

A Level Subject Options Booklet 2023/24

Please see below the course outlines for all A Level subjects available to study at Padworth College. The blocking system is also below. Please be reminded that each student should select a total of three A Level subjects. International students also need to select IELTS from either Block A or Block D, plus three A Level subjects from other subject blocks.

A Level Subject Blocking System

A	B	C	D	E
ICT	Economics	Geography	Biology	Art
Further Maths	English	Maths	Business	Chemistry
Sociology	Physics	Psychology	Maths	History
IELTS 1			Politics	
			IELTS 2	

A Level Biology

Exam Board: AQA

Aims

To gain a core understanding of the biological world.

Entry Requirements

GCSE grade 6 or above in Biology, Maths and English.

Why you should choose Biology

To develop and extend your knowledge of a range of biological topics and prepare you to pursue study and/or careers in a range of scientific fields.

Course Structure

Year 1	Year 2
Biological Molecules Cells Organisms' exchange with their environment Genetic Information, variation and relationships between organisms Energy Transfer in and between organisms	Organisms respond to changes in their environments Genetics, Populations, evolution and ecosystems The control of gene expression

Assessment

- Paper 1 – Biological Molecules, Cells, Organisms' exchange with their environment, Genetic Information, variation and relationships between organisms.
- Paper 2 – Energy Transfer in and between organisms, Organisms respond to changes in their environments, Genetics, Populations, evolution and ecosystems, The control of gene expression.
- Paper 3 – All of the Above + essay.

Each assessment is a 2 hour written exam; 260 marks are available in total (91 marks each for Paper 1 and 2, 78 marks for Paper 3).

Core Texts - Years 1 and 2

AQA A Level Biology 2nd Ed (Toole & Toole).

Careers and Opportunities

Any Scientific Research career, any medical career, any veterinary career, any environmental science career, sports and physiology related careers, any career that requires use of mathematics (accountancy etc.)

For more information on A Level Biology, please contact alex.phillips@padworth.com

A Level Business

Exam Board: AQA

Aims

To engage with, explore and understand business behaviour and to develop a critical understanding of what business is and does.

Entry Requirements

GCSE English grade 5 or above.

Why you should study Business

It is an interesting subject which is relevant and useful for most career pathways. Most students can relate to it easily.

Course Structure

Year 1	Year 2
<ol style="list-style-type: none"> 1. What is business? 2. Managers, leadership and decision making. 3. Decision making to improve marketing performance. 4. Decision making to improve operational performance. 5. Decision making to improve financial performance. 6. Decision making to improve human resource performance. 	<ol style="list-style-type: none"> 7. Analysing the strategic position of a business. 8. Choosing strategic direction. 9. Strategic methods: how to pursue strategies. 10. Managing strategic change.

Assessment

- Paper 1 – Multiple-choice questions, short answer and two essays.
- Paper 2 – Three compulsory data response questions.
- Paper 3 – One compulsory case study consisting of six questions.

Each assessment is a 2 hour written exam and is of equal weighting; 80 marks per paper.

Core Text - Years 1 & 2

AQA A Level Business ISBN 978-1-471-83569-8

Careers and Opportunities

The course provides a good foundation for the further study of business in higher education as well as providing a good general education. It is also useful for anyone intending to pursue careers in any area of business.

For more information on A Level Business, please contact accountancy@padworth.com

A Level Chemistry

Exam Board: AQA

Aims

To inspire students, nurture their passion for chemistry and lay the groundwork for further study in courses such as chemistry, medicine and pharmacy.

Entry Requirements

GCSE grade 6 or above in Chemistry and Maths.

Why you should study Chemistry

You'll develop strong mathematical and numerical skills. You'll also develop skills in analysis and problem-solving, time management and organisation, recording and monitoring data and teamwork.

Course Structure

Year 1	Year 2
Physical Chemistry I Inorganic Chemistry I Organic Chemistry I Practical Skills	Physical Chemistry II Inorganic Chemistry II Organic Chemistry II Practical Skills

Assessment

- Paper One
 - Relevant physical chemistry topics
 - Inorganic chemistry
 - Relevant practical skills
- Paper Two
 - Relevant physical chemistry topics
 - Organic chemistry
 - Relevant practical skills
- Paper Three
 - Any content
 - Any practical skills

Papers One and Two are 2-hour written exams; 105 marks in total; 35% of A-level.

Paper Three is a 2-hour written exam; 90 marks in total; 30% of A level.

Core Text - Years 1&2

AQA Chemistry A Level. Ted Lister and Janet Renshaw. Oxford University Press 2nd Ed. 2015.

