

LEICESTER GRAMMAR
SCHOOL

# Sixth Form 'Aspire' A-level subjects 

2023-2025

## List of A-level Subjects

Academic Physical Education
Art and Design
Biology
Business
Chemistry
Classical Civilisation
Computer Science
Design and Technology
Drama and Theatre
Economics
English Literature
Geography
Greek (Classical)
History
Latin
Mathematics
Further Mathematics
Modern Languages (French, German and Spanish)
Music
Physics
Politics and Government
Psychology
Religious Studies (Philosophy, Ethics and Theology)

## Academic Physical Education

The OCR A level Physical Education syllabus is both practical and theoretical in content. It will allow learners to study Physical Education in an academic setting, enabling them to critically analyse and evaluate their physical performance and apply their experience of practical activity in developing their knowledge and understanding of the subject.

This course will build upon the IGCSE Physical Education course taught at Leicester Grammar School. Students undertaking the A level Physical Education course must have not only a passion for the subject but must also be playing and competing regularly to a high standard in teams both inside, and outside of school. The most successful A Level student, not only participates regularly in their chosen sport, but may also coach, volunteer and participate in other sporting co-curricular activities. This is an expectation for our students at Leicester Grammar School.

It is essential that prior to opting for A level Physical Education potential students should, via consultation with the PE Department, ensure that their chosen sport is approved for practical assessment by the awarding body.

The prior completion of (I)GCSE Physical Education is not a prerequisite of this course; however, the most successful A level Physical Education students will not only have a Grade (7) or higher at (I)GCSE in Biology but also high grades in all Sciences (or Dual Award). Where (I)GCSE Physical Education has been taken, we regard a good score in the theory element [ 7 ) or higher] as particularly important for prospective A level students.

Students learn about physiological and psychological factors affecting performance, alongside sociocultural issues in physical activity and sport. Their practical performance will be assessed in performing ONE activity $O R$ in coaching ONE activity.

This course will prepare learners for the further study of PE or sports science courses as well as other related subject areas such as psychology, sociology and biology. Learners will also develop the transferable skills that are in demand by further education, Higher Education and employers in all sectors of industry.

Art and Ceramics are taught together at A level and both are certificated as Fine Art. The approach is different from GCSE although you will find that both lead on quite naturally. During the early stages of the course, there is a greater emphasis on processes, experimentation, and ideas, and comparatively less on finished artwork. As the course progresses, a higher level of technical proficiency is expected together with a more developed awareness of contemporary and historical practice.

A good Art or Ceramics student will be receptive to new ideas and ways of doing things. Expect new content such as Contextual Study and be prepared to take an active role in your own education. As well as learning from your teachers, you should be prepared to inform yourself by reading art / craft journals and articles about the visual arts in the quality papers, watching television programmes about the visual arts, and going to exhibitions. Over the year we will help you to develop a good understanding of the History of Art, though your own individual study alongside our contextual study lessons will be required.

Each year a number of our students choose Art related courses at university and last year was no exception. Our graduating students from last year have all continued a higher education study of Art, in courses ranging from Computer Game Design, Architecture, sculpture and a Foundation Pre-Degree Art \& Design course to further develop their specialisms. The range of degree courses and career journeys stemming from the Arts is wide and varied, with access to the top Art and Architecture courses being highly competitive. Admissions tutors look for qualities beyond technique and creative flair. A cultural knowledge of the visual arts is desirable as is the ability to be a conceptual thinker and work independently and to interact constructively within a group, cemented by a solid contextual understanding. We set out to instil these abilities, to develop a mature and sophisticated way of working and thinking, aware that this then stands you in good stead when you seek admission to the courses of your choice. These qualities in learners are also key for a range of other degree courses and career paths outside of the Arts which makes the course suitable for any creative student.

## COURSE STRUCTURE

Like GCSE this is a linear course comprising a body of coursework, which accounts for $60 \%$ of the marks, and an examination, which, together with preparatory work, accounts for the remaining $40 \%$.

## Coursework:

$100 \%$ coursework comprised of a series of A2 practical folders and outcomes/three-dimensional ceramic outcomes with a 10-hour Mock exam in December of Year 13, and a 15-hour practical exam at the end of year 13 of the course. Component 1 is worth $60 \%$ of the course mark and Component 2 is worth $40 \%$ of the course mark.

Component 1 - Year 12 experimental workshop tasks and contextual studies, personal investigation project and personal study essay, which starts in the Lent term of Year 12 and continues until the end of the Advent Term in Year 13 (1000-3000 words to support your personal investigation project practical work, worth $12 \%$ of the total $60 \%$ for Component 1 ).

Component 2 - Year 13 Exam project, led by an exam paper which is released in February of Year 13, and continues for the remainder of the course (until half-term in the Trinity Term).

We will begin the course with an experimental and explorative workshop covering both practical and theoretical elements of the course. We begin with Contextual studies, looking at how artists have explored some key themes within art, titled 'Light, Play, Movement, Marks, Meaning and Colour'. The titles sculpt the research and History of Art that we explore at each stage, drawing on historical but mostly contemporary artists to understand how to respond in more sophisticated and exciting ways. This is followed by an experimental drawing programme focused on the skills of direct observation alongside workshops which explore a range of Art mediums in a more sophisticated and technical way, aiding the jump in skill and ability between GCSE and A-level expectations. The aim of this approach is to develop your basic skills and understanding of the expressive elements (colour, line, pattern, shape, texture \& tone) of Art and Design. During these early stages, you will produce a body of work that includes studies of sculptural forms created using a deconstructed and reconstructed theme, with objects and/or still life, life drawing, and experimental image-making in various drawing, print-making and digital media. Practical responses and outcomes to each theme will be created in partnership with these lectures to help students broaden their thinking and to help to better understand the link between theory and practice.

We then progress on to your own thematic work, which is concerned with the relationship between ideas, and art or ceramics practice. You will be asked to make a personal response to a given starting point or project title and to work sequentially through a series of studies which will include visual research, analysis, experimentation with media and imagery and written responses culminating in a finished piece, or series. The process is similar for both two- and three- dimensional work.

Towards the half-way point of the first year, you will be asked to devise a programme of study for the remainder of the A level course forming the beginning of your personal investigation project. You do this through a series of discussions with your teachers. You will agree a theme with them, or a visual problem to address, or an art issue to explore though studies culminating in a series of finished artworks.

In conjunction with the practical work and as mentioned above, you will set up a corresponding programme of research for the Personal Study. The Personal Study accounts for $12 \%$ of the overall qualification. Intended to inform your practical artwork, it entails research, evaluation, and critical analysis demonstrating an awareness of the methods employed by critics and art historians in analysing and interpreting imagery. The finished Personal Study takes the form of an illustrated essay with footnotes and accompanying appendices and bibliography comprising a minimum of 1000 words.

Examination: Externally Set Assignment (40\% of A level)
The Externally Set Assignment represents the culmination of the A level course. It will give you the opportunity to use the 'language of the subject' - formal elements, the practices and processes to communicate ideas, thoughts and feelings. By this stage of the course, it is expected that you will have developed a personal style and that you will be able to integrate working methods, handling and interpretation in your response. You will be given around eight weeks to produce preparatory studies for the fifteen-hour examination.

## Contextual Studies

This aspect of the course helps you to acquire the knowledge and critical skills necessary to relate your own practice to the wider context of contemporary Art and Design. The programme addresses:

- Concepts and themes in modern art and craft;
- Seminal works and key episodes in the history of modern art and craft;
- Influential contemporary artists.

The Art and Crafts Contextual Studies takes the form of PowerPoint lectures and discussion. You will make your own notes, which are to be submitted at the end of the course. The Art Tour complements this aspect of your study.

## University Courses \& Careers

Art and Design is one of the larger fields of graduate employment and research shows that the proportion of Art and Design graduates who find settled employment within the field of their qualification is well above average.

In addition to Art and Design, there is a number of visual courses for which a portfolio is desirable, such as Architecture (and Landscape and Interior Architecture) and Advertising. There are also related academic disciplines such as Art History and a variety of Art Business degrees. Art and Design itself comprises broad disciplines: Fine Art, Visual Communication, Fashion and Textiles, 3-D Design and Craft Design. Each of these has its own fields of specialism; Visual Communication, for example, has over 80 distinct areas of specialism. Access to Art and Design courses is usually through a one-year Foundation Course, although some students with a clear idea of career direction and a strong portfolio prefer to apply directly to degree courses.

For those who do not wish to study the subject any further, an Art A-level is a highly regarded qualification for all university courses, Arts, Sciences, Humanities, and Business. We have a good record of students securing places on very competitive courses including Oxbridge.

A level Biology offers the opportunity to study some of the most exciting aspects of modern life. The A level course is varied and stimulating, providing an opportunity for students to extend their interest in any number of areas, whether their initial preference is human anatomy and physiology, ecology, or biochemistry and genetics. Biology is one of the most popular subjects studied at A level at LGS and has an excellent record of success over recent years.

