

# DUBAI COLLEGE

*A tradition of quality in education*



## Dubai College: A Level Options for September 2021

### Contents

ARABIC .....	2
ART AND DESIGN .....	3
BIOLOGY.....	5
CHEMISTRY .....	6
COMPUTER SCIENCE .....	7
DESIGN AND TECHNOLOGY (Product Design) .....	9
DRAMA AND THEATRE STUDIES .....	10
ECONOMICS.....	11
ENGLISH LITERATURE.....	12
FRENCH.....	13
GEOGRAPHY .....	14
HISTORY .....	15
LATIN.....	16
MATHEMATICS and FURTHER MATHEMATICS .....	18
FURTHER MATHEMATICS (AS Level) .....	20
MUSIC.....	21
PHYSICAL EDUCATION.....	22
PHYSICS .....	23
POLITICS .....	24
PSYCHOLOGY.....	25
SPANISH.....	27

# ARABIC

For further information, please click on the following link:

<https://qualifications.pearson.com/en/qualifications/edexcel-a-levels/arabic-2018.html>

## **Course Outline**

The course is designed to make the learning of the Arabic language enjoyable and stimulating. Students will develop an understanding of Arabic in a variety of contexts and genres, and learn to communicate confidently, clearly and effectively in it. Students will develop an awareness and understanding of the contemporary society, cultural background and heritage of the countries or communities where Arabic is spoken.

The course has a 'two unit' format and focuses on language which facilitates the study of literature and acknowledges the importance of Arabic language culture. Students need to master reading and grammar and be able to convey their understanding of written Arabic. They also need to draw on, and apply, their knowledge of Arabic language, grammar and lexis to produce a short translation from Arabic into English, as well as demonstrate an ability to manipulate Arabic language in continuous writing.

Students will be expected to recognise and use Arabic in a variety of contexts as well as in the following general topic areas:

- Youth matters
- Lifestyle, health and fitness
- Environment and travel
- Education and employment.

Students need a minimum of a grade 8 at GCSE to be able to start this course.

## ART AND DESIGN

For further information about the course, please click on the following link:

<https://qualifications.pearson.com/en/qualifications/edexcel-a-levels/art-and-design-2015.html>

The best foundation for success at A Level is a good grade at GCSE, a passion for art and a desire to create. Students should understand the basic formal elements of art: colour, tone and form, as well an appreciation of the importance of art, craft and design.

The A Level course encourages an adventurous, open-minded and enquiring approach. We work with a wide range of materials and techniques which include drawing, painting, printmaking, textiles, sculpture and photography. Students should own their own camera, and we provide a list of art materials that we recommend students purchase before the start of the course. Independence of thought is paramount. We encourage our students to think and act as artists and designers and to understand the context in which artworks are made. We encourage our students to refer to as many sources and other artists as possible in order to generate ideas. We hope that they visit art galleries and museums in Dubai and abroad as much as possible. Students produce practical work that embraces a variety of ideas and experiments, documenting this process in sketchbook 'journals'.

The course presents an opportunity for students to produce highly personal creative work and to pursue individual interests. It is vital that students are able to work independently and that they are well motivated and enthusiastic about art in all its guises.

### **Qualification Aims and Objectives**

The aims and objectives of the course are to enable students to develop:

- Intellectual, imaginative, creative and intuitive capabilities
- Investigative, analytical, experimental, practical, technical and expressive skills, aesthetic understanding and critical judgement
- Independence of mind in developing, refining and communicating their own ideas, their own intentions and their own personal outcomes
- An interest in, enthusiasm for, and enjoyment of art, craft and design
- Their experience of working with a broad range of media
- An understanding of the interrelationships between art, craft and design processes and an awareness of the contexts in which they operate
- Knowledge and experience of real-world contexts and, where appropriate, links to the creative industries
- Knowledge and understanding of art, craft, design and media and technologies in contemporary and past societies and cultures
- An awareness of different roles, functions, audiences and consumers of art, craft and design.

## **Course Outline**

Students work on two themed coursework components in Year 12. In Year 13, there is one coursework component and a timed examination via an externally set assignment.

### Year 12

A theme is set and students develop appropriate research from primary and secondary sources. Students collect and produce a range of images in various media, exploring ideas and experimenting with materials. In Year 12 there is a focus on drawing; this is the key to most successful art projects. From their drawings, students develop personal and original works, which culminate in a painting, print, sculpture, installation, multi-media, digital or mixed media final piece or series of pieces.

### Year 13

Students devise their own theme based upon personal preferences, previous work and individual interests. The theme is arrived at through consultation with the teacher; appropriate tasks are set and guidance is given. The practical work culminates in a final piece, or series of pieces, of original art.

- **Personal Study**

Responding to the work of established artists is an integral part of all art and design projects. The Personal Study focuses upon a selected aspect of art, craft or design that is closely related to students' own practical work. It takes the form of a written and illustrated dissertation in any format. Students are required to write 3000 words.

- **Externally Set Assignment**

A question paper is set by the examination board, with a theme for students to follow in a similar way to the coursework unit. This is given to students in February. A final piece is produced under examination conditions in early May. All work is exhibited for internal marking towards the end of May and an external moderator visits the school shortly after.

## **Career Prospects**

There are many careers related to art, craft and design. Those that are directly art related will require further study at university. For many UK students, we recommend that they embark upon a Foundation course, which provides opportunities to discover the most suitable degree course. Students that apply to the US or UK are required to submit a portfolio. This is based on A Level coursework and we provide lots of help with applications and assistance in preparing portfolios. Many of our students also opt to study Art at A Level but choose not to specialise directly in Art. We have, for example, had art students who have gone onto to study economics, mathematics, English literature, anthropology, psychology, philosophy, computer science, physics, medicine and biological sciences at university.

Studying and making art gives students the opportunity to learn how to think critically. Since most questions regarding a piece of art do not have a specific answer, pupils are encouraged to come up with their own solutions. The problem solving and research skills that students acquire over the A Level course will prove useful no matter what specialism they may eventually choose to follow.

