



Year 10

GCSE

Options Booklet

2009–2010

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YEAR 10 CURRICULUM

INTRODUCTION:

In Year 10 the curriculum consists of the following;

- Core subjects studied for TWO years and leading to a FULL GCSE. These subjects are Mathematics and English (comprising two separate GCSEs, Language and Literature).
- Compulsory qualification in ICT (currently short course GCSE) studied and examined only in Year 10.
- Option subjects. Pupils make a free selection of 6 subjects they wish to study for two years leading to a FULL GCSE. The subjects available are; **Art, Biology, Business Studies, Chemistry, Design and Technology (either Resistant Materials or Electronic Products), Drama, French, Geography, German, History, Music, Physics, Religious Studies, Science (Single Award) and Spanish.**
- After discussion with their tutor and their Learning Support teacher, some pupils may choose to take 5 options and continue Learning Support lessons as the sixth option.

Ultimately most pupils should gain a minimum of 9 Full GCSEs plus an ICT qualification by the end of Year 11.

This booklet gives important information regarding the subjects. When choosing the option subjects the following criteria should be used:

LANGUAGES – All pupils will be expected to choose a minimum of one modern language. The only exception will be when a pupil has obtained prior agreement between the Head of Modern Languages and the Head of Learning Support that this is not in the pupil's best interests. Competent linguists may choose to study either Spanish and French or Spanish and German.

SCIENCE – All pupils will be expected to choose either a minimum of two separate sciences each leading to a GCSE or Single Award Science. A pupil may study Biology, Chemistry and Physics (three separate option choices). The Single Award Science (which covers basic Biology, Chemistry and Physics) course leading to a single GCSE constitutes one option choice. Pupils choosing this option will be unable to study any science at A level.

Included in the booklet is information regarding Higher Education and Careers but it is important to realise that current plans may change and it is important that the option choices

- Keep as many possible Higher Education and Career pathways open
- Reflect the interests and strengths of the pupil – *remember you are committing yourself to two years of study and enthusiasm may well prove to be the difference between a good and mediocre grade!*

Hopefully the booklet will provide an outline of the various courses but more importantly the reasons for studying the subject. Please discuss the subject choices with your tutor. The subject teachers will be able to give some advice on a pupil's suitability for a chosen course at the Parents' Consultation on **TUESDAY 5th MAY 2009**.

When you have made your choices, please complete the enclosed form and return it to your tutor. **ALL forms MUST be returned by FRIDAY 15th MAY 2009** (forms returned after this date may reduce the chances of the choices being available). The subjects will then be placed in option blocks to match the choices as far as possible.

While we offer pupils a free choice of options we can neither guarantee that every choice can be timetabled nor that a set will run if the numbers are too small. Several of the subjects are likely to occur in only one option block. These are likely to include; Drama, German, Music, Science (Single Award) and Electronic Products. It is important to realise that the more single block subjects which are selected the less likely it is that we can accommodate them all given the free option choice system. Recent experience suggests that 99% of choices will be met – in the unlikely event that your choices cannot be delivered you will be contacted to offer another choice.

UNIVERSITY ENTRANCE

Most, but not all, Trent students enter university and GCSE choices are the first step in that direction. The choice of GCSE's is important but

- Enjoying a subject is the main requirement of study at all levels.
- Good GCSE grades get pupils onto 'good university courses' – another reason for picking subjects that will be enjoyed.
- Taking subjects because they may be needed for a possible future career or university course can cause problems, especially when pupils change their plans! For example, if a pupil has aspirations to be a doctor they will be taking a specialised science degree at university and this should follow from a genuine interest in science at GCSE level.
- GCSE passes (at grade C or above) in English Language and Mathematics are normally required as general entry requirements for most universities.

If more information about specific university courses is required then prospectuses are available in the school's careers library or ask Mrs Brimblecombe at the Year 9 Parents' Consultation evening. University information is available directly from university web sites e.g. www.durham.ac.uk or from the University and Colleges Admission Service at www.ucas.com. The latter site also has a parents' section. We also subscribe to www.coursediscoveronline.co.uk which provides information about University courses as well as a very useful section about 'Making choices at 15/16'. Our subscription details for this site require the following information:

organisation:- Trent College; password:- i0a6 22904 f69 246

Trent students apply for a wide range of subjects and universities; a list of the destinations of last year's applicants can be viewed on the school website in the section about academic success.

Mrs Brimblecombe (felicity.brimblecombe@trentcollege.net)
Head of Entry to Higher Education

CAREERS EDUCATION

From September 2008 Careers Education in Year 10 has become embedded within the PSHE programme. It consists of 6 x 50 minute sessions running throughout the year. In these sessions we try to encourage pupils to begin thinking about the world of work and what is meant by a career.