Whilst naturally supported by Chemistry, Maths, Psychology and Physical Education, Biology can certainly complement other non-science based A level subjects and is often the science of choice for students studying the Arts or Humanities, giving a breadth of experience that is highly valued by both universities and future employers. Studying Biology develops an enquiring mind, excellent analytical and evaluative skills, and the ability to communicate clearly, as well as honing manual dexterity and precision through plentiful practical work. Lessons are fast-paced and varied in style, with our teachers employing a range of methods to ensure all students fully grasp even complex topics.

Like any of the A level Sciences, Biology has a significant mathematical component, including data analysis and some statistics. To support all students, but particularly those not studying A level Maths, Year 12 students have an additional 'Maths for Biologists' period timetabled, in which core skills are taught. Similarly, students not studying Chemistry may need to be prepared to seek extra support with fundamental Biochemistry and Molecular Biology. The most successful A level Biologists will not only have a Grade (8) or higher at (I)GCSE in Biology but also high grades in both Chemistry and Mathematics at GCSE.

A grade (7) at IGCSE/GCSE Biology is a minimum requirement.
The School will not permit the study of Biology for A level if the requirement of a Grade (7) or higher is not met.

## Course structure

In A level Biology, students are taught by two teachers, with lessons involving a mixture of theory and frequent practical work. Students follow the Edexcel Biology B course, which is composed of ten units of study:
Topic 1: Biological Molecules
Topic 2: Cells, Viruses and Reproduction of Living Things
Topic 3: Classification and Biodiversity
Topic 4: Exchange and Transport
Topic 5: Energy for Biological Processes
Pupils are also entered for a Certificate in Practical Competence, for which they are required to complete a number of 'Core Practicals' designed to help students become capable and confident scientists.

## Co-curricular

The Biology Department organises a biennial trip to Costa Rica for A level students and a yearly residential field trip, often the highlight of many students' time in the Sixth Form. Our BioSoc is attended by pupils of all ages, and Sixth Formers take part in the Intermediate and National Biology Olympiad, as well as numerous other competitions. Pupils of all ages benefit from a wide range of activities during Biology week, National Science Week, and during the Big Bang @ LGS Science Fair.

The Department runs both a Pre-Med course (as one of the Sixth Form Short Course options) and a vibrant, weekly Med Soc, both designed to prepare and equip potential Medics, Vets and Dentists with the knowledge, experience and skills required for a successful application. These include talks from visiting speakers, short courses in First Aid and BSL, MMI interview practice, BMAT and UCAT preparation and numerous role play scenarios.

Apple is one of the most successful companies globally. It is worth more than a trillion dollars. What has made it successful? What is unique about its marketing and people working there? How is the company managed? Which objectives and strategies are in place? How are decisions made? How does it ensure it is continually competitive in a global context? How is change managed? These are also questions facing many national and local businesses. How does one run a business successfully as an entrepreneur or as a chief executive of organisations?


Business is suited to students who want to learn about the practical aspects of running their own business or part of one in the future, be it in a private sector organisation or in a public sector department, where increasingly business decisions have to be made, for example in the NHS. Business A level will give you an incredibly powerful start to launch your career with transferable skills, knowledge and critical decisionmaking skills that will apply to and complement any subject or career choice.

Students who take Business will find that it combines well with subjects such as Geography, Psychology, English, Mathematics, and Modern Languages, but students committed to the arts or sciences should also consider taking Business in this cost- and profit- centred world. Engineers and Computer Programmers, for example, will have to respond to a business brief, doctors will be in charge of their own budgets, and architects and designers will have to run their own practices as a business.

Business students also take part in the Business and Economics Society. Visits are organised to the Bank of England, the Museum of Brands and a car factory to assess how business principles and theories are applied in practice. Many students have gone on to top business schools in the UK.

## What is the difference between Business and Economics?

Leicester Grammar School does not permit the study of Business and Economics in combination. It is therefore important to know the difference between the two when considering which one to do. Both subjects do share some topic areas.

Whilst Economics studies the more 'global' aspects of the world's economies, economic policies, and theoretical and diagrammatical aspects of business behaviour, Business is more specifically concerned with the vision, strategic decisions, detail and skills required to run a company or organisation. Economics, on the other hand, is a social science that attempts to explain how the actions and decisions of firms, consumers, workers and governments affect the operation of the economy, with links to Human Geography, Politics and international affairs. Economics is more theoretical. This does not mean that Business is easier as students have to apply rigorous quantitative analysis on accounting and finance topics. Business also looks at how the economy affects businesses. Economics has more depth, whereas Business has more breadth. Where Business is the more popular undergraduate subject, Economics graduates are paid some of the highest salaries in the country following university graduation.

What's so amazing about Chemistry? It answers so many questions! Why do lightning strikes produce ozone? Why are gold and copper so-coloured? Why does water expand when it freezes? Why are the hydrogen atoms in my body 13 billion years old? Why is Mars red? Is it easy to make medicines?

The study of Chemistry is fundamental in gaining an insight into its importance in our lives, in industry and in society in general. Chemistry enhances our lifestyle immeasurably. Just consider batteries: we need more and better; Chemistry will provide these in the decades to come. Studying Chemistry opens so many doors, to future study at degree and doctoral level, working abroad and as the foundation of other, unrelated careers. It is also THE pre-requisite for many other degree courses including Medicine, Dentistry, Veterinary Science, Biochemistry and Chemical Engineering. A degree in Chemistry is also highly prized by the Financial Services Sector, for example in banking and fund management.

Chemistry in the Sixth Form is a practically-based course involving one, and sometimes two, hours of experimental investigation per week. The practical work enables students to investigate and consolidate the concepts introduced in theory lessons. It also familiarises them with the experimental procedures and skills. Prospective students should note that the new specification will report "Practical Competency" separately from the A level grade, as a "Pass" or "Fail". Besides timetabled lessons, classes are run for highly-motivated students for participation in the International Chemistry Olympiad and Cambridge Chemistry Challenge. Many students take part in each of these highly prestigious competitions each year and go on to obtain Bronze, Silver and Gold Awards. For those aspiring to entry into highly competitive Universities and/or highly competitive courses such an award is a major enhancement to their CV.

A grade (7) at IGCSE/GCSE Chemistry is a minimum requirement.
The School will not permit the study of Chemistry for A level if the requirement of a Grade (7) or higher is not met.
Topics include:

- Atomic Structure and the Periodic Table
- Bonding and Structure
- Formulae and Equations
- Redox
- Inorganic Chemistry
- Organic Chemistry
- Analytical Techniques
- Energetics
- Kinetics
- Equilibria

These topics will be introduced in Year 12 and developed considerably throughout Year 13. Practical work will be based around competence in twelve "core" techniques. You are required to undertake lab work, but you will be tested on this aspect of the course in the written exams.

There are three written papers at A level.
You should also note that the study of Chemistry both at A level and at degree level develops exactly the key skills that are so much in demand from prospective employers, for example those of logical deductive thought and high-level problem solving.

## SCIENTIFIC SECTORS

## MEDICAL:

Doctor, Dentist, Veterinary Science, Pharmacy, Pathology, Forensic Science, Pharmaceutical Industry (New Medicines, Vaccines), BioMedical Science

## NON-MEDICAL:

Teacher/Lecturer, Researcher, Chemical Engineer, Chemical Industry, Chemistry, Biochemistry,
Biotechnology/Genetics, Agricultural Science, Material Science, ICT/Computational, Medicinal Chemistry, Materials, Supply Chain, Petrochemicals, Batteries

OTHER SECTORS

## FINANCIAL SECTOR:

Banking, Accountancy, Economics and Finance, Management, Actuarial Science

## LEGAL SECTOR:

Barrister, Solicitor

## MANAGEMENT SECTOR:

Research and Development, Project
Management
Production, Marketing, Sales,
Human Resources

God(s), sex, and politics, not to mention mythology, drama, religion, history, philosophy, life, love, war, and literature; Classical Civilisation covers every possible topic with which one could hope to cause offence at a polite family gathering. The subject is the ultimate humanity, encompassing an entire world of thought just as complex and sophisticated as our own, The Greek and Roman civilisations more than any other still dictate how we act and think as we do today.

Classical Civilisation is as varied as it is interesting. For instance, as part of the A level, you can expect to read two Greek and Roman 'epic' poems such as the lliad, Odyssey, and Aeneid - stories that deal with great heroes and gods, the worlds they inhabit, and those who suffer at their hands. These are the texts that marked the birth of literature as we know it. They are stories that have been read and reread for good reason. Other parts of the A level will require you to use visual and material objects to understand an aspect of ancient life. For example, how did the Roman emperor Augustus use statues, coins, and monuments to "spin" his public image? How did he convince his fellow citizens to accept his one-man rule of Rome? You will also have the opportunity to explore ancient "beliefs" and classical "thought" - ideas ranging from the nature of politics and correct governance, to what is 'right' and 'wrong' in matters of love and desire, to the nature of the gods and their relationship with mankind.

Students of Classical Civilisation are quick-thinking, intellectually flexible, and infinitely adaptable. They are good at using fragmentary and diverse evidence to reach balanced and well-informed opinions. For instance, studying the art and imagery of the Parthenon can help us to understand the public facing, majestic side to Greek religion. But what can we learn from tiny, scratched, fragile lead tablets that contain secret questions asked by worshippers at the Oracle of Zeus at Dodona? You may be surprised to discover that these lead tablets even contain questions asked by slaves. Their most common query? "Will I receive the freedom my master has promised, or would I do better to run away?"

