



Moira House
GIRLS SCHOOL - EASTBOURNE

SIXTH FORM

COURSES BOOKLET

for courses commencing
September 2011

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HOW TO CHOOSE YOUR COURSES

Mrs Richards or Miss Fermor discusses a student's course choice and career aspirations in detail with her. There is a big effort to programme the right courses for each person.

AS Levels

Students typically take 4 AS Level (Advanced Subsidiary Level) subjects in Year 12, the first year of the Sixth Form. An AS Level consists of the first half of an A Level course. It is examined and graded. The pass scale is A - E. Grades are awarded by judging the performance that might reasonably be expected of an A Level student half way through the course.

A Levels

In Year 13, the second year of the Sixth Form, normally 3 of these AS Level subjects are continued to give 3 A Levels (Advanced Levels), though sometimes 4 subjects are taken. We normally require a student to achieve at least Grade D at AS Level in order to progress to A Level in a subject. A2 examinations are taken in Year 13 and the questions are at the more demanding end of the A Level spectrum. A2 examinations contribute equally with AS examinations to give the full A Level, which also has an A-E pass scale.

Actually Choosing

The *Social Sciences* have recently proved very popular, particularly Business Studies, where the Head of Department is a Principal Examiner for the subject. Mathematics, Further Mathematics and Information Technology (ICT) are frequently chosen with Business Studies. Economics is also available.

The *Sciences and Mathematics* remain traditional strengths. In the last 10 years, 18 students have gained entry to UK medical schools and we normally win Awards in the annual UK Mathematical Challenge. We encourage students to study these subject and many of them enter UK universities to read related degree courses such as Aeronautical, Electrical and Mechanical Engineering.

The *Arts* complete our provision of all-round excellence. Our Performing Arts Group of Music and Drama students undertakes international tours, and from time to time we have an entry into the Royal Academy of Dramatic Art (RADA), which annually receives 1000 applications for 30 places.

There are further fine lines of detail beyond the broad picture described, such as the reaction of top universities to the mix of subjects chosen. It is therefore essential that courses are worked out during one to one sessions, which all students receive. **Particularly if students are applying from abroad, preliminary discussion can be conducted by email to Carol Richards, careers@moirahouse.co.uk.** Timetabling is undertaken freshly each year to accommodate the choices of students though we do aim to ensure that each group is viable both academically and economically.

In choosing your subjects, it is best to consider first the three you wish to pursue to A Level over two years and then which one you would like to take to AS Level only, over one year. While we cannot guarantee to do so, we usually manage to give each student her chosen combination of subjects.

UNIVERSITY ENTRY AND CAREERS

When courses are well under way, we start thinking about the timing of applications to university. We plan visits to open days, and to careers and university conventions. Almost every student goes on to university.

Literature on all universities and on all careers is stored in the careers centre and online resources can be accessed through VLE (Virtual Learning Environment). Mrs Richards and Miss Fermor can help direct you to the right information. The Careers Centre contains all university prospectuses and literature on all careers, updated three times a year.

Your tutor and Mrs Richards write your university recommendation on behalf of the School, because we know you and your plans well. Mrs Richards discusses with you the finance of higher education and tutors go over rough drafts of your applications with you. Students also apply to universities abroad. Each student is prepared individually for any interview.

After you leave, Mr Richards is here in the summer holidays when your A Level results come out. When students move on, they often write back with useful inside information on what this or that university is like at the moment. It is not uncommon for old students to come back after university to take part in careers presentations. There is a nice saying: "You are never ex-MoHo, only old-MoHo".

The features of the university entry and careers programme are:-

- On-going personal support basing vocational direction on the analysis of aptitudes, personality, interests and values
- Sophisticated testing at cost price, with computer-assisted data for discussion
- University Open Days
- Consideration of Oxford and Cambridge
- Applications to universities abroad
- Drama and Art applications
- In depth consideration of university applications
- Individual personal help with applications
- Assistance with university entry tests
- Individual interview preparation
- Careers Conventions
- Parents' Careers Register
- Visiting speakers
- Current literature
- Links with careers organisations (e.g. ISCO)
- Internet Support
- The financial aspects of university study
- Careers experience events
- Specialised courses e.g. Future Doctors

SIXTH FORM ENRICHMENT PROGRAMME

In addition to any of the courses described in this booklet, there is a Sixth Form Enrichment Programme consisting of talks and special events organised both within and outside the normal school day. Details are given on a termly basis in the “White Book”.

GAMES

Sporting opportunities available in the Sixth Form include hockey, tennis, swimming, aerobics, trampolining, athletics, netball, cricket, squash, badminton, jogging, volley ball.

LIFE IN THE SIXTH FORM

With over 100 sixth form students our Sixth Form is a thriving and busy place. All sixth formers have their own study space in Boston House, our Sixth Form Centre. The centre is staffed during the day so there are people on hand to help you. Sixth Form students are members of a tutor group and register with their tutor in the morning. They register in Boston in the afternoons. Sixth Formers may study in their rooms during study periods in the school day.

Students may arrange to take driving lessons during some of their study periods provided they follow the system overseen by Mrs Harris Moss. Once they have passed their test girls may ask for permission to drive to and from school. With our permission and that of both sets of parents they may take another girl in their car. Students may attend up to 3 Open Days in an academic year.

Students must be in school during the morning session. However, they may go out from 1:30 to 2:45 pm in the afternoon to Meads or Eastbourne. Day girls are free to leave at 3:40 if they have no lessons or school commitments. Upper Sixth students can nominate one day per week as their half day. There are a wide range of opportunities available to girls in the Sixth Form both in terms of activities and in terms of leadership.

We encourage students to have a small part time job however, the hours they work must not impact on their studies. If girls have completed their life saving we can offer them work in swimming pool. Students may also apply to work in our After School Club and some students work in our holiday clubs and other holiday work opportunities.

ART, CRAFT AND DESIGN AS AND A LEVEL

What you need to start the course

The best foundation for success in AS and A Level Art is a good grade at GCSE, success in AS/A Level Art requires determination and dedication.

What you study

The course has been designed to encourage an adventurous and enquiring approach to art and design. The skills you will develop will be varied. Among them, you will develop a working knowledge of materials, practices and technology within Art including Textiles. You will develop the skills to interpret and convey your ideas and feelings using art and design. You will develop your imaginative and creative powers and your experimental, analytical and documenting skills. You will also develop a specialist vocabulary and the knowledge and understanding of the place of art and design in history and in contemporary society. The skills you acquire will be determined to some extent by the area of study you choose. However whether you see yourself as a painter, graphic artist, web designer or film maker, the same basic skills apply.

How you are assessed

The modular nature of the course allows the subject content and work load to be spread over each of the two years.

AS Level

Unit 1:

- Coursework which explores a theme, supporting studies which show the breadth and depth of the students' visual thinking in the progress of their work. A wide exploration of various media. Drawing practice and gallery visits.
- Analysing and using sources and contexts to inform and inspire their work.
- Final pieces and evaluation

60% of the AS, 30% of the total A level marks

Unit 2:

- Externally set Assignment. A theme is set by the Board in January with an 8 hour timed exam in April/May.

40% of the AS, 20% of the total A Level marks

A2 Level

Unit 3:

- Problem solving and contextual studies linked to the students' own interests. In the form of practical work and a personal study.

30% of the total A level marks

Unit 4:

- Externally set Assignment; A theme is set by the Board in January with a 12 hour timed exam in April/May. Students will be expected to investigate a wide range of work and sources. This must include work in galleries and museums or of buildings and design objects. The study and images by the student will be accompanied by a well documented book by mid May.

20% of the total A level marks

What it's useful for

Art and Design is of interest for students who wish to undertake further studies in art, craft and design, usually a degree at art college or university. Careers could include publishing, architecture, museums, theatre or art gallery work. The course is also suitable for students who have an aptitude for the subject but who do not intend to take the subject beyond the AS or A level. Some candidates decide to pursue a career in Art during Years 12 and 13.

