A Level Curriculum Guide

A Level 课程指南

MERCHISTON

曼彻斯通城堡学校

The A Level Programme

A Levels are considered amongst the most valuable pre-university qualifications in the world (it was once said that a good set of British A Levels was regarded as equivalent to a U.S. college degree). We therefore believe that the new A Level qualification, along with the EPQ and IELTS, gives the most challenging and rewarding programme of study we can offer. Combining them with our outstanding range of co-curricular activities, this gives our young people the best possible opportunities for higher education and employment and the ability to compete in the global market.

ADVANCED LEVEL ART
ADVANCED LEVEL PHOTOGRAPHY

Examination board: Edexcel

Overview of content: We explore and experiment with all available materials and processes as we work on developing understanding and expertise in the formal elements. We look at a wide range of contemporary artists as inspiration before the final theme is chosen for the Independent Project. The course consists of two units; a Personal Investigation, which is an independent project with the theme by the student in consultation with the art team; and is an Externally Set Assignment, which is a six week project with the theme set by the exam board. All work is carefully monitored to ensure the depth of inquiry demanded by the exam board is reached.

Requirements: High level of key skills demonstrated by portfolio, good level of academic English.

Assessment method: Portfolio and examination in the second year.

Students typically go on to study: Fine Art, History of Art, Architecture, Graphic Design.

ADVANCED LEVEL BIOLOGY

Examination board: Cambridge International Examinations

Overview of content: Students study topics across a range of biological scales from genetics to ecology considering how parts of living systems work together to produce the abundance of life around us. Students have the opportunity to investigate their ideas through a series of practical experiments and develop their scientific literacy ready to make informed judgments about information presented.

Requirements: This course builds on IGCSE level Biology and requires high levels of critical thinking and the ability to handle and analyse data.

Assessment method: Modular examination. 3 papers (2 theory and 1 practical) are sat at the end of Year 12 and 2 papers (1 theory and 1 practical) are sat at the end of Year 13.

Students typically go on to study: Medicine, Veterinary Science, Biomedical Science, Zoology and Plant Sciences.

ADVANCED LEVEL BUSINESS STUDIES

Examination board: Edexcel

Overview of content: This is a very dynamic and complete course, students gain critical skills for better productivity, efficiency and performance in the world of business. They study: types of businesses, managing a business, marketing, financial objectives, people in business, finance and business operations.

Requirements: Confident numerical, literacy and critical thinking skills.

Assessment method: 100% examination - synoptic assessment at the end of the second year.

Students typically go on to study: Marketing, Advertising, Finance, Accounting, Sales, Business Consultancy and Human Resources.

ADVANCED LEVEL CHEMISTRY

Examination board: Cambridge International Examinations

Overview of content: Widely considered to be one of the most challenging A Level subjects, with significant numerical content and a lot of abstract conceptual material. Students study: atomic structure and chemical bonding; physical chemistry; organic chemistry and organic synthesis; and inorganic chemistry. Experiments and practical work are an integral part of the course. Students develop the ability to observe carefully, think logically, and make connections between apparently disparate concepts.

Requirements: Strong mathematical skills, good memory, an interest in understanding how the world works and linking experimental evidence to theory.

Assessment method: 100% examination – both written and practical exams. Exams currently at end of first and second years (this may change to examination at end of second year only).

Students typically go on to study: Accountancy, Biochemistry/Biotechnology, Chemistry, Chemical Engineering, Economics, Engineering, Finance, Materials Science, Medicine, Veterinary Science.

ADVANCED LEVEL CHINESE

Examination board: Edexcel

Overview of content: Edexcel Level 3 Advanced GCE in Chinese (Spoken Mandarin) has been developed to inspire all students who have an appreciation of the language, literature, film and culture of the Chinese-speaking world. It is a motivating course of study that enables students to develop an advanced level knowledge and understanding of the Chinese language, the culture of China and other Chinese speaking countries, as well as practical and valuable language and transferable study skills.

Requirements: High writing, literacy, presentation and critical thinking skills.

Assessment method: 100% examination - synoptic assessment at the end of the second year.

Students typically go on to study: Teaching, Journalism, Marketing, Business, Politics.