If you have studied Classical Civilisation before at GCSE, you will soon find that one of the best parts of your A level studies comes from being able to explore and deepen your understanding of a subject that you already know you like. There is still so much more for you left to discover. However, if you are thinking about studying Classical Civilisation for the very first time, then you will find yourself in good company. Nationally, the overwhelming majority of A level Classicists begin their studies in the Sixth Form. For anyone who enjoys reading and history, Classical Civilisation can provide a new and refreshing period to study.

Above all else, the students who do best in Classical Civilisation are those who are both interested in the Greeks and Romans and who are happy to read and write at length. If this sounds like you, then Classical Civilisation will help you develop your skills in close reading, source analysis, synthesis and evaluation. Some of the topics we study can also involve sensitive issues. You must therefore be willing to discuss these in a mature and objective way, discussing them from an academic perspective.

## Classics Beyond the Curriculum

Classical Civilisation is highly interdisciplinary and both complements and is complemented by A levels in the humanities, particularly English, History, Politics and RS. Many students with interests in the sciences also opt to study Classical Civilisation to enhance their critical and communicative skills. Classicists know how to argue and write well. Whatever direction your life may take, this is an invaluable skill.

The LGS Classics Department tries to encourage interest in the classical world that extends well beyond getting good grades. We therefore host regular academic lectures aimed at Sixth Formers, enter students into essay competitions, run trips to universities, attend theatre productions and visit sites of classical interest, including Italy and Greece. You will not just learn more from these opportunities but better enjoy your studies in the Sixth Form.

Classics students at LGS are motivated, informed and enthusiastic about their subject. Almost all our students go on to their first-choice universities, to study a wide range of degrees. Classics develops those transferable skills especially prized by universities and employers- academic rigour, analysis, communication, and above all else, a broad understanding of big questions that lack easy answers.

Graduates of Classics degrees typically go on to highly successful careers such as in Politics, Education, Consulting, Marketing, Management, Banking or Law; with Finance, Management and Law serving as the most popular career destinations for graduates in recent years.

We live in a world which is full of technology and over $90 \%$ of it is driven by a computer! It's estimated that there will be 38.6 billion Internet of Things-connected devices around the world in 2025. Computing industries are bursting with invention and creative opportunities. They figure in all avenues of our lives: within science, technology, manufacturing, research, medicine, etc. Computer Science, therefore, influences and affects everything we do in society today.

The term 'computing' covers every kind of digital technology that we use to create, store, communicate, and how we exchange and use information. As such, it is the foundation for all organisations, small and large, to build their strategies and grow. It is a key component in making our personal lives easier and more fun: think about mobile phone technology and the invention of mobile apps, online shopping sites and carts, smart devices and personal assistants, etc. We, as consumers, often forget that Computer Science is behind these everyday interactions.

The department encourages Sixth Form students with an interest in the latest technology, programming, Mathematics and Physics to consider Computer Science at A level. The course is both practically and knowledge based, designed to make students proficient, creative and independent users of a wide range of computer applications and some niche programming languages. They should have the capacity to think creatively, innovatively, analytically, logically and critically,

Students do not need to have any prior knowledge of Computer Science, but it is considered an advantage to have a GCSE in Computer Science at grade (6) or above, coupled with experience of database software within ICT and a good understanding of a programming language, for example Python. It is advised students considering Computer Science should have the capabilities of gaining a Grade (7) or above in GCSE Mathematics or equivalent with a view of continuing Mathematics at A level.

## Topics include:

Theoretical and practical knowledge (Paper 1) from the following topics:

- Programming (OOP, SQL, Functional)
- Data structures
- Algorithms
- Theoretical Computation

It also focuses on the design, implementation, testing and evaluation of their chosen programmed project (NEA).

Synoptic and extended response questions
(Paper 2) from the following topics:

- Data representation
- Computer Systems
- Organisation and Architecture
- Consequences of Computing
- Databases \& SQL
- Big data
- Functional Programming
- Communication and Networking.

Topics are introduced in Year 12 and further developed in Year 13. It is important for students to be diligent and organised, so that delivery of class and homework is punctual. There are elements of self-learning which require motivation and discipline especially when working on practical application. Students are encouraged to take ownership of their work and time management skills.

There are two written papers at A Level:

| Paper 1 | 2 h 30 m | 150marks | $40 \%$ of A Level |
| :--- | :--- | :--- | :--- |
| Paper 2 | 2 h 30 m | 150 marks | $40 \%$ of A Level |
| NEA |  | 75 marks | $20 \%$ of A Level |

The full specification can be found on the AQA website
Studying Computer Science at both A Level and degree level develops key skills in adaptability, creative and analytical thinking, high-level problem solving, risk awareness, teamwork, commercial awareness, and time management.

| Digital Marketing |  |
| :---: | :---: |
| Data Science | Blockchain Technology |
| Big Data Analytics / Mining | Cyber Security |
| Cloud Computing | Big Data Processing |
| Artificial Intelligence and Machine Learning | Mechatronics |
| Robotics | Networking |
| Ethical Hacking | Augmented Reality |
| Automation | Game / Software Development |
| System Analyst | Project Management |
| FinTech | Teaching / Lecturing |
|  | Hardware Engineering |

## Design \& Technology: Product Design

"There are three responses to a piece of design - yes, no, and WOW! Wow is the one to aim for."
As a subject, Design \& Technology prepares students for careers in the Creative, Engineering and/or Manufacturing industries and aims to be modern and relevant. Students will learn about contemporary technologies, materials and processes, as well as the more traditional practices. They will use their imagination and creativity to make prototypes that will solve real and relevant problems, whilst considering their own and others' needs, wants and values. Eventually, they will be able to design and manufacture products which will be relevant to the society of the future.

The first year will focus on a variety of practical problem-solving projects, which are linked to the theory element. These include the modelling of a scaled Lego Figure from jelutong timber, a metals key hook project, Memphis tea-light design and a plywood lamination stool design and make task. All of these will prepare pupils for the challenges of the NEA in Year 13 and will support students' understanding in many material theory topics for the exam. They are also good fun!

The second year will focus on a design and make project of the student's choice. Like GCSE, students will need to find a problem to solve, and follow the design process from concept to prototype. It is much more involved and rewarding as students are given the freedom to choose a context of their own. This is a real opportunity for students to showcase their skills. A high quality and varied range of presentation and practical skills may be developed when designing for an effective outcome. Those students required to produce a portfolio for university may use these designs as evidence of excellence.

External assessment is structured as follows.
Paper 1: Core Technical Principles
150 minute written exam; $30 \%$ of the A level
A mixture of short answer, multiple choice and extended response questions
Specialist knowledge, technical principles and designing and making principles
Paper 2: Core Designing and Making Principles 90 minute written exam; 20\% of the A level
With sections on Product Analysis and Commercial Manufacture
A mixture of short answer, multiple choice and extended response questions
Practical application of technical principles, designing and making principles and specialist knowledge

## Non-Examined Assessment (NEA): Substantial Design and make task

45 hours; $50 \%$ of the A level Written or digital design portfolio and photographic evidence of final prototype.
This unit sees students create a portfolio of work approximately 30-40 pages of A3. In consultation with a client, students will research a problem and design context in order to produce a range of designs which are to be developed into a solution. They are encouraged to use the iterative design process by constantly reviewing and improving their developed ideas. They are to make a prototype of their developed idea and gain feedback from their client on the final outcome.

- Part 1: Identify, investigate and outline design possibilities
- Part 2: Design and make prototypes that are fit for purpose
- Part 3: Analyse and Evaluate

A Grade (6) at GCSE in Design and Technology, Product Design or Textiles should prove an adequate basis for A level study. Students will also be considered with a GCSE in Art as this provides a sound knowledge base to begin. A Grade (7) at GCSE in Mathematics is also recommended, but not essential.

DT is taken by students in combination with a variety of different subjects. Commonly this may include Physics, Chemistry or Mathematics for those wishing to study Engineering. It could, however, be combined with a variety of other subjects such as Geography, Economics, Art, Music and Modern Languages depending on a student's chosen University courses.

DT at A level supports a wide range of career choices. It can lead to undergraduate courses which directly use the knowledge, skills and techniques developed, such as Product Design, Industrial Design, Engineering (all types) or Architecture. It is also extremely useful when considering courses that require 3D thinking, manual dexterity, or understanding complex processes, such as Medicine, Dentistry, Biochemistry, or Veterinary Sciences.

Students also could apply for the ASPIRE Greenpower team competition which is led by the Design \& Technology Department. This electric powered kit car contest supports those pupils wishing to take a career in engineering. More information may be found at https://www.greenpower.co.uk/

Be mindful: Design and Technology is not easy, but it is very rewarding. Only those that dedicate time to their major project will excel. Students need to have a love of design and should be prepared to spend extra time in the department using new software, designing, and using the facilities to manufacture their products.

So, if you enjoy the subject, love designing and making and understanding the theory behind design and manufacturing, then Design and Technology could be an excellent opportunity for you.
"Design and technology is a phenomenally important subject. Logical, creative and practical, it's the only opportunity students have to apply what they learn in maths and science - directly preparing them for a career in engineering."