Careers and Opportunities

A chemistry qualification is great start for a variety of careers, including Anaesthesiologist, Assayer, Astrophysicist, Ballistics Expert, Biochemist, Cardiologist, Chemical Analyst, Chemist, Physician, Pharmacist, Professor and many more!

For more information on A Level Chemistry, please contact rachel.archer@padworth.com

A Level Economics

Exam Board: AQA

Aims

The aims of the course are as follows:

- Give students an understanding of the intricate relationships between households, governments and businesses.
- Encourage students to use their knowledge to combine analytical models with an awareness and consideration of the real world limitations.
- Provide students with the chance to understand the interactions of global forces which affect our everyday lives.

Entry Requirements

GCSE grade 5 or above in English and Mathematics.

Why you should choose Economics

A Level Economics will give you an excellent understanding of how economies allocate their scarce resources to meet the needs and wants of their citizens. You will develop a greater understanding of the economic problems that face individuals, firms and governments on a local, national and global level and the alternative ways these problems can be resolved.

Studying economics can help you solve problems in a creative way – you will be able to combine written, numerical and data handling skills to tackle issues from a range of perspectives, within set timeframes and working under pressure.

Economics will help you build strong quantitative and qualitative approaches to handling data, analysing ideas and drawing conclusions, using specialist statistical software as well as literacy skills.

The analytical and evaluation skills that you will have developed will be useful whatever path you choose in the future. A level economics is highly regarded by universities.

Course Structure

Year 1	Year 2
1. Theme 1: Markets and Market Failure: Economic problem, types of markets, market mechanism, market failure and government intervention in markets 2. Theme 2: The UK economy: How macroeconomy works, economic performance and measurement, macroeconomic policy.	1-2 as for Year 1, plus: 3. Theme 3: Business Behaviour and Labour Market: Behaviour economic theory, distribution of income and wealth, poverty and inequality. 4. Theme 4: Global Perspective: Globalisation, Trade, Exchange Rate, balance of payments

Assessment

- Paper 1 – Markets and Market Failure
- Paper 2 – National and International Economy
- Paper 3 – Economic principles and issues
- All papers are 2 hour written papers for 80 marks each

Core Text

AQA A Level Economics 1 & 2 by Ray Powell & James Powell.

Careers and Opportunities

In a typical year, over 200 000 job ads in the UK are economics-related. Some of the largest employers of economics graduates are NHS, Amazon, Sky, AstraZeneca and Shell. Careers include Professional Economist, Journalism, Civil Service, Banking and Finance, Stockbroker and Teaching to name a few.

For more information on A Level Economics please contact john.macintyre@padworth.com

A Level English Literature and Language

Exam Board: AQA

Aims

This challenging course aims to develop the key skills of critical analysis, interpretation, coherent argument and evaluation of evidence.

Entry Requirements

GCSE grade 5 or above in English Language/Literature.

Why you should choose English

We look at a wide range of different texts leading to a broad knowledge of different writers and genres. This course develops essential, transferrable skills that are required both for progression to higher education but also, for enhanced employability. A key theme of this A Level is the importance of context. Students, therefore, gain insight into the wider political, social, cultural and historical impact of their set texts. This ensures they not only learn how to be detailed and precise but they also gain wider, general knowledge. And, last but by no means least, it is fun!

Course Structure

Year 1	Year 2
The poetry of Carol Ann Duffy; The Handmaid's Tale, Margaret Atwood; and an anthology of non-literary texts including contributions from Bill Bryson, Ernest Hemmingway and Lucy Knisely.	The Kite Runner, Khaled Hosseini; All My Sons, Arthur Miller; and a Non-Examined Assessment based on the student's own interests.

Assessment

- Paper 1 (3 hours) Telling Stories.
- Paper 2 (2 ½ hours) Exploring Conflict.
- Non-Examined Assessment: an investigation of a literary and non -literary text in which students demonstrate independent learning.

Core Texts

Year 1

The Handmaid's Tale by Margaret Atwood
Poetry Anthology of Carol Ann Duffy's poems
AQA Anthology of non-fiction texts

Year 2

The Kite Runner by Khaled Hosseini
All My Sons by Arthur Miller
Two texts of the student's choice

Careers and Opportunities

There are many careers and opportunities that follow an English A level. Here are just a few: Lawyer, Teacher, Editor, Copy writer, Advertising, Business and communications, Media and Politics.

For more information on A Level English, please contact english@padworth.com

A Level Extended Project Qualification (EPQ)

Exam Board: AQA

Aims

The aims of the qualification are as follows:

- understand and use research skills.
- have a significant input to the choice and design of an Extended Project and take responsibility for an individual task.
- develop and improve your own learning and performance as critical, reflective and independent students.
- develop and apply decision-making and, where appropriate, problem solving skills.
- extend planning, research, critical thinking, analysis, synthesis, evaluation and presentation skills.
- develop and apply skills creatively, demonstrating initiative and enterprise.
- use your learning experiences to support their personal aspirations for further study and career development.
- transfer skills developed as part of the extended project to other areas of study.

