



MERCHANT TAYLORS'
School



Sixth Form Supercurricular
Programme
2021-2022

What is the Supercurricular Programme?

The Sixth Form Supercurricular programme covers all academic activities outside of those which form part of your A-level studies. Some of it will be delivered by your teachers, in school, and some of it you will be expected to complete independently during private study or outside school.

Why do I need to complete supercurricular activities?

Most importantly because a love of learning is something that will stay with you for life. In the Sixth Form, we want you to find your passion, and it is most likely that you will do this by following your own academic path, reading, listening and watching things that interest you purely because they interest you, and not because they will be included in an exam or test. Secondly, because it will make you a broader and more interesting person. Thirdly, because it will help you adjust to the independent nature of university study and finally, because it will help you write a personal statement, sit an admissions test, perform well in a university interview and improve your chances of high grades at A level.

What supercurricular activities do I need to complete?

This very much depends on how well you are managing your A-level studies and what your aspirations are for university. For students studying three A-level subjects, you will have nine private study periods per week. Of these, up to three will be used for MTS Supercurricular Courses, one will be timetabled for Academic Supervision, two will be supervised private study and you will be expected to attend Careers and PSHE sessions, as per your timetable. All remaining private study sessions must be completed in school, in the Common Room, Library or one of the free classrooms shown on the timetable displayed in the Common Room. As a rough guide:

All students must:

- Choose one supercurricular course
- Attend a weekly Academic Supervision session with their timetabled supervisor
- Complete some form of supercurricular activity (e.g., complete a MOOC, read a book)
- Complete work experience

Some students will:

- Choose two or three supercurricular courses
- Enter an essay competition or Olympiad
- Complete several MOOCs
- Read books, listen to podcasts, watch lectures
- Attend a conference or course outside of school
- Complete an EPQ

Your Academic Supervisor will guide you as to the supercurricular activities you ought to be completing, based on your interests and aspirations. When considering your application to university, it is important to remember that they do not want to see a simple 'check list' of everything you have done. You will need to reflect and learn from your supercurricular activities and demonstrate to the Admissions Tutors the academic journey you have taken and what skills and attributes it has given you.

Reflective Journal: You must keep a record of all your supercurricular activity, what you did, when you did it, and, most importantly, what you learned or how you felt about it. You may choose to use a notebook or keep a record electronically. Either way, you will need to be able to share it with your Academic Supervisor.

MTS Supercurricular Courses.

Courses marked **extension** are only suitable for those studying the subject for A-level. Courses marked **enrichment** are open to anyone with an interest in the topic, although many will be geared to studying the subject at university.

BIOLOGY EXTENSION

In these sessions we explore fundamental science questions and look at a variety of topics ranging from evolution to artificial intelligence, discussing the ethical dimensions as well as practical applications of science, with a focus on Biology. Students are encouraged to read, research and present on biological topics of their own interests. The sessions are ideal for those interested in applying to study Biology or Natural Sciences and include period of NSAA preparation later in the year together with an element of freestyle within and beyond the syllabus and interview-style biology questions.

CHEMISTRY EXTENSION

The Chemistry Extension lessons look to explore chemical ideas beyond the realms of the specification. They will help to prepare you for the Chemistry Olympiad and Cambridge Chemistry Challenge, in both competitions the department has supported students to perform to the highest standard at a national level. The lessons should also support your critical thinking and to develop your problem-solving skills. By the end, you will know the theory behind how to synthesise real life molecules. You will also be able to carry out complex calculations, such as determining the size of an ion in a compound, just by knowing the density of the substance.

CHEMISTRY PRACTICAL EXTENSION

Practical Enrichment sessions are aimed at those who wish to further develop their skills in Organic and Inorganic Synthetic Chemistry. These sessions will be particularly interesting to those intending to study Chemistry or Natural Sciences at University. They will provide an opportunity to experience advanced practical techniques and chemical reactions beyond the school level. Sessions will also give an insight into the mechanisms and applications of these reactions. Sessions are limited to six students.

CLASSICS ENRICHMENT

An introduction to the Ancient World, suitable for those with or without any prior knowledge. There will be **no language** involved, but we will look at various topics of Greek and Roman history and literature, including some of the myths, the great works of literature, the expansion of Roman power, exploits of the Roman emperors, as well as some art and architecture. All welcome, whether you are intending to study a Humanities subject at undergraduate level, or you no longer do a Classical subject and miss them, or you have no knowledge of the Ancient World but want to gain some.