# BIOLOGY

For further information about the course, please click on the following link:  
<https://qualifications.pearson.com/en/qualifications/edexcel-a-levels/biology-a-2015.html>

## Course Outline

Saving threatened species, studying microbes, growing organic foods, modifying organisms to suit our needs, preventing and curing diseases, solving crimes, studying animal behaviour and considering the impact of environmental change are just some of the many opportunities, and challenges, that the study of biology will provide students today.

With important advances in biotechnology, genetics, medicine and the increasing awareness of our effects on the environment, the study of biology has become even more relevant to today's society. The A Level course reflects this relevance by engaging and inspiring students to further their understanding of the wide range of topics that make up the 'Biological Sciences'. The course will also help students appreciate how society makes decisions about biology-related issues and to see how biology can contribute to the success of the economy and society in general.

This specification has been developed in collaboration with the Salters-Nuffield Advanced Biology Project which leads the field in innovative approaches to the teaching and learning of Biology at A Level. The course follows on from the GCSE Biology course and continues the '*How Science Works*' theme, encouraging students to consider the contemporary social and ethical context of the Biological Sciences.

Throughout the course there is great emphasis on practical work, the application of biology and the concepts that underlie these applications. Students will be given the opportunity to use relevant apparatus and techniques to develop and demonstrate specific practical skills; this will be reported separately on students' certificates alongside the overall grade for the qualification. To achieve a pass, students must demonstrate that they are competent in all of the practical skills listed in the subject content requirements for biology.

The topic areas covered in Year 12 are:

- Lifestyle, health and risk
- Genes and health
- Voice of the genome
- Biodiversity and natural resources.

In Year 13, students will study the following topic areas:

- On the wild side
- Immunity, infection and forensics
- Run for your life
- Grey matter.

At the end of Year 13, students will take three papers covering topic areas from Year 12 and Year 13 to gain the full A Level qualification.

# CHEMISTRY

For further information about the course, please click on the following link:

<https://qualifications.pearson.com/en/qualifications/edexcel-a-levels/chemistry-2015.html>

## Course Outline

Have you ever wondered why a stick of dynamite explodes, how we can produce fire retardant materials for furniture manufacture, where all that energy in sugar comes from or what is this ozone layer that people talk about?

If you have, you have been thinking about chemistry. Our entire world is composed of about one hundred different elements, but the atoms of these elements can combine to form compounds in millions of ways. Modern chemistry involves the study of the way atoms are linked together with chemical bonds to form larger structures such as molecules.

Much of chemistry is concerned with elucidating chemical structures by using such techniques as nuclear magnetic resonance, infra-red spectroscopy and X-ray crystallography. Chemists are also concerned with studying changes that take place and the patterns that occur when atoms within a structure disengage from one another and link to form new structures. The very essence of chemistry is studying this breaking and making of chemical bonds.

When we understand there are rules, we can explain why diamond is hard but rubber is elastic. If we manufacture new chemicals we can use the rules to our advantage and produce polymers or plastics, alloys for aircraft engines, heatproof tiles for space shuttles and drugs to fight disease.

## Assessment

All units will be assessed at the end of Year 13 through a written examination:

Paper 1: Advanced Inorganic and Physical Chemistry

Paper 2: Advanced Organic and Physical Chemistry

Paper 3: General and Practical Principles in Chemistry

## Career Prospects

Chemistry is a central area in science and, as such, it overlaps with many other areas. This results in Chemistry being an essential or preferred requirement for admission to university to study a range of subjects. Some degree courses for which Chemistry is either compulsory or advantageous are agriculture, biochemistry, chemical engineering, dentistry, geology, pharmacy, pharmacology, biology, medicine and polymer technology.

# COMPUTER SCIENCE

For further information about the course, please click on the following link:  
<https://filestore.aqa.org.uk/resources/computing/specifications/AQA-7516-7517-SP2015.PDF>

## Course Outline

The aim of the course is to encourage students to develop:

- An understanding of, and the ability to apply, the fundamental principles and concepts of computer science, including abstraction, decomposition, logic, algorithms and data representation
- The ability to analyse problems in computational terms through practical experience of solving such problems, including writing programs to do so
- The capacity for thinking creatively, innovatively, analytically, logically and critically
- The capacity to see relationships between different aspects of computer science
- Mathematical skills related to:
  - Boolean algebra
  - comparison and complexity of algorithms
  - number representations and bases

A high-quality computer science education equips students to use computational thinking and creativity to understand and change the world. Computer Science has deep links with Mathematics, Biology, Chemistry, Physics, and Design and Technology, providing insights into both natural and artificial systems.

## Subject content

1. Fundamentals of programming
2. Fundamentals of data structures
3. Fundamentals of algorithms
4. Theory of computation
5. Fundamentals of data representation
6. Fundamentals of computer systems
7. Fundamentals of computer organisation and architecture
8. Consequences of uses of computing
9. Fundamentals of communication and networking
10. Fundamentals of databases
11. Big Data
12. Fundamentals of functional programming
13. Systematic approach to problem solving
14. Non-examination assessment – the computing practical project

## Assessment

**Paper 1** assessed students' ability to program, their theoretical knowledge of computer science from subject content 1–4 above. Students answer a series of short questions and write/adapt/extend programs in an electronic answer document provided. AQA issue preliminary material, a skeleton program (available in each of the programming languages) and test data for use in the examination.

**Paper 2** assesses students' ability to answer questions from subject content 5–12 above through a series of compulsory short-answer and extended-answer questions.

**The non-examination assessment** assesses student's ability to use the knowledge and skills gained through the course to solve or investigate a practical problem. Students will be expected to follow a systematic approach to problem solving.