Entry Requirements

Students should have at least 5 GCSEs (grade 9-4), including English and Mathematics.

Why you should complete an EPQ

The EPQ provides an opportunity for you to extend your abilities beyond you're A Level subjects and prepare for university or your future career. You can choose to research and produce a report (5,000 words) or artefact on any area of interest to you, so long as it does not overlap with the academic subjects that you are studying. You will develop key study skills such as researching, referencing, time management, report writing, presentation skills and many more! This will provide you with an additional qualification equivalent to half an A Level, giving you extra UCAS points to include in your university application. The EPQ is also very well recognised by universities as they acknowledge the importance of your skills development during the EPQ, so if you study this qualification, it is possible that the universities you apply to could lower the grade requirements needed as you will have experience using key skills which are beneficial during a degree.

Course Structure

Year 1
<p>Term 1</p> <p>Taught study skills programme – learning and applying a range of study skills including note taking, finding credible sources, referencing, report writing and presentation skills.</p> <p>Research, planning and initial writing phase, with an end of term presentation task.</p> <p>Term 2</p> <p>Drafting and writing phase – The key phase of producing your project, focused on your independent thinking, analysis and time management skills to ensure you have effectively completed your research and preparation to write your report. You will also have further opportunity to discuss your progress with your supervisor.</p> <p>Term 3</p> <p>Submission and final presentation – Upon completion of your project, you will submit your written report and present your process and findings as part of your assessment, evidencing your progress and reflections.</p>

Assessment

- 5000 word written report OR Artefact with supplementary 1,000 word report.
- Presentation upon completion of project.

Core Text

Christine Andrews (2019). Extended Project Qualification. ISBN: 9781510443143

Careers and Opportunities

The EPQ is a chance to explore and research an area of your choice, relating to any field, industry or occupation in which you are interested. Therefore, you can tailor your project to your own interests and needs to best support your development and progression. This is particularly useful for your university and professional aspirations to enhance your specialised knowledge, as well as gain insight and experience in researching and analysing areas that could be relevant and helpful to your future – whatever that may be!

Please note: The EPQ does not need to be selected as an A Level subject option. This is a supplementary qualification that builds essential skills and offers specific benefits to the university application and admission process.

For more information on the EPQ, please contact luci.smith@padworth.com

A Level Fine Art

Exam Board: AQA

Aims

To foster creativity, self-expression, problem solving ability, improve drawing and painting, explore ideas and use of media, develop visual awareness and visual communication.

Entry Requirements

GCSE grade 6 in Art or equivalent drawing ability.

Why you should choose Art

If you wish to study architecture, 3D design or fine art, art is an important subject and also to express your creativity!

Course Structure

Year 1	Year 2
Select topic – develop drawing and painting skills, explore use of media, develop ideas, research relevant artist and designers’ work and create resolved final work in 2d and 3d.	Extend topic - develop drawing and painting skills, explore use of media, develop ideas, research relevant artists’ work and create resolved final work in 2D and 3D. Write and illustrate a personal investigation on selected topic explaining and exploring links between research and own practice. Examination project and 15 hour timed final piece.

Assessment

- Coursework unit to include observational drawing and painting, research of artists’ work, development of own ideas through media and final pieces in 2D and 3D.
- Personal investigation (Year 2) 2,000 to 3,000 words.
- Examination unit and 15 hour timed piece (Year 2).

Careers and Opportunities

A Level Fine Art can lead to a range of career opportunities including in:

- Fine art
- 3D design
- Film, TV and media
- Teaching
- Museum and gallery work

For more information on A Level Art, please contact marianna.ziffo@padworth.com

A Level Further Mathematics

Exam Board: Edexcel

Aims

- Develop an even greater depth of understanding of the mathematical processes used to solve ever more complex problems and foster confidence and enjoyment.
- Extend the range of mathematical skills and techniques and use them in more complex and unstructured problems.

Entry Requirements

GCSE/IGCSE grade 8 or above in Maths.

Why you should choose Further Mathematics

Further Mathematics will give you further insight into the application and uses for mathematics at university. Although it is not necessary, courses which have a high content of mathematics find it useful for students who have taken further mathematics at A Level, such as Mathematics, engineering, physics and economics.