To this end we start in the Michaelmas term with two sessions where students are introduced to a software program called 'Kudos' which involves answering a series of questions on career preferences such as:

'How would you like a career that includes working with babies, children, teenagers?'

This work could involve: Teaching, advising, giving health care, counselling.

Students then 'click' on one of five responses ranging from: Like very much, Like, Doesn't matter, Dislike, Dislike very much. There are 50 of these questions at the end of which the program either suggests careers that might be suitable to that particular student on the basis of his/her answers to the questions, or provides a further series of questions to refine students' profiles. Against each career listed it will read: very good match, good match, fairly good match, questionable match, or poor match. Once the student has been matched against suitable careers a detailed description of those careers can be accessed from the software. These descriptions are broken down into a brief introduction about the type of work and why it is suitable for the student, work activities involved, personal qualities and skills required, pay and opportunities, entry routes and training, qualifications, further information and photographs. All of the information can be printed off and kept by students in their PSHE folder or saved electronically. The Kudos programme teaches students the value of research and encourages them to broaden their perspectives regarding career choice and to ensure that their preconceptions about careers are consistent with their interests and personal qualities.

In the Lent term the first session is spent introducing students to CVs and developing their ability to present facts about themselves in an appropriate format. In the second session students practise writing job application letters, a skill which they may put into practice in Year 11 as part of the process for gaining a work experience placement.

In the Trinity term students spend 2 sessions developing their interview skills, using what they have learned about themselves from previous sessions as the raw material for role play in the form of mock interviews. In these sessions they take the part of both interviewer and interviewee, asking and answering questions on one of the career areas they have researched, gaining confidence and valuable experience for the future.

M R Field
Head of Careers

ART



Catherine Bralesford Year 11 'Pastel'

The GCSE in Art offers a broad range of visual and practical areas of study. On the course pupils produce work across a breadth of disciplines such as drawing, painting, sculpture, printmaking, graphic design, computer graphics, and art appreciation. Art Gallery visits are part of the course.

Coursework accounts for 60% of the total marks. The examination, sat at the beginning of the Summer Term, towards the end of the two year course, accounts for 40% of the total marks. The examination paper is distributed to pupils in the first week of the Lent Term for pre exam preparation purposes and unlimited time is afforded to candidates to research their chosen exam question. Pupils present a selection of their coursework and their examination work in an assessment exhibition at the end of the course.

So, why study Art at GCSE level?

1. In today's educational climate a sound visual education is increasingly relevant as we all become more discerning about how the environment looks. Studying art gives you aesthetic skills and an ability to judge matters of taste, beauty and function. Artistic skills remain with you for life and can improve your lifestyle and quality of life.
2. You will be taught by specialist teachers experienced in painting, illustration, printmaking, sculpture and graphic design who will provide you with the technical and creative skills by which you can express yourself independently. Many techniques are demonstrated, including acrylic, watercolour and oil painting, charcoal and pastel drawing, clay modelling and casting in sculpture, computer graphics lino cut, collagraph and art history research methods.
3. "Doing GCSE Art allows me to express myself freely and independently within a structured programme of work." A quote from a Year 11 GCSE art pupil.
4. "It is a time in the school week which I enjoy and can be challenged by the work." A quote from a Year 11 art pupil.
5. "Having done GCSE Art, I now realise the solid foundation the course gave me in my drawing and painting skills." A quote from an Upper 6th A' level art student.
6. Studying Art to a GCSE qualification can also add balance to your Year 10 and Year 11 overall education. A feature of the subject is learning to study independently and thematically,

improving those important study-skill methods. Art is a language which complements and encompasses those literary, mathematical, scientific and humanity based subjects.

7. Choosing to do GCSE Art opens up real prospects of studying the subject at AS and A2 level in the Sixth Form. This gives an option of considering going on to Art College or University leading ultimately to possible careers in Advertising, Architecture, Landscape Architecture, Fashion Design, Graphic Design, Interior Design, Fine Art, Product Design, Art Teaching, Museum Curatorships and Art History.
8. Ask to see artwork produced by Years 10, 11 and Sixth Form artists to see what can be achieved. Studying Art after Year 9 gives you the opportunity to continue having your artwork displayed in exhibitions and around the school, a way of representing the school in an excellent light.
9. Developing an ability to express yourself artistically is a skill to be highly valued. Consider carefully the merits of the subject and the relevance of the subject to you. You may choose to do the subject at GCSE purely because you enjoy it or you may have longer term motives. What is certain, once you do start studying the subject at exam level your interest in it just grows!
10. Visual and emotional intelligence is as important to a pupil's development as intellectual intelligence, fortunately art is a subject which contains all three. Art allows pupils and students to develop a broad approach to the world around them.