### **Career Prospects**

According to Bureau of Labour Statistics in America, 74% of new STEM (science, technology, engineering and mathematics) jobs created by 2022 will be in the following computer science related fields: software development, systems analysis, support specialists, network and systems administration and security. More information about careers that are related to computer science can be found at: <https://www.computerscience.org/careers/>



## **DESIGN AND TECHNOLOGY (Product Design)**

For further information about the course, please click on the following link:

<http://www.aqa.org.uk/subjects/design-and-technology/as-and-a-level/design-and-technology-product-design-7552>

### **Course Outline**

This course specialises in project management and designing to meet the needs of a client. Effective time management is emphasised throughout a range of varied design tasks, which encourage the student to utilise a range of ICT and key skills, in the development and manufacture of new and innovative products. Possible contexts for project work include commercial products, furniture, architecture, leisure and environmental issues whilst the specification encourages students to adopt a realistic and professional approach to designing. There are mathematical and scientific links throughout the course and a strong proficiency in these would be advantageous. Students must have studied the GCSE in Design Technology in order to embark on the A Level course.

There are two written examinations, which are worth 50% of the final mark, and a non-examination assessment of a 'design and manufacture project', which is also worth 50% of the final mark.

### **Career Prospects**

The two year course is a prime qualification for such careers as product design, industrial design, mechanical engineering, transportation design, architecture, interior design, design consultancy, marketing and advertising. There has been a rising trend of students taking A Level Design and Technology, along with Mathematics and Physics, for university degree courses in mechanical or similar types of engineering. A combination of Art with Design and Technology along with Mathematics, also provides a good foundation for those aspiring to architecture and other design related careers. Aside from particular career choices, the course will also provide students with a range of problem solving approaches that can be applied to many of life's day to day challenges.

# DRAMA AND THEATRE STUDIES

Further information about the course may be found at:

<http://www.aqa.org.uk/subjects/drama/a-level/drama-and-theatre-7262>

## Course Aims

- To develop confidence and creativity, with students becoming active participants and informed audience members
- To develop a selective understanding of theatre and performance and how meanings are communicated through acting, design and directorial decisions
- To develop an understanding and appreciation of the significance of the social, cultural and historical influences on the development of theatre
- To experience a range of opportunities to develop dramatic and theatrical skills, enabling students to grow creatively and imaginatively in both devised and scripted work
- To integrate theory and practice through students understanding of critical concepts and the use of specialist terminology

Candidates following this course will study drama and theatrical texts from exploration through to full-scale performance. The focus at all times will be on depth and quality of reflection, analysis and interpretation.

The units are as follows:

### Unit 1: Drama and Theatre

This unit is assessed through a written examination. Students answer 3 essay-based questions. Two of them explore extracts from two contrasting set texts from the perspective of actor, director or designer. The third question requires students to analyse a piece of live theatre. To prepare for this examination, students will explore both set texts practically and create detailed design concepts. There will also be a minimum of three compulsory theatre trips to give students a range of experiences of live theatre.

### Unit 2: Creating Original Drama

Students create and perform an original piece of theatre in response to a stimulus or text; they are assessed on the research and development of their work as well as the final performance. Students complete a detailed evaluation on the rehearsal process, artistic decisions, context and performance of their work.

### Unit 3: Making Theatre

Students explore extracts from three contrasting plays and rehearse one of these extracts to performance standard. This performance is assessed under examination conditions. The practical examination is supported by an assessed reflective document, analysing the differences between the text extracts explored.

### Career Prospects

The analytical, reflective, confidence and team-based key skills that are inherent in the study of drama make it a fantastic subject for multiple career choices.

Drama is especially relevant to students who wish to pursue a career that involves public speaking or working with people. A career in law, sales, business management, the media, human resources, public relations, marketing, teaching and the hospitality industry are all excellent examples. It also provides the perfect springboard for working in the theatre as a performer, director or designer.

# ECONOMICS

For further information about the course, please click on the following link:

<https://qualifications.pearson.com/en/qualifications/edexcel-a-levels/economics-a-2015.html>

## Course Outline

Economics surrounds us and has a significant impact on our daily lives. Studying economics therefore provides an insight and understanding into many of the important issues that govern our wellbeing as individuals, the economy and society as a whole.

There are many questions that can be asked about everyday things to which economics can provide answers. For example, why are some goods taxed more heavily than others, why do food mountains exist, why are some goods provided by the state and not others, why do some countries export cars and others food, what happens to unemployment if benefits are reduced and what happens to the economy if interest rates rise?

The syllabus aims to:

- Develop students' understanding of the world by applying economic concepts to real world problems and issues.
- Analyse, explain and evaluate the strengths and weaknesses of the market economy and government policy.

The course follows four themes:

1. Introduction to markets and market failure
2. The UK economy: performance and policies
3. Business behaviour and the labour market
4. A global perspective

Students will study all four themes and will take 3 written examinations at the end of Year 13.

Students do **not** need to have studied Economics at GCSE Level. The course will appeal to those who:

- wish to pursue a career in an economics, finance or business related area
- have completed a GCSE course in Economics and wish to further their study
- have an interest in current affairs and a desire to explore and understand the workings of the real world
- wish to keep their options open for their future beyond tertiary education

## Career Prospects

Economics is an excellent choice with any other combination of A Levels.

Good economics' students are confronted with a choice in the labour market since they possess a wide range of 'marketable' skills that are transferable across a variety of careers. These include law, business, accounting, banking and finance, politics, insurance, management and, of course, professional economists in the public and private sectors, research institutes, universities, in the City or in international organisations. Post-university employment rates for economists are among the highest for graduates.

# ENGLISH LITERATURE

For further details of A Level English Literature, please click on the following link:

<https://qualifications.pearson.com/en/qualifications/edexcel-a-levels/english-literature2015.html>

## **Course Outline**

English Literature is like other academic subjects as it involves finding, analysing and evaluating evidence, but it can seem to lack hard facts or certainties. Many might feel unnerved by the seeming absence of a lot of learnable content and miss the comfort of a solid core of facts. There are, of course, fascinating facts available about writers: Shakespeare's father was a glove maker, George Eliot was a woman, Virginia Woolf preferred to write standing up, and Roald Dahl was buried with chocolate, red wine, HB pencils, a power saw and his snooker cues. Unfortunately these interesting facts may not, by themselves, enable students to write something meaningful about what these people wrote.