Course Structure

Year 1	Year 2
<p><i>Core Pure</i></p> <ul style="list-style-type: none"> • Proof • Complex numbers • Matrices • Further algebra and functions • Further vectors <p><i>Statistics</i></p> <ul style="list-style-type: none"> • Discrete random variables • Poisson distributions • Hypothesis testing • Chi-squared tests <p><i>Further Pure</i></p> <ul style="list-style-type: none"> • Vectors • Conic sections • Inequalities • T-Formulae 	<p><i>Core Pure</i></p> <ul style="list-style-type: none"> • Complex numbers • Further algebra and functions • Further calculus • Polar coordinates • Hyperbolic functions • Differential equations <p><i>Statistics</i></p> <ul style="list-style-type: none"> • Geometric distribution • Negative binomial distribution • Further hypothesis testing • Central limit theorem • Probability generating functions • Quality of tests <p><i>Further Pure</i></p> <ul style="list-style-type: none"> • Vectors • Conic sections • Inequalities • T-Formulae • Taylor Series • Methods in Calculus • Reducible differential equations

Assessment

The new A Level has been designed to challenge students to think critically and not simply regurgitate information and theories. The examination question will be written to force the candidate to analyse and reflection upon their solutions.

- Paper 1 – Further Mathematics 1 (9FM0/01): 1 hour 30 minutes, 25 % weighting.
- Paper 2 – Pure Mathematics 2 (9FM0/02): 1 hour 30 minutes, 25 % weighting.
- Paper 3 – Further Statistics 1 (9FM0/03): 1 hour 30 minutes, 25 % weighting.

- Paper 4 – Further Pure 1 (9FM0/04): 1 hour 30 minutes, 25 % weighting.

Core Texts**Year 1**

Edexcel AS and A Level Further Mathematics Core Pure
ISBN: 9781292183336

Edexcel AS and A Level Further Mathematics Further Statistics 1
ISBN9781292183374

Edexcel AS and A Level Further Mathematics Further Pure Mathematics 1
9781292183350

Year 2

Edexcel A Level Further Mathematics Core Pure Mathematics Book 2
ISBN: 9781292183343

Edexcel AS and A Level Further Mathematics Further Statistics 1
ISBN9781292183374

Edexcel AS and A Level Further Mathematics Further Pure Mathematics 1
ISBN: 9781292183350

Careers and Opportunities

Further Mathematics will give you further insight into the application and uses for mathematics at university. Although it is not necessary, courses which have a high content of mathematics find it useful for students who have taken Further Mathematics at A Level, such as Mathematics, Engineering, Physics and Economics.

For more information on A Level Further Mathematics, please contact jonathan.robinson@padworth.com

A Level Geography

Exam Board: CIE

Aims

- Encourage learners to apply geographic knowledge, theory and skills to the world around them.
- Enable learners to develop a critical understanding of people, place and environments in the 21st Century.
- Develop knowledge and understanding of contemporary geographic concepts and issues.
- Develop a wide range of transferable skills that will enable progression to higher education and a wide, varied range of career opportunities.

Entry Requirements

GCSE grade 5 or above in English and Maths.

Why you should choose Geography

Geography provides students with the unique opportunity to explore the world around them and assess their role and place within it. It enables us to understand the complex and connected relationships between society, nature, and the physical world. Arguably, Geography is more important now than ever before. Many of the local and global issues of the 21st Century need geographers to help understand them and solve them. In A Level Geography you will study current, global issues such as climate change, migration, and population through a critical and analytical lens.

Course Structure

Students will study a diverse range of topics during their 2-year A Level programme:

Years 1 and 2

- Hydrology and fluvial geomorphology
- Atmosphere and weather
- Rocks and weathering
- Population
- Migration
- Settlement dynamics
- Coastal environments
- Hazardous environments
- Environmental management
- Global interdependence

Core Text

Collins Cambridge International AS & A Level - Collins Cambridge International AS & A Level – Cambridge International AS & A Level Geography Student's Book.

Assessment

- Paper 1 – Core Physical Geography.
- Paper 2 – Core Human Geography.
- Paper 3 – Advanced Physical Geography.
- Paper 4 – Advanced Human Geography.

Each assessment is a 1.5-hour written exam worth 60 marks; 25% of the total A-Level.

Careers and Opportunities

The diverse nature of Geography means that those who study it go on to pursue a wide, varied range of careers. The skills that you will gain from A Level Geography are relevant to almost all careers and workplaces. A Level Geography connects both physical and social science and will complement many of the A Levels on offer at

Padworth. Studying geography could lead to careers in conservation, sustainability, environmental management, politics, travel & tourism, business, education, finance, or meteorology (to name just a few!)

For more information on A Level Geography, please contact lucy.ball@padworth.com

A Level History

Exam Board: OCR

Aims

To understand and explore why History matters - History is the study of the past. It examines the **political, economic, social and cultural issues** of different era and cultures.