James Dyson - Patron of the Design \& Technology Association

## "But I don't want to be an actor!"

No, not many people do! But equipping actors for Drama School or professional work is just a tiny part of what Drama \& Theatre A Level can offer students. Whilst some of our students have embraced careers in the performing arts, many have pursued areas as diverse as Medicine, Law, Environmental Science, Politics, Art, Midwifery, Business - the list goes on! Drama really does prepare students for life and work in ways that extend far beyond most 'traditional' A Level subjects.

Our A-level course is diverse and exciting, with the emphasis on the practical exploration and application of theatrical works and techniques, combined with aspects of dramatic theory. There is much to offer students interested in acting and theatre - through the study of live theatre, set texts, playwrights, theatrical styles and practitioners - and the performance pieces give students tremendous scope to work creatively and with significant autonomy. Eduqas is a highly-respected examination board, and Drama \& Theatre A Level is accepted by all universities, including Oxford and Cambridge, and it complements Arts, Humanities, Languages and Science subjects alike.
> "Universities, like many employers, value a well-rounded education. If, for example, a budding young scientist has met their course's requirements by taking biology and maths A Levels, why shouldn't they vary their experience with a language or an arts subject?" Dr Tim Bradshaw, Chief Executive, Russell Group

The course doesn't stop at the subject matter, though. Probably most important amongst the many things Drama \& Theatre has to offer is the so-called 'soft skills' so highly valued by universities and employers.
" It is soft skills that set successful graduates apart. This applies across sectors and is just as important in science and technology roles" Report by the Hay Group

It is not surprising that employers are increasingly rejecting the term in favour of 'transferable skills'. The recruitment company Workable gives a list of 15 essential traits among employees: communication, teamwork, problem-solving, time management, critical thinking, decision-making, organisational, stress management, adaptability, conflict management, leadership, creativity, resourcefulness, persuasion and openness to criticism. Whilst many subjects provide opportunities to improve some of those skills, no subject besides Drama \& Theatre will see every single one employed, tested and developed throughout the two-year course.

At LGS, the Drama department promotes excellence and innovation. Our experienced staff includes a Drama Technician, and we support the work of our students in fully-equipped, purposebuilt facilities. Students also enjoy a wealth of opportunities: theatre trips, visiting companies, workshops with practitioners, school productions, the biennial musical, technical training, and much more.


So what does a 'good Drama student' look like? They will be keen to immerse themselves in the course and engage in an intellectual, as well as practical, way. It is not essential for students to have taken Drama at GCSE (although this is obviously an advantage) - an interest in theatre is what matters most.

## COURSE STRUCTURE

Component 1: Theatre Workshop - 20\%
Development and performance of a reinterpretation of an extract from a text. Internally assessed and externally moderated through performance and a creative log.

## Component 2: Text in Action - 40\%

Externally examined performance of two pieces of theatre - a devised piece and an extract from a text plus a written process and evaluation report.
Component 3: Text in Performance - 40\%
Written terminal examination assessing the interpretation of two set texts - one pre-1956, one post-1956 (both open book) - and an extract from a third set text.

Britain has just been through one of the worst recessions ever following the pandemic. What caused this? What are the effects of this on the government, households and firms? Why does the government have to cut spending? Why are some firms more successful than others in earning profit? How are consumers and society affected by the actions of firms and government? Will consumers shop more or less as a result of these actions? How will this affect supply and demand in different markets? The Prime Minister, Liz Truss, is working towards making the economy grow and deal with the cost of living crisis - What is this going to mean for our economy? Future trading position globally? The level of income and wealth in the UK?


All these questions are to do with Economics. For most students Economics will be a new academic subject, about which they may have rather hazy ideas, although some of the topics involved will have been met by those who read newspapers intelligently. It is a practical subject, in that it involves an understanding of everyday problems, such as unemployment and changing prices of goods in the market, but it is also a rigorous academic discipline which requires an analytical mind and an ability to apply general principles to particular situations. Skills, such as the logical presentation of an argument, or the ability to distinguish fact from opinion, are also developed. No previous knowledge of the subject is required, but a readiness to read widely and think intelligently is essential. Any student with an interest in social and economic conditions could benefit from the course in Economics.

Learning Economics does not stop after your lessons have finished. Many students of Economics join the Business and Economics Society. You can be involved in extra-curricular activities that will broaden your understanding of Economics greatly and enhance your application for university courses in Economics and/or Business Management. Visits are organised to the Bank of England, the Museum of Brands, and a car factory to assess how economic principles and theories are applied in practice. Previous students liked Economics because:

'It is career enhancing, especially if you want to work in law, business, government, banking, stock broking and management consulting.'
'It complements other subjects such as Maths, Politics, Languages, History, English, or Computing'
'It prepares you for life whatever you do in the future. As a doctor, government taxation and spending plans affect what you can and cannot do.'
'I wanted to learn about what goes on in society.'
'I am interested in how the world of money works.'

## What is the difference between Business and Economics?

The school does not permit the study of Business and Economics in combination. Both subjects do share some topic areas. Whilst Economics studies the more 'global' aspects of the world's economies, economic policies, and theoretical and diagrammatical aspects of business behaviour, Business is more specifically concerned with the vision, strategic decisions, detail and skills required to run a company or organisation. Economics, on the other hand, is a social science that attempts to explain how the actions and decisions of firms, consumers, workers and governments affect the operation of the economy, with links to Human Geography, Politics and international affairs. Economics is more theoretical. This does not mean that Business is easier as students have to apply rigorous quantitative analysis on accounting and finance topics. Business also looks at how the economy affects businesses. Economics has more depth, whereas Business has more breadth. Where Business is the most popular undergraduate subject, Economics graduates are paid some of the highest salaries in the country following university graduation.

The study of English Literature at A level is unashamedly academic in emphasis and so students who simply enjoy 'a good read' should think long and hard before they opt for it - and students who start with modest IGCSE grades (IGCSE English Literature of at least grade (6) is obviously important) have also gone on to be successful, so with the right approach there is no necessary bar to success. The subject is a stimulating and challenging intellectual exercise and it fully repays the hard work it demands. A student will develop the ability to analyse a wide range of texts in depth and detail and will acquire the skills necessary to formulate a concise, coherent and comprehensive critical argument. Any student wishing to study literature at A level must have the self-discipline and maturity of mind to be able to read far beyond the set texts and he or she should be aware of literature's place in a wider cultural context. Students are expected to arrive at their classes prepared to discuss a text in detail and they should expect to produce a sustained piece of critical writing each week.

Students should also be thinking of the transferable skills they develop in this subject which would facilitate a number of careers, not simply going to university to study Literature: emotional intelligence, analysis of sources, processing a large range of material, argumentation, the ability to communicate complex ideas clearly and concisely, and the ability to effectively summarise some very complex issues that relate to wider society. To be a good lawyer you need to master the writing of and interpretation of the English language, so it is clearly relevant to a Law degree, but this is true of a number of other degrees where the same skill set is required in order to be successful - according to a study carried out by the British Academy and the London Economics consultancy in 2020, the fastest growing sectors of the economy (IT, finance, transport and property) all prefer humanities graduates. Studying English Literature (and other similar subjects) clearly facilitates a number of degree and careers choices.

## Realistic Expectations of Sixth Form Students taking English Literature

- To read the set texts according to given deadlines.
- To have detailed notes, in time for the exam, for character, theme, and style/structure, based upon lesson notes and supplementary reading.
- To be prepared to do some reading around the set texts during the Lower Sixth (e.g. all supplementary handouts, and at least one critical work per set text), and during the Upper Sixth (e.g. all supplementary handouts plus at least two critical works per set text, especially for the synoptic paper). Examples of suggested supplementary reading lists are readily available from the relevant members of staff.
- To be willing to participate in class discussion.
- To produce competent analytical essays under timed conditions by the end of the Lower Sixth, and closely argued analytical essays under timed conditions by the end of the Sixth Form.
- To produce suitably analytical pieces for coursework, hitting deadlines as set by the Head of Department and supervisors.
- To structure work around deadlines and to anticipate problems early, and negotiate solutions.