There are facts about writing that teachers will expect students to know. For example, it is important to know what genre is and what the features of tragedy are. Students will also learn that knowing these things will not in themselves make them competent students of literature.

Students might choose to study English Literature at A Level because they enjoy reading, or enjoy analysis, or want to learn more about people and what motivates them. They might be curious about great writers' ideas about the world, or might want to study how writers use words because they themselves want to write more effectively.

Students will study how texts are constructs of an author, learning to appreciate and understand literature through close reading of the language and by developing analytical skills. They will learn to be thoughtful and insightful and to develop critical thinking skills. Part of the course will focus on study through literary genres.

## **Assessment**

There are three written examinations: Paper 1 is based on two drama texts (including a Shakespeare play), Paper 2 is based on two prose texts (including a pre-1900 text) and Paper 3 is based on two poetry texts (including a post-2000 text). There is also a non-examined assessment based on a comparative study of two texts of the candidate's choice.

## **Career Prospects**

English Literature students will be expected to become independent researchers and thinkers. They will develop confidence in their ability to read and think independently and develop understanding of self and of others, encouraging students to think for themselves. These qualities and attributes are valued in all walks of life and by any employer.

# FRENCH

For further details of the course, please click on the following link:

<http://www.aqa.org.uk/subjects/languages/as-and-a-level/french-7652>

## **Course Outline**

Accessing the most up to date resources and communicating in French in lessons, students will consolidate and build on the language skills acquired at GCSE. Students will focus on how French-speaking society has been shaped, socially and culturally, and how it continues to evolve. Students study technological and social change, looking at diversity and the benefits it brings. They will study highlights of French-speaking artistic culture, including francophone music and cinema, and learn about political engagement and who wields political power in the French-speaking world.

Students also explore the influence of the past on present-day French-speaking communities. Throughout their studies, they will learn the language in the context of French-speaking countries and the issues and influences which have shaped them. Students will study texts and film and have the opportunity to carry out independent research on an area of their choice. This will enable them to build their research and critical thinking skills. As the course progresses, students will not only develop their linguistic skills and knowledge of grammar but also their analytical, essay writing and translation skills. They will develop their oral confidence and competence in conversation lessons and, by the end of the course, we would expect them to be able express themselves coherently, offering and defending points of view with a fair degree of fluency.

## **Course Content Social issues and Trends**

- The changing nature of family
- The 'cyber-society'
- The place of voluntary work
- Positive features of a diverse society
- Life for the marginalised
- How criminals are treated

## **Political and Artistic Culture**

- A culture proud of its heritage
- Contemporary francophone music
- Cinema: the 7th art form
- Teenagers, the right to vote and political commitment
- Demonstrations, strikes – who holds the power?
- Politics and immigration

## **Literary Texts and Films**

- A study of one film and one literary text, or two literary texts

## **Individual Research Project**

In addition, students will also conduct independent research into a subject which is of personal interest to them and which relates to a country or countries where French is spoken. This project will develop their enquiry, research and analytical skills akin to those of an EPQ. The findings of their project will be presented and discussed as part of their final speaking assessment.

# GEOGRAPHY

For further information about the course, please click on the following link:

<https://qualifications.pearson.com/en/qualifications/edexcel-a-levels/geography-2016.html>

## Course Outline

Many people see geography as a bridge between the Arts and the Sciences and one attraction of the subject is the way in which it is linked to, yet different from, both of these groups. The subject gives a scientist the possibility of a switch into a different field at university: the arts student may include Geography in his or her A Levels to keep open the full range of social sciences in higher education.

The knowledge, understanding and skills acquired through GCSE Geography will help in the introductory stages of this course but are not essential. Candidates will be expected to understand units used for geographical quantities and measurements and interpret geographical numerical data presented in a variety of forms.

## Subject content

### Paper 1: Physical Geography

- Water and carbon cycles
- Coastal landscapes and change
- Tectonic processes and hazards

### Paper 2: Human Geography

- Globalisation
- Regenerating places
- Superpowers
- Global development and connections

### Paper 3: Geographical Issues

Synoptic themes on:

- Players
- Attitudes and actions
- Futures and uncertainties

### Non-Examination Assessment: Independent Investigation

Students will also have to prepare for a non-examination assessment of between 3000 and 4000 words which will be based around one written independent investigation using the collection of both primary data and secondary data.

### Career Prospects

Geography is an excellent subject for encouraging research skills in a social studies context and for the development of written, graphical and mathematical skills. As such, it is highly regarded by universities and employers alike. It is an ideal subject for anyone considering a career in the following areas: environmental management, tourism, transport, journalism, finance and recreation management, law, accountancy, hotel management, retail management, teaching and business management. Geography complements the study of many other subjects. Common combinations are with Mathematics, Biology, Economics, History and English.

# HISTORY

For further information about the course, please click on the following link:

<https://qualifications.pearson.com/en/qualifications/edexcel-a-levels/history-2015.html>

The History A Level course will appeal strongly to students who have an interest in exploring the past in all its variety, complexity and strangeness. Students will seek to develop their analytical and evaluative skills and there will be numerous opportunities for discussion and debate. The subject places a premium on putting forward a well-argued case, whether verbally or in written form. The course is extremely well supported via an extensive range of classroom resources, a well-stocked library and online access to numerous journals. Teaching strategies place an emphasis on academic rigour and maintaining high levels of student participation in their own learning.

## Course Outline

In Year 12 students will explore the way in which the twentieth century liberal democracies of Britain and the United States came under increasing challenge from both within and without. Students will grapple with the nature, and effectiveness, of the response to these challenges and have an opportunity to explore the contrasts and similarities in these two nation's experiences.