"Why was a particular course of action followed?" is a fundamental question underlying the study of history, and its primary purpose is **not to judge** but to **comprehend**.

From an intellectual standpoint, A Level History is about the **acquisition of vital learning skills**: you need to be able to read large amounts of information and to pick out what is and is not relevant to the question you are dealing with.

History will teach you **how to analyse, reflect** and to **argue** clearly in class and in writing.

Entry Requirements

GCSE grade 5 or above in English.

Why you should choose History

The rewards are many! The enjoyment and intellectual stimulation you get when you've securely understood the topic are considerable. This is when arguments can be formed and you can involve yourself in the cut-and-thrust of historical debate. Your ideas will be revived or challenged and you are bound to establish new perspectives.

Work Involved

- Reading around the topics and researching are key elements of A level History.
- Historians need to be effective at making notes: grouping information according to themes and noting different sorts of evidence (dates, statistics and quotes).
- You will learn to evaluate source-material: understanding a document in relation to who wrote it and when it was composed.
- Writing essays is a major part of any History course. Learning how to assemble information into a thematic and analytical response to the specific question posed.

Course Structure

Year 1	Year 2
<ul style="list-style-type: none"> • Britain 1900-57 • The Cold War in Asia 1945-93 Part 1 	<ul style="list-style-type: none"> • The Cold War in Asia 1945-93 Part 2 • The Changing Nature of Warfare 1792-1945 • Coursework

Assessment

- Paper 1 – Britain 1900-57.
- Paper 2 – Cold War in Asia 1945-1993.
- Paper 3 – The Changing Nature of Warfare 1792-1945.

Each assessment:

- British period study: 1.5 hours paper - 50 marks and 25% of total A Level.
- Non-British period study: 1 hour paper - 15% of total A Level.
- Thematic study and historical interpretations – 2.5 hours paper – 80 marks and 40% of total A Level.
- Topic based essay/coursework: 3,000–4,000-word essay and 20% of total A Level.

Core Texts

- The Cold War in Asia 1945-93 Vivienne Sanders access to history Hodder Education.
- Britain 1900-57 Michael Lynch access to history Hodder Education.
- The Changing Nature of Warfare 1792-1945 Nicholas Fellows and Mike Wells Hodder Education.

Careers and Opportunities

History is a highly respected A Level and very popular at degree level. Offers from top universities will regularly be AAA or A*AA. The analytical skills required for History A Level also make it a natural foundation for anyone wishing to study Law.

Studying history can lead to a great number of excellent careers as diverse as the media, government, heritage organisations, conservation, teaching, archives, museums and galleries, the police and law.

For more information on A Level History, please contact andres.cd@padworth.com

A Level Mathematics

Exam Board: Edexcel

Aims

A Level Mathematics emphasises how mathematical ideas are interconnected and how mathematics can be applied to model situations using algebra and other representations, to help make sense of data, to understand the physical world and to solve problems in a variety of contexts, including social sciences and business.

Entry requirements

I/GCSE Maths grade 7 or above.

Why you should choose A Level Mathematics

Mathematics is an A Level entry requirement at university for a wide variety of subjects. Geography, Psychology and Sociology degrees all have modules where mathematical techniques are vital to your understanding of the subject. Biology, Chemistry and Physics all require mathematical techniques which are taught in A Level Mathematics.

Course Structure

Year 1	Year 2
<p><i>Core</i></p> <ul style="list-style-type: none"> Algebraic Notation Quadratics Equations and Inequalities Graphs and Transformations Coordinate Geometry Algebraic Methods Binomial Expansion Trigonometric Ratios Trigonometric Identities and Equations Vectors Differentiation Integration Exponentials and Logs <p><i>Statistics</i></p> <ul style="list-style-type: none"> Data Collection Measures of Location and Spread Representations of Data and Correlation Probability Statistical Distributions Hypotheses Testing <p><i>Mechanics</i></p> <ul style="list-style-type: none"> Modelling in Mechanics Constant Acceleration Forces and Motion Variable Acceleration 	<p><i>Core</i></p> <ul style="list-style-type: none"> Algebraic Methods Functions and Graphs Sequences and Series Binomial Expansion Radians Trigonometric Functions Trigonometry and Modelling Parametric Equations Differentiation Numerical Methods Integration Vectors <p><i>Statistics</i></p> <ul style="list-style-type: none"> Regression, Correlation and Hypothesis Testing Conditional Probability Normal Distribution <p><i>Mechanics</i></p> <ul style="list-style-type: none"> Moments Forces and Friction Projectiles Applications of Forces Further Kinematics

Assessment

The new A Level has been designed to challenge students to think critically and not simply regurgitate information and theories. The examination question will be written to force the candidate to analyse and reflection on their solutions.

