potential sources of error and uncertainty. They produce a full report of their work and the best report from their category (GCSE or A Level) is sent for assessment by the BPhO. It is excellent training in the techniques of conducting thorough and thoughtful experiments. It is one of the most challenging of the Olympiad competitions as students are required to be independent, self-directed, and self-motivated over several months.

#### **PSYCHOLOGY SOCIETY**

#### YEARS 10 - 11 • TERMS ONE & TWO

An opportunity to explore the human mind and behaviour with guest speakers from our very own A Level Psychologists.

#### (DUBAI) PHYSICS SOCIETY YEARS 9 – 13 • TERMS ONE & TWO

Weekly presentations and discussions surrounding the subject of Physics with a different focus every term, starting with quantum mechanics.

#### STEMTALKS

#### YEARS 7 - 13 • ALL TERMS

We invite all mad scientists, serious techies, innovative engineers, nerdy mathematicians and genius medics to brainstorm and talk about their passions.

SIXTH FORM (YEARS 12 – 13)

ACADEMIC ENRICHMENT ACTIVITIES

#### **CRAFTIVISM**

#### YEAR 12 • TERM ONE

Craftivism is the combination of sewing and stitching with gentle political activism.

# COMPUTER SCIENCE AND ROBOTICS SOCIETY YEARS 10 - 13 • TERMS ONE & TWO

Mini robotics projects and competitions using a range of devices such as MicroBits, Arduino and Raspberry Pi.

#### (SENIOR) DEBATING

#### YEARS 10 - 13 • ALL TERMS

Develop your debating skills and prepare for local and international competitions.

#### **ELECTRONIC KIT CONSTRUCTION**

#### YEARS 9 - 13 • TERMS ONE & TWO

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#### **GEOGRAPHY SOCIETY**

#### YEAR 12 • TERMS ONE & TWO

The society is made up of staff and students who aim to explore and promote Geography beyond the curriculum to all year groups e.g. movie nights, visiting speakers, quizzes, competitions, alumni visits, career talks, and university guidance whilst providing the opportunity to debate and enquire on a variety of topical and current themes.

# HISTORY AND POLITICS SOCIETY YEARS 12 - 13 • TERMS ONE & TWO

A friendly student-led Monday lunchtime society, where discussion of history and politics can take place unshackled from exam board specifications. Students set the agenda, delivering short presentations or choosing discussion points based on their interests, and the range of topics we explore is therefore eclectic.

# INTRODUCTION TO MONOLOGUES YEARS 10 - 13 • TERM 1

Monologue club is an opportunity to explore how to approach new texts using vocal and physical skills. Every week students are giving a new explorative task to delve deeper into characters not just individually but also as a group to put the page onto the stage. In the end, each student will be confident at presenting an individual monologue, which encompasses the emotions of a character, ranging from contemporary plays to classics such as Shakespeare.

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# MATHEMATICS SOCIETY/PUZZLE CLUB YEARS 7 – 9 • ALL TERMS

This is a Mathematics puzzle club for all students, of all ages and abilities. Once every half term this will become Maths Society meeting for the members of the Society at Dubai College.

# (SENIOR) MEDICAL SOCIETY YEARS 12 - 13 • ALL TERMS

The Medical Society is a student led activity for Year 12 and 13 students who are interested in studying medicine at university. There will be presentations on the application process and the courses available. There will also be practice interviews and discussions about a wide range of medical issues.

#### **MICRO FINANCE CLUB**

#### YEARS 10 - 13 • TERMS ONE & TWO

What stops poor countries from becoming rich? What can developing country governments put in place to help their

citizens flourish? What can WE do to help make the world a fairer and better place? MF Club looks at such questions and more in an open and relaxed environment. We also make microloans to real life entrepreneurs in poor countries via Kiva.org.

