



# HEADTEACHER'S WELCOME

**Linda Talbot** 

Headteacher
British Section

Dear Parent/Guardian and Students,

This booklet is designed to compliment our 'Introduction to A-Level Options Presentation' and provide you with information about each of the A-Level courses we intend to offer students who will enter Year 11 next academic year.

We advise you to consult your son/daughter, consider their university aspirations (and research the subject requirements for these), and to make an informed decision. Whilst the British curriculum allows your son/daughter to begin to specialise in subjects he or she is particularly interested in, there is also the option of maintaining a broad balance of subjects and keeping options for Y11 upwards open (AS/A Levels or IB Diploma Programme).

In November, your son/daughter will receive a form asking you to indicate the option subjects you would ideally like your son/daughter to take next year. Please complete this form and ask your son/daughter to return it via Ms. Mai Husseni by Thursday 9th December 2021 at the latest.

If you have any further questions, please do not hesitate to contact Mr. Nathan DeSouza (Assistant Head – Years 11-12), Mrs. Sarah Clingan (Deputy Head, British Section), or myself, Mrs. Linda Talbot (Headteacher, British Section).

Yours sincerely,





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## THE SUBJECT CHOICES AT MES CAIRO

We offer a wide range of subjects, from which students can choose. If they know what career they ultimately wish to follow, they can begin to specialise in related subjects. If they are unsure about their future they are encouraged to maintain a broad balance of subjects. The combination of on-going teacher support throughout the two years of sustained study and the experience of final examinations provides an excellent base for success in AS and A Levels, and for university thereafter.



Students typically take 4 AS Level subjects in Y11 and continue to take 3 of these subjects at A2 Level in Y12

In addition, all students study the following subjects to meet the Ministry of Education requirements:

Arabic

**Arab students must also study:** 

- · Religious Studies
- History and Geography (Egyptian Ministry Syllabus Year 9)
- History, Geography and Civil Studies (Egyptian Ministry Syllabus Year 10)
- Civil Studies (Egyptian Ministry Syllabus only in Years 11 & 12)

Physical Education (PE) and Homeroom Community Forum (HRCF) are also compulsory at MES Cairo.

## **A-Level**

A-Level stands for Advanced Level. It is designed for students in schools and colleges throughout the world and the syllabi are international in content and approach. IGCSE assessment is by final examination at the end of Year 10 in most cases. Students are prepared throughout the 2 year course for the examinations, allowing teachers time to give students guidance on how to improve their performance.

Students are maturing over this period, developing and honing their examination technique and are assessed when they are at their peak. Students who find examinations a motivation for learning, who work conscientiously and who follow teachers' advice are successful in this programme.

AS Levels grades are awarded on a scale from A to U after successful completion of the first year of the A-Level course. Grade A is considered the highest grade.

A Level grades are awarded after two years of successful study, the first of these two years is AS and the second is A2. The grades are awarded on a scale from A\* to U. Grade A\* is considered the highest grade. It is strongly advised that students research admission requirements for the courses they wish to study at University. There are no standard admission requirements. Many courses have grade requirements whilst some courses have both subject and grade requirements.



## THE SUBJECT CHOICES AT MES CAIRO



- ARABIC
- ART
- BIOLOGY
- BUSINESS STUDIES
- CHEMISTRY
- COMPUTER SCIENCE
- DESIGN TECHNOLOGY
- DRAMA AND THEATRE STUDIES
- ECONOMICS
- ENGLISH LITERATURE
- FRENCH
- GEOGRAPHY
- HISTORY
- INFORMATION TECHNOLOGY (ICT)
- MATHEMATICS
- PHYSICS
- PSYCHOLOGY
- SPANISH

#### **Important Notes**

- There are no compulsory A-Level subjects
- For Engineering (at AUC) students must have passed IGCSE Maths, Physics, Chemistry and a fourth science course or Information Technology. Additionally, passes are required in Maths and either Physics or Chemistry at AS level, or Maths A Level, or an IB Diploma featuring Maths, Physics and Chemistry (Maths must be taken at Higher Level, while Physics and Chemistry could be taken at Standard Level)
- IGCSE Art, Design Technology, Music, Drama, Travel and Tourism and Global Perspectives, whilst welcomed in universities overseas, may not be recognised for entrance into some universities in Egypt
- Under Egyptian Ministry of Higher Education regulations, for applications to universities in Egypt only, the examinations taken in the last 3 years before university entrance are considered

Arab students must complete 12 years of schooling

# **University Admission**

For students who are contemplating the study of Medicine or Engineering at university please check individual course admission requirements carefully as these vary greatly. Often Chemistry is recommended for Medicine and Physics and Maths are recommended for Engineering.