- Paper 1 – Pure Mathematics 1 (9MA0/01): 2 hour, 33.33 % weighting.
- Paper 2 – Pure Mathematics 2 (9MA0/02): 2 hour, 33.33 % weighting.
- Paper 3 – Statistics and Mechanics (9MA0/02): 2 hour, 33.33 % weighting.

Core Texts**Year 1**

Edexcel AS and A level Mathematics Pure Mathematics Year 1/AS.

ISBN: 9781292183398

Edexcel AS and A level Mathematics Statistics & Mechanics Year 1/AS.

ISBN: 9781292232539

Year 2

Edexcel A level Mathematics Pure Mathematics Year 2.

ISBN: 9781292183404

Edexcel A level Mathematics Statistics & Mechanics Year 2.

ISBN: 9781446944073

Careers and Opportunities

Mathematics will open doors in a variety of disciplines in higher education and career opportunities. The skills students learn will be easily applied to many situations and are valued by employers and universities alike. Possible future career opportunities include accountancy, actuary, banking and finance engineering, physical sciences, architecture and teaching.

For more information on A Level Maths, please contact tracy.shand@padworth.com

A Level Physics

Exam Board: AQA

Aims

Physics is one of the toughest A Levels you could have chosen! The students who work the hardest do the best. Over the course you will have 6 hours of lessons a week that will cover all the theory and practical skills you will need.

You will be given questions nearly every lesson and these will be expected to be completed by the next lesson in most cases, during independent learning and Prep time. At A Level you are expected to be spending 6 hours per week out of class completing work, reviewing your work and reading around the subject.

Entry Requirements

GCSE grade 6 or above in Physics and Maths.

Why you should choose Physics

You will have covered many of the A Level Physics topics at GCSE, including forces, waves, radioactivity, electricity and magnetism.

At A Level, you will look at these areas in more detail and find out how they are interconnected. You will also learn how to apply maths to real-world problems and explore new areas such as particle physics, quantum mechanics, cosmology and medical physics.

Perhaps more importantly, you will develop skills that can be transferred to just about any other area of work, from setting up a business to saving the planet. Even if you don't go on to become a physicist, learning to think like one will help you get to the root of any problem and draw connections that aren't obvious to others. Physics won't give you all the answers, but it will teach you how to ask the right questions.

Course Structure

Year 1	Year 2
<ul style="list-style-type: none"> • Foundations of physics • Motion • Forces in action • Work, energy and power • Materials • Laws of motion • Momentum • Quantum Physics • Charge and current • Optics 	<ul style="list-style-type: none"> • Waves • SHM • Thermal Physics • Electromagnetism • Nuclear Physics • Fields • Development of practical skills

Assessment

- Paper 1 Sections 1-5 and 6.1 (Periodic motion) written exam: 2 hours, 34% of A Level, 85 marks, 60 marks of short and long answer questions and 25 multiple choice questions on content.
- Paper 2 – Sections 6.2 (Thermal Physics), 7 and 8 as well as assumed knowledge from sections 1 to 6.1, 2 hours, 34% of A-level, 85 marks, 60 marks of short and long answer questions and 25 multiple choice questions on content.
- Paper 3 – Section A Compulsory section: Practical skills and data analysis, Section B: Students enter for one of sections 9, 10, 11, 12 or 13, 2 hours, 32% of A Level, 80 marks, 45 marks of short and long answer

questions on practical experiments and data analysis, 35 marks of short and long answer questions on optional topic.

Core Text

AQA Physics: A Level, Jim Breithaupt, ISBN: 978-0-19-835187-0

Careers and Opportunities

Could it be to a game studio, designing the next Minecraft? Or to the Met Office, creating computer models to predict climate change? Perhaps into education, to inspire the next generation? Or to a hospital, using physics to help to save lives? There are thousands of exciting, rewarding physics-related careers to choose from.

For more information on A Level Physics, please contact lewis.hutchinson@padworth.com

A Level Politics

Exam Board: Edexcel

Aims

Studying A Level Politics will provide insight into political beliefs central to an understanding of the modern world. It also develops analytical and evaluative skills in relation to interesting topics prevalent in the turbulent political climate of today. The aims of the subject are:

- To understand of the framework of political institutions in the UK and US.
- To explain and analyse political and governmental processes and outcomes.
- To use political concepts and specialist vocabulary with confidence.
- To develop the skills required to analyse and evaluate arguments.
- To develop the ability to write clearly structured essays which develop a line of argument.

Entry Requirements

GCSE grade 5 or above in English.