CLASSICS EXTENSION

This includes language work, literature, history, philosophy, preparation for Oxford entrance exams and Oxbridge interviews

COMPUTING ENRICHMENT

Computing Enrichment for the Lower Sixth this term will focus on problem solving; learning techniques for understanding and being able to solve the kind of logical riddles and puzzles that are popular at interviews. Practice for these type of interview questions will be useful for candidates for Oxbridge, Imperial or Manchester and the skills learned give a valuable insight into the art of programming, finding algorithmic solutions to complex problems.

ENGLISH LITERATURE ENRICHMENT

The aim of these sessions is to introduce students to new forms of literature and writers that go beyond the A Level syllabus and to give them a taster of what life as an English Literature undergraduate life is like. You will be introduced to literary theory and the discourses surrounding the role of literature that have been circulating since the middle of the 19th Century. Dr Hetherington, a former lecturer and researcher in English Literature at Oxford University, leads these sessions, which by their very nature are intellectually challenging, stimulating, and, ultimately, very rewarding.

EXTENDED PROJECT QUALIFICATION

The EPQ is a stand-alone qualification that has the 'value' of half an A Level. It is a free-standing project which a student conducts on a topic of their choosing with final submission in the Autumn Term of their Upper Sixth year. It runs alongside other subjects and does not have to be based in a subject studied in the Sixth Form.

GEOGRAPHY ENRICHMENT

Covering Human and Physical topics, you will be introduced to some key theorists and concepts and will be challenged to think about geographical issues at a more academic level. There will be an opportunity to engage in much debate and discussion, take part in an internal and external symposium, and engage with academic content which will enhance your personal statement and wider geographic studies. Some examples of the topics you will cover are:

- What is Geographic Truth?
- Urban Revolutions - power and control in post-modern cities
- Classical and Critical Geopolitics
- Introduction to Climate Science
- Sustainable Development

GYM ENRICHMENT

Structured gym session using free weights and machines. You will be given guidance and assessment criteria. Open to all students interested in strength and conditioning, although numbers will be limited.

HISTORY EXTENSION

Oxbridge Preparation and Extension - Open to all considering applications to read History and related fields at university.

HISTORY OF MEDICINE ENRICHMENT

This course will look at some of the key developments in the History of Medicine, many of which will lead to parallels with modern situations. There will be opportunities to trace where some of the issues in modern medicine and cultural medical values have come from. Will suit those interested in History and the Sciences in particular.

ITALIAN FOR BEGINNERS ENRICHMENT

The aim of this course is to get you to use colloquial Italian and acquire a broader sense of awareness of Italian culture. It is an easy, interesting course with both practical and intellectual/cultural input to assist you in your travels, itineraries and gastronomic choices in sunny Italy. The beginners' course *Buongiorno Italia!* is based on conversations and interviews with Italians in Stresa and Orvieto and has been devised to provide students with their study of *spoken* Italian. In addition, you will gain a flavour of Italian culture and society through the analysis of a series of examples of art and architecture, films and music.

IRISH HISTORY ENRICHMENT

Belfast - The untaught tale of a divided British city. From Sectarian murders, violent protests, bonfires, and the squabbling politicians of Stormont. This enrichment module should appeal to geographers, politicians, and historians alike, offering a unique study of the Northern Irish capital.

LAW ENRICHMENT

This course will offer an introduction to the English legal system and some of its intellectual and philosophical complexities. We will focus on diverse aspects of the law, including: principles of contract law; the idea and development of that slippery concept the “Rule of Law” (or rule of law?); and some human-rights based case law. We will have time to tailor classes to the individual interest of participants, too. There will also be a chance - later in the year - to focus on preparation for the Law National Aptitude Test (the LNAT), the admissions test that is required by some universities.

LOGIC ENRICHMENT

Logic is, broadly, the study of the principles of correct reasoning. In this course you will be introduced to formal logic, specifically propositional and predicate logic. Useful for any aspiring philosophers or mathematicians.

MEDICINE EXTENSION

This course is compulsory for students considering Medicine or Dentistry courses at university. We begin with the question ‘Why choose Medicine/Dentistry?’, followed by a look at university choices, how to write the perfect personal statement and finally UKAT and interview training. Please note that this course runs from February half-term Lower Sixth to February half-term Upper Sixth.