Students often require evidence of their English ability. IELTS testing should be arranged through the British Council in Cairo. It would be good if the tests were completed before students apply to University. In terms of languages, students interested in studying French or Spanish as a part of their undergraduate degree should complete an A-Level in these subjects.

Universities often specify grades A\* to C in particular subjects in their entrance requirements. The examinations are set by the University of Cambridge Assessment International Examinations and students answer scripts which are sent to the Examination Board in England for marking. The rigour of the Examination Boards' procedures ensures that A-level qualifications are recognised by universities and colleges world-wide.





**Ms Safaa Bagoury** 

Head of Arabic sbagoury@mescairo.com

Component 2 Reading and Writing
Written examination 1 hour 45 min
Component 3 Essay
Written examination 1 hour 45 min
Component 4 Texts
Written examination 2 hours 30 min
Component 5 Essay
Written examination 45 min

## **ARABIC**

(Although previous study of IGCSE Arabic in this subject is helpful, it is not a requirement for this course)

The Cambridge International AS Level in Arabic consists of 2 externally-examined papers that assess listening, reading and writing skills. These assessments will be assessed through examinations marked by Cambridge International exam board.

#### Content summary:

The examinations are designed to assess candidates' linguistic competence and their knowledge of contemporary society. In the exams, candidates will be expected to:

- understand and respond to texts written in the target language, drawn from a variety of sources such as magazines, newspapers, reports, books and other forms of extended writing
- manipulate the target language accurately in spoken and written forms, choosing appropriate examples of lexis and structures
- select information and present it in the target language
- organise arguments and ideas logically.



Mr Greg Thomas

Head of Expressive Arts gthomas@mescairo.com

#### Paper 1 (AS 50% A2 25%): Component 1

Coursework. Portfolio and final Candidates explore and develop coursework based on a theme, producing a portfolio of work leading to a final outcome. Themes may be set by the teacher or candidates may choose one in consultation with their teacher.

#### Paper 2 (AS 50% A2 25%): Component 2

Controlled Test. Students select from a question paper with an externally set range of themes for interpretation. Candidates create support studies prior to a controlled 15 hr exam in which they produce a final outcome.

#### Paper 3 (A2 50%): Component 3

Personal study. A critical and visual appraisal undertaken in a written and practical form. Candidates investigate a theme, idea, concept or process that is personal to them. The personal investigation is an in-depth study demonstrates the candidate's ability to carry out independent research through to a fully realised conclusion. During the investigation, candidates work is supported by written analysis.

## ART

(Students must have a minimum grade C at IGCSE in this subject before starting this course)

The course builds on the skills developed at IGCSE. Students have the opportunity to explore artistic processes in depth through drawing and painting as they develop ideas to express their individual, personal responses to a range of themes. All projects will include:

- Direct observation from primary sources and secondary sources
- An emphasis on the development of ideas
- Media experimentation and exploration
- Critical appraisal of the work of others
- Critical evaluation of ideas and artwork

The assessment objectives for all components are:

- Personal Qualities
- Manipulative, artistic skills and analytical skills
- Aesthetic qualities
- Knowledge and critical understanding.

#### Sketchbook

Students must keep a sketchbook. The sketchbook combines visual and written exploration and is a time-based record. It will contain evidence of the development of students' ideas, including reference to the work of others and experimentation with mediums. It is a vital tool in supporting and stimulating the student's artistic process and has a major role in the production of preparatory work. It encourages creative thinking; records problem solving and can improve the student's general learning skills.



# **Biology**

**Dr Rania El Geoshy** 

Head of Science relgeoshy@mescairo.com

(Students must have a minimum grade C at IGCSE in this subject before starting this course)

If students enjoyed and were successful at IGCSE Biology they will do well in AS/A-Level Biology. This course builds directly on the knowledge gained at IGCSE and allows students to explore Cellular theories, Human Physiological and Ecological concepts at a much greater depth. Students will use this knowledge and apply it to new contexts and solve real world problems. The course encourages creative thinking and problem-solving skills which are transferable to any future career path.

Students who choose Advanced Biology need good problem-solving skills and a logical mind. The previous study of IGCSE Chemistry is also helpful.

Many interesting and varied career opportunities exist for the successful biologist: medicine, marine biology, pharmacy, medical research, veterinary science, agriculture, teaching, optometry, dentistry, physiotherapy, botany are just a few.