## Course Content

An exemplar scheme of work is shown below: specific texts and approaches may vary.

|  |  | TEACHER A: (4 LESSONS PER WEEK (5 IN UPPER SIXTH)) | TEACHER B: (4 LeSSONS PER WEEK) |
| :---: | :---: | :---: | :---: |
| 1 | Lower Sixth | Poetry (for the A2 part of the Poetry-Drama Comparison Question) Introduction to Chaucer (General Prologue) <br> Chaucer - The Merchant's Tale | Prose (core text for the Synoptic element for A2) Angela Carter, The Bloody Chamber and Other Stories (Gothic Core Text 1) |
| 2 |  | Drama text: Williams - A Streetcar Named Desire | Shakespeare - Hamlet |
| 3 | Trial Exam 1-1 hour 30 minutes Shakespeare and Poetry Pre-1900 <br> Trial Exam 2-1 hour 45 minutes Drama and Prose post-1900 | Exam Prep (pre exam) <br> A2 Coursework prep (post exam) | Exam Prep (pre exam) <br> A2 Synoptic Prep (post exam) Gothic Core Texts: Stoker - Dracula, Carter - The Bloody Chamber and Other Stories |
| 4 | Upper Sixth | A2 Coursework <br> Three literary texts: Poetry, Prose, <br> Drama - all post 1900, one post 2000 <br> Narrative Voices: Heaney, Rosecrantz and Guildenstern are <br> Dead, Atonement | A2 Synoptic <br> Gothic - Dracula (Core text 2) <br> Gothic - The Monk <br> Gothic extracts (Own Text Notes - each student will have to deal with a separate text assigned to prepare for the group) |
| 5 |  | Drama text: Webster - The Duchess of Malfi | Gothic - Northanger Abbey; Gothic Extracts and Poems Revision of Hamlet |
| 6 | A2 Exam 1-2 hour 30 minutes Drama and poetry pre-1900 <br> A2 Exam 2-2 hour 30 minutes Comparative and contextual study A2 Coursework | Revision and terminal exams | Revision and terminal exams |

The world is changing faster than it ever has done. How can we understand this and come to terms with it? Many issues that confront young adults like you can be found in the new Geography International A level specification. There is, however, traditional Geography too. From the study of the reasons behind global pandemics to why volcanoes exist - it is all here!
It involves:

- Investigating the interaction of people with their environment;
- Understanding how both the physical environment influences people and how people influence the physical environment;
- Recognising that these interactions create opportunities and problems which require careful management;
- Understanding that management needs to be sustainable to maintain the environment for future generations;
- Developing the enquiry skills necessary to understand and explain these geographical issues.


## Key Skills

The Cambridge International A level course aims to equip students with the skills required to make a success of their subsequent studies at university.
> Communication
$>$ Numeracy
$>\quad I T$
> Problem solving
$>$ Working in teams
> Improving own learning and performance

## Course Requirements

These are similar to those in other A level subjects, being ideally a minimum of a GCSE Grade (7), an interest in the subject and a real commitment to work hard for two years. You must also be prepared to attend any field trips that are organised for you. Geography is not an easy option; the highest grades are only attainable through consistent hard work.

## Mode of Working

As in all subjects, you are expected to do much more work independently at A level, sometimes for specific assignments, but also for your own benefit; your final grade will depend on your commitment to this.
You will rarely be set work to be done on a particular evening; more often you will be given a week to do the task. There is more emphasis on extended writing at this level so your essay writing will be improved. While factual recall is important, interpretation of maps and graphs, and analysis of data are also vital skills.
There is no coursework at A level, but fieldwork remains an integral part of the course in order to compile case studies for use within the four examination papers.

The Cambridge International A level Specification comprises of a combination of compulsory and optional modules.

## Grade Awards

The International A level follows the same grading system as other A level subjects and is recognised and accepted by British and foreign universities.

## What Comes After?

Geography leads to many different courses in further education, and many areas of employment in the long run. You will gain transferable skills throughout the course. Especially useful to employers will be your ability to collect, present, analyse and communicate data, and to bring many diverse strands of information together into a whole - a valuable management quality.
Geography combines well with most subjects. Taken with Maths, Chemistry or Biology, Geography supports applications for almost any science- based university course like Engineering, Medicine and Oceanography. Taken with humanities subjects it supports an equally wide range of courses, such as Law, Accountancy or Politics. Geography degrees lead into important careers such as weather forecasting (Meteorology), urban planning, resource management, planning, logistics, marketing, finance, journalism and teaching. A good Geography degree can gain you access for many top graduate programmes. Why not try it?

Study of the Classical Greek language allows first hand access to the minds of some of the most seminal and ground-breaking writers the world has ever seen; this really is the birth of history and thought as we know it. The subject matter covers the full range from mythology, history and drama through to philosophy, erotic poetry and politics. The fact that the course is linguistic in focus allows more flexibility than other subjects can offer in regard to the subject matter studied and we aim to select reading material which reflects the specific interests of our students.

On average there are just two hundred students across Britain who study Greek at A level and in recent years the department has had the pleasure of teaching $1 \%$ of the entire national cohort. The average ability of these students is well above the national average and this is reflected in the grades awarded. Students at Leicester Grammar are no exception, both in terms of their academic profile and their success.

## Aims of the Course

- Acquire an understanding of the linguistic structures of Classical Greek;
- Read and make a personal response to a selection of Classical Greek literature;
- Consider the spiritual, moral and cultural issues that emerge from their reading;
- Allow access to Higher Education courses at the highest level in Classical Greek, whether linguistic or non-linguistic.


## Learning and Skills

The specification builds on the knowledge, understanding and skills specified for GCSE Classical Greek. The linguistic challenge is rigorous but fair, and learners will quickly find themselves able to read increasingly complex Greek texts with fluency and precision. You will become resourceful when confronted with unknown texts and develop a disposition to think creatively about 'solving the problems', reflecting upon solutions and translations better than those initially found. The literary texts are deliberately chosen to spark interest and debate. You will read some of the best parts of the best Classical Greek authors, developing your eye to read stimulating works with subtlety and sophistication. In the world of thought and big ideas, we have not yet moved far from the grand questions discussed by the Greeks. You will learn how to argue persuasively about such issues, responding to how they are presented in Greek texts,

## Specification Content

The content is chosen to provide a balanced and coherent study of Classical Greek. Detailed information about linguistic requirements and prescribed texts may be obtained from subject staff. The course is structured parallel with Latin and typically the two subjects will be studied in tandem. This allows students to focus on the subject itself rather than having to learn exam technique separately for each subject. It is, however, neither uncommon nor discouraged for a student to opt for Greek without Latin.

There are four components in the specification:

- Unseen Translation (33\% of total) - for example Thucydides and Euripides
- Prose Composition or Comprehension (17\%)
- Prose Literature (25\%) - for example Herodotus and Plato
- Verse Literature ( $25 \%$ ) - for example Homer and Sophocles


## Classics Beyond LGS

Classics students at LGS are motivated, informed and enthusiastic about their subject. Almost all our students go on to their first-choice universities, to study a wide range of degrees. Classics develops those transferable skills especially prized by universities and employers- academic rigour, analysis, communication, and above all else, a broad understanding of big questions that lack easy answers. Oxbridge is a realistic option for most LGS students who pursue Classical Greek, both in classical and nonclassical subjects (most recently: Linguistics, Law and History).

Graduates of Classics degrees typically go on to highly successful careers such as in Politics, Education, Consulting, Marketing, Management, Banking or Law; with Finance, Management and Law serving as the most popular career destinations for graduates in recent years.


History is the study of the people, events and patterns that have shaped our world. It is very much a living subject, its events and reputations constantly reinterpreted by those who lift the lid on stories of the past. It provides the essential transferable skills to navigate and understand our increasingly complex world and connects you more closely to the worlds of our ancestors and the unique struggles of previous generations. The minimum requirement is (6) at GCSE History although you will also need to demonstrate a genuine commitment and appreciation of the subject's requirements at A level.

## IS IT FOR ME?

If you have ever disagreed with a commentator on Question Time or on the radio, this course offers you the chance to refine your own evaluative skills and communicate your understanding of the past with depth and persuasion. It will provide you with an ability to critique sources, analyse arguments and evaluate historical positions. You will develop convincing arguments of your own about past trends and appreciate and anticipate the motives of others. You will be expected to follow independent reading each week to supplement textbook material on the topics and issues covered in class. You will produce analyses of both primary and secondary sources and essays over the course and engage in presentations, debates and discussions about contested histories. You will see how historians have differed in their historical interpretations and be willing to see the gaps. You will identify how ideas about religion have changed over time. You will enjoy contributing in class, be comfortable with deadlines and anticipating difficulties. You will develop the ability to structure an effective piece of persuasive writing.

## CAREERS:

According to a study carried out by the British Academy and the London Economics consultancy in 2020, the fastest growing sectors of the economy (IT, finance, transport and property) all prefer humanities graduates. Studying History clearly facilitates a number of degree and careers choices. The critical skills you develop are lifelong, repaying the efforts you put in. They are highly sought after by a vast range of industries and employers of all stripes. While this people-centred humanity is a natural complement to subjects like English, MFL, Politics and Geography, it also offers an important vocational sidearm skill to evaluate and manage human activity in other fields. You will certainly find direct transferable skills in the world of law as you study precedent and unpick legal language. Also in demand for historians' skills are employers in communications, strategy based, accountancy, all forms of management, marketing, digital and journalism fields.

## The Course (AQA 7042)

Unit 1: Breadth Study: (1C) The Tudors: England 1485-1603
Part ONE Lower Sixth: Consolidation of the Tudor Dynasty 1485-1547
Part TWO Upper Sixth: England, 1547-1603: Turmoil and Triumph
The study of significant historical developments over a period of around 100 years and associated interpretations.

## Unit 2: Depth Study: (2N) Revolution and Dictatorship: Russia and the Soviet Union, 1917-1953

Part ONE Lower Sixth: The Russian Revolution \& the Rise of Stalin 1917-1929
Part TWO Upper Sixth: Stalin's Rule, 1929-1953
The study in depth of a period of major historical change or development and associated primary evidence.