Why you should choose Politics

If you have an interest in current affairs and enjoy debate and discussion, this subject is for you. Everyone is affected by politics and the actions of politicians, therefore studying and talking about politics are a necessary part of the life that we lead. You must enjoy reading about current affairs and watching programmes such as Question Time and the Daily Politics show, and you must be interested in how and why decisions are made by politicians in a democratic system.

Course Structure

Year 1	Year 2
<p>Year 1 explores the nature of politics and how people engage in the political process in the UK.</p> <p>Students will also explore the core political ideas and principles and how they apply in practice to human nature, the state, society and the economy, the divisions within each idea and their key thinkers.</p> <p>Topics include:</p> <ul style="list-style-type: none"> • UK politics. • UK government • Core Political Ideas 	<p>During the second year, students will explore the US Constitution and the arguments surrounding this guiding document of US democracy. In learning about the key institutions of government in the USA and analysing the manner in which they achieve this power and exercise it over their citizens, students will judge ultimately whether 'liberty and justice for all' has been achieved in the USA.</p> <p>Topics include:</p> <ul style="list-style-type: none"> • Government and Politics of the USA • Non-Core Political Ideas

Assessment

- **Paper 1** – UK Politics.
- **Paper 2** – Core Political Ideas.
- **Paper 3** – US Politics.

Each assessment consists of a **2 hour written exam**.

- Component 1: 33% - 84 Marks **UK Politics + Core Political Ideas**
- Component 2: 33% - 84 Marks **UK Government + Non-core Political Ideas**
- Component 3: 33% - 84 Marks **US Comparative Politics**

Core Texts

- Edexcel AS and A Level Politics new for 2017 Pearson.
- AS UK Government and Politics 4th Edition 4 by Paul Fairclough, Philip Lynch, Eric Magee.
- Edexcel Government & Politics for A2: Ideologies Illustrated by Neil McNaughton.

Careers and Opportunities***University Courses***

Many students who study A Level Politics progress to a university degree, and there are many degree courses that A Level Politics can suit, including Anthropology, Economics, English, History, International Relations, Journalism, Law, Politics, Philosophy and Sociology.

Employment

Whether jumping straight into employment after completing your A Levels, or completing a university course first, A Level Politics can lead to some interesting careers. According to www.prospects.ac.uk some of the best jobs suited to A Level Politics include the Civil Service, Government social research officer, policy officer, political risk analyst, politician's assistant, public affairs consultant and social researcher.

For more information on A Level Politics, please contact andres.cd@padworth.com

A Level Psychology

Exam Board: AQA

Aims

The aims of the course are as follows:

- Provide students with insight into a range of psychological concepts and topics, including those applied to the contexts of research and practice.
- Outline key issues and debates in psychology with discussion of these issues in relation to topics covered.
- Equip students with various skills that will be beneficial to them in both psychology and wider areas of study, including essay writing, critical analysis and evaluation.

Entry Requirements

GCSE grade 5 or above in English, Maths and Science.

Why you should study Psychology

Psychology allows us to explore a range of perspectives, experiences, disorders and processes that exist for human beings. This subject is a fascinating way to understand the complexities of the brain, social interactions, biological processes and much more! We will cover a range of topics that encourage debate, discussion and curiosity through recognition of research studies, historical development, as well as contemporary examples.

This is not only a great subject to develop your learning around Psychology, but an opportunity for understanding many of your own experiences and abilities!

Course Structure

Year 1	Year 2
<ul style="list-style-type: none"> • Approaches in psychology • Introduction to research methods • Social influence • Memory • Attachment • Psychopathology 	<ul style="list-style-type: none"> • Biopsychology • Research methods and statistical testing • Issues and debates • Options in Psychology: Relationships; Eating Behaviour; and Addiction.

Assessment

- Paper 1 – Introductory topics in psychology; Social influence, Memory, Attachment, Psychopathology.
- Paper 2 – Psychology in context; Approaches, Biopsychology, Research methods.
- Paper 3 – Issues and options in psychology; Issues and debates, Relationships, Eating behaviour, Addiction.

Each assessment is: a 2 hour written exam; 96 marks in total; 33.3% of A Level.

Core Texts

Year 1

Cara Flanagan, Matt Jarvis, Rob Liddle. AQA Psychology for A Level Year 1 and AS Student Book, 2nd Edition. ISBN: 9781912820429

Year 2

Cara Flanagan, Matt Jarvis, Rob Liddle. AQA Psychology for A Level Year 2 Student Book, 2nd Edition. ISBN: 9781912820467

Careers and Opportunities

An insight into mainstream psychology will open up opportunities to pursue higher education in various disciplines of psychology, including counselling, forensic, sport and clinical domains, as well as careers in academic research. This course also provides detailed consideration of the many ways that psychology is relevant to everyone, in everyday situations, therefore being advantageous for a variety of careers, including any people-facing roles, such as education, business and medical environments. There is also a growing need for mental health support and roles across a number of industries, for which this A Level would be highly relevant and helpful.