#### (SENIOR) MODEL UNITED NATIONS

#### YEARS 10 - 13 • ALL TERMS

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#### **OXBRIDGE PREPARATION SESSIONS**

#### YEAR 12 • TERM 3, YEAR 13 • TERM 1

These after-school sessions on Mondays and Tuesdays in term 3 of Year 12 and term 1 of Year 13 will help students prepare for Oxbridge applications in the following programmes: History, History & Politics, HSPS, Law, and programmes that require students to sit the TSA Paper 2 (in co-ordination with Economics Department and Mr Monks). All aspects of preparation are covered, including advice on external essay prizes, summer work, personal statements, entrance exams and interview practice and preparation.

#### (DUBAI) PHYSICS SOCIETY

#### YEARS 9 - 13 • TERMS ONE & TWO

Weekly presentations and discussions surrounding the subject of Physics with a different focus every term, starting with quantum mechanics.



#### THE HOUSE ACADEMIC CUP

The Academic cup is a part of the school house system, and allows students to compete in a number of stimulating academic challenges throughout the year. These challenges span across all subjects and disciplines, and are intended to stretch and challenge students while allowing them to earn house points for their respective houses.

In Key Stages 3 and 4, students from each house participate in a monthly academic contest created by one of the subject departments of the school. These are judged by the respective department, with house points being awarded according to the criteria set.

An example of a monthly contest would be the "cell projects" that are part of Year 7 Science. As part of the assessment criteria, students are encouraged to go above and beyond the curriculum expectations and make authentic, hand-made models of specialised cells. The houses choose their top submissions, and these are then ranked against each other for the available house points!

In Sixth Form, a "University Challenge" style trivia competition allows the houses to compete in a round-robin tournament, semi-final and final round to crown the Dubai "College Challenge" champions. Houses must select a balanced 4-player teams for each stage of the competition, maximising opportunities for all students to get involved.

As contributions to the overall Academic Cup point totals are made from students from Years 7 to 13, this is truly a team endeavour that builds house spirit and friendly competition. At the end of the year, the house that has tallied the most points overall will be awarded the prestigious "Academic Cup" for that school year.

	KEY STAGE 3 (YEARS 7 – 9)	KEY STAGE 4 (YEARS 10 - 11)	KEY STAGE 5 (YEARS 12 - 13)
ALL TERMS	Mathematics Puzzle of the week	Mathematics Puzzle of the week	Mathematics Puzzle of the week
TERM 1	YEAR 7 Science: Cell projects YEARS 7 – 9 MFL: Vocab Express YEAR 9 History: Peter Hill essay prize	Royal Geography Society Young Geographer of the Year	College Challenge Rounds 1 – 3
TERM 2	<b>YEARS 7 – 9</b> Science: SciComp	DC Stock Market Challenge	DC Stock Market Challenge College Challenge Semi-final and final
TERM 3	YEAR 7 House public speaking YEAR 8 Science: Crest awards	YEAR 9/10 Salters Festival of Chemistry YEAR 10 French: Haiku competition	End of year examinations

# ACADEMIC CUP CALENDAR

THE FORUM & THE DIALOGUE CENTRAL PODCAST

### THE FORUM AND THE DIALOGUE CENTRAL PODCAST

The Forum and the Dialogue Central Podcast are cornerstones of the Academic Enrichment Programme at Dubai College. Students of all ages participate and contribute to interdisciplinary explorations of various themes throughout the school year.



THE DIALOGUE CENTRAL PODCAST

Students from Years 7 to 11 are invited to organise, produce, host and participate in this dialogue-based podcast. It has been designed in the spirit of intellectual curiosity and dialogue, much like the podcast "In Our Time" (hosted by Melvyn Bragg on BBC4). However, rather than Oxford and Cambridge scholars, we have teenagers engaging in the dialogue from their unique perspectives.

The podcasts are based around open-ended questions related to subjects and topics that our students are passionate about. The intent is to build meaning and understanding through constructive and explorative dialogue.



#### **THE FORUM**

At the Sixth Form level, students collaborate with teachers to host panel discussions. Each discussion is centred around a chosen theme, providing a platform to explore the theme from various points of view.