BIOLOGY AS AND A LEVEL

The basic content of the course prepares candidates for university studies in a wide range of biologically related subjects. The 'A' Level Biology specification has recently been brought up to date and broadened out. As well as containing more of the traditional topics associated with an 'A' level in Biology (such as biochemistry, physiology and cell ultrastructure) it now also includes many applications of biology and topical subjects including: cardiovascular disease, genetic screening, the human genome project, genetically modified organisms, seed banks, global climate change, forensic science, neurological disorders, sports science, medical technology and ethics. Students should enjoy the challenge of the new specification and at the end of the course will have a good feel for how real scientists research questions in biology and how biological knowledge is used in the 'real world'.

What you need to start the course

You should be well prepared for AS level if you have studied Biology and Chemistry at GCSE and it is recommended that you should have achieved at least a grade B in these subjects. An interest in biology and natural curiosity about biological systems is also a great help!

What you study

AS Level

Unit 1: Lifestyle, Transport, Genes and Health

Students will learn about the structure and function of many aspects of the cardiovascular system as well as the diseases, treatments and risk factors associated with cardiovascular disease (CVD). The importance of water as a transport medium will be considered as well as some of the more traditional biochemistry of biological molecules, such as carbohydrates, proteins and fats when discussing diet as a risk factor for CVD. The structure and properties of proteins, enzymes and nucleic acids lead to the genetic code and protein synthesis. Principles of inheritance, gene therapy and genetic screening are included and the ethics of these issues are considered.

Unit 2: Development, Plants and the Environment

In the first half of this unit students will look at the cellular structure of organisms and how multicellular organisms develop from gametes and can be organized into tissues, organs and systems. The ability of some cells to differentiate into new cell types and the importance of stem cells will be considered, as well as the factors that affect how characteristics are inherited and genes are expressed.

In the second half of the unit students will consider how the biological properties of some organisms allow us to exploit them as a resource. We will also evaluate the methods used by zoos and seedbanks in the conservation of endangered species and their genetic diversity for a sustainable future.

Unit 3: Practical biology and Research skills

Students write 1500-2000 words as a report of a visit to a site of biological interest or a report of research into a biological topic. The report should focus on a biological question or problem and link strongly to the 'How Science Works' criteria. Student's practical skills will be internally assessed against criteria provided by the exam board.

A2 Level

Unit 4: The Natural Environment and Species Survival

This unit will start by looking at the topic of photosynthesis as the primary process that underpins most ecosystems. The extinction or evolution of species will be considered in the context of global climate change as well as the evidence for and impact of climate change on plant and animal communities.

In the second part of this unit the role of bacteria and viruses as agents of infection will be considered in the context of the adaptations organisms to combat infection and the evolutionary battles that take place between invading pathogens and their hosts. This unit will also look at the analytical techniques used by forensic pathologists to determine the identity of people or organisms and establish the time and cause of death.

Unit 5: Exercise, Energy and Coordination

This unit looks at the topics of aerobic respiration, homeostasis, muscle physiology and medical technology in the context of sporting participation and performance and explores the contentious issue of performance enhancing substances. Also covered is the structure and function of the central nervous system; how it can be imaged, responses to stimuli, learning and how chemical imbalances in the brain can lead to disorders such as Parkinson's disease.

Unit 6: Practical Biology and Investigative Skills

Students will present a written report of between 2700-3300 words of an experimental investigation they have devised and carried out. The individual investigation in Unit 6 is an individual practical project which is designed to show progression from the Unit 3 internal assessment at AS. Students will be assessed on their ability to plan and carry out experimental procedures, to interpret their experimental results and to report on their work.

How you are assessed

All questions in the written papers are compulsory and will cover a range of styles including short-answer and data response questions. The table below shows how each unit contributes to the marks for the AS, A2 and whole GCE.

Unit	AS	A2	Whole GCE
1	40%	-	20%
2	40%	-	20%
3	20%	-	10%
4	-	40%	20%
5	-	40%	20%
6	-	20%	10%

What is it useful for?

A student who has studied these topics will have a good grasp of how the different aspects of the course interrelate and therefore should be able to acquire more detailed tertiary education and apply it to this good foundation. University courses and careers that can be followed by students studying Biology are highly diverse and could include Medicine, Veterinary Science, Physiotherapy, Dentistry, Horticulture, Pharmacology, Genetics, Conservation, Forensic Science, Food science plus many more!

BUSINESS STUDIES AS AND A LEVEL

What you need to start the course

Did you know that Wal-Mart is the biggest employer in the world? How does the increasing number of women choosing to have a career affect all businesses?

Business Studies is of interest to students who want to know more about the workings of business enterprises and the behaviour of people within them. Since the subject covers a wide range of different topics, both theoretical and practical, it appeals to a wide range of different interests.

No prior knowledge of the subject is required. However, the methods of assessment are such that students must have a good level of literacy. Students have to be able to write analytical answers to questions on a wide range of topics from an early stage of the course. An ability to write clearly and to recognise the need for supportive detail in analysing situations is of great importance. The level of mathematical ability is such that non-mathematicians need not be concerned.

Business Studies is taken with any combination of subjects, although it particularly complements the work that is done in Economics and Geography, with little overlap.

What you study

The general themes of the course are:-

Objectives of businesses

Different types of objectives and their changing nature

Internal organisation of a business

Both the legal and organisational structure

Impact of external change

How social, legal, economic and technological change affects business

Marketing

How a business identifies its customers and how it gets them to buy

Managing people

Recruitment, motivation and legal issues

Operations management

Methods of production, efficiency, quality and stock control

Basic finance & accounts

Simple accounting records and sources of finance

Business strategy

A critical evaluation of how a business formulates policy

How you are assessed

The modular nature of the course allows the subject content and workload to be spread over each of the two years.

AS Level Exams

Year 12

An introduction to business

Business functions

A2 Exams

Year 13

Strategic management

People in organisations

As the course will reflect the nature of problem solving within an organisation, traditional class teaching is supplemented by group work, problem simulation and case studies.

Unit 1: An introduction to business (1 hour)

A mixture of short-answer and data response questions, based on an unseen case study. This unit considers the way in which businesses operate and the effect of the external business environment.

40% of the total AS Level marks, 20% of the total A Level marks

Unit 2: Business functions (2 hours)

This paper has two sections. Section A contains 6 short, knowledge-based questions. Section B contains longer questions based on a pre-released case study. This unit recognises the inter-relationships between each of the four main functions of business

60% of the total AS Level marks, 30% of the total A Level marks

Unit 3: People in organisations (2 hours)

A mixture of shorter and longer questions, based on an unseen case study. This unit builds on the introductory work at AS Level. It considers organisational structure, employment participation, employment law, communication, remuneration and training.

20% of the total A Level marks

Unit 4: Strategic management (2 hours)

Five strategic questions based on a pre-released case study. This unit's unifying theme is choosing and justifying strategy. It is designed to test candidates' ability to recognise the inter-relationships and potential conflict between business objectives. The unit takes a more in-depth look at the external constraints affecting business and the devising, implementing and reviewing of strategy. *30% of the total A Level marks*

What it's useful for

There is a large number of Business Studies based courses available at universities, including links with most other subjects. Its wide ranging nature and analytical challenge make Business Studies an ideal choice for a student who is as yet uncertain about her career choice. Although many students who study the subject do so with the aim of a career in business and management, that is not the primary aim of the course.

CHEMISTRY AS AND A LEVEL

What you need to start the course

Chemistry is of interest to students who want to know more about the world around them. Students will study aspects of chemistry that are often in the media and affect their lives. It is important that students have the necessary knowledge and understanding to explain many different aspects of contemporary chemistry. These areas include climate change and green chemistry.

There are no specific entry requirements. However, such is the nature of this subject that students should have a good level of literacy and a sound knowledge of basic mathematics. Since the subject covers a wide range of different topics, both theoretical and practical, it should appeal to those who wish to continue with a career in the Sciences, or those who simply wish to broaden their education at AS level.