Biology is assessed in the same way as other AS/A2 Sciences:

#### **Assessment: Biology AS Level**

Paper 1	1hr multiple choice	31%
Paper 2	1hr structured questions	46%
Paper 3	Practical examination	23%

#### **Assessment: Biology A2 Level**

A2 Level carries the marks forward from AS

Paper 4 1hr structured questions 38% Paper 5 Planning, Analysis and Evaluation 12%

The time for the practical examination for all three Sciences is 2 hours.



### **Mr Chris Stock**

Head of Commercial Studies cstock@mescairo.com

## **BUSINESS**

(Students need a grade C in this Subject or IGCSE Mathematics and IGCSE English before starting this course)

This course suits students wishing to study Business Studies at university and those who wish to develop an understanding of the nature and scope of business activity in society. Students need well developed reasoning, evaluation and judgement skills. Emphasis is placed on the application of concepts and issues to the local context where possible. This course enables students to:

- Develop a critical understanding of organisations and the markets they serve
- Be aware of the economic, environmental, ethical, governmental, legal, social and technological issues associated with business activity
- Develop decision-making and problemsolving skills in the light of evaluation
- Develop skills of communication, analysis, interpretation and presentation of both qualitative and quantitative management information

The AS and A2 courses cover the following topics:

- Business and its Environment
- People in Organisations
- Marketing
- Operations and Project Management
- Business Finance and Business Accounting

The A2 course has an additional topic: Strategic Management

#### **Assessment:**

Paper 1 1hr 15mins – Section A four short answer questions; AS= 40% A2= 20% Section B one essay from a choice of three questions

Paper 2 1hr 30mins – Two data response questions AS=60% A2= 30%

Paper 3 3hrs - Case Study five questions, plus one essay question A2= 50%



**Dr Rania El Geoshy** 

Head of Science relgeoshy@mescairo.com

## **CHEMISTRY**

(Students must have a minimum grade C at IGCSE in this subject before starting this course)

If students enjoyed and were successful in IGCSE Chemistry, they will do well in AS/A-Level Chemistry. The content of the course builds upon the knowledge and understanding established from the IGCSE course and will allow exploration of the advanced theories and processes that make Chemistry an exciting and rewarding subject. Biology and Physics students will find some common areas of understanding between the Science subjects. The course encourages creative thinking and problem-solving skills which are transferable to any future career path.

Chemists may follow various career paths, including chemical research and development, environmental scientist, food scientist, forensic scientist, chemical engineering and materials scientist. Also, Chemistry is a requirement for the study of Biochemistry, Medicine, Pharmacy, Dentistry and Veterinary Science.

Chemistry is assessed in the same way as other AS/A2 Sciences:

#### **Assessment: Chemistry AS Level**

Paper 1	1hr multiple choice	31%
Paper 2	1hr structured questions	46%
Paper 3	Practical examination	23%

#### **Assessment: Chemistry A2 Level**

A2 Level carries the marks forward from AS

Paper 4 1hr structured questions 38% Paper 5 Planning, Analysis and Evaluation 12%

The time for the practical examination for all three Sciences is 2 hours.



## **COMPUTER SCIENCE**

 Computer Science is the study of the foundational principles and practices of computation and computational thinking and their application in the design and development of computer systems.

(Students must have a minimum grade C at IGCSE in Mathematics before starting this course)

Cambridge International AS Level and A Level Computer Science are accepted by universities and employers as proof of essential knowledge and ability.

#### Progression

Cambridge International A Level Computer Science provides a suitable foundation for the study of computer science or related courses in higher education. Equally, it is suitable for candidates intending to pursue careers or further study in computer science or ICT, or as part of a course of general education.

Cambridge International AS Level Computer Science constitutes the first half of the Cambridge International A Level course in computer science and provides a suitable foundation for the study of computer science at Cambridge International A Level and then for related courses in higher education. Depending on local university entrance requirements, it may permit or assist progression directly to university courses in Computer Science or some other subjects. It is also suitable for candidates intending to pursue careers or further study in computer science or ICT, or as part of a course of general education.



Head of Expressive Arts gthomas@mescairo.com

# DRAMA and THEATRE

(Students must have a minimum grade C at IGCSE in English as a First Language, or a minimum grade C in IGCSE English Literature, in order to be considered for enrolment on this course)

Drama and Theatre is a course for students who have an interest in how play texts are brought to life in performance. AS Drama and Theatre is thought-provoking, challenging and exciting. Much of the time is spent working practically with others. Students also have to work as individuals in researching material and demonstrating written understanding.

Only AS Level Drama and Theatre is offered.