Previous themes include:

- The Good Life
- Nature
- Gender and the Body
- Warfare
- The City

# **The Good Life**

A panel discussion. Come and be part of the conversation. Open to all DC students.



Date: Sunday 28<sup>th</sup> October @ D-Block Lecture Theatre, 3.45-5pm

ACADEMIC COMPETITIONS AND TRIPS

#### ACADEMIC COMPETITIONS AND TRIPS

Above and beyond the academic enrichment activities offered each term, a wide variety of academic competitions and subject related trips take place each year.

Competitions allow students to apply their subject-based and collaborative skills to new situations, and to interact with other students from the region or further afield. School trips provide authentic, real world experiences which cannot be replicated in the classroom. No matter what a student's favourite subject is, they will be able to pursue their passions with the many exciting on campus, national and international opportunities available.

Some competitions and trips may be subject to external fees, where applicable. All are supervised by Dubai College staff members, with a maximum student-teacher ratio of 1:10.

The following pages outline the current offering of academic competitions and trips that are facilitated by the school departments. Each department will communicate in advance how and when students should sign up for any events of interest.

#### ACADEMIC ENRICHMENT TRIP CALENDAR

The following is an indicative outline of trips offered (pre-COVID) in 2019-2020. These, and any new trips are offered subject to student demand and subscription.

#### TERM 1

TRIP	DESTINATION	WHO?	WHEN?
Conservation Project (Biology)	Madagascar	Years 9-11	October
Geography	Iceland	Years 10-11	November
Model United Nations	Korea	Years 11-13	December
Bedales Drama Exchange	UK	Years 12-13	December
Economics	Japan	Years 10-12	December

#### TERM 2

TRIP	DESTINATION	WHO?	WHEN?
Young Musician of the Gulf	Bahrain	Years 7-13	January
COBIS Senior Debating	Spain	Years 12-13	February
History	Berlin, Germany	Year 9	February
History	Russia	Years 10-13	October
ISMTF Senior Maths Competition	Austria	Year 12	March
COBIS Junior Debating	Romania	Years 9-10	March
Classics	Italy/Greece	Years 7-11	April

TRIP	DESTINATION	WHO?	WHEN?
Space Camp	Belgium	Year 8	May
Spanish	Spain	Years 7-9	June
Conservation Safari	South Africa	Years 11-13	July

# ACADEMIC ENRICHMENT COMPETITIONS

#### ENGLISH

### TERM 2

COMPETITION	SUBJECT	WHO?	WHEN?
Gulf Debates	English	Year 11+	January

# **HUMANITIES**

#### TERM 1

COMPETITION	SUBJECT	WHO?	WHEN?
Butler Prize	Politics	Year 12	August
Peter Hill essay price	History	Years 7 – 9	December
History Bee and Bowl	History & Politics	Years 7 – 13	December

# TERM 2

COMPETITION	SUBJECT	WHO?	WHEN?
Contemporary Issues Essay Prize	Geography	Year 12	March - April
Junior History Society Prize	History	Years 7 – 11	March
Senior History and Politics Society	History & Politics	Years 12 – 13	March

# TERM 3

COMPETITION	SUBJECT	WHO?	WHEN?
The TORCH Humanities and Science Essay Competition	Humanities	Years 7 – 13	May
Robson History Prize	History	Year 12	May
History Prize*	History	Years 7 – 13	June
Young Geographer of the Year	Geography	Years 7 – 13	June
Young Economist of the Year	Economics	Years 7 – 13	June – July

# **FOREIGN LANGUAGES**

# TERM 1

COMPETITION	SUBJECT	WHO?	WHEN?
Vocab express	Spanish/French	Years 7 – 9	Oct – Nov

COMPETITION	SUBJECT	WHO?	WHEN?
Oxford Modern Languages Flash	Spanish/French	Years 7 – 13	Jan - Mar
Fiction			