MATHEMATICS EXTENSION

The primary goal of these sessions will be to develop students’ problem-solving skills beyond those required at A Level. You will have the opportunity to consider complex problems drawing upon a wide range of mathematical concepts, strengthen connections between mathematical ideas and, at times, explore new areas of mathematics beyond the constraints of the formal syllabus. One eye is very much on preparation for university entrance tests for Mathematics (MAT, STEP and TMUA) as well as for those subjects requiring significant mathematical skill, e.g., Physics, Engineering, Economics and Natural Sciences (entrance tests including ENGAA, ECAA, PAT, NSAA). By the end of the year, we will build up to solving demanding MAT and STEP written problems. However, you do not need to be considering a course that requires an entrance test to enjoy these sessions or take part in them! All you need is a solid grasp of the A-Level material covered to date, a love of mathematical problem solving and a good dose of tenacity and resilience in the face of challenge!

MFL EXTENSION

This course is designed for anyone thinking of applying to read modern languages at university, either as a pure language degree or as a joint language and non-language course. We will look at a selection of literary extracts including poems and extracts from novels to get an overview of potential areas for further reading and summer holiday research. This can follow your own individual areas of interest. In addition, we will have a look at some of the typical grammar questions set for MLAT tests. As well as the cultural aspect, the aim is to give you an area of focus for your UCAS application. The course is one hour per week and will occasionally involve a little preparation before the lesson.

MUSIC APPRECIATION ENRICHMENT

Music has often been attributed power. It has the power to soothe an aching heart or enrage the passions of soldiers on the medieval battlefield. It is sometimes referred to as ‘the shorthand of emotion’, but its power goes further. The type of music we like becomes inextricably linked with our identity. We use songs to leaven the mundanity of

the dullest tasks (washing the dishes) or add pathos to the most solemn occasions (funerals). Music can be weaponised and used as an instrument of torture. Music can reach into the atrophied brains of dementia patients and bring memories flooding back. An understanding of pitch and rhythm is, for many people, innate. Music is social. Music is fun. Music is human. Why? This is one of the central questions which musicology aims to answer. Why does music have these powers; where did music come from; why is music-making such a universal human experience? This introduction to the field of musicology will appeal to you if you are interested in psychology, philosophy, history, or sociology. Each week, we will focus on a single area of research and discuss a key text. We will debate the main principles whilst trying to discern why music has power. Tea (and stimulating ideas) will be provided.

PHILOSOPHY AND THEOLOGY ENRICHMENT

Guided by pupils' interests, we study a range of arguments in Philosophy and Theology, which have recently included the nature of democracy, ethics and atheism, the basis of property rights, and the adequacy of consent-based sexual ethics. We read academic articles together, and frequently have seminars with their authors. We intensively develop pupils' ability to interpret and parse an argument, and to articulate their own views.

PHYSICS ENRICHMENT

You will get a chance to explore fun areas of Physics and Engineering that are not on the A level course, but which grow your understanding of the workings of the world around you. We will cover topics such as: the dilation of time when moving near the speed of light; how engines work; spinning tops and gyroscopes; how to build more advanced electronic circuits such as timers.

PHYSICS EXTENSION

You will learn to solve advanced problems beyond the scope of A-level Physics, this will include preparation for the BPHO competitions, Oxbridge/ Imperial Interview questions and University Admissions tests as well as some fun additional topics. It is worth noting if you wish to be a successful Oxbridge candidate additional work beyond these lessons will be required.

POLITICS ENRICHMENT

This year's class will examine questions of personal politics. What does it mean to be "woke"? What is "White privilege"? Is the personal really political? How have we come to a point where we are dominated by culture wars and what are the implications of this for our modern society?

POLITICS EXTENSION

This year's extension class in politics will focus on International Relations. We will look at theories of international relations, problems of examining the international system, supranational organisations, aspects of international law and examples of international interventions.

PSYCHOLOGY ENRICHMENT

Psychology enrichment will focus on famous case studies and research in psychology such as Phineas Gage and Genie. Case studies are in depth research projects which try to make sense of unique individuals. Each week we will consider a different case example from the field of Psychology and will look at what these studies tell us about the wider population.

RUSSIAN FOR BEGINNERS ENRICHMENT

This ab initio Russian course is based on the textbook "Russian grammar in dialogues", which is aimed at foreign learners. Within 12 /13 weeks you will be able to read, to communicate in simple short sentences and to use cases correctly. Each lesson will also comprise 15 minutes of Russian culture such as history, literature, cinema, and art.