ADVANCED LEVEL COMPUTER SCIENCE

Examination board: Cambridge International Examinations

Overview of content: Students follow a course of topics including information representation, communication and Internet technologies, hardware, software development, and relational database modelling. As they progress, students develop their computational thinking and use problem solving to develop computer-based solutions using algorithms and programming languages. Studying Cambridge International AS and A Level Computer Science helps students develop a range of skills such as thinking creatively, analytically, logically and critically.

Requirements: High numerical, literacy and critical thinking skills.

Assessment method: 100% examination – 50% in year one, 50% in year two.

Students typically go on to study: Computer Science with different options – Programming, Databases, Security, Web Design, Systems Architecture, Gaming & Apps and many more.

ADVANCED LEVEL ECONOMICS

Examination board: Edexcel

Overview of content: Studying for A Level Economics is highly challenging but equally rewarding, students gain advanced level skills of analysis and knowledge of key concepts in Economics. They study: markets and market failure, consumer and producer theory, economic modelling and decision making, quantitative methods, financial economics, development and globalisation, macroeconomic analysis and much more.

Requirements: High numerical, literacy and critical thinking skills.

Assessment method: 100% examination - synoptic assessment at the end of the second year.

Students typically go on to study: Economics, Finance, Financial Modelling, Business, Marketing, Politics.

ADVANCED LEVEL ENGLISH

Examination board: Cambridge International Examinations

Overview of content: Studying English Language A Level helps students develop an understanding and enjoyment of a wide variety of different texts, both written and spoken. They gain pleasure and awareness of how language works in different ways, for different purposes and for different audiences. In addition, they gain skills for life, including the ability to appreciate how different texts are shaped by their language and style; skills in creating their own imaginative and persuasive writing for different purposes and audiences; skills in researching, selecting and shaping information from different sources; and the ability to analyse and compare written and spoken texts in close detail.

Assessment method: 100% written examinations.

Requirements: High levels of literacy and critical thinking skills.

Students typically go on to study: English Language, Linguistics, English Literature, Psychology, Philosophy, Politics.

ADVANCED LEVEL FURTHER MATHEMATICS

Examination board: Edexcel

Overview of content: A Level Further Mathematics is studied alongside A Level Mathematics to broaden and deepen mathematical understanding. The additional material is beneficial to those wishing to study Mathematics at university.

Requirements: This syllabus is intended for high ability learners who have achieved, or are likely to achieve, a high grade in the standard A Level Mathematics course.

Assessment method: Modular - 6 examinations; 3 in the first year and 3 in the second year.

Students typically go on to study: Further studies in any Science or Maths-based course, such as Mathematics, Computer Science, Medical Sciences, Statistics, Management, Economics, Finance, Financial Modelling, Business.

ADVANCED LEVEL GEOGRAPHY

Examination board: Cambridge International Examinations

Overview of content: Geography is unique in its study of human and physical patterns and the interaction of people and their environment in shaping the landscape. It also makes a wider contribution to the curriculum in the skills, personal development and also the moral, social and cultural development it fosters.

Geographical skills are an important element of the A Level and these are developed as an on-going aspect of classroom teaching. The main skills encouraged are map drawing, complex graphical representation and the interpretation of these.

Requirements: Whilst having studied Geography at IGCSE level is desirable it is not essential. High numerical, literacy and critical thinking skills.

Assessment method: 100% examination - synoptic assessment at the end of the second year.

Students typically go on to study: Environmental Science, Town & Country Planning, Geographical Engineering, Leisure & Tourism, Geology, Geophysics and Education.

ADVANCED LEVEL HISTORY

Examination board: Edexcel

Overview of content: The History International Advanced Level develops a breadth of knowledge and depth in skills that are very desirable to universities. In the British and American systems, History is a highly valued academic subject.

The students follow an exciting, varied and engaging series of topics throughout course. (France in Revolution 1774-99, South Africa 1948-2014, Civil Rights and Race Relations in the USA, 1865–2009 and the Making of Modern Europe 1805-70)

Requirements: High literacy and critical thinking skills.

Assessment methods: 100% examination, one per unit at the end of the second year.

Students typically go on to study: History, English, Science, Law, Journalism and Economics.

ADVANCED LEVEL MATHEMATICS
A LEVEL 数学

Examination board: Edexcel

Overview of content: The aim of this course is to develop logical thought and understanding the basic concepts of Pure Mathematics, Mechanics and Statistics. Mathematics underpins all the sciences and is seen favourably by all universities, especially for courses that require some mathematical processes.