# ACADEMIC ENRICHMENT COMPETITIONS

#### MATHEMATICS

# TERM 1

COMPETITION	SUBJECT	WHO?	WHEN?
KENKEN Rounds 2 & 3*	Maths	Year 7-9	October
Mangahigh	Maths	Year 7-8	November
UKMT Senior Maths Comp	Maths	Year 11-13	November
Dubai Maths Super League	Maths	Year 8	November
UKMT British Maths Olympiad 1	Maths	Year 11-13	December
Dubai Maths Super League	Maths	Year 11	December
DC Puzzle of the Week	Maths	Year 7-13	Weekly

\*KENKEN R1 commences in term 3 of the academic year. Note also, that students must qualify for the UKMT BMO1 by achieving a qualifying score in the UKMT SMC. Finally, be aware that all DMSL dates are 'locked in' in October and are subject to change.

# TERM 2

COMPETITION	SUBJECT	WHO?	WHEN?
Dubai Maths Super League	Maths	Year 12-13	January
ИКМТ ІМС	Maths	Year 9-11	February
Dubai Maths Super League	Maths	Year 9	February
UKMT IMC follow on rounds	Maths	Year 9-11	March
Dubai Maths Super League	Maths	Year 10	March
ISMTF	Maths	Year 12-13	March
Mangahigh*	Maths	Year 7-8	March
DC Puzzle of the Week	Maths	Year 7-13	Weekly

\*Mangahigh are operating a competition in March 2021, owing to the COVID 19 pandemic.

COMPETITION	SUBJECT	WHO?	WHEN?
Dubai Maths Super League	Maths	Year 7	April
UKMT Junior Maths Challenge	Maths	Year 7-8	April
DC Maths Olympiad Round 1	Maths	Year 7-13	April
DC Maths Olympiad Round 2	Maths	Year 7-13	May
DC Maths Olympiad Round 3	Maths	Year 7-13	June
KENKEN Round 1	Maths	Year 7-9	May/June
UKMT JMC follow on rounds	Maths	Year 7-8	June
House Maths Competition Maths Year 7-8		Year 7-8	June
DC Puzzle of the Week	Maths	Year 7-13	Weekly

# ACADEMIC ENRICHMENT COMPETITIONS

# SCIENCE

# TERM 1

COMPETITION	SUBJECT	WHO?	WHEN?
Dubai Science Super League	Science	Years 7 – 9	October
Royal Society of Biology Photography Competition	Biology	Years 7 – 13	October
Physics Olympiad Challenge	Physics	Year 13	October
Physics Olympiad Round 1	ysics Olympiad Round 1 Physics Year 13 Nover		November
Chemistry Olympiad	Chemistry	Year 13	December

# TERM 2

COMPETITION	SUBJECT	WHO?	WHEN?
Dubai Science Super League	Science	Years 7 – 9	February
Science Challenge (ICL)	Chemistry	Years 10 – 13	February
SciComp	Science	Years 7 – 9	March
Physics Olympiad	Physics	Year 11	March
Physics Olympiad	Physics	Year 12	March
British Biology Olympiad	Biology	Years 12 – 13	March
Nancy Rothwell Award Specimen Drawing Competition	Biology	Years 7 – 13	March
Royal Society of Biology Photography Competition	Biology	Years 7 – 13	March
F1 in Schools	Science	Years 7 – 13	April

COMPETITION	SUBJECT	WHO?	WHEN?
British Biology Challenge	Biology	Years 9 –10	May
Physics Olympiad	Physics	Year 10	May
Dubai Science Super League	Science	Years 7 – 9	June
Salters Festival of Chemistry	Chemistry	Year 9	June
Intermediate Biology Olympiad	Biology	Year 12	June
CREST Awards Science projects	Science	Year 8	July
The 2021 Cambridge Chemistry Challenge	Chemistry	Year 12	June/July

HIGHER PROJECT QUALIFICATION (HPQ) YEARS 10-11

EXTENDED PROJECT QUALIFICATION (EPQ) YEARS 12-13



# HPQ (HIGHER PROJECT QUALIFICATION) EPQ (EXTENDED PROJECT QUALIFICATION)

Our school's highly popular HPQ and EPQ programmes offer students the chance to explore subjects, topics and issues that they are highly passionate about. The qualifications empower students to develop research skills and delve beyond the scope of the curriculum.