#### **Component 1: Exploration and Performance**

Internally assessed (externally moderated) 60% of the qualification

**Content Overview** 

A group performance/design realisation of one key extract from a performance text and informed by the methodology of one influential practitioner.

A monologue or duologue performance/design realisation from one key extract from a different performance text.

There are three parts to the assessment:

- 1.a portfolio –mixed media presentation of learning experiences
- 2.the group performance
- 3.a monologue or duologue performance

#### **Component 2: Theatre Makers in Practice**

Written examination: 1 hour 45 minutes 40% of the qualification Content overview

Section A: Live Theater Evaluation

Section B: Page to Stage: Realising a performance text

At AS: A minimum of one complete and substantial performance text and a minimum of two key extracts from two different texts placed in context of the whole text.

Students must study the work and methodologies of one influential theatre practitioner (individual or companies) at AS and two theatre practitioners at A level.



## **Mr Chris Stock**

Head of Commercial Studies cstock@mescairo.com

The AS and A2 courses cover the following Economics topics:

- The basic economic ideas and resource allocation division of labour & money functions
- The price system and the micro economy
- Government microeconomic intervention
- Statistical measurement in the macro-economy
- Government macro-economic intervention

## **Economics**

(Students need a grade C in this Subject or IGCSE Mathematics and IGCSE English before starting this course)

This course provides quite extensive coverage of the fundamental principles of Economics. This course suits those interested in specialising in this field at university or who may have an interest in the wider issues discussed, such as politics and government intervention in the economy. Students need to pay close attention to current national and international events through television programmes, online news articles and economic journals.

The syllabus is intended to:

- Provide a basis of factual knowledge of economics
- Encourage the development in the student of:
- A facility for self-expression, not only in writing but also in using additional aids such as statistics and diagrams where appropriate
- The habit of using works of reference as sources of data specific to economics
- The habit of reading critically to gain information about the changing economy in which we live o An appreciation of the methods of study used by the economist and of the most effective ways in which economic data may be analysed, correlated, discussed and presented.

#### **Assessment:**

Paper 1 1hr 15mins – Section A four short answer questions;

AS= 40% A2= 20%

Section B one essay from a choice of three questions
Paper 2 1hr 30mins – Two data response questions

AS=60% A2=30%

Paper 3 1hr 15 mins Multiple Choice

A2 =15%

Paper 4 2 hrs 15 mins Data response & structured essay from a choice of six A2=35%



## **ENGLISH LITERATURE**

(Students must have a minimum grade C at IGCSE in English as a First Language; previous study of Literature at IGCSE Level is an advantage but not a prerequisite)

The Cambridge A Level and AS Level 'Literature in English' course encourages students to develop their interest in literature through studying a range of texts and translating critical understanding into essays composed in formal, analytical prose.

Their analysis will focus on the way language, form, structure and context shape the ways in which we might read a text. Such an approach demands: detailed knowledge of the text; critical understanding of its cultural setting; skills in close language analysis; a personal response from amongst the various interpretative possibilities. The examinations are 'closed book'.

#### Content at AS Level:

Paper 3: Poetry and Prose (2 hours)

The aim of this module is to develop students' understanding of a novel and of a range of poetry, usually by a named poet. In the examination students will be required to write two extended essays, one on each of the texts.

Paper 4: Drama (2 hours)

The aim of this module is to develop students' understanding of the literary genre of drama and of the dramatic qualities of play texts. In the examination students will be required to write two extended essays, one on each of the plays they have studied.

Content at A2 Level:

Paper 5: Shakespeare and other pre-20th century texts (2 hours)

The aim of this module is to enable students, through their detailed study of a Shakespeare play and one other text written before the 20th century, to increase their understanding of different critical interpretations and the importance of context. In the examination, students will be required to write two extended essays, one on each of the texts studied.

Paper 6: 20th Century Literature (2 hours)

The aim of this module is to enable students, through their detailed study of two texts written during the 20th century, to increase their understanding of different critical interpretations and the importance of context. In the examination, students will be required to write two extended essays, one on each of the texts studied.

#### Who might enjoy this course?

A student who enjoys reading and thinking about challenging ideas; who enjoys discussion and debate; who finds analytical writing exciting and empowering; who is independent-minded and curious about the world; who is as interested in big ideas as they are in the nuances of language – a student, in brief, who is interested in just about everything.