Unit One, *Britain Transformed, 1918-97*, comprises a study in breadth; students will learn about the extent to which Britain was transformed politically, socially, economically and culturally in the years 1918–79. They will consider responses to the challenges of war, fluctuations in the economy, technological advancement and the desire for greater social equality. The focus of study is on developments and changes over a broad timescale and so the content is presented as themes spanning a significant duration: 1918–79. This option also contains a study in depth which will be focused on the impact Margaret Thatcher had on Britain between 1979 and 1997.

Unit Two, *The USA, 1955-92*, comprises a study in depth of the USA in the years 1955–92, from post-1945 affluence, through racial and political protests in the 1960s, to the rise of rightwing groups in the 1980s and the development of bitter divisions between Democrats and Republicans. Students will gain an in-depth understanding of the challenges posed to the American political system by popular protests and different styles of leadership, and the effects on society of widespread economic, social and cultural change.

In Year 13, in preparing for Paper 3, students will explore the dramatic developments in late medieval England that centred around the personalities and political skills of a series of kings, queens and their powerful subjects, and the impact of these developments on the kingdom. Within the primarily political focus on the nature of kingship and authority in England, this option also explores the wider social and economic contexts of political struggle.

The Year 13 coursework unit enables students to develop skills in the analysis and evaluation of interpretations of history through an independently researched assignment centred on the causes of the Cold War. The focus is on understanding the nature and purpose of the work of the historian. Students will be required to analyse, explain and evaluate the interpretations of three historians and to form their own critical view on the topic through significant wider reading.

## Career Prospects

History continues to be a highly regarded subject and these skills are recognised and valued by employers, universities and colleges. History provides an excellent foundation for a wide variety of careers, including government, journalism, law and business.

# LATIN

For further information about the course, please click on the following link:

<https://www.ocr.org.uk/qualifications/as-and-a-level/latin-h043-h443-from-2016/>

## Course Outline

A Level Latin is a progression from GCSE Latin. Students will study the writing of a range of authors, both prose and verse, to develop a wider vocabulary and more complex understanding of syntax and grammar. For the language components students will translate unseen passages of Latin into English and either answer comprehension and grammar questions on an unseen prose passage or translate a passage of English into Latin. For the literature components students will study Latin literature in greater breadth and depth than at GCSE, with greater emphasis on critical analysis and evaluation.

A Level Latin is an intellectually demanding subject and requires prior knowledge of Latin. Students should have achieved at least a grade 8 at GCSE.

## Course Aims

The syllabus will enable students to:

- Develop competence in reading and translating the Latin language in order to read literary texts, both prose and verse, in the original language, with a sensitive and analytical approach to language
- Develop the skills needed to discuss the literary techniques, styles and genres in ancient literature and to make informed personal responses
- Develop an interest in, and enthusiasm for, the literary, historical and cultural features of the ancient world
- Develop research and analytical skills to facilitate independent learning

## Course Content

There are four written examination papers which students will sit at the end of Year 13:

### Latin Unseen Translation

In this paper students must translate passages of unseen prose and verse from Latin into English. For the 2023 examination the unseen passages for translation will be taken from Livy and Ovid.

### Prose Composition or Comprehension

In this paper students must either translate an unseen passage of English into Latin, or demonstrate their understanding of a passage of unseen prose text through comprehension, translation and questions on syntax and accidence.

### Prose Literature

In this paper students must:

- Understand and respond to passage(s) from a set text
- Demonstrate knowledge and understanding of the wider context of a set text
- Translate passages of each set text into English
- Critically analyse the literary style, characterisation, argument and literary meaning of a passage from a set text, using appropriate technical terms in English
- Write a short essay on one of the set texts studied

Students will either study one set text in depth, or two set texts from different authors. For the 2023 examination the set text options are selections from:

- Cicero, *Pro Cluentio*;
- Tacitus, *Annals IV*; and
- Livy, *Book I*.



## **Verse Literature**

In this paper students must:

- Understand and respond to passage(s) from a set text
- Demonstrate knowledge and understanding of the wider context of a set text
- Translate passages of each set text into English
- Critically analyse the literary style, characterisation, argument and literary meaning of a passage from a set text, using appropriate technical terms in English
- Write a short essay on one of the set texts studied

Students will either study one set text in depth, or two set texts from different authors. For the 2023 examination the set text options are selections from:

- Virgil, *Aeneid XII*;
- Catullus; and
- Ovid: *Heroides I*.

## **University Courses and Career Prospects**

A Level Latin provides a suitable foundation for the study of Latin or other Classics courses in further and higher education. The multi-faceted nature of the subject and broad skills developed whilst studying Latin also provide a suitable foundation to study many other subjects including English, History, Modern Foreign Languages, Law, Philosophy and Politics.

Often labelled ‘the most employable of degrees’, Latin and Classics gives students access to a full range of careers.

## MATHEMATICS and FURTHER MATHEMATICS

Details on the Pearson Mathematics and Further Mathematics courses can be found at: <https://qualifications.pearson.com/en/qualifications/edexcel-a-levels/mathematics-2017.html>

Mathematics is the engine room of science and engineering. It is the set of ideas, insights and techniques that enable us to understand, model, analyse and solve problems. Within mathematics there is also the area of statistics which enables us to model, using historical data and theoretical situations, enabling the creation of predictions together with an appreciation of relevance and reliability. These skills are used in other subjects ranging from medicine, social sciences to business studies and economics. Mathematics has an elegance and beauty that fascinates and inspires those that understand it and it can therefore be studied for this end alone.

### Mathematics

Due to the rigour and difficulty rating of A Level Mathematics, it is important that students already have excellent algebraic skills alongside an ability to quickly grasp new concepts and apply them to a variety of problems that may not have been previously exemplified. Therefore, a suitable candidate should achieve **at least a grade 8 at GCSE** and have displayed interest and enthusiasm for the subject throughout the GCSE course. Students who obtain a grade 7 *may* be considered at the discretion of the Head of Mathematics, following a recommendation from their GCSE teacher, who will consider the levels of commitment, enthusiasm and skills on an individual basis in a meeting on the Year 12 Induction Day. Such students will need to, during the first six weeks of the course, demonstrate that they are coping with the content and fulfilling the day-to-day expectations that we have of students studying Mathematics, prior to a discussion regarding their suitability to progress further.