What you study

AS Unit 1: The Core Principles of Chemistry

- 1.1 Formulae, equations and amounts of substance
- 1.2 Energetics
- 1.3 Atomic structure and the periodic table
- 1.4 Bonding
- 1.5 Introductory organic chemistry
- 1.6 The Alkanes
- 1.7 The Alkenes

AS Unit 2: Application of Core Principles of Chemistry

- 2.1 Shapes of molecules and ions
- 2.2 Intermediate bonding and bond polarity
- 2.3 Intermolecular forces
- 2.4 Redox
- 2.5 The periodic table - groups 2 and 7
- 2.6 Kinetics
- 2.7 Chemical equilibria
- 2.8 Organic chemistry
- 2.9 Mechanisms
- 2.10 Mass spectra and IR
- 2.11 Green chemistry

AS Unit 3: Chemistry Laboratory Skills I

A2 Unit 4: General Principles of Chemistry I

Rates, Equilibria and Further Organic Chemistry

- 4.1 How fast? - rates
- 4.2 How far? - entropy
- 4.3 Equilibria
- 4.4 Application of rates and equilibrium
- 4.5 Acid/base equilibria
- 4.6 Further organic chemistry
- 4.7 Spectroscopy and chromatography

A2 Unit 5: General Principles of Chemistry II

Transition Metals and Organic Nitrogen Chemistry

- 5.1 Redox Chemistry
- 5.2 The transition metals
- 5.3 Organic chemistry – arenes.
- 5.4 Organic nitrogen compounds.
- 5.5 Organic synthesis

How you are assessed

The full A Level is made up of four units, two at AS and two at A2 standard. The modular nature of the course allows the subject content and workload to be spread over each of the two years. At the present time we have no intention to take any January module tests.

AS Level Exams

Unit 1: *Core Principles of Chemistry*
Unit 2: *Applications*
Unit 3: *Chemistry Laboratory Skills I*

A2 Level Exams

Unit 4: *General Principles of Chemistry I*
Unit 5: *General Principles of Chemistry II*
Unit 6: *Chemistry Laboratory Skills II*

Unit 1: The Core Principles of Chemistry (1 hour 30 minutes)

The paper is in two sections:-

Section A: Objective test questions.

Section B: A mixture of short-answer and extended answer questions.

40% of the total AS Level marks, 20% of the total A Level marks

Unit 2: Application of the Core Principles of Chemistry. (1 hour 30 minutes)

This paper is in three sections:-

Section A: Objective test questions.

Section B: A mixture of short-answer and extended answer questions and Section C: contemporary context questions.

40% of the total AS Level marks, 20% of the total A Level marks

Unit 3: Chemistry Laboratory Skills I

This is an internally assessed coursework unit. There is no specific content but practical work is based on the contents of Units 1 and 2.

20% of the total AS Level marks. 10% of the total A Level marks

Unit 4: General Principles of Chemistry I (1 hour 40 minutes)

This paper is in three sections:-

Section A: Objective test questions.

Section B: A mixture of short-answer and extended answer questions and Section C: data questions, with the use of a data booklet.

40% of the total A2 Level marks, 20% of the total A Level marks

Unit 5: General Principles of Chemistry II (1 hour 40 minutes)

This paper is in three sections:-

Section A: Objective test questions.

Section B: A mixture of short-answer and extended answer questions and Section C: contemporary context questions.

40% of the total A2 Level marks, 20% of the total A Level marks

Unit 6: Chemistry Laboratory Skills II

This is again an internally assessed coursework unit. There is no specific content but practical work is based on the contents of Units 4 and 5.

20% of the total A2 Level marks, 10% of the total A Level marks

What it's useful for?

Although Chemistry is an important subject in its own right, it is also the Science that underpins Biology and any career in the biological sciences will require knowledge of this subject to at least AS Level. It is also an essential subject for those who wish to study Medicine, Chemical Engineering and Pharmacology at University.

There is a large number of Chemistry-based courses available at universities, including links with many other subjects such as ICT, Business and even Modern Languages. These will often involve a year's placement in Industry or in Universities abroad. Its analytical nature also makes it a good choice for students wishing to take other non-science courses such as Law.

DRAMA AND THEATRE STUDIES AS AND A LEVEL

What you need to start the course

As you would imagine, you really need to enjoy performing if you are going to choose this subject! There is written work involved, but the board that we use is fairly heavily weighted in favour of the practical. This means that when we explore a play in class, we do it through practical means: for example role-play, hot-seating, and off-text improvisation. This differs from say, English Literature, where you would be more likely to analyse characters through discussion and written work.

It is also possible to take the course if you are interested in design skills such as costume, lighting, make-up, set and props and sound. Although you cannot work exclusively on your chosen skill for the duration of the course, you can opt to offer one of these skills for the second module, which is the performance of a play to an outside examiner.

At the end of the course, there is a written paper, which will involve the study of one period of theatre history and a play from that time. It is therefore important that the student enjoys working with text and has a good understanding of language generally.

Because of the nature of the subject, it is a requirement of the examination board that the course needs at least three students, all of whom are sure that they will be continuing on to the full A Level.

What you study

Exploration of plays through practical work.

The study of plays through practical means.

Understanding different performance styles.

Practitioners

Study of the main theatre practitioners that have influenced the changing shape of theatre over the years.

Creative design and technical support.

Work on set-design, lighting, stage-management, sound, costume and stage make-up.

Performance experience.

Performing to outside examiners and other audiences - both in a group situation and on your own (monologue)

Devising work

Learning how to devise and structure a piece of theatre from a basic idea.

History of Theatre.

A study of one period of theatre history and a play written during that time.

Directorial overview

Learning to think like a director and to make creative decisions.

How you are assessed

The full A Level is made up of four units, two at AS and two at A2.

AS exams

Year 12

Completion of exploration notes

Performance to an outside examiner

A2 exams

Year 13

Performance of devised piece of theatre

Written paper - "Theatre text in context"

Unit 1 - Exploration of Drama and theatre

This is the study of two different plays through practical means. This means that we explore the plays through role-play, on and off-text work, improvisations and explorative strategies (such as hot-seating.) The student keeps a series of notes to record her findings. Students are also expected to write an in-depth evaluation of a live theatre experience.

40% of AS mark, 20% of A2 mark

Unit 2 - Theatre text in performance

The performance of a published play to an external examiner. As well as working on a play in a group, the student will be expected to perform a monologue or duologue from a different play. Students may wish to choose design skills instead of acting in this unit.

60% of AS mark, 30% of A2 mark

Unit 3 - Exploration of Dramatic Performance

The creation of a unique and original piece of theatre. Students will devise a group piece and perform it to an audience. They will be assessed on the devising process as well as the final performance. They are also required to complete an evaluation of both the process and the performance.

40% of total A2 mark

Unit 4 - Theatre text in context

A 2 hour and 30 minute written paper requiring the detailed study of a set play text and the study of a prescribed period of theatre history. A live performance of a play from the chosen period must be seen and a comparison made with the original staging conditions.

60% of total A2 mark

What it's useful for

Drama crosses over into so many parts of our lives. If you are confident and articulate, you could have an advantage over other candidates at university and job interviews, no matter what your qualifications are - and all through your life, this ability to communicate will stand you in good stead. This subject allows the student to express themselves creatively and to freely discuss and try to understand the many issues that are part of our lives, but that are not often addressed within other academic subjects. Drama basically helps us to become better-rounded individuals and better communicators in an age when communication is paramount.

ECONOMICS AS AND A LEVEL

What you need to start the course

Economics provides us with the answers to three basic questions: what to produce; how to produce; and for whom to produce? The subject is a stimulating one that helps individuals, organisations and governments to make choices.

Students will be given the opportunity to ask and answer a wide range of questions. For example; What will happen to inflation and employment if interest rates rise? Do taxes on alcohol and tobacco have a large negative effect on consumption? What services, such as Health and Education, should be provided by the government? What impact has the growth in the Indian and Chinese economies had on the global economy? Is free trade beneficial to all countries?

More importantly, the study of economics develops a mental approach suitable for analysing a whole range of problems. These skills are highly marketable and will prepare students for a wide range of careers.