## **FRENCH**

(Students must have a minimum grade B at IGCSE in this subject before starting this course)

### **Ms Fiona Currie**

**Head of Languages** fcurrie@mescairo.com

#### **AS/A2 French components**

- 1. Speaking test
- 2. Reading and writing
- 3. Essay
- 4. Texts

culture of France and other Francophone countries, as well as practical and valuable language and transferable study skills. This specification will help to prepare students for higher education and enhance their employability

The Cambridge Assessment International

all students. This course of study will enable students to develop an advanced level knowledge

and understanding of the French language, the

Education in French has been developed to inspire

profile. The aims and objectives of this qualification are to enable students to:

- Enhance their linguistic skills and promote and develop their capacity for critical thinking
- Develop control of the language system to convey meaning, using spoken and written skill
- Develop their ability to interact effectively with users of French in speech and in writing
- Develop knowledge about matters central to the society and culture
- Equip themselves with transferable skills such as autonomy, resourcefulness, creativity

#### AS/A2 French topics

Human relationships Generation gap Law and Order Philosophy and belief Equality of opportunity Travel and tourism

Cultural life/heritage

Technological innovation Health and fitness Employment and unemployment Social and economic development Scientific and medical advances Contemporary aspects of the country/countries where French is spoken. The Media Education War and peace **Environment** Conservation

Cambridge International A Level is typically a two-year course, and Cambridge International AS Level is typically one year.



**Mrs Jennifer Rainford** 

Head of Humanities jrainford@mescairo.com

## **GEOGRAPHY**

(Students must have a minimum grade C in English is an essential requirement for access to this course, a C grade in Math's is preferable but not essential. Studying IGCSE Geography is not a requirement for this course)

Students develop an understanding of the main processes within physical and human geography. They will gain an awareness of the relevance of geographical analysis to understanding and solving contemporary human and environmental problems. Students will also increase their knowledge of the main components of human and physical geography and use geographical skills to demonstrate how they are interrelated.

The AS and A2 Geography course examines aspects of both human and physical geography and includes the following topics:

Population change, Settlement dynamics, Hydrology and fluvial geomorphology

Atmosphere and weather, Rocks and weathering, Migration

A2 course options include the following topic areas (students study two topics for each paper): Paper 2 – Advanced Physical Geography

Tropical environments, Coastal environments, Hazardous environments, Hot Arid and Semi-Arid environments

Paper 3 - Advanced Human Geography

Production, location and change, Environment management, Global interdependence, Economic transition

#### **Assessment:**

AS level Geography: Candidates sit 2 papers (Core Physical and Core Human Geography) each 1 hour 30 minutes long. Each paper forms 50% of AS total marks and 25% of A level total marks. A2 level Geography: Candidates sit 2 papers (each paper is one and a half hours long). Each paper forms 25% of the complete A level total marks.



**Mrs Jennifer Rainford** 

Head of Humanities jrainford@mescairo.com

## **HISTORY**

(Although a minimum grade C at IGCSE in this subject is helpful, studying IGCSE History is not a requirement for this course; a grade C or better in IGCSE English is a pre- requisite however)

Students study aspects of the past and develop an understanding of the complexity of human societies. The study of AS and A2 History helps students understand the present, not because events repeat themselves, but because all social, political, cultural and economic developments have their roots in the past and cannot be explained without reference to these roots. Students will also develop a range of skills that are useful in everyday life, including evaluation and analysis of information, evidence, report-writing, independent thought and making informed judgments on issues.

The AS History course is a combination of International History and Modern European History and is assessed through two examination papers. The first is a one hour source paper on the topic of The Search for International Peace and Security, 1919 - 1945. In part (a) candidates will be expected to consider two sources on one aspect of the material. Part (b) requires candidates to use all the sources and their knowledge of the period to address how far the sources support a given statement.

The second examination paper lasts for 1.5 hours and students are required to answer two questions from a choice of four. There will be two parts to each question. Part (a) requires a causal explanation while part (b) requires consideration of significance and weighing the relative importance of factors.

Paper 2 includes the following topics: The Russian revolution, 1894-1917 and Origins of World War I, 1900-1914

The A2 History course requires students to have already completed the AS History course, and consists of two components. The first component assesses a student's understanding of differing interpretations of History. In preparation, they will study differing interpretations that historians have produced, with a particular focus on the over-arching Key Question, 'Who was to blame for the Cold War?' In the one-hour examination, candidates will be given an extract from an historian's writing. The author of the extract will not be identified, nor will candidates be asked to identify the author. One extract will be set on each of the topics. The extract will be no more than 600 words in length. There will be a single question, asking candidates what they can learn from the extract about the interpretation and approach of the historian who wrote it.

The second component is a depth study entitled Europe of the Dictators, 1918–1941. The examination lasts for 1.5 hours and students are required to answer two questions. The questions will be a combination of causal explanations and an assessment of the relative importance of factors.