Unit 3: Historical Investigation: Imperial Spain 1485-1600 OR The Arab-Israeli Conflict 1896-2010
This independent study covering over a hundred years handles issues such as great tumult of the Spanish Inquisition, Spain's Golden Age OR the narratives which explain conflict in the Middle East.
Assessed 3000-3500 words (emphasis on precise writing, not verbose). 40 marks; 20\% of A level. Marked by teachers, moderated by AQA.

As a subject which remains a cornerstone of an academically focused education, whose students' intellectual ability, creativity, and powers of perseverance demonstrably command respect, what's not to like about Latin? It also happens to combine fascinating subject matter with some of the best employability prospects of any non-vocational course, including STEM subjects. If you opt for Latin, you can expect to study: Ovid's tales of gods and girlfriends; Virgil's epic poetry on heroes and burning cities; Cicero's legal and political speeches and his insider view of titans of history such as Julius Caesar; Tacitus's descriptions of the depravities of the emperors; and Pliny's accounts of volcanic eruptions and the execution of Christians. Along the way, you will become more confident, fluent and derive more pleasure in reading the Latin language itself.

## Aims of the Course

- Acquire an understanding of the linguistic structures of Latin;
- Read and make a personal response to a selection of Latin literature;
- Consider the spiritual, moral and cultural issues that emerge from their reading;
- Allow access to Higher Education courses at the highest level in Latin, whether linguistic or nonlinguistic.


## Learning and Skills

The specification builds on the knowledge, understanding and skills specified for GCSE Latin. The linguistic challenge is rigorous but fair, and learners will quickly find themselves able to read increasingly complex Latin texts with fluency and precision. You will become resourceful when confronted with unknown texts and develop a disposition to think creatively about 'solving the problems', reflecting upon solutions and translations better than those initially found. The literary texts are deliberately chosen to spark interest and debate. You will read some of the best parts of the best Latin authors, developing your eye to read stimulating works with subtlety and sophistication. In the world of thought and big ideas, we have not yet moved far from the grand questions discussed by the Romans. You will learn how to argue persuasively about such issues, responding to how they are presented in Latin texts,

## Specification Content

The content is chosen to provide a balanced and coherent study of Latin. Detailed information about linguistic requirements and prescribed texts may be obtained from subject staff. The course is structured parallel with Classical Greek and there are natural practical and academic benefits to studying both.

There are four components in the specification:

- Unseen Translation (33\% of total) - for example Ovid and Caesar
- Prose Composition or Comprehension (17\%)
- Prose Literature (25\%) - for example Tacitus and Cicero
- Verse Literature (25\%) - for example Virgil and Catullus


## Classics Beyond LGS

Classics students at LGS are motivated, informed and enthusiastic about their subject. Almost all our students go on to their first-choice universities, to study a wide range of degrees. Classics develops those transferable skills especially prized by universities and employers - academic rigour, analysis, communication, and above all else, a broad understanding of big questions that lack easy answers. Oxbridge is also a realistic option for most LGS Latinists, both in classical and non-classical subjects (most recently: Linguistics, Law and History).

Graduates of Classics degrees typically go on to highly successful careers such as in Politics, Education, Consulting, Marketing, Management, Banking or Law; with Finance, Management and Law serving as the most popular career destinations for graduates in recent years.

Mathematics is the most popular subject in the Sixth Form with between 60 and 90 students opting to study it every year. It is also one of the most successful; an average of $27 \%$ of students obtained $A^{*}$ grades (with $85 \% A^{*}$ to B) over the last five years when normal exams occurred.

An A level in Mathematics is a very valuable qualification and is highly rated by both university tutors and employers. Any student who has enjoyed IGCSE (or GCSE) Mathematics and who feels they would benefit from being challenged by the more in-depth material of A level Mathematics should consider taking the subject in the Sixth Form. As with any other A level subject, it should be noted that A level Mathematics requires hard work and dedication and students should not opt for the subject unless they are prepared to apply themselves fully.

A grade (7) at IGCSE/GCSE Mathematics is a minimum requirement, along with a very good level of fluency with algebra.
The School will not permit the study of Mathematics for A level if the requirement of a Grade (7) or higher is not met.
The course followed at Leicester Grammar School is the Edexcel A level. From September 2017, A level Mathematics is a linear course with three equally weighted exams taken at the end of the Upper Sixth determining the grade a student obtains. Unlike previous A level specifications, there is now no longer any choice in the Applied Mathematics that a student will study, while the content in Pure Mathematics and Applied Mathematics is in approximately a 2:1 ratio.

## Calculators:

Calculators may be used for all three papers. The exam board has specified that calculators used for A level must include an iterative function and the ability to compute summary statistics and access probabilities from standard statistical distributions.

## Setting:

Mathematics is fortunate in that all classes occur in the same option block. Hence it is possible to set by ability. It is likely that 4,5 or 6 ability sets will be used in each year, usually with between 8 and 14 students in each.

The table below gives a list of the of the topic areas that make up an A-level in Mathematics and what is found on each of the three A level exam papers.

| Pure | Proof, Algebra and Functions, Co-ordinate Geometry, Sequences and Series, <br> Papers 1 and 2 |
| :--- | :--- |
| (2hours each) | Trigonometry, Exponentials and Logarithms, Differentiation, Integration, |
| Applied Paper | Statistical Methods, Vectors |
| (2 hours) | Statistical Sampling, Data Presentation and Interpretation, Probability, Statistical <br> Distributions, Statistical Hypothesis Testing |
|  | Mechanics: <br> Quantities and Units in Mechanics, Kinematics, Forces and Newton's laws, Moments |

To study Further Mathematics in the Sixth Form, a student needs to have real enthusiasm for the subject as around twice as much lesson time (and twice as much self-study time) will be spent on Mathematics as compared to other subjects. The most able mathematicians who have found IGCSE/GCSE Mathematics straightforward and who are considering taking university courses in Mathematics, Engineering, Computer Programming or the Physical Sciences at top universities should consider this option. As a large part of the Sixth Form timetable will be spent on Mathematics, the coverage of material is very rapid and so a firm grasp of the algebraic skills learnt at IGCSE/GCSE is needed.

A grade (8) or (9) at IGCSE/GCSE Mathematics is a requirement for anyone wishing to follow the course in Further Mathematics. The School will not permit the study of Further Mathematics for A level if the requirement of a Grade (8) or higher is not met

Selection of Further Mathematics will require:

- Mathematics to be included among the subject choices
- Further Mathematics to be included among the subject choices
- A further two subjects to be included among the given choices

Unlike A level Mathematics, while half of the course content is compulsory, there is an element of choice in A level Further Mathematics. It may be the case that students within the class (or classes) have some firm ideas about the areas they wish to pursue and, if this is possible from a timetabling standpoint, there will be the possibility of different students studying different topics. However, this will always be at the discretion of the Head of Mathematics and the School's Senior Leadership Team in consultation with the subject teachers.

In most years, there will only be one Further Mathematics group and so little choice will be possible. There are two compulsory papers that every student taking Further Mathematics must take: Core Pure Mathematics 1 and Core Pure Mathematics 2. When there is only one group, the most likely optional modules to be taken are Further Pure Mathematics 1 and Further Mechanics 1, with a possibility of the relatively straightforward Decision Maths 1 being offered as a third optional paper. In the event of students taking an extra paper, the Exam Board will award the grade based on the best two performances on the three optional papers. However, should the group be sufficiently large, should there be a possibility of timetabling it and should sufficient students request it, it is possible that Further Statistics 1 could be offered alongside Further Mechanics 1.

When numbers are large enough, there will be two Further Mathematics groups. In this case, it is much more likely that Further Statistics 1 would also be offered as a mainstream alternative to Further Mechanics 1.

The table below gives a list of the topic areas that make up the content of each paper that must/could form part of an A-level in Further Mathematics.

| Compulsory Paper: Core Pure Mathematics 1 (11/2 hours) | Proof, Complex Numbers, Matrices, Further algebra and functions, Further calculus, Further vectors. |
| :---: | :---: |
| Compulsory Paper: Core Pure Mathematics 2 ( $11 / 2$ hours) | Complex numbers, Further algebra and functions, Further calculus, Polar co-ordinates, Hyperbolic functions, Differential equations |
| Optional Paper: Further Pure Mathematics 1 ( $11 / 2$ hours) | Further calculus, Further differential equations, Co-ordinate systems, Further vectors, Further numerical methods, Inequalities |
| Optional Paper: Further Mechanics 1 (11/2 hours) | Momentum and Impulse, Collisions, Centres of mass, Work and energy, Elastic strings and springs |
| Optional Paper: Further Statistics 1 (1½ hours) | Linear regression, Statistical distributions (discrete), Statistical distributions (continuous), Correlation, Hypothesis testing, Chi squared tests |
| Optional Paper: Decision Mathematics 1 (11/2 hours) | Algorithms and Graph Theory, Algorithms on Graphs, Critical Path Analysis, Linear Programming |

# Modern Languages: French, German and Spanish 


"People who have learned languages are articulate, flexible and adaptable. Employers value their communication skills very highly and, as a result, languages graduates in the UK have the lowest unemployment rate other than medicine and education"(Guardian Education). They also earn, on average, $8 \%$ more than other graduates! Students realise this, and many continue studying a language at university - often with subjects like International Business or Law.