No prior knowledge of the subject is required. However, the methods of assessment are such that students should have a sound level of literacy and numeracy, as indicated by, for example, a Grade C or above in GCSE Mathematics and English.

Economics can be taken with any combination of subjects, but especially complements Business Studies, Geography, History and Mathematics. There is little overlap with Business Studies; the two subjects benefit each other.

What you study

The general themes of the course are:-

- How markets work
- Market failure and government intervention
- Aggregate demand & supply
- Government macroeconomic policy
- International trade & integration
- Trends in employment & leisure
- How do firms operate
- The labour market
- Performance of the UK economy
- Development & sustainability
- The economics of globalisation

How you are assessed

The modular nature of the course allows the subject content and workload to be spread over each of the two years.

AS Level Exams

Year 12

Markets in Action

The National & International Economy

A2 Exams

Year 13

Economics of Work & Leisure

The Global Economy

Unit 1: Markets in Action (1½ hours)

Compulsory questions of varying lengths, including data interpretation, based on a particular theme. This unit provides an introduction to why economic choices have to be made, how markets work and why they might fail.

50% of the total AS Level marks, 25% of the total A Level marks

Unit 2: The National & International Economy (1½ hours)

Compulsory questions of varying lengths, including data interpretation, based on a particular theme. This unit provides an introduction to macroeconomics and the key macroeconomic indicators.

50% of the total AS Level marks, 25% of the total A Level marks

Unit 3: Economics of Work & Leisure (2 hours)

A compulsory data response question, plus a choice of one structured essay question from three. This unit focuses on the concepts and theories that help economists to understand and analyse issues in both product and labour markets.

25% of the total A Level marks

Unit 4: The Global Economy (2 hours)

A number of questions of varying length, based on pre-released stimulus material. Some questions may involve data interpretation. This unit provides the conceptual framework for the analysis and evaluation of macroeconomic performance in national, regional and global contexts.

25% of the total A Level marks

What it's useful for

Economics education gives a broad intellectual training, providing the foundations of knowledge of how the economy works and helping to develop the relevant skills for the constructive use of that knowledge. Economics is a good subject for developing personal transferable skills. It is intellectually robust and of contemporary relevance. It can prepare students for very high-powered jobs in all career areas that can be rewarding financially and intellectually.

ENGLISH LITERATURE AS AND A LEVEL

What you need to start the course

English Literature isn't reading books; it's the study of passion and belief, morality and mercy, full of the ambiguity of humanity. In Literature, an answer can never be simply right or wrong, it is your opinion, supported by what think about what you read. We specialise in grey areas, the possibilities of interpretation, where what you bring to the subject shapes what the text means. You will join in a discussion - in some cases, discussions that have been going on for 400 years or just within your lifetime - where your insightful opinion will be one of the voices.

Is your level grade B or higher in both GCSE English and GCSE English Literature? Do you like to read and think? Then English Literature is the course you are looking to study.

What you study

The English Literature course is designed to encourage wide reading and advanced detailed research within the whole field of literary studies. It builds on the skills, knowledge and understanding acquired by candidates who have successfully passed GCSE English and English Literature.

The course offers a programme of study which will be rewarding and enjoyable in its own right and can also, for some students, form a basis for further specialist study at degree level.

This course involves the close study of texts from the three genres of literature, both pre- and post-1900: poetry, prose and drama.

How you are assessed

Students at Moira House study **WJEC English Literature**. This is a modular course which seeks to show how texts interact and illuminate each other.

AS Level Exams, Year 12: Summer 2011

Unit 1

Study of two poets: This year, the students are studying an anthology of Sylvia Plath's poetry as their core text and will analyse her work in light of the poetry of Ted Hughes.

Study of one drama: David Hare's *Murmuring Judges* is the current choice as a post 1990 play.

The exam is Two and a half hours, two questions.

60% of the final AS grade

Unit 2

Two novels are studied and analysed commenting on how our understanding of Charlotte Bronte's *Jane Eyre* is changed by reading Jean Rhys' post-modern retelling, *Wide Sargasso Sea*. Coursework. One essay, 1200-1500 words.

Margaret Atwood's *Cat's Eye* is the inspiration for a Creative writing piece with student's own commentary. Two essays totaling 1500 words
40% of the final AS grade

A2 Level Exams, Year 13: Summer 2012

Unit 3

Shakespeare's *Measure for Measure* read in light of Webster's *Duchess of Malfi* - one comedy, one tragedy - both deeply twisted.

William Blake's Songs of Innocence and Experience analysed with an unseen poem.

Two questions, Three hours.

30% of the overall A Level

Unit 4

Coursework. One essay: a comparative study of of three texts which must include one poetry anthology. For example: The Gothic, Satire, Romance

20% of the overall A Level

Students studying A Level English Literature will also have the opportunity to see theatre performances and film interpretations of the texts being studied.

What it's useful for

Thinking of medicine, law, accountancy, teaching, design, management, dentistry, the service industries? Then study English Literature, the preferred course of universities and business alike! The possibilities are endless.

FURTHER MATHEMATICS AS AND A LEVEL

What you need to start the course

To find the simple in the complex, the finite in the infinite - that is not a bad description of mathematics (Jacob Schwartz).

If you just can't get enough mathematics then this is the course for you.

You must have decided to study A Level Mathematics and ideally have a grade A or A* at GCSE. You take this course in addition to the A Level in Mathematics.

What you study

The general themes of the course are

Pure Mathematics

You will take at least two of the following:-

- Further Pure Mathematics 1 which covers summation of series; mathematical induction; roots of polynomial equations; complex numbers; matrices.
- Further Pure Mathematics 2 which covers rational functions and graphs; polar coordinates; hyperbolic functions; differentiation and integration; numerical methods.
- Further Pure Mathematics 3 which covers differential equations; vectors; complex numbers; groups.

Applied Mathematics

Each of the Applied Mathematics units offers the opportunity to specialise in a particular aspect of Mathematics. You will take either three or four of the following according to the interests and needs of the group:-

- Mechanics 1 which covers force as a vector; equilibrium of a particle; kinematics of motion in a straight line; Newton's laws of motion; linear momentum.
- Mechanics 2 which covers centre of mass; equilibrium of a rigid body; motion of a projectile; uniform motion in a circle; coefficient of restitution and impulse; energy, work and power.
- Mechanics 3 which covers equilibrium of rigid bodies in contact; elastic strings and springs; impulse and momentum in two dimensions; motion in a vertical circle; linear motion under a variable force; simple harmonic motion.
- Probability and Statistics 2 which covers continuous random variables; the normal distribution; the Poisson distribution; sampling and hypothesis tests.
- Probability and Statistics 3 which covers continuous random variables; linear combinations of random variables; confidence intervals and the t distribution; difference of population means and proportions; chi squared tests.
- Decision Mathematics 1 which covers algorithms; graph theory; networks; linear programming.
- Decision Mathematics 2 which covers game theory; flows in a network; matching and allocation problems; critical path analysis; dynamic programming.

How you are assessed

The full A Level is made up of six units, three at AS and three at A2 standard. The modular nature of the course allows the subject content and workload to be spread over each of the two years.

AS Level Exams

Year 12

*Further Pure Mathematics 1
Mechanics 1 & 2 or Decision 1 & 2*

A2 Exams

Year 13

*Statistics 2
Further Pure Mathematics 3 and either
Further Pure Mathematics 2, Mechanics 3
or Statistics 3*

- Each module has the same weighting for the final assessment.
- The examination of each unit is by means of a single written paper, of duration 1 hour and 30 minutes, and carrying a total of 72 marks.
- Each question paper consists of a number of questions of different lengths and mark allocations. Question papers are designed to have a gradient of difficulty, with the more straightforward questions towards the beginning of the paper, and more demanding questions towards the end. Where appropriate there is also a gradient of difficulty within individual longer questions. The order in which the questions are printed in the paper will generally correspond to increasing numbers of marks for questions.
- Calculators are allowed in all papers.