Jessica Storey Year 10 Foundation perspective study 'Boxes' Acrylic collage



Tom Towle Year 11 'Still Life', Acrylic



BIOLOGY



Why study Biology?

Discoveries in Biology are having a huge impact on society. Biodiversity, Conservation, Disease-causing agents, Gene manipulation and Nutrition are some of the topics often in the news.

Biology helps develop a wide range of skills such as ICT, communication, improving own learning & performance and problem solving, as well as involving a fascinating body of knowledge and understanding. Investigative skills are developed and assessed during the course. We also study the historical basis of some key developments in Biology.

The Course

The course will be the AQA GCSE Biology course. The course builds upon work studied in Years 7 & 8 and begins in January in Year 9.

Course content

The course is divided into 3 units and looks at questions such as:

- How do human bodies respond to changes in their environment?
- What causes infectious diseases?
- How can our bodies defend themselves against diseases?
- Why have some species of plants and animals died out?
- How do humans affect the environment?
- What are animals and plants built from?
- How do plants obtain the food they need to live and grow?
- How do we inherit characteristics?
- How does exercise affect the exchanges taking place within the body?
- How are micro-organisms used to make food and drink?

Assessment

75% of the marks are based on the written examinations. There are 3 separate written papers; one for each unit. The other 25% will be from practical assessment. This will be ongoing during the course; pupils will be encouraged to think about the science they are doing and to collect and analyse data from practical work carefully. There is a 45-minute written paper assessing their practical skills. This will prepare pupils well for practical work at AS level. The majority of pupils will sit the Higher Tier, although a few may be encouraged to sit the Foundation Tier.

Where can Biology GCSE take you?

The course prepares pupils for further study at GCE AS and A Levels. The study of Chemistry and Physics with Biology is encouraged. **Chemistry GCSE is particularly relevant and is essential for any pupil who might wish to study any Biological subject at a higher level.**

There are many different courses / careers open to Biologists. Here are just a few suggestions:

Medicine	Pharmacology	Food Science	Pharmacy
Veterinary Science	Microbiology	Nursing	Biochemistry
Dentistry	Biotechnology	Marine Biology	Physiotherapy

For more information please ask your Biology teacher

BUSINESS STUDIES



The Business Education Department will teach the new OCR GCSE in Business Studies starting in September 2009. All of the modern classrooms in the Swallow Business Centre are equipped with the latest Interactive whiteboards, internet access and video. In addition the Thai lecture theatre is adjacent to the classrooms and provides us with a valuable resource for outside presentations from industry and cinema style multi media presentations.

We believe that the study of Business Studies requires students to understand the dynamic environment in which business operates and to appreciate the many and varied factors which impact on business activity and business behaviour. Students will work towards gaining an understanding of the issues facing businesses in the 21st century. The specification content is delivered with reference to examples of local, national and international contexts. Specifically the content includes marketing, enterprise, people in business, production, finance and the external environment in which business exists.



Business Studies offers pupils a breadth of study in modern, relevant and interesting topics. It is delivered by an experienced team of teachers from both commercial and academic backgrounds. It links well with many subjects giving pupils a sound base on which to build their A Level choices. Modern languages are valued by global employers in an increasingly competitive world. If the possible future career choices include finance, then clearly Maths is very useful. There are also content links with Design Technology and ICT.

CHEMISTRY

Why study Chemistry?

You will always need chemistry for the colours you see, the food you eat and the clothes you wear. As you continue to study chemistry you will obtain a clearer understanding of how objects for which there appears no use can be transformed into useful ones. It is hoped that the impact of chemistry on our every day lives will add to the enjoyment of its study.

Besides studying chemistry for the sheer enjoyment and interest of it, it must be realized how important chemistry qualifications can be in obtaining that all important career when leaving school or university.

A knowledge of chemistry at GCSE aids the study of other sciences at A level. If Chemistry is studied to A level it can help you obtain degrees at university in subjects such as Law, and Computing, (subjects requiring logical thought) it is **essential** for the study of Biological Sciences, Medicine, Dentistry, Pharmacy, Agriculture, Food science, Veterinary Science and Chemical or Civil Engineering. A degree in chemistry is an excellent indicator that a person has the necessary skills required for careers as diverse as Accountancy and Business Management.

Having explained how useful the skills you will develop whilst studying chemistry are, here is a list of the main topics covered during the two year course, some of which have already been started during year 9.

Chemistry 1

Structure of the Earth

Plate