#### Abstract

Whether you are for or against Brexit, there can be little doubt that, in a world where international relations and mutual understanding are becoming ever more crucial to our economy and lifestyle, there can never be a better time to master a foreign language. This is particularly so when, contrary to popular opinion, only $6 \%$ of the world's population speak English as a first language and $75 \%$ don't speak any English at all. The benefits of studying a language are wide-ranging: from learning to communicate in fresh ways to having a window onto the culture of another country, from learning to express your views and listen to the views of others through the language that you are learning to studying its culture through a variety of modern media. Furthermore, it is now widely recognised through physiological studies that learning two or more languages is a great asset to the cognitive process, offering long-term mental benefits.


Linguists are highly sought after, and, according to the University of Reading, their unique mix of specialist knowledge and generic abilities is making them more employable than all the rest in that open competition. Additionally, a modern foreign language complements most subjects, giving students the necessary breadth to secure a wide range of career opportunities. For example, graduates in Mathematics and Languages are consistently near the top of graduate employment tables, and the coupling of disciplines in this degree course ensures a highly marketable qualification.

A grade (7) at IGCSE/GCSE in the corresponding language(s) is a minimum requirement.
The School will not permit the study of MFL subjects for A level if the requirement of a Grade (7) or higher is not met.

## The Course

We offer French, German and Spanish in the Sixth Form. Not only do the courses improve and extend knowledge of the target language, building on the knowledge, understanding and skills gained at GCSE, but students also examine the contemporary culture of the country, as well as its literature. It constitutes an integrated study with a focus on language, culture and society, fostering a wide and valuable range of transferable skills including communication, critical thinking, research skills and creativity. Whether you choose French, German, Spanish, or a combination thereof, you will be amazed at how quickly you learn to work with material from authentic sources, extending your ability to think laterally and independently along the way, gaining essential skills for further study and in the workplace, not just in communication but also in thinking evaluatively and in problem-solving.

Courses are broadly similar for each language, but have subtle differences in focus within them. Throughout all courses, however, you will learn the language in the context of the target language countries and the issues and influences which have shaped them. There will also be a study topic of individual choice to prepare for the oral exam. In parallel to this you will revise and expand your knowledge of grammar, so that you can handle the language with confidence and adapt what you know to new situations. There is also one lesson per week with the Assistant (a native French/German/Spanish speaker) - an excellent opportunity to improve your spoken skills and confidence.

## French

The approach is a focus on how French-speaking society has been shaped, socially and culturally, and how it continues to change. In the first year, aspects of the social context are studied, together with aspects of the artistic life of Frenchspeaking countries, including francophone music and cinema. In the second year further aspects of the social background are covered, this time focusing on issues such as life for those on the margins of French-speaking society as well as looking at the positive influences that diversity brings. Students also study aspects of the political landscape in a French-speaking country, looking at immigration from the political perspective and at the way in which political power is expressed through action such as strikes and demonstrations. Teenagers and the extent to which they are politically engaged looks towards the future of political life in French-speaking society. The course also includes the study of The French film La Haine and the text L'Etranger.

## German

The approach is a focus on how German-speaking society has been shaped socially and culturally and how it continues to change. In the first year, aspects of the social context are studied, together with aspects of the artistic life of Germanspeaking countries. In the second year, further aspects of the social background are covered, alongside the German political landscape, both in relation to Germany itself and its place in Europe. The past and its role in shaping the present is viewed through the reunification and its consequences while the focus on young people and politics looks forward to shaping the future of German-speaking countries.
The course also includes the study of the German film Goodbye Lenin and the text Die Verwandlung.

## Spanish

The approach is a focus on how Spanish-speaking society has been shaped, socially and culturally, and how it continues to change. In the first year, aspects of the social context are studied, together with aspects of the artistic life of Spanishspeaking countries, including Hispanic music and cinema. Other topics include cyberspace, equality of sexes, regional identity of Spain and the cultural heritage of Hispanic countries. In the second year further aspects of the social background are covered, this time focusing on issues such as racism in Spanish-speaking society as well as looking at the positive influences that diversity brings. Students also study aspects of the political landscape in a Spanish-speaking country, looking at immigration from the political perspective and at the way in which political power is expressed through action such as strikes and demonstrations. Teenagers and the extent to which they are politically engaged looks towards the future of political life in Spanish-speaking society. The course also includes the study of The Spanish film María, llena eres de gracia and the play La casa de Bernarda Alba.

## Assessment

This is a linear course whereby all assessments are carried out and completed at the end of the course. Three papers are taken.

Paper 1: Listening, Reading \& Writing ( $21 / 2$ hours, worth $50 \%$ )
Students will listen to spoken passages from a range of contexts and sources and answer a range of questions.
Paper 2: Writing (2 hours, 20\%)
Students will answer two essay questions of approximately 300 words each in the target language on the two works they have studied (a book and a film, or two books). Students will have a choice of question on each book/film.

Paper 3: Speaking (21-23 minutes, including 5 minutes' preparation time,30\%)
Part 1 Students will discuss a target-language stimulus card based on one of the sub-themes in the specification.
Part 2 Students will present the findings of the individual research project for up to two minutes. This will be followed by a discussion of the findings of the student's research with the examiner.

## Career Paths

Some linguists may go on to study Languages at university and use their linguistic expertise as interpreters or indeed as teachers, but there are many other destinations for linguists where their skills are highly valued. These include many secure lucrative jobs in banking, accountancy, insurance, advertising, marketing, journalism, dentistry and medicine. All of these jobs involve good communication, presentation and organisational skills, which studying a foreign language foster. Furthermore, there is an increasing number of university courses offering a language element in combination with other subjects, such as Law, Business Studies, Management, Engineering and Sciences.

## Is it for you?

Having a good GCSE result is just the start. The very best qualification for the course is quite simply an avid interest in the language and culture of your chosen target language country, a passion for real communication, and the ability to undertake independent study and research. The best preparation for this is regular independent study of European current affairs, either via the internet, newspapers, radio or television broadcasts. Modern Foreign Languages go well with any subject combination, as it is the perfect way to broaden your skills portfolio, especially if you are studying two similar subjects, such as science or maths. It is a popular choice with other languages, Law, Travel \& Tourism, Business and Arts subjects.

Leicester Grammar School provides an excellent opportunity for MFL study because you will be working in a closely knit department, which will give tailored support and encouragement throughout the course. Our classes sizes are typically between four and twelve. Our teaching team is highly specialised, really friendly and approachable, enabling you to achieve the best grade possible in your A level studies.

Music is a moral law. It gives soul to the universe, wings to the mind, and life to everything... Without music, life would be an error. (Plato)

Music has been one of the keys to human flourishing throughout history. Not only this, but embracing the breadth and rigour of A level Music will prepare you to understand and contribute to a dynamic and creative economy well into the Twenty First Century. Creative instincts, technical analysis, presentation skills, event management and self-expression; all are developed through the study of music and contribute decisively to a portfolio that is attractive to admissions tutors and employers alike.

Music A level is a broad qualification that allows you to weight your studies towards composing or performing and towards musical genres according to your preference.

Similarly, in the Listening and Appraising part of the course, two Areas of Study are mandatory, whilst a further two are chosen from four possible options. As such, the course is suited to any musician who is keen to develop further an instrumental (or vocal) specialism and to broaden their appreciation of a range of jazz, classical and popular genres.

As a subject choice, A level Music coexists happily alongside any combination of other A levels and, whilst it is an excellent choice for a student wishing to study Music or other humanities subjects beyond their school years, it serves equally well as a cultural education or enrichment subject for anyone with ambitions in the sciences. We encourage anyone with a GCSE in Music or with Grade-5 theory to give it serious consideration as an option.

The co-curricular music activities on offer at LGS provide enviable opportunities for A level musicians to develop their leadership and listening skills whilst broadening their musical portfolio.

Students take components: 01, 03, and 05; OR 02, 04 and 05:

| Content Overview | Assessment Overview |  |
| :--- | :--- | :--- |
| Recital minimum 6 minutes and <br> contrasting pieces. | Performing A (01) Recital 75 marks <br> Externally assessed via audio-visual recording | $\mathbf{2 5 \%}$ of A level |
| Recital - minimum 10 minutes and 3 <br> contrasting pieces | Performing B (02) Recital 105 Marks <br> Externally assessed via audio-visual recording | $\mathbf{3 5 \%}$ of A level |
| Compositions - with a combined duration <br> of at least 8 minutes | Composing A (03) 105 marks <br> Externally assessed via audio recordings plus score | $\mathbf{3 5 \%}$ of A level |
| Compositions - with a combined duration <br> of at least 4 minutes | Composing B (04) 75 marks <br> Externally assessed via audio recordings plus score | $\mathbf{2 5 \%}$ of A level |
| Listening and Appraising <br> Analysing / evaluating music <br> Familiar \& unfamiliar works <br> Prescribed works \& aural extracts | Listening and Appraising (05) 120 Marks <br> Written exam including aural extracts <br> 2 hour and 30 minutes written exam | $\mathbf{4 0 \%}$ of A level |

All pupils study Areas of Study 1 and 2 and any two of Areas of Study 3, 4, 5 or 6.