There is a strong correlation between performance, ability, commitment and enjoyment of Mathematics at GCSE and the outcome at A Level, so it is important that students consider carefully their motivations for studying Mathematics, and fully commit to the demands of the course from the start.

All students will be expected to complete a workbook, provided by the Mathematics Department, over the summer holidays to deepen and confirm fluency in the required algebra skills. At the start of Year 12 students will complete a baseline assessment on these skills and will be required to show a proficiency level above 50%. With this being a very generous minimum expected level, those not reaching it will be invited to discuss the implications on their potential in this subject.

## **Further Mathematics**

Further Mathematics is designed for exceptional students who wish to extend their skills and build on the A Level Mathematics course as it provides a study of a wider range of topics in greater depth, requiring greater mathematical agility. This means that this course is not for everyone and must only be considered by strong mathematicians who have already shown a penchant for 'higher level' problem solving, research and independent study.

The A Level in Further Mathematics is taught alongside the A Level in Mathematics; this has benefits but also challenges for those who have not studied beyond GCSE in Year 11. Due to the demands of this course a potential student **must have a grade 9 at GCSE** and, if they have completed an additional course, a minimum of a grade B must have been obtained to demonstrate continued progress during Year 11. Students who have completed IGCSE Mathematics must have an A\* and, ideally, also have completed an additional course, gaining a minimum of B in it.

Further Mathematics can only be taken as a 4<sup>th</sup> subject and must be taken with Mathematics.

## **University research linked to Further Mathematics**

It is important to consider university course requirements when thinking about whether to take Further Mathematics at A Level; some universities, such as the LSE, do require it for specific courses, but not all. In general, most university courses do **not** require it unless they are heavily Mathematics based.

Courses that state that '*Further Mathematics is preferred*' will be looking for a high performance in it. However, these universities certainly prefer high performances in other subjects over a mediocre Further Mathematics performance. It is therefore crucial that students do some early research into their university courses as students will not be admitted onto the course after the end of September.

## **Examination structure**

The Mathematics course is two-thirds pure and one-sixth each of statistics and mechanics. It is examined through 3 written papers.

The Further Mathematics course has the following elements: Paper 1 (Core Pure); Paper 2 (Core Pure); Paper 3 (Further Statistics 1); Paper 4 (Further Mechanics 1).

## **Calculators**

Calculator use is expected in both courses and it is important that students have a calculator that can carry out all the necessary functions. Currently there is a limited range of calculators that fulfil the course requirements. The two Pearson recommended models are either the cheaper scientific *Casio FX 991EX* (Classwiz) or the more expensive and sophisticated graphics model that is the *Casio fx CG50*. Students at Dubai College using a graphics calculator will only be permitted the *fx CG50* in external examinations.

Either of the calculators will be sufficient to access the whole course and every student must have one of them; however, if you will be studying Further Mathematics, students should have the graphics model. If you are unable to obtain your own calculator prior to the start of Year 12, the Mathematics Department will be able to give details of how you can obtain one of the models.

## FURTHER MATHEMATICS (AS Level)

Details on the AS Further Mathematics courses can be found at:  
<https://qualifications.pearson.com/en/qualifications/edexcel-a-levels/mathematics2017.html#tab-ASFurtherMathematics>

### AS Further Mathematics

Further Mathematics is designed for passionate mathematicians who wish to extend their skills and build on the A Level Mathematics course. It provides a study of a wider range of topics, in greater depth, and greater mathematical agility.

The course is not for everyone and must only be considered by strong mathematicians who have already shown a penchant for 'higher level' problem solving, research and independent study and who are applying for university courses which have a preference for students successfully studying Further Mathematics.

The AS Level will be taught alongside the A Level in Mathematics over 2 years as a **fourth subject option only**. A student following this course will have 3 lessons a week for the duration of two years. Studying over two years has the benefit of allowing the content to be taught when any prerequisite skills or topics have already been taught within the Mathematics A Level course. It also allows a student to go that bit further than simply studying Mathematics, without overshadowing other subject choices.

### Entry Requirements

Due to the demands of this course a potential student **must have a grade 9 at GCSE**, but we will consider students with a grade 8 if they have a recommendation from their Year 11 teacher for having a dedicated work ethic and passion for Mathematics. Students in this position will need to pass a baseline test, achieving greater than 65%, to be allowed onto the course. If a student has completed an additional course in Year 11, we would require a minimum of a grade B to have been obtained to demonstrate continued progress during Year 11. Students who have completed IGCSE Mathematics must have an A\* and, ideally, have completed an additional course, gaining a minimum of B in it.

### University research linked to Further Mathematics

It is important to consider university course requirements when thinking about whether to take Further Mathematics at AS Level (or A Level); some universities, such as the LSE, do require it for specific courses, but not all. In general, most university courses do **not** require it unless the course are heavily Mathematics based.

Courses that state that '*Further Mathematics is preferred*' will be looking for a high performance in it. However, these universities certainly prefer high performances in other subjects over a mediocre Further Mathematics performance. It is therefore crucial that students do some early research into their university courses as students will not be admitted onto the course after the end of September.

### Examination structure

The AS Further Mathematics course is made up of 50% Core Pure and 25% each of two options. It is likely that these options will be two of Further Pure, Further Statistics or Further Mechanics. The decision on which two of these options will be followed by all students will be made based on a discussion between the students and the Head of Further Mathematics.

### Calculators

Please refer to the information contained on the Mathematics A Level page.