What it's useful for

Further Mathematics is particularly appropriate if you wish to study Mathematics, Physics, Theoretical Chemistry, Engineering or Theoretical Economics at University.

GEOGRAPHY AS AND A LEVEL

What you need to start the course

Do you know why some areas are at risk of flooding? Are you concerned about sustainability? Do you wonder whether there will be sufficient food to feed the world's population in the future?

Then you may enjoy studying Geography in the Sixth Form. The course looks at aspects of both physical and human geography and will appeal to students who have an interest in the world around them, a concern for the environment and who enjoy finding out about people, places and events.

A good pass at GCSE Geography provides an excellent foundation for further study at AS and A Level. A good standard of literacy is also essential.

Geography combines well with most other A and AS subjects as it contains elements of both the sciences and the humanities.

What you study

At AS Level

The physical topics are:

- Rivers, floods and flood management
- Coastal environments

The human topics are:

- Global population change
- Food supply issues

In addition, geographical skills relevant to these topics will be studied and this will include a compulsory residential fieldtrip.

At A Level

The physical topics include:

- Plate tectonics and related hazards
- Weather and climate and associated hazards

The human topics include:

- Growth and change in cities

In addition, a detailed fieldwork investigation of a river will be conducted, based on data collected during the AS fieldtrip.

All the above topics are illustrated with case studies and examples.

How you are assessed

The full A Level is made up of 4 units, 2 at AS and 2 at A2.

Unit 1 - Physical and Human Geography (2hours)

Structured short and extended questions on the 4 physical and human topics (70% of the total AS marks, 35% of the total A level marks)

Unit 2 - Applied Geography (1 hour)

A geographical skills paper based on the content of Unit 1 (30% of total AS marks, 15% of total A level marks).

Unit 3 - Contemporary Geographical Issues (2 1/2 hours)

Structured short and extended questions plus an essay on the physical and human topics studied for A level (20% of total A level marks)

Unit 4 - Geographical Fieldwork Investigation (1 1/2 hours)

Candidates produce a detailed write up of their river fieldwork and answer questions based on this piece of work. Additionally there are questions on general geographical skills (20% of total A level marks)

What it's useful for

Most universities offer degrees in Geography and there are a wide variety of joint degrees where Geography can be studied with either a science or a humanities subject. The range of skills that geographers acquire are much sought after by employers and geography graduates have access to a wide variety of careers ranging from marketing and finance to land management and conservation.

HISTORY AS AND A LEVEL

What you need to start the course

An inquiring mind, a thirst for knowledge about the past and a refusal to accept just one opinion!

Ideally a Grade C at GCSE is required and it is an advantage, although not a necessity, to have studied History at GCSE. However, it is essential that students have good levels of literacy.

What you study

This course covers an exciting and important period in modern British and International History by looking at Britain, America and China in the 20th century. We investigate their domestic affairs, their involvement in international relations and how their actions helped to shape current events.

Unit 1 : Britain 1906-1951

This unit provides an overview of a period of rapid and significant change affecting British politics, society and the economy. It investigates how key events, for example, 2 world wars and the great depression of the 1930s affected Britain and includes the study of the rise of the Labour Party, the emancipation of women and the development of the NHS.

50% of total AS marks / 25% of the total A Level marks

Unit 2 : The Impact of Chairman Mao - China, 1946-1976

This unit provides an opportunity to analyse the extent to which Mao Zedong transformed China. It places this period in the broader context of Chinese History, particularly its culture and traditions and the political development of China since the late nineteenth century, before investigating the reasons for Communist success in the Civil War and the establishment of the Chinese People's Republic in 1949. This unit also includes a study of agrarian reforms, industrialisation and society in China across the whole period and evaluates the extent of change in China and the role which Chairman Mao played.

50% of total AS marks / 25% of the total A Level marks

Unit 3 : The Making of Modern Britain, 1951-2007

This unit looks at political, economic and social continuity and change in Britain over an approximately 50 year period, including key events such as the 'Swinging Sixties', the Falklands War and entry into the EEC and important individuals such as Wilson, Thatcher and Blair. It also investigates how issues such as multiculturalism have changed Britain.

30% of total A Level marks

Unit 4 : Historical Enquiry : Civil Rights in America

This unit looks at 150 years of American History (1850 - 2000) and investigates the changing situation of minorities during this period, including African Americans, Native Americans and Hispanic Americans. Students have the opportunity to choose an aspect of this topic and research it in more depth culminating in a piece of coursework approximately 3500 words. *20% of total A Level marks*

How you are assessed

The full A-Level is made up of four units, two at AS and two at A2 standard.

Unit 1 is assessed by a written paper of 1 hour 15 minutes which tests the understanding of change over time with 2 essay questions.

Unit 2 is assessed by a written paper of 1 hour 30 minutes which consists of 1 compulsory two-part source-based question and 1 structured two-part question from a choice of 2 which tests understanding of a significant period of history in depth.

Unit 3 is assessed by a written paper of 1 hour 30 minutes which tests understanding both in depth and breadth and consists of two essay questions from a choice of 3.

Unit 4 is a piece of coursework of approximately 3500 words which is an analysis of an historical issue showing change over 100 years.

What is History useful for?

History is recognised as a challenging and rewarding subject in itself and ideal as preparation for a number of university courses including Law, Politics, English, Literature and Languages. It is also seen as a valuable subject by employers in a range of professions due to the skills that are developed during the course, for example, the ability to select, organise and evaluate information, conduct independent research, to make balanced and informed opinions, to construct coherent arguments and communicate them in a variety of ways.

'With History you can aspire to be Prime Minister, a press baron, famous lawyer, Archbishop of Canterbury, diplomat, famous comedian, business multimillionaire or celebrated pop musician!'

ICT AS AND A LEVEL

What you need to start the course

"Computers are useless. They can only give you answers" (*Pablo Picasso, 1881-1973*). This course aims to equip intelligent communicators with the skills needed to frame the right questions and interpret the answers for the rest of us.

There are no specific entry requirements. Students will be asked to undertake project work - most of which involves finding out what people want computers to do, and making the computers do it.

What you study

The general themes of the course are:-

- *ICT Capability*
Practical capability in applying ICT
- *Knowledge and Understanding*
Knowledge and understanding of ICT systems in organisations and society
- *ICT Problem Solving*
Apply knowledge, skills and understanding to solve ICT problems
- *Evaluation*
Evaluate ICT solutions and your own performance.

How you are assessed

The full A Level is made up of six units, three at AS and three at A2 standard. The modular nature of the course allows the subject content and workload to be spread over each of the two years.

AS Level

Year 12

Unit 1: The Information Age

Unit 2: The Digital Economy

Unit 3: The Knowledge Worker

A2 Level

Year 13

Unit 7: Using Database Software

Unit 8: Managing ICT Projects

Unit 11: Using Spreadsheet Software

As the course will reflect the nature of problem solving within an organisation, traditional class teaching is supplemented by group work, problem simulation and case studies. The full A Level is made up of six units, three at AS and three at A2 standard. The modular nature of the course allows the subject content and workload to be spread over each of the two years.

Unit 1: The Information Age

Internal assessment - Portfolio of work

We are living in an age in which an enormous amount of information –television broadcasts, text messages, photographs, news reports, emails, etc – is produced, communicated and stored in digital format every day.

¹/₃rd of the total AS Level marks, ¹/₆th of the total A Level marks

Unit 2: The Digital Economy

Internal assessment - Portfolio of work

Paperless transactions are hallmarks of the digital economy. In the global e-marketplace transactional websites are the interface between e-enabled customers and organisations.

1/3rd of the total AS Level marks, 1/6th of the total A Level marks

Unit 3: The Knowledge Worker

External assessment - computer-mediated 2 hour examination

Computers and communications technology provide many of us with access to vast quantities of information. As ICT users, we need to make judgements about sources and accuracy of information and be able to select and manipulate information to support sound decision making.