The in-depth study includes the following topics: Russia, 1924–1941 and Hitler's Germany, 1929–1941



Head of Technology staha2@mescairo.com

# INFORMATION COMMUNICATION TECHNOLOGY

- (Students must have a minimum grade C at IGCSE in this subject before starting the course)
- In a world where information technology (IT) is constantly changing, individuals increasingly need technological and information literacy skills that include the ability to gather, process and manipulate data. The impact of IT on society is enormous and as the percentage of businesses and households connected to communication networks such as the internet grows, so does the need for individuals who understand these new technologies.
- This syllabus encourages learners to become effective and discerning users of IT. It helps them to develop a broad range of IT skills, knowledge and understanding. Learners study the structure and use of IT systems within a wide range of organisations, including the use of a variety of computer networks. As a result, learners gain an understanding of IT system life cycles, and how these affect the workplace. They also learn about the wider impact of IT on society in general. At A Level, learners also study simple programming for the web relevant to their own use of IT.

#### Progression

#### **Cambridge International A Level Information**

Technology provides a suitable foundation for the study of IT or related courses in higher education. Equally it is suitable for candidates intending to pursue careers or further study in IT, or as part of a course of general education.

#### **Cambridge International AS Level Information.**

Technology is the first half of Cambridge International A Level Information Technology. Depending on local university entrance requirements, the qualification may permit or assist progression directly to university courses in information technology or some other subjects.

\*It is imperative to know that IT can only be taken if you are not doing Computer Science in AS/A2\*



Mr Sean Rayner

Head of Mathematics srayner@mescairo.com

## **MATHEMATICS**

(Students must have a minimum grade C at IGCSE in this subject before starting this course)

Cambridge International A & AS Level Mathematics is accepted by universities and employers as proof of mathematical knowledge and understanding. Successful candidates gain lifelong skills, some of which are listed below.

- A deeper understanding of mathematical principles
- The further development of mathematical skills including the use of applications of mathematics in the context of everyday situations and in other subjects that they may be studying
- The ability to analyse problems logically, recognising when and how a situation may be represented mathematically
- The use of mathematics as a means of communication
- A solid foundation for further study

The AS course covers the following topics:

- Calculus: differentiation and integration and their applications
- Algebra: equations, quadratic functions, binomial theorem, progressions
- Circular measure: radian as a measure of angle, arcs and sectors, segments and triangles
- Co-ordinate geometry: gradients, equations of straight lines, intersecting, perpendicular and parallel lines
- Trigonometry: identities and angle equations
- Functions: inverses, composites, domain and range
- Mechanics 1: forces & equilibrium, kinematics of motion in a straight line, Newton's laws of motion, energy, work & power

The A2 course builds on knowledge gained at AS level and covers the following topics:

- Pure Mathematics: functions, calculus, vectors, trigonometry, complex numbers, circular measure, co-ordinates, iterations, further calculus, further trigonometry
- Statistics: representation of data, permutations & combinations, probability, discrete random variables, the normal distribution.
- At AS Level, students sit two papers; Paper 1 Pure Mathematics (1hr 50 mins) worth 30% of the final grade and Paper 4 Mechanics (1hr 15mins) worth 20% of the final grade. At A2 Level students sit a further two papers; Paper 3 Pure Mathematics (1hr 50 mins) worth 30% of the final A Level grade and Paper 5 Probability and Statistics (1hr 15 mins) worth 20% of the final A Level grade.

All students need a scientific calculator (a Casio fx-991ES PLUS or similar is recommended) for this course.



**Dr Rania El Geoshy** 

Head of Science relgeoshy@mescairo.com

## **PHYSICS**

(Students must have a minimum grade C at IGCSE in this subject and in IGCSE Mathematics before starting this course)

Students who have enjoyed and been successful at IGCSE Physics will do well in AS/A-Level Physics. Students will study the main theoretical concepts of Physics and apply those concepts to solve real world problems. The use of Mathematical proofs means it is strongly recommended that students have a good understanding of Mathematics. This course encourages creative thinking in new contexts and problem-solving skills which are transferable to any future career path.

In addition to at least a grade C IGCSE pass in both Physics and Mathematics, students choosing AS/A-Level Physics need good problem-solving skills and a logical mind. Having studied IGCSE Chemistry is also helpful. Many interesting and varied career opportunities exist for the successful physicist: medicine, engineering, aviation, telecommunications, space research, power production, veterinary science, radiography, air traffic control, mineral exploitation, teaching and computer science are just a few.