## AoS

1 Instrumental Music of Haydn, Mozart and Beethoven
2 Popular Song: Blues, Jazz, Swing and Big Band
3 Developments in Instrumental Jazz 1910 to the present day
4 Religious Music of the Baroque Period
5 Programme Music 1820-1910
6 Innovations in Music 1900 to the present day

Our sixth form students undertake a varied and exciting Physics curriculum which ensures a foundation in many aspects of this fascinating subject. We feel the OCR specification is the best qualification to study as it reinforces our IGCSE course whilst introducing new and challenging theories and concepts.

Subject content in the Lower Sixth year includes:

- Mechanics
- Electricity
- Quantum Physics
- Waves

The Upper Sixth topics include:

- Newton's laws
- Circular motion
- Oscillations
- Thermal Physics
- Capacitors
- Gravitational, Electric and Magnetic fields

The OCR specification is also the only specification to still include content taken from all three of the legacy option papers, namely Cosmology, Nuclear and Medical Physics.

As this is a linear course, all examinations are taken in the summer of the Upper Sixth. There are three examinations, namely Modelling Physics ( 135 minutes), Exploring Physics ( 135 minutes) and the synoptic Unified Physics ( 90 minutes). Students must also achieve a Practical Endorsement from the centre which has no weighting towards the qualification, but is a pass/fail component.

The specification links closely with the topics covered by the current IGCSE, the study of which, or of an equivalent qualification (or of Science: Dual Award), is a prerequisite for starting the A level course. As well as there being a large amount of new material, the vast majority of modules are more challenging conceptually. A level Mathematics is not a necessity if a strong grade had been obtained in both subjects at (I)GCSE level. However, it should be highlighted that some Universities offering courses in Physics and Engineering may require Mathematics to be included in the A level programme of study.

A level Physics supports a wide variety of applications to higher education, e.g. degrees in Physics (all courses), Engineering, Medicine, Dentistry, Material Science, Industrial Design, Mathematics, Management and Law.

A grade (7) at IGCSE/GCSE Physics is a minimum requirement.
The School will not permit the study of Physics for A level if the requirement of a Grade (7) or higher is not met.

Why Should We Study Politics?

Politics has always been regarded as an activity that has the potential to be a little 'dirty'. The American journalist Ambrose Bierce went as far as to define politics as 'a means of livelihood affected by the more depraved portion of our criminal classes'. This sentiment is echoed, in part, in our experience of British Politics, where our politicians are increasingly seen as evasive and dishonest. However, regardless of what we think about politicians, we ignore the workings of government at our peril. Unless we understand how government works, we will never be able to play a full and active part in society. We will always be on the receiving end of other people's wisdom, rather than being in a position to advance our own agenda.

Who Should Study Politics?

Government and Politics is a subject which should appeal to students who take an active interest in current affairs, who are prepared to watch political documentary programmes on television and read a good newspaper regularly. A good standard of written English will also be essential for examination success.

The Specification \& Method of Examination

The School offers a linear two year A-level qualification in Government and Politics, following the Edexcel specification. All assessment for this qualification takes place at the end of the two years and will be examination based.

Overview of the Specification

Students in the Lower Sixth are required to study various aspects of British government and politics. Students also study a range of core political ideas, including Conservatism, Liberalism and Socialism.

The Upper Sixth course builds on that of the Lower Sixth, but focuses on the government and politics of the USA. In addition, students extend their study of political ideas to include an optional political idea from a broad choice including; feminism, nationalism, multiculturalism and anarchism. The external examinations come at the end of the second year and are essay based. There is no coursework element.

How do we learn Politics at Leicester Grammar School?

As in the study of any other Arts or Humanities subject, the study of Politics involves a certain amount of reading and note-taking. In lessons, however, we tend to focus more on explanation and discussion, sometimes making use of current affairs video stimuli to prompt discussion and illustrate points.

## What is Psychology?

- Ever wondered if there is a criminal gene?
- Or why some people obey authority figures but others defy orders?
- Or perhaps if the experiences you had as an infant affect relationships you have in later life?

A level Psychology is currently the second most popular subject in the UK, which tells you what an exciting and relevant area of study it is. It will give you an understanding of the way people think and why people behave in the way they do. The word psychology literally means the study of the soul. As an academic discipline it is exceptionally diverse and unique in the way it straddles the sciences (natural and social) and the humanities. Development of critical analysis skills are key and this subject is taught in a way that fosters such insight via applied case studies, practical research tasks and formal debates. Students have access to key resources such as the British Psychological Society monthly magazine, The Psychologist, Scientific American, Psychology Today and Psychology Review. Some topics (e.g. Schizophrenia) are excitingly accompanied by lunchtime academic lectures from professionals working in the field of Psychology. This fascinating subject requires an inquisitive mind, as well as a diligent approach to studying in order to manage the significant breadth and depth of content.

Students have the opportunity to attend support clinics and the Psychology Society, where current research (topics like personality, behavioural economics, the psychological impact of the pandemic) is discussed and reviewed in seminar-style sessions. Co-curricular opportunities are vast and include university trips to conferences, a "Brain Day" with Dr Guy Sutton and an obedience seminar at the National Holocaust centre.

Psychology can be a controversial and sensitive topic to study - topics such as mental illness, gender, attachment and forensic psychology may affect you or members of your family so you will need to approach the study of the subject in an objective and mature way.

## What subjects does Psychology complement?

Psychology is a multifaceted scientific subject and leads to a variety of specific degree options (e.g. Clinical Psychology) but also serves as a valuable basis for other higher education options (e.g. Neuroscience; Law; Medicine; Business Management). Many of our students go on to study pure psychology and specific study options (e.g. criminal and sports psychology) at university. To achieve chartered status as a Psychologist, a highly standardised and regulated route of study and practice is required (https://www.bps.org.uk/public/become-psychologist). However, studying Psychology at A Level can open doors to careers in the health sector, education and research. A Level Psychology is not necessarily required to study Psychology at degree level, but it is certainly advised. Some BSc courses may require a Science at A level, in addition to Psychology. An increasing number of university medical schools will include Psychology among the subjects considered as a Science; students with a desire to read Medicine should conduct their own research on admissions pages online.

## How is Psychology assessed?

Three examination papers at the end of Year 13 (there is no coursework in A level Psychology) consisting of multiple choice, short answer and extended essay questions. $30 \%$ will be on the topic of Research Methods and Statistics, at least $10 \%$ will consist of mathematical calculations and there is an entire topic worth over $10 \%$ of the final grade on Biological Psychology. One third of the final A Level grade will consist of assessment on extended writing; essay writing skills are essential.

## What type of student chooses Psychology?

Someone who likes to reflect on the world around them and to understand people's behaviour better from a scientific perspective. The subject is suitable for a diverse range of students who wish to develop an interest in the causes of human behaviour. Students will need to be able to write extended essays and conduct practical investigations involving analysis of qualitative and quantitative data.

Grades (9) - (6) in GCSE English Literature, Mathematics and Biology (or (6)(6) in Dual Science in lieu of Biology) are required.

The ancient Greek Philosopher Socrates said 'the unexamined life is not worth living.' Religious Studies is a popular and very successful A Level at LGS. You need neither to be religious to study this course nor to have studied RS at GCSE. You just have to be interested in the most important questions that humans can ask and you must be prepared to question and to think logically and critically about the way that you argue. It is both intellectually demanding and stimulating, challenging your own presuppositions and those of others. You will develop skills in critical thinking, debating, evaluative essay writing and will learn how to identify the strengths and weaknesses of other people's arguments.

## Course summary:

The course leads to 3 externally assessed papers.

Paper 1: Philosophy of Religion: The ideas of the ancient Greek philosophers, Plato and Aristotle; arguments for the existence of God; the teleological, cosmological and ontological arguments; the problem of evil and religious experience; religious language \& the nature of God.

Paper 2: Ethics: you will learn and explore four different (religious and non-religious) ethical theories and apply these to different issues: euthanasia, business ethics and sexual ethics. You will examine ethical language and thought and debates around the idea of conscience.

Paper 3: Theology (Developments in Christian Thought): If you think you know what Christianity is, then this aspect of the course (whether you are a Christian or not) will make you think again. You will explore Christian beliefs and how they have developed historically. You will examine the Christian influence upon philosophy and ethics and how this influence has come to be challenged. You will examine philosophical and political secularism and whether Christianity has any relevance in today's modern society.

The course provides an excellent foundation for further study in a range of academic subjects, not limited to Theology, Religious Studies and Philosophy, and remains a very attractive qualification to universities. Some of our students go on to degrees in Philosophy and Theology but others do combined-honours degrees such as Philosophy and Maths, PPE (Philosophy, Politics and Economics) or Philosophy and Psychology. Others have applied to do Medicine or Veterinary Science.

Within this course you will consider how Religion, Ethics and Philosophy are intertwined within culture, law, medicine, social care, environment and politics. If you are looking to pursue a career as a lawyer, politician, teacher, doctor, social activist, diplomat, aid worker, police officer (or any job that works with people) then this course will provide you with a range of transferable skills essential for the modern workplace.