1/3rd of the total AS Level marks, 1/6th of the total A Level marks

Unit 7: Using Database Software

External assessment - computer-mediated - 10 hour supervised board set assignment

You will learn the principles of data modelling and sound database design, and will use relational database software to build working database systems capable of storing large quantities of data and of handling both routine and one-off requests for information.

1/3rd of the total AS Level marks, 1/6th of the total A Level marks

Unit 8: Managing ICT Projects

Internal assessment - Portfolio of work

Perhaps not surprisingly, a large number of projects – particularly in ICT – do not fully meet their objectives. This module promotes the correct planning.

1/3rd of the total AS Level marks, 1/6th of the total A Level marks

Unit 11: Using Spreadsheet Software

Internal assessment - Portfolio of work

This portfolio is produced concurrently with the portfolio for Unit 8, so the project being managed is one where a spreadsheet is produced as the product.

1/3rd of the total AS Level marks, 1/6th of the total A Level marks

What it's useful for

In every arena of life there will be interaction with computers. An understanding of the decisions being made in the use of those computers is essential in every business. This course offers a good grounding in choices about technology and how to make them.

LANGUAGES: FRENCH, GERMAN AND SPANISH - AS AND A LEVEL

What you need to start the course

Are you interested in communication, different cultures, tourism and travel? Would you like to improve your career prospects in the business world?

Studying a language at a higher level, either at AS or A level, means developing your language and communication skills and building upon the knowledge you have gained during the GCSE course. Besides consolidating what you know of the language already you will learn how to research independently, develop arguments and then go on to analyse and evaluate both orally and in writing on a wide range of topics.

We aim to offer you a stimulating language-learning environment, with enjoyable activities in small classes. You will improve your knowledge of global current affairs and issues. You will learn more about contemporary issues in a topic-based course, using a variety of materials: texts, CDs, DVDs and the Internet. You will have the opportunity to attend individual oral sessions with a specialist teacher. Study visits to all three counties are encouraged to develop your awareness and advanced language skills.

What you study

Besides a comprehensive grounding in essential grammar you will be looking at the following topic areas:-

AS Level

Aspects of daily life: the family, food, drink, health, transport

Leisure and entertainment: sport, tourism and the environment, cultural life

Communication and media: communication technology, written press, radio, television

Education and training: school and school life, work and training

A2 Level

Society: integration and exclusion, law and order, unemployment

The environment: the individual and the environment, energy management, conservation, pollution

Science and technology: medical progress, ethics, scientific advances, technological developments

Culture: literature and the arts, political issues, history and heritage

How you are assessed

The full A Level consists of four units, namely two at AS and two at A2.

Both AS and A Level have one speaking test unit and one unit where multi-skills are required.

AS Level Exams

Year 12

Speaking 1- Role-play and Presentation

(AS 30%, A Level 15%)

Listening, Reading and Writing 1

(AS 70%, A Level 35%)

A2 Exams

Year 13

Speaking 2- Reading/Oral Task and Presentation

(A Level 15%)

Reading, Writing and Listening 2 (A Level 35%)

What is a modern foreign language useful for?

Knowledge of foreign languages has become more and more important over the last few years and with continuing European integration and co-operation will be a very relevant skill for the 21st century. Official Government reports state that the UK has an insufficient supply of specialist linguists with English mother tongue to meet our interpreting and translating needs. Languages are also needed to support the hoped-for growth in our tourist industry linked to the 2012 Games, and will increase your career opportunities abroad.

You will also find languages welcomed by employers recruiting in law, the civil service, media, advertising and public relations. They all appreciate the general enhancement of communication skills that are gained when studying a foreign language at AS or A Level. These may also be valuable for students who are otherwise specialising in Sciences or Mathematics.

MATHEMATICS AS AND A LEVEL

What you need to start the course

Are you someone who delights in doing logic puzzles, do you care about the finer points of a SUDOKU puzzle, does it matter to you that bees store honey in hexagonal honeycombs? If you are someone who loves algebra and sees it as a useful shorthand way of seeing the World or someone who considers Pythagoras's theorem when trying to get a large wardrobe up an awkward staircase, then this is the course for you.

Ideally you should have GCSE Mathematics grade A or above taken at the higher tier. This is because the higher level syllabus contains the necessary topics that students need in order to have sufficient background knowledge to progress with A Level Mathematics. It is not impossible to take A Level Mathematics with less than this but the gap is quite large and you need to be prepared to put a lot of extra work in at the beginning. If you have studied Statistics at GCSE level and or FSMQ Additional mathematics then this will have enriched your background and be of benefit in further work in that area of Mathematics.

What you study

The general areas of the course are:

Pure Mathematics

The Pure Mathematics units cover the core common to all Mathematics syllabuses. You will extend your knowledge of algebra and trigonometry as well as studying new topics such as calculus. Pure Mathematics allows you to begin to see the power and elegance of Mathematics as a study of structure and a way of analysing the world. This forms the underpinning core of all the Mathematics that we study.

Core Mathematics 1

This covers indices and surds; polynomials; coordinate geometry and graphs; differentiation.

Core Mathematics 2

This covers trigonometry; sequences and series; algebra; integration.

Core Mathematics 3

This covers algebra and functions; trigonometry; differentiation and integration; numerical methods.

Core Mathematics 4

This covers algebra and graphs; differentiation and integration; differential equations; vectors.

Applied Mathematics

Each of the Applied Mathematics units offers the opportunity to specialise in a particular aspect of Mathematics.

Mechanics

This demonstrates the power of Mathematics when used in conjunction with the laws of Physics.

Mechanics 1

This covers force as a vector; equilibrium of a particle; kinematics of motion in a straight line; Newton's laws of motion; linear momentum.

Statistics

This develops data handling ideas already encountered at GCSE and formalises techniques for analysing data and making reliable predictions in an uncertain world. You will study how to collect, present and interpret data as well as probability, sampling, hypothesis testing, correlation and regression. This is particularly useful if you are studying Psychology, Economics, Business Studies, Biology or Geography.

Probability and Statistics 1

This covers representation of data; probability; discrete random variables; bivariate data.

Decision Mathematics

This is a relatively new and highly accessible option at A Level and covers a range of topics including graph theory, linear programming, logic and critical path analysis. This is particularly useful if you are studying Economics, Business Studies or ICT.

Decision Mathematics 1

This covers algorithms; graph theory; networks; linear programming.

How you are assessed

The full A Level is made up of six units, three at AS and three at A2 standard. The modular nature of the course allows the subject content and workload to be spread over each of the two years.

AS Level Exams

Year 12

Core Mathematics 1
Core Mathematics 2
Statistics 1

A2 Exams

Year 13

June, Year 13

Core Mathematics 3
Core Mathematics 4
and either Mechanics 1
or Decision Mathematics 1

- Each module has the same weighting for the final assessment.
- The examination of each unit is by means of a single written paper, of duration 1 hour and 30 minutes, and carrying a total of 72 marks.
- Each question paper consists of a number of questions of different lengths and mark allocations. Question papers are designed to have the more straightforward questions towards the beginning of the paper, and more demanding questions towards the end. Where appropriate there is also a gradient of difficulty within individual longer questions. The order in which the questions are printed in the paper will generally correspond to increasing numbers of marks for questions. Calculators are allowed in all papers **except** Core Mathematics 1.

What it's useful for

Well qualified mathematicians are in demand because they have demonstrated the ability to analyse and find solutions to complex problems: this is an essential skill in many areas of life. There is a large number of mathematically based courses available at universities, including links with most other subjects. Its wide ranging nature and analytical challenge make it an ideal choice. Mathematics is a highly regarded qualification that leads to a great range of careers including Computing, Teaching, Statistics, Risk Assessment, Engineering, Operations Research, Accountancy, Architecture, Finance or Business. It will be useful in almost any career and valued by all universities. Mathematics is widely used by people in a variety of professions. It is difficult to think of areas where mathematics is not used.

MUSIC AS AND A LEVEL

What you need to start the course

Do you play an instrument or sing? Are you in a choir or instrumental group? Then read on, this course might be for you.

If you learn an instrument or sing, are of grade 5 standard or above and you enjoy music then this course is for you.