Physics is assessed in the same way as other AS/A2 Sciences:

#### **Assessment: Physics AS Level**

Paper 1 1hr multiple choice 31% Paper 2 1hr structured questions 46% Paper 3 Practical examination 23%

#### **Assessment: Physics A2 Level**

A2 Level carries the marks forward from AS
Paper 4 1hr structured questions 38%

Paper 5 Planning, Analysis and Evaluation 12%

The time for the practical examination for all three Sciences is 2 hours.



**Mrs Jennifer Rainford** 

Head of Humanities jrainford@mescairo.com

## **PSYCHOLOGY**

(A grade C or above in IGCSE English and IGCSE Mathematics are essential requirements in order to take this course. C or above in one Science is preferable, but not essential.)

Psychology is the scientific study of the mind and human behaviour.

The aims of CIE AS and A Level Psychology are:

- To provide an introduction to psychological concepts, theories, research findings and applications
- To create an understanding of the range and limitations of psychological theory and practice
- To encourage candidates to explore and understand the relationship between psychological findings and everyday life
- To develop skills of analysis, interpretation, application and evaluation
- To promote an appreciation and understanding of individual, social and cultural diversity
- To develop an understanding of ethical issues in psychology, including the moral and ethical implications of psychological research
- To explore and understand the relationship between psychological findings and social, cultural and contemporary issues
- To study psychological principles, perspectives and applications
- To improve communication skills.

Throughout the two -year course, students are assessed on their use of the following key skills: knowledge and understanding as well as analysis, application and evaluation. All of which are essential skills that students will use in all aspects of their life.

AS Psychology comprises of the study of 4 key Psychological approaches which underpin the majority of human behaviour. Within these approaches, twelve key psychological research studies and methods are examined in detail as well as issues and debates and key concepts within Psychology. Topics taught at AS include: Biological psychology, Social psychology, Cognitive psychology, Learning psychology AS Psychology is examined in two papers of 1 hour 30 minutes' length.

Papers 1 and 2 contribute 50% each of the total AS mark and 25% each of the total A level mark. A level Psychology comprises of the study two core applications of Psychology to real life: Abnormal Psychology and Health Psychology

Within each chosen applied area, students will be required to look at the core approaches studied in AS psychology: cognitive psychology, social psychology, physiological psychology and learning psychology. Candidates will also be required to apply the issues and debates from the AS Level component along with various methodological considerations.

A level Psychology is examined on two exam papers (paper 3 and paper 4). Paper 3 focuses on the theory behind the specialist options and paper 4 focuses on the application of the two specialist options. Each paper contributes 25% of the overall A level grade. The overall grade from papers 3 and 4 is then combined with the student's grade from AS (50%) to establish a final grade.



## **SPANISH**

(Students must have a minimum grade B at IGCSE in this subject before starting this course)

### **Ms Fiona Currie**

Head of Languages fcurrie@mescairo.com

#### **AS/A2 Spanish components**

- 1. Speaking test
- 2. Reading and writing
- 3. Essay
- 4. Texts

all students. This course of study will enable students to develop an advanced level knowledge and understanding of the Spanish language, the culture of Spain and other Spanish speaking countries, as well as practical and valuable language and transferable study skills. This specification will help to prepare students for higher education and enhance their employability

Education in Spanish has been developed to inspire

The Cambridge Assessment International

The aims and objectives of this qualification are to enable students to:

- Enhance their linguistic skills and promote and develop their capacity for critical thinking
- Develop control of the language system to convey meaning, using spoken and written skill
- Develop their ability to interact effectively with users of Spanish in speech and in writing
- Develop knowledge about matters central to the society and culture
- Equip themselves with transferable skills such as autonomy, resourcefulness, creativity

#### AS/A2 Spanish topics

Human relationships Generation gap Law and Order Philosophy and belief

Philosophy and belief
Equality of opportunity
Travel and tourism
Cultural life/heritage

Health and fitness
Employment and unemployment
Social and economic development
Scientific and medical advances

Education
War and peace
Environment
Conservation

The Media

Contemporary aspects of the country/countries where Spanish is spoken.

Cambridge International A Level is typically a two-year course, and Cambridge International AS Level is typically one year.

Technological innovation

profile.