# MUSIC

For further information, please click on the following link:

<https://www.aqa.org.uk/subjects/music/as-and-a-level/music-7272>

## Course Outline

The A Level Music course is an exciting and challenging curriculum which develops student's creativity and, at the same time, teaches key knowledge and skills in relation to the historical and cultural study of music. In addition, advanced performance is a key feature and students do have the opportunity to plan and play a recital programme.

The course is aimed at able musicians who have demonstrated good all-round musical skills at GCSE level and wish to develop further their musical skills and understanding. A minimum performance level of Grade 6 standard on any instrument or voice is recommended at the beginning of the course. The course is varied and interesting, covering all aspects of music from 1550 to the present day. There are seven areas of study as outlined below; this will allow students to follow their own personal interests and do in-depth research on topic of their choice.

- Western classical tradition 1650–1910 (compulsory)
- Pop music
- Music for media
- Music for theatre
- Jazz
- Contemporary traditional music
- Art music since 1910.

Students must study *Western classical tradition 1650–1910*, and choose two other topics.

In the composition component, students must learn how to develop musical ideas, including extending and manipulating musical ideas, and compose music that is musically convincing through two compositions. One must be in response to an externally set brief (Composition 1) and the other a free composition (Composition 2).

## Assessment Outline

The written paper involves a listening section based upon set works within the areas of study, analysis questions and an extended essay.

The Composition involves submitting two coursework compositions by May of Year 13. The combined duration of the compositions must be a minimum of four and a half minutes.

The Performance involves performing and recording a recital of a minimum of 10 minutes duration of Grade 7 standard or above.

## Career Prospects

The following are potential careers where A Level Music may be beneficial: performing, composing, teaching, studio work, broadcast/media, music retail and administration, librarianship, music therapy.

All students taking Music are required to take part in at least one ensemble in school.

# PHYSICAL EDUCATION

For further information, please click on the following link:

<http://www.aqa.org.uk/subjects/physical-education/as-and-a-level/physical-education7582/specification-at-a-glance>

## **Course Outline**

- Applied anatomy and physiology
- Skill acquisition
- Sport and society
- Exercise physiology
- Biomechanical movement
- Sport psychology
- Sport and society and the role of technology in physical activity and sport

Assessment is through two written examinations and a coursework unit based on practical performance.

## **Paper 1: Factors affecting participation in physical activity and sport**

Section A: Applied anatomy and physiology

Section B: Skill acquisition

Section C: Sport and society

## **Paper 2: Factors affecting optimal performance in physical activity and sport**

Section A: Exercise physiology and biomechanics

Section B: Sport psychology

Section C: Sport and society and technology in sport

## **Non-examination assessment: Practical performance in physical activity and sport**

Students are assessed as a performer or as a coach in a fully competitive version of one activity. They will have to give a written or verbal analysis and evaluation of their own or someone else's performance.

## **Course Outline and Career Prospects**

The course covers a great variety of topics and areas within sport and physical education. The specification can lead to higher education study in areas such as sports science and physiotherapy. It can also be useful when looking at some of the newer course areas such as sports psychology, sports management and marketing. The scientific nature of the theory content leads to study in other areas and careers in the active leisure industry. Students' existing interest in sport will be enhanced and they will further develop their understanding of the science of sport. The representation of sport in the media will be analysed and the course will endeavour to look at society's ever changing influence.

# PHYSICS

For further information about the course, please click on the following link:

<https://qualifications.pearson.com/en/qualifications/edexcel-a-levels/physics-2015.html>

## Course Outline

The aim of A Level Physics is for students to:

- Sustain and develop their enjoyment of, and interest in, physics
- Develop essential knowledge and understanding in physics by developing the skills needed for the use of this knowledge and understanding in new and changing situation
- Appreciate the importance of physical laws in everyday life
- Develop an understanding of the link between theory and experiment
- Appreciate how physics has developed and is used in present day society
- Show how physics links with social, philosophical, economic, industrial and environmental matters
- Understand how mathematical expressions relate to physical principles
- Bring together knowledge of ways in which different areas of physics relate to each other

Through the two-year course students will study the following topics:

- Working as a physicist
- Mechanics
- Electrical circuits
- Materials
- Waves and the particle nature of light.
- Further mathematics
- Electric and magnetic fields
- Nuclear and particle physics
- Thermodynamics
- Space and gravitational fields
- Nuclear radiation
- Oscillations

At the end of Year 13, students will take three papers covering topic areas from Year 12 and Year 13 to gain the full A Level qualification.

The department consists of a suite of laboratories in a custom-built science block which is very well equipped. Practical work is encouraged as a means of acquiring skills and understanding and, wherever possible, all teaching is done using a 'hands on' experimental basis. Data logging features prominently in the practical aspect of the course and students will gain considerable experience in the recording and processing of experimental results by computers connected to the apparatus in the Department's own computer laboratory. Students complete 16 assessed 'CPAC' experiments which contribute towards their 'practical endorsement'.

## Career Prospects

Physics leads to a wide range of courses and careers. Students could go on to use physics to support other qualifications or progress onto further studies or employment. It is very relevant for many courses e.g. physics, the sciences, medicine, engineering and related programmes such as radiography and biotechnology.

# POLITICS

For further information about the course, please click on the following link:

<https://qualifications.pearson.com/en/qualifications/edexcel-a-levels/politics-2017.html>

In Year 12 students will study UK politics, with a focus on the wide variety of agents and processes that make up the UK's political universe. They will study the role of political parties, pressure groups and the media and a wide range of forms of political participation, from elections and referendums to direct action and lobbying. Students will be introduced to the set of rules governing politics in the UK and to the specific roles and powers of the major branches of the UK government. They will also learn about the ideologies of conservatism, liberalism, socialism and nationalism and the ways in which these systems of ideas have exerted, and continue to exert, a practical influence on politics in the UK today.

In Year 13 students will develop an understanding of the international and global dimensions of political activity. They will engage with the significant challenges facing our complex world, including global terrorism, poverty, economic instability, weapons proliferation, failing states and environmental degradation. Global politics encourages discussion and debate and requires students to study different theoretical perspectives and to interpret competing and contestable claims.