Requirements: This syllabus is intended for high ability learners who have achieved, or are likely to achieve, a high grade in the standard IGCSE Mathematics course.

Assessment method:Modular - 6 examinations; 3 in the first year and 3 in the second year.

Students typically go on to study:Further Mathematics provides a foundation for further studies in any Science or Maths-based course, such as Computer Science, Medical Sciences, Statistics, Management Economics, Finance, Financial Modelling, Business.

ADVANCED LEVEL MUSIC

Examination board: Oxford Cambridge and RSA

Overview of content: This is a demanding but rewarding course designed to develop students instrumental or vocal technique by working towards an externally assessed performance, to teach students how to compose music, and to deepen their understanding and enjoyment of music by learning to analyse masterpieces in the same way that one might analyse a work of art or literature. Students come to understand how music relates to its wider cultural context.

Musicians learn how to perform; how to deliver their best when it really matters, and this skill can be transferred to other examination or professional situations in future. Musicians also know how to write clearly because music is hard to describe. This is another transferrable skill.

Requirements: Students should have a willingness to develop strong instrumental/vocal technique, to deepen knowledge of music theory and to learn to be creative, develop strong writing skills as music is not easy to describe.

Assessment method: Performing 35%, Composing 35%, 'Listening' (analysis and appreciation examination) 30%.

Students typically go on to study: Music, Maths based subjects, Languages and Medicine tend to be the most popular choices for A Level Music students.

ADVANCED LEVEL PHYSICS

Examination board: Cambridge International Examinations

Overview of content: In Physics students study how the universe works from the smallest atoms to the largest stars. Students need to use the scientific method to understand how these discoveries are made in physics, as well as the role of physics in building technology to engineer our future.

Students will study: Experimental techniques, motion and mechanics using Newton's laws, electricity and electromagnetism, wave theory of light and sound, material and thermal properties, quantum and particle physics using Einstein's laws, atomic and nuclear physics, gravity and astrophysics.

Requirements: Highly numerical, analytic thinking skills, experimental and engineering techniques.

Assessment method: 100% examination.

Students typically go on to study: Engineering, Finance, Software, Science and Mathematics.

ADVANCED LEVEL PRODUCT DESIGN

Examination board: Edexcel

Overview of content: Students study materials, processes and technologies in great depth and be able to recognise how these are utilised in the design and manufacture of everyday products. Students are also challenged to design a product that solves a real problem by taking an idea through multiple iterations until a final solution is realised.

Requirements: High creativity, problem-solving, artistic and mathematical skills. Experience in Design Technology at an IGCSE or GCSE Level is encouraged.

Assessment method: 50% Examination, 50% Non-Examined Assessment (Independent Design & Make Project).

Students typically go on to study: Product Design, Engineering, Architecture.

ADVANCED LEVEL THEATRE STUDIES

Examination board: Edexcel

Overview of content: This is a course designed to explore the multi-faceted world of Theatre. Students look at concepts of Theatre throughout history, doing case studies regarding the most influential practitioners and what they offer to alter the medium and explore different avenues of interpreting work. There are independent study of Drama theory, texts, and wider reading, all to develop an intellectual curiosity for this exciting topic.

Requirements: Creative thinking, analytical skills, High level of literacy.

Assessment method: 40% practical performances 60% written exam.

Students typically go on to study: Acting, Design, Film Studies, Theatre Studies, Business (Theatre focused).

IELTS ACADEMIC

Examination board: IELTS (Cambridge/British Council)

Overview of content: The IELTS Academic test is an essential requirement for students applying to higher education in English speaking institutions. It provides a thorough grounding in academic language and assesses students' proficiency to meet the demands of higher education. Students learn how to: develop key listening skills to ensure they are ready to follow a lecture, structure and write an essay in the required academic register, read and comprehend subject relevant literature and speak confidently when discussing topics with both peers and professors.

Requirements: Basic Proficiency in English.

Assessment method: 100% examination – 4 exams (Speaking, Reading, Writing and Listening) each graded separately. Students are advised when to sit the IELTS exams once they have demonstrated enough proficiency in their class assessments.

Students typically go on to study: University courses in any subject.

A BRITISH INTERNATIONAL BOARDING SCHOOL FOR BOYS AND GIRLS AGED 4-18

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