SPORTS SCIENCE ENRICHMENT

From recreational athletes to elite Olympians, people are inspired by sport, and they want to push themselves to greater heights, speeds, and distances. Sports science can help answer questions, optimize strategies, and shed light on the invisible (and visible) barriers to performance. This course will explore the science behind sport and sporting performance.

The Extended Project Qualification (EPQ)

The EPQ is a stand-alone qualification that has the 'value' of half an A Level. It is a free-standing project which a student conducts on a topic of their choosing with final submission in the Autumn Term of their Upper Sixth year. It runs alongside other subjects and does not have to be based in a subject studied in the Sixth Form.

The EPQ comprises six elements:

1. Choosing an area of interest
2. Drafting a project title
3. Drafting aims of the Project
4. Planning, researching, and carrying out the project
5. Providing evidence at all stages of the project production
6. Delivering a presentation to a 'lay' audience

The project could be in the form of an academic essay, an investigation or might be more practical – perhaps an art exhibition, a film, or a practical engineering project.

The outcome is either an essay of approximately 5,000 words or the submission of an 'artefact' with a 1,500-word report. Students complete a Production Log throughout the process with a focus on reflection and self-evaluation. It is assessed internally and moderated externally, with grades being awarded alongside other A Levels in August.

Marks are awarded for the **management** (20%) of the project; the **use of resources** (20%), the **development and realisation** of the project (40%) and the **reviewing** (20%) of the project.

Pupils are supervised by a teacher in school who gives guidance and advice but does not 'teach' the content of the project. The supervisor will meet with their pupils once per week during the spring and summer terms of the Lower Sixth year. The emphasis is always on independent research. Pupils are also given electronic access to a textbook produced by AQA.

Timetable

Pupils are briefed about the project in the Autumn Term of their Lower Sixth year. Project titles are finalised, and initial planning starts in January of the Lower Sixth, with research and writing occupying the spring and summer terms. Pupils will complete the written or artefact components by the end of the summer holiday. Presentations on research and the project itself will take place early in the Autumn Term of the Upper Sixth year and final submissions made soon afterwards.

Good projects can be discussed in UCAS references and university interviews. Increasing numbers of universities are making alternative (reduced) offers to students who submit successful EPQs.

Pupils opt into the project on a voluntary basis, but the school reserves the right to refuse a student entry to the project if we believe that it is not in the best interests of the student to add to their workload.

Previous Merchant Taylors' EPQs

Successful projects at the school have been extremely varied. Pupils have researched the effects of British colonisation in Africa, the Salem Witch Trials and applications of Game Theory in negotiations regarding climate change. Pupils have also stripped and refitted motorbikes and grown some particularly exciting algae.

Academic Supervision

You will be timetabled a weekly Academic Supervision period with an allocated teacher. This is based on the format of an Oxbridge tutorial. Your supervisor will guide your supercurricular studies, discussing your recent reading, listening, or completed courses, suggesting areas of research, answering questions you may have and maybe setting you a question for discussion or debate. You will need to show your supervisor your reflective journal on a regular basis. Remember, rather than just generate a long list of books, articles, and podcasts you have read or watched, it is far more valuable to read one or two books in depth and focus on reflection and development of your own opinions and ideas around those topics.

You are given timetabled supervised private study periods each week, during which we expect you to complete your supercurricular courses, reading, podcasts, lectures and essay competitions.

Some of the following resources would be a good place to start your supercurricular studies, and your supervisor will be able to suggest more:

1. Massive Open Online Courses (MOOCs)

These are freely available online courses, mostly provided by universities. <https://www.mooc-list.com/> and <https://www.coursera.org/> have thousands of courses available. Specific universities sometimes offer their own free courses e.g., <https://online-learning.harvard.edu/catalog/free>

2. Online lectures

Aside from the ubiquitous TED Talks (<https://www.ted.com/>) try <https://www.gresham.ac.uk/> and specific universities e.g. <https://www.imperial.ac.uk/be-inspired/social-and-multimedia/lectures-online/>

3. Podcasts

<http://podcasts.ox.ac.uk/>

<https://www.cam.ac.uk/research/research-at-cambridge/podcasts-from-the-university-of-cambridge>

<https://www.bbc.co.uk/programmes/p06qh86j>

4. Reading lists.

These will be issued by Departments, but you can find some useful suggestions through this link <https://www.undergraduate.study.cam.ac.uk/super-curricular-activities>

5. Essay Competitions: details of relevant competitions will be publicised through Departments.