#### **HPQ (HIGHER PROJECT QUALIFICATION)**

The HPQ is a GCSE standard qualification which equates to half a GCSE. Students are invited to apply at the start of Term 2 in Year 10. Stringent criteria for acceptance apply to ensure that students are fully committed to the course and its requirements as there is a substantial independent input. The course is taught once a week and covers Philosophy followed by critical thinking skills and research skills. The bulk of the research is then carried out from June to the end of August. A formal written course is taught at the start of Term 1 in Year 11, with a presentation in November and submission at the end of the term.

The Year 10 aspects of the course enable students to explore knowledge, the nature of knowledge and how to develop as critical thinkers. We draw on current affairs so they can relate ideas to the world around them. Over the years our students have produced high calibre projects, many articulated beyond GCSE standard, covering topics such as driverless cars involving AI to the reliability of History texts books to the emotional mindset required to win sailing competitions.

Students select their own areas of study and fine tune their titles before embarking on extensive research. They participate in seminar style teaching groups along with a few group lectures. They then present their findings to their group before producing the final written thesis in the region of 3000 words, submitted at the end of Term 1, Year 11. The HPQ teacher is there to act as a guide and to question. Unlike the other subjects there is no report, target grades or chasing of the student. It is entirely their own choice to engage and complete the project.

#### **EPQ (EXTENDED PROJECT QUALIFICATION)**

The EPQ is the next step up and offers an A Level standard qualification (carrying half the UMS of a whole A Level) where the student goes into greater depth and further exploration. It operates in a similar manner to the HPQ. Students apply at the start of Year 12 and embark upon a course in academic thesis set up followed by critical thinking skills and research skills. The formal writing course takes place at the start of Year 13 with the presentation either in November or the start of Term 2. Final submission is in the second week of term 2. A key difference between the HPQ and EPQ is that we offer 4 distinct project types through the EPQ. They are: Dissertation, Investigation, Performance and Artefact.

#### (i) Dissertation

With our Dissertation cohort, virtually all subject areas are normally explored. Science proves popular with projects asking 'How will the emerging role of Precision Medicine transform the management of Alzheimer's Disease?' to 'Are probiotics effective in the prevention of allergic diseases?' What is interesting about their choices is that these topics are often relevant to their peers who may have first-hand experience of people affected by such issues. Politics and Economics also inspire our students to question 'To what extent has the increasing presence of social media impacted the marketing strategies of luxury fashion brands such as Christian Dior and Louis Vuitton?' to 'To what extent is the export-led industrialisation the main reason for South Korea's rapid economic growth from the early 1960s to the 1980s?' Many students like to delve into issues in their country of origin which encourages a deeper connection and understanding of their heritage.

#### (ii) Performance and Artefact

Performance and Artefact projects have increased in number in recent years as more students wish to engage practically and create. Sustainability is a theme covered across all projects but none more visibly than a student who made a guitar made from a plastic water container and recycled wood. He successfully played a piece of music on it. Another student devised a monologue in Latin having taught herself how to actually write in the correct form and metre, then produced it for her Performance EPQ. It was quite astonishing as was an Artefact produced by another student whose premise was: 'To design and create a symbolic outfit, telling a narrative of how the Chinese revolution changed the role of middle-class women in Chinese society'. Her Year 8 audience were suitably stunned and impressed.

Self-teaching as a specific skill is becoming more and more popular amongst the students. Recent examples include making electrical items with one student spending his summer break learning the guitar so he could perform a piece of music showcasing Jimi Hendrix's rhythm guitar style. DC seems to have many emerging writers. Recent years have seen a wonderful selection of books produced involving poetry and novellas. Our students often like to be topical: in one case, was a book was the written and illustrated for small children entitled 'Try Us, Virus'. This was aimed at teaching young children why we socially distance and wear masks at the moment.