# **CHOOSING A-LEVELS**

Subject	Prerequisite qualifications	Possible futures	
Arabic	None	Reporter, foreign correspondent, interpreter, international banking, contract consultant, corporate consultant, political risk analyst, legal assistant, government relations specialist, foreign-service officer, government translator	
Art	IGCSE Art C	Professional artist, fashion consultant, illustrator, game designer, photographer, animator, graphic designer, curator, printmaker, art teacher/university lecturer, gallery owner, architect, historian, digital artist.	
Biology	IGCSE Biology C	Academic researcher, Biotechnologist, Higher education lecturer, Marine biologist, Microbiologist, Nanotechnologist, Nature conservation officer, Pharmacologist, Research scientist, technician, Teacher, Soil scientist.	
Business Studies	IGCSE Business studies C or IGCSE Maths and English C	Management, marketing, finance, accounting, banking, retailing, manufacturing, local government, advertising, consultancy, entrepreneurship, recruitment, L.T. and human resources.	
Chemistry	IGCSE Chemistry C	Analytical chemist, Biotechnologist, Chemical engineer, Clinical scientist, biochemistry, Forensic scientist, Nanotechnologist, Patent attorney, Pharmacologist, Research scientistScientific laboratory technician, Toxicologist	
Computer Science	IGCSE Maths C	Actuary, Accountant, Application analyst, Applications developer, Cyber security analyst, Data analyst, Database administrator, Forensic computer analyst, Game designer, Games developer.	
Drama and Theatre Studies	IGCSE English C	Arts administrator, choreographer, further education teacher, media researcher, music producer, secondary school teacher, special effects technician, make-up artist talent agent, actor and director.	
Economics	IGCSE Economics C or IGCSE Maths and English C	Accountant, Actuarial Analyst, Chartered Accountant, Data Analyst, Economist, Finance and Banking, Financial Risk Analyst, Financial Planner, Forensic Accountant, Investment Analyst, Statistician, Stockbroker.	
English Literature	IGCSE English 1st Language C	Publishing, broadcasting, marketing, public relations, journalism, law, teaching, politics, advertising, copywriter, editor, social media manager, recruitment and human resources, art and design.	
French	IGCSE French B	Broadcast journalist, Detective, Diplomatic service officer, Education consultant, English as a foreign language teacher, International aid/development worker, Logistics and distribution manager, Marketing executive	
Geography	IGCSE English C	Cartographer, Commercial/residential surveyor, Environmental consultant, Geographical information systems officer, Planning and development surveyor, Secondary school teacher, Social researcher, Town planner.	
History	IGCSE English C	Academic researcher, Archivist. Heritage manager, Historic buildings inspector conservation officer, Museum education officer, Museum/gallery curator, museum /gallery exhibitions officer, Secondary school teacher.	
ICT	IGCSE ICT C	Business Analyst, Computer Service Technician, Cyber Security Specialist, Data Analyst, Data Centre Technician, Data Scientist, Database Administrator, Database Analyst.	
Maths	IGCSE Maths C	Acoustic consultant, actuarial analyst, actuary, astronomer, chartered accountant, chartered certified accountant, data analyst, data scientist, banking, finance, engineering, insurance, pensions, LT and the internet	
Physics	IGCSE Physics C	Academic researcher, Acoustic consultant Astronomer, Clinical scientist, medical physics Geophysicist, Metallurgist, Meteorologist, Nanotechnologist, Radiation protection practitioner, Research scientist, Sound engineer,	
Psychology	IGCSE English C and IGCSE Maths C	Clinical psychologist, Counselling psychologist. Educational psychologist, Forensic psychologist, Further education teacher. Health psychologist, High-intensity therapist. Occupational psychologist.	
Spanish	IGCSE Spanish B	Broadcast journalist, Detective, Diplomatic service officer, Education consultant, English as a foreign language teacher, International aid/development worker, Logistics and distribution manager, Marketing executive	

# **POSSIBLE SUBJECT CHOICES**

Career	Subject 1	Subject 2	Subject 3
Medicine	Chemistry	Physics	Maths
	Chemistry	Physics	Biology
	Chemistry	Biology	Maths
Dentistry	Chemistry	Physics	Biology
	Chemistry	Maths	Further Maths
	Chemistry	Physics	Maths
Engineering	Maths	Physics	Further Maths
	Maths	Physics	Chemistry
	Maths	Physics	Economics
Chief Executive	Business	Maths	French
Officer (CEO)	Business	Psychology	History
	Business	English Lit	Economics
Architect	Maths	Physics	Art
	Maths	History	Art
	Economics	Physics	Psychology
Software developer	Computer Science	Art	Drama and Theatre
	Computer Science	Art	Psychology
	Art	Psychology	Geography
Lawyer	English Literature	Psychology	History
	English Literature	History	Art
	Computer Science	Biology	History
Diplomat	English Literature	Arabic	French
	Spanish	Arabic	French
	Drama and Theatre	Business	French