For more information on A Level Psychology, please contact luci.smith@padworth.com

A Level Sociology

Exam Board: AQA

Aims

The aims of the course are as follows:

- Provide students with the opportunity to understand how society works, with knowledge development of society's structures and processes through sociological theories, perspectives and methods.
- Encourage the ability to recognise and evaluate the research conducted by sociologists that contributes to our knowledge of society.
- Enable the ability to discuss the theoretical and methodological perspectives and debates that exist within sociology across the different structures explored in the course.

Entry Requirements

GCSE grade 6 or above in English.

Why you should study Sociology

Sociology provides knowledge and insight across a range of social issues and contexts that relate to various everyday situations faced by many people. This provides in-depth understanding and consideration of different opinions, perspectives and experiences that allow thought-provoking discussion and skill development that will facilitate both your academic and personal development! There is also great opportunity to gain exposure to a range of research methods and perspectives which familiarise individuals with research processes that will often be taught and used at university level.

Course structure

Year 1	Year 2
<ul style="list-style-type: none"> • Families and Households • Education • Research methods 	<ul style="list-style-type: none"> • Crime and Deviance • Theory and Methods • The Media

Assessment

- Paper 1 – Education with Theory and Methods.
- Paper 2 – Topics in Sociology; Families and Households; The Media.
- Paper 3 – Crime and Deviance with Theory and Methods.

Each assessment is a 2 hour written exam; 80 marks in total; 33.3% of A Level.

Core Texts

Year 1

Ken Browne. Sociology for AQA Volume 1: AS and 1st Year A Level.

ISBN: 9780745691305

Year 2

Ken Browne, Jonathan Blundell and Pamela Law. Sociology for AQA Volume 2: 2nd Year A Level.

ISBN: 9780745696942

Careers and Opportunities

Studying sociology at A Level will provide opportunities to pursue higher education in sociology, philosophy, psychology, politics and law, as well as careers in academic research. This course also provides a deep understanding of the processes and structures that exist within society, relevant to a range of careers and industries, including law enforcement, education, health care, media and various other public and private sectors.

For more information on A Level Sociology, please contact luci.smith@padworth.com

Cambridge Technicals Introductory Diploma in IT

(Specialist Pathway – Emerging Digital Technology Practitioner)

Exam Board: OCR

Aims

The aims of the course are as follows:

- Give students an understanding of the essentials of IT and Cyber Security.
- Give students an insight into the IT sector as they investigate the pace of technological change, IT infrastructure on a global scale, and the importance of legal and security considerations.
- Develop the transferable skills required by universities and employers such as communication, problem solving, time management, research and analytical skills.

Entry Requirements

GCSE grade 5 or above in English, Mathematics and ICT.

Why you should choose IT

You will be able to develop your knowledge, understanding and skills of the principles of IT and Global Information Systems. You will gain an insight into the IT sector and can investigate the pace of technological change, IT infrastructure, the flow of information on a global scale, and the importance of legal and security considerations. This qualification focuses on the requirements that today's universities and employers demand.

You will also develop professional, personal and social skills, as well as theoretical knowledge and understanding to underpin these skills. These support the transferable skills required by universities and employers such as communication, problem solving, time management, research and analytical skills.

Course Structure

Year 1	Year 2
<ul style="list-style-type: none"> • Unit 1 Fundamentals of IT • Unit 2 Global Information • Unit 3 Cyber Security 	<ul style="list-style-type: none"> • Unit 3 Continuing Cyber Security • Unit 4 Virtual and Augmented Reality • Unit 5 Internet of Everything

Assessment

- Unit 1 externally assessed exam taken in January of Year 1.
- Unit 2 externally assessed exam taken in June of Year 1.
- Unit 3 externally assessed exam taken in January of Year 2.
- Unit 4 and Unit 5 internally assessed assignments.

The 3 externally set examinations make up 65% of the grade and the internally assessed assignments 35%.

Core text

Cambridge Technicals Level 3 IT – Mo Everett, Sandra Middleton, Victoria Ellis and Graham Manson – Hodder Education ISBN 978-1-471-87491-8

Careers and Opportunities

The Cambridge Technicals is a vocational qualification and will educate you in the knowledge and skills required for employment and for the community. They will help you develop the behaviours and attributes needed to progress and succeed in education and work. The chosen pathway focuses on the use and development of

virtual and augmented reality, and emerging technologies for application across a range of sectors which include mobile technology, digital marketing and the visualisation of Big Data.

For more information on the Cambridge Technicals Diploma in IT, please contact sharon.molton@padworth.com