#### (iii) Investigation

Investigation projects enable students to learn how to produce questionnaires, interviews or conduct experiments following correct academic and research ethics and protocols, thus adding authentic research findings to the current academic body of research. One student wanted to investigate 'To what extent are behavioural and decision processes affected after the interaction with a device?' and tested her peers over a series of days using controlled experiments in classrooms. The second student was lucky enough to gain access to a behavioural lab and more than 20 of our staff gave up their time to be 'tested' to find out 'How far do emotions experienced while viewing advertising campaigns influence consumer buying behaviour?' Volunteers had their faces mapped as they looked at a series of dental advertisements, the results of which were compared to psychological studies.

For the EPQ, each student has a mentor from the staff body. Whereas the EPQ team teach and deliver the course the mentor's role is to challenge and support. It is not necessary to have a subject specialist as the mentor is there to question. The student is the expert in their field and so needs to be clear about what they are doing. Both courses provide a taste of university through lectures, seminars and the overall independent research experience. Students need to be highly motivated, effective with time management and, most importantly, be passionate about what they want to pursue. Returning alumni are strong advocates, reporting on the positive impact having completed their project has had on their studies at university.

Both the HPQ and EPQ offer students the opportunity to explore, create and pursue something which they are passionate about and can bring to life.

# TOPUP

TOP UNIVERSITY PREPARATION YEARS 12-13

# TOP UNIVERSITY PREPARATION (TOPUP)

Our bespoke TopUP offering is designed to enrich and extend Sixth Form students in a subject of their choosing. By attending the weekly TopUP sessions with a subject expert, students are empowered to push themselves beyond the specification in preparation for the competitive university application process and for study at the university level.

Where applicable, there is an emphasis on development of metacognitive and oracy skills to prepare students for requisite university entrance examinations and interviews.

TopUP consists of one lesson per week, and is integrated into the timetabled curriculum. Available TopUP subjects include:

Art & Architecture
Biology
Computer Science
Economics
Engineering
English
French
FIEIICII
Geography & Earth Sciences

**History & Politics** 

Law
Mathematics
Medicine
Biomedicine
Biochemistry
Veterinary Medicine &
Dentistry
Physics
Spanish
Thinking Skills
Assessment preparation

#### **GENERIC OUTLINE**

YEAR 12 TERM 1	The Sixth Form team's Thinking Skills modules are common for all Year 12s.
YEAR 12 TERM 2	ACADEMIC ENRICHMENT Exploration of topics not on the A Level syllabus or discussion of topical events or issues relating to the field of study.
YEAR 12 TERM 3	<ul> <li>ACADEMIC ENRICHMENT</li> <li>Further exploration of topics not on the A Level syllabus, complex problem tackling and/or discussion of topical events or issues relating to the field of study.</li> <li>TOPUP <ul> <li>UCAS courses discussions</li> <li>Personal statements</li> <li>Super-curricular exploration and IPP reviews for Oxbridge applicants</li> <li>Competitions and prizes</li> <li>Introduction to admissions tests</li> <li>DC Alumni mentor pairings</li> </ul> </li> </ul>
YEAR 13 TERM 1	<ul> <li>ACADEMIC ENRICHMENT         Further complex problem tackling and discussions of key issues.     </li> <li>TOPUP         <ul> <li>Personal statement finalisation</li> <li>Admission test practice and mock assessments</li> <li>Interview preparation and mock interviews</li> <li>Specialist topic discussions and presentations</li> </ul> </li> </ul>

The TopUP booklet containing more detailed descriptions may be accessed at this link:

https://resources.finalsite.net/images/v1625459299/dubaicollegeorg/rryuwzftucwikzqkziid/DCTopUPPack.pdf