You do not need to have previously studied GCSE or grade 5 theory although a knowledge of both is useful.

What you study

The course is broken into three parts at both AS and A Level - those of performing, composing and listening (historical studies).

AS Performing

- You will perform a recital of varied pieces on your preferred instrument of up to 8 minutes long.
- You will look at your pieces in terms of how they are performed and be prepared to answer questions on them.
- You will perform a duet on your instrument or a shorter recital programme on a second instrument.

AS Composing

- You will prepare a portfolio of 6 stylistic exercises and do one stylistic exercise under supervised conditions at the end of the course.
- You will either compose a free composition or do an arrangement of a song for between 4 and 10 instruments.

AS Historical Studies

- Aural recognition and analysis are studied.
- Three orchestral works from the Baroque and Classical periods are studied.
- Three pieces of jazz repertoire are studied.

A Level Performing

- You will perform one recital of up to 15 minutes on your preferred instrument or voice. The pieces prepared must be within one specific genre.
- You will study two different recordings of your pieces and the examiner will ask you questions on these and the way that these recordings influenced your own performance.

A Level Composing

- You will prepare a portfolio of 8 stylistic exercises, one of which will be done under supervised conditions towards the end of the course.
- You will compose one further piece from a choice of three:
 - A song
 - A piece of programme music
 - A short film/TV sound track

A Level Historical studies

- Aural recognition and analysis are studied with specific reference to an accompanied vocal piece composed between 1900 - 1945.
- The study of one historical topic from a choice of six.

How you are assessed

Performing is assessed towards the end of the course (either at the end of the Spring term or the beginning of the Summer term) by a visiting examiner who will listen to your recital and then discuss it with you in a viva voce.

Composition is assessed through a portfolio produced at the end of the spring term in each year. This is internally marked and externally moderated.

Listening is assessed by an examination at the end of each year that consists of one aural question and other questions based on the set works or historical topic of each course.

What it's useful for

Obviously for those who want to go on to study Music at university or Music College, it is very important, but it is also useful for anyone who is looking at a career in the theatre or dramatic arts. If you are an advanced instrumentalist or singer it can be of great benefit in helping you to better understand the music that you play and its performance conventions.

Many people who go on to study other subjects find that the music that they did at school provides a good stepping stone into a variety of amateur opportunities of listening and performing.

PHOTOGRAPHY AS AND A LEVEL

What you need to start the course

The best foundation for success in AS and A level Photography is a good grade in any Arts related GCSE, success in AS/A level Photography requires determination and dedication.

What you study

Work in photography - lens and light-based media should form a means of personal enquiry and expression involving the selection and manipulation of images. Students must employ creative approaches which go beyond mere observation and recording. Disciplines will include film-based photography and digital photography. Students will be expected to develop knowledge and understanding of the following aspects of Film-based Photography:

- The use of light as the most important element in photography
- Film types, film speeds, specialised films which will facilitate the processes of generating and developing ideas
- Viewpoint, composition, focus, shutter speed, exposure
- Dark-room techniques involving the recognition of appropriate paper types, developing and printing, emulsions, exposures, tone and contrast.
- Acquisition and manipulation of the image through computers, scanners, photocopiers and computer software.

Students will be expected to develop knowledge and understanding of the following aspects of Digital Photography:

- The use of light as the most important element in photography
- The basis of digital photography, including the pixel and digital processing
- Viewpoint, composition, focus, shutter speed, exposure
- The use and qualities of image acquisition hardware and software and image manipulation and analogies between digital and other forms of photography
- The relationships between colour and tone for screen- and print-based media
- The use of a range of source material, software and hardware in the generation and development of ideas.

How you are assessed

The modular nature of the course allows the subject content and work load to be spread over each of the two years.

AS Level

Unit 1:

- Coursework which explores a theme, supporting studies which show the breadth and depth of the students' visual thinking in the progress of their work.
- Analysing and using sources and contexts to inform and inspire their work.
- Final pieces and evaluation

60% of the AS, 30% of the A level marks

Unit 2:

- Externally set Assignment. A theme is set by the Board in January with an 8 hour timed exam in April/May.

40% of the AS, 20% of the total A Level marks

A2 Level

Unit 3:

- Problem solving and contextual studies linked to the students' own interests. In the form of practical work and a personal study.

30% of the total A level marks

Unit 4:

- Externally set Assignment; A theme is set by the Board in January with a 12 hour timed exam in April/May. Students will be expected to investigate a wide range of work and sources. This must include work in galleries and museums or of buildings and design objects. The study and images by the student will be accompanied by a well documented book by mid May.

20% of the total A level marks

What it's useful for

Photography is of interest for students who wish to undertake further studies in art, design and photography, usually at Art College or further education. Careers could include photography, design, digital art, publishing, advertising or art gallery work. The course is also suitable for students who have an aptitude for the subject but who do not intend to take the subject beyond the AS or A Level.

PHYSICAL EDUCATION AS AND A LEVEL

What you need to start the course

The GCSE in Physical Education does offer a useful foundation for the course, but it is not a pre-requisite. Also a grade B in Science or the Sciences would be advisable but, more importantly, a fundamental interest in current issues relating to the sports world is vital.

What you study

The AS Level consists of:

- *An Introduction to Physical Education:-* students will acquire an appreciation of topic areas including anatomy and physiology, acquiring movement skills and socio-cultural studies relating to participation in physical activity.
- *Acquiring, developing and evaluating practical skills in Physical Education:-* students will experience activities and work towards responding to a live performance in one of their own assessed activities.

The A2 Levels consists of:

- *Principles and concepts across different areas of Physical Education:-* in this unit students will acquire an appreciation of the historical and psychological factors that impact upon competence in physical education. Students will also acquire an appreciation of how the body changes as a result of physical activity.
- *The improvement of effective performance and the critical evaluation of practical activities in Physical Education:-* students will build upon the skills acquired in one of their chosen activities and work towards responding to a live performance in their own assessed activity.

How you are assessed

AS Level Exams

Year 12

AS Unit 1: An Introduction To Physical Education

This question paper has three sections with one question in each section.

60% of the total AS marks

AS Unit 2: Acquiring, developing and evaluating practical skills in Physical Education.

Students are assessed in two chosen practical activities.

40% of the total AS marks

A2 Exams

Year 13

A2 Unit 3: Principles and concepts across different areas of Physical Education

This question paper has three sections with the last question in section being a 20 mark question.

35% of the total A Level marks

A2 Unit 3: The improvement of effective performance and the critical evaluation of practical activities in Physical Education.

Students are assessed in one chosen practical activity.

15% of the total A Level marks

What it's useful for

Candidates in the past have pursued a wide range of courses from medicine and physiotherapy to teaching and psychology. It is an accepted A Level qualification at all universities; although many candidates pursue sports orientated courses, it is not exclusively for those students.

PHYSICS AS AND A LEVEL

What you need to start the course

We live in the Scientific Age, and science has dominated society over the past few centuries. Physics is one of the key disciplines of science. What are the distinctive features of Physics? The subject can be described as the study of matter and energy. Physics helps us to understand nature from the smallest possible scale (deep inside the atom) to the largest conceivable (stretching across the entire Universe).

Studying Physics is an exciting experience for those prepared to probe the ideas in the subject, more so now than ever before. Discovering new ideas and applications can be very rewarding. You will learn the skills of making observations and measurement, and how to use your mathematical skills to make sense of experiments. You will also learn how to communicate your knowledge and understanding of the subject effectively. You will discover that Physics is a very creative subject that calls for imagination and inventiveness.

Physics is taken with any combination of subjects although it is important to have some good knowledge of Mathematics to AS Level.