Students will continually be asked to read, write about, discuss, debate and present on all manner of questions and topics in connection with the course and this will allow them to develop strong analytical and evaluative skills.

## Course content

### Paper 1: UK Politics

- *Political Participation*: democracy and participation, political parties, electoral systems, voting behaviour and the media
- *Core Political Ideas*: conservatism, liberalism, socialism

### Paper 2: UK Government

- *UK Government*: the constitution, parliament, the Prime Minister and executive, relationships between branches.
- *Optional Political Ideas*: nationalism

### Paper 3: Global

- *Global*: theories of global politics, sovereignty and globalisation, global governance, human rights and the environment, regionalism and the European Union.

## Career Prospects

The study of Politics will provide significant insights into the workings of the modern world as well as honing students' powers of communication and analysis; as such, it will lend itself to several career paths including government, the media, law, business, international charitable organisations and education.



# PSYCHOLOGY

For further information about the course, please click on the following link:

<https://qualifications.pearson.com/en/qualifications/edexcel-a-levels/psychology2015.html>

## Course Outline

Psychology is the scientific study of the human mind and behaviour. The field of psychology bridges the gap between science and society: it encompasses a biological underpinning and a focus on sociological influence. A Level study allows students to further their understanding of the anatomy and workings of the human brain, as well as examining human behaviour and the contribution of science to the success of society. The course aims to widen students' horizons and perspective, whilst developing their interest in, and enthusiasm for, psychology, including developing an awareness of further study and careers.

The course is heavily rooted in scientific methods: students are encouraged to develop and demonstrate a deep appreciation of the skills, knowledge and understanding required for scientific research. In the course, students will develop competence and confidence in a variety of practical, mathematical and problem-solving skills. Students are required to respond to stimulus material using psychological theories and research from across topic areas. Practical research exercises are an essential component to the course; students will be given the opportunity to design and conduct scientific studies, generating both qualitative and quantitative data. Report writing skills will be developed as students outline their procedures, results, discussions and evaluations. Critical thinking skills will see students consider issues of validity, reliability, credibility, and objective and subjective views.

The topic areas covered in Year 12 are:

- Social Psychology
- Cognitive Psychology
- Biological Psychology
- Learning theories

In Year 13, students will study the following topic areas:

- Clinical Psychology
- Criminological Psychology

Relevant scientific skills are contextualised and drawn together in a final topic area: Psychological Skills. This element of the course requires students to analyse quantitative data using statistics.

## Assessment

Students will be assessed through three examination papers at the end of Year 13 covering topic areas from the whole course. Extended writing questions in papers 1 and 2 may ask students to draw on their knowledge from other topics addressed and paper 3 is, by nature, synoptic.

## Careers

Studying A Level Psychology will develop a range of transferable skills to enable students to respond, with confidence, to the demands of undergraduate study and the world of work. The competencies which will be developed by students include metacognition, creativity, collaborative problem-solving, and interpersonal skills including active listening.

Psychology is an academic discipline that works in combination with subjects from both the sciences and humanities. Students can choose to specialise in an array of psychological fields including clinical, health, forensic, neuro, sport and exercise, occupational, counselling, educational as well as research and academia.

Further information on psychology and associated careers can be obtained from the British Psychological Society website: <https://careers.bps.org.uk/>

# SPANISH

For further details of the course, please click on the following link:

<http://www.aqa.org.uk/subjects/languages/as-and-a-level/spanish-7692>

## **Course Outline**

Accessing the most update to date resources and communicating in Spanish in lessons, students will consolidate and build on the language skills acquired at GCSE. Students will focus on how Spanish-speaking society has been shaped, socially and culturally, and how it continues to evolve. Students study technological and social change, looking at diversity and the benefits it brings. They will study highlights of Spanish-speaking artistic culture, including Hispanic music and cinema, and learn about political engagement and who wields political power in the Spanish-speaking world.

Students also explore the influence of the past on present-day Spanish-speaking communities. Throughout their studies, they will learn the language in the context of Spanish-speaking countries and the issues and influences which have shaped them. Students will study texts and film and have the opportunity to carry out independent research on an area of their choice. This will enable them to build their research and critical thinking skills. As the course progresses, students will not only develop their linguistic skills and knowledge of grammar but also their analytical, essay writing and translation skills. They will develop their oral confidence and competence in conversation lessons and, by the end of the course, we would expect them to be able express themselves coherently, offering and defending points of view with a fair degree of fluency.

## **Course content**

### **Social issues and Trends**

- The changing nature of family
- The 'cyber-society'
- The place of voluntary work
- Positive features of a diverse society
- Life for the marginalised
- How criminals are treated

### **Political and Artistic Culture**

- A culture proud of its heritage
- Contemporary Hispanic music
- Cinema: the 7th art form
- Teenagers, the right to vote and political commitment
- Demonstrations, strikes – who holds the power?
- Politics and immigration

### **Literary Texts and Films**

- A study of one film and one literary text, or two literary texts

### **Individual Research Project**

Students will also conduct independent research into a subject which is of personal interest to them and which relates to a country or countries where Spanish is spoken. This project will develop their enquiry, research and analytical skills akin to those of an EPQ. The findings of their project will be presented and discussed as part of the final speaking assessment.

Assessment is through 3 papers. Paper 1 assesses the skills of listening, reading and writing (comprehension and translation); paper 2 is a writing paper based on literary text and film. Paper 3 is a speaking paper, an independent research project and a general discussion of themes.

### **Career Prospects**

A good working knowledge of a foreign language is increasingly being regarded as a valuable acquisition in many occupations, especially in the commercial world. It is recognised by both employers and universities that students who study languages not only acquire linguistic competence but also a range of transferable skills which are highly desirable in the world of employment. These relate to the global market of the 21<sup>st</sup> century where having strong communication skills, being a creative thinker, and having a deeper insight into different cultures makes candidates stand out in the competitive world of employment.