What you study

The general themes of the course are:-

Mechanics

Rectilinear motion, energy, forces and power

Materials

Flow of liquids, viscosity, Stokes' law, properties of materials, Hooke's law, Young's modulus and elastic strain energy

Waves

Properties of different types of waves, including standing waves, refraction, polarisation and diffraction

DC Electricity

Definitions of various electrical quantities, Ohm's law, non-ohmic materials, potential dividers, emf, internal resistance of cells and negative temperature coefficient thermistors

Nature of Light

Wave/particle nature of light

Further Mechanics

Momentum and circular motion

Electrical and Magnetic Fields

Coulombs's law, capacitors, magnetic flux density and electromagnetic induction

Particle Physics

Atomic structure, particle accelerators and the standard quark-lepton model

Thermal Energy

Specific heat capacity, internal energy and the ideal gas equation

Nuclear decay

Radioactive decay

Oscillations

Simple harmonic motion and damping

Astrophysics and Cosmology

Astronomical observations, the formation and evolution of stars, and the history and future of the universe

How you are assessed

EDEXCEL AS GCE Physics (8PH01)

EDEXCEL A2 GCE Physics (9PH01)

The full A Level is made up of four units, two at AS and two at A2 standard. There are also two further practical/essay units, one at AS and one at A2 standard. The modular nature of the course allows the subject content and workload to be spread over each of the two years.

AS Level Exams

Year 12

Unit 1 *Physics on the go*

Unit 2 *Physics at Work*

Unit 3 *Exploring Physics (Practical/essay)*

A2 Exams

Year 13

Unit 4 *Physics on the move*

Unit 5 *Physics from Creation to Collapse*

Unit 6 *Experimental Physics (Practical/essay)*

The course will include theoretical lessons as well as planning, carrying out and analysing experiments:

Unit 1: Physics on the go

Written examination paper consisting of objective questions, short questions and long questions.

40% of the total AS Level marks, 20% of the total A Level marks

Unit 2: Physics at Work

Written examination paper consisting of objective questions, short questions and long questions.

40% of the total AS Level marks, 20% of the total A Level marks

Unit 3: Exploring Physics (Practical/essay)

An experiment based on a physics-based visit or a case study of an application of physics. The experiment must be conducted under supervised conditions. Students write a report that is internally marked and externally moderated. The experiment can be done in a normal lesson.

20% of the total AS Level marks, 10% of the total A Level marks

Unit 4: Physics on the move

A written examination paper consisting of objective questions, short questions and long questions.

40% of the total A2 marks, 20% of the total A Level marks

Unit 5: Physics on the move

A written examination paper consisting of objective questions, short questions and long questions.

40% of the total A2 marks, 20% of the total A Level marks

Unit 6: Exploring Physics (Practical/essay)

The student must plan and carry out an experiment. The plan may be their own plan, or a plan provided by the board or by the school, but it must be produced at a different time from the experiment. The experiment can be done in a normal lesson. This unit is internally marked and externally moderated.

20% of the total A2 marks, 10% of the total A Level marks

PSYCHOLOGY AS AND A LEVEL

What you need to start the Course

Do you like puzzles? Do you like the challenge of solving problems? If you answered 'yes' to either of these questions you might enjoy learning about Psychology. You might ask 'What is psychology?' Well, herein lies your first puzzle, because the most common definition of psychology is 'The Science of Mind and Behaviour'. Well, if like me, you see 'Science' as the kind of activity where men in white coats chop things into little pieces and boil them up in a test tube over a Bunsen burner, you might wonder exactly how they are going to do that with something like the 'mind' which is an abstract concept. Then of course, there is the problem of 'behaviour'. How do you do a science of behaviour? Are you studying your behaviour, other people's behaviour, or the intention behind the behaviour. If you answered 'yes' to any of these questions then psychology might be the subject for you.

There are no specific entry requirements. However the method of assessment is such that a good level of English is a necessity. Students have to write in a precise, analytical manner on a range of topics from an early stage of the course. They need to be able to differentiate between material which is descriptive in nature, and that which is evaluative and analytical. Although some arithmetic knowledge is required, it is at a fairly basic level.

Psychology can be taken with a variety of other subjects although it particularly complements the work done in Biology and PE. However students of English, Religious Studies and History have also found interesting links.

What you study

The course is topic based drawing material from the major psychological perspectives such as:-

Cognitive Psychology: The nature and structure of memory, why and how we forget things, and how our knowledge of memory informs our understanding of the accuracy of eye-witness testimony.

Developmental Psychology: The nature of attachment, the effects of separation and deprivation from the major care-giver, and an investigation into the effects of day-care on the well-being of our students.

Research Methods: The ways in which psychologists study human behaviour. For example, experimental techniques, observation, correlations, surveys and case studies.

Biological Psychology: The body's response to stressors, the effects of stress on health and well-being and ways of managing stress.

Social Psychology: Reasons we conform and follow the lead of other people, research into obedience and resistance to obedience, and an examination of the ethical issues surrounding this research.

Individual differences: Definitions of abnormality, different perspectives on abnormality.

A choice of a further three topics from the following eight topics: Biological Rhythms and sleep, Perception, Relationships, Aggression, Eating behaviour, Gender, Intelligence and Learning, Cognition and Development.

Psychopathology: The nature and research on different types of psychopathological conditions. These will include Schizophrenia, phobias, depression and Obsessive Compulsive disorder.

Psychology in Action: The application of psychology to everyday life. Students study Addiction and attempt to analyse and specific, addictive behaviours, their causes, how they are maintained and consequently how they are treated.

Research Methods: A structured question that allows the student to explore the ways in which psychologists study their subject.

How you are assessed

The full A Level is made up of four units, two at AS and two at A2 standard. The modular nature of the course allows the subject content and workload to be spread over each of the two years.

AS Level Exams

Two papers consisting of short answer questions, stimulus material and one question requiring extended writing.

Year 12

Cognitive Psychology
Developmental Psychology
Research Methods
50% of the AS, 25% of the A2

Biological Psychology
Social Psychology
Research Methods
50% of the AS, 25% of the A2

A2 Level Exams

One paper consisting of three essay style questions; and one paper with two essay style questions, plus a structured question.

Year 13

A choice of three topics from the eight specified.
25% of the A2

June Upper Sixth

Psychopathology
Psychology in Action
Research Methods
25% of the A2

What it's useful for

Psychology is a very popular subject which can be studied at a large number of universities. It can be studied on its own or combined with a number of other subjects. The analytical skills needed in the study of this subject can be easily transferred to a wide ranging number of employment opportunities, particularly those to do with human resources. It does not of itself lead to a career in psychological counselling or clinical work, which normally needs study at postgraduate level.

RELIGIOUS STUDIES AS AND A LEVEL

What you need to start the course

There are no specific entry requirements. However, the methods of assessment are such that students must have a good level of literacy. Students have to be able to write analytical answers to questions on a wide range of topics from an early stage of the course. An ability to write clearly and to recognise the need for supporting detail in analysing situations is of great importance.

What you study

The modules of the course are:-

- Philosophy of Religion
- Religious Ethics
- Jewish Scriptures
- New Testament
- Developments in Christian Theology
- Buddhism
- Hinduism
- Islam
- Judaism

At Moira House we have chosen to study Philosophy of Religion with Religious Ethics both at AS and at A Level.

The AS course is the first half of the full Advanced Level GCE course. You can take just the AS on its own, or you and your tutor can decide, even near the end of the AS course, whether to continue on to take the full A Level by taking A2 papers.

How you are assessed

All assessment is by written examination.

AS Examinations

Year 12

Philosophy of Religion

Influences on the Philosophy of Religion

Arguments for the existence of God

Challenges to religious belief

Religious Ethics

Ethical theories

Their application to topics

A2 Examinations

Year 13

Philosophy of Religion

Religious language

Experience and religion

The nature of God

Life and death

Miracles
Religious Ethics
Meta-ethics
Free will and determinism
Conscience
Virtue ethics
Applied ethics

What it's useful for

Religious Studies is an ideal choice for a student who is interested in the Humanities, Law, Medicine, or Philosophy. It combines well with subjects such as History, Psychology and English Literature, and also with Biology, Physics and Chemistry, to which it adds breadth. Successful completion of this Advanced GCE will give you access to a range of career and higher education opportunities because it has developed the skills of collecting, synthesising and interpreting information from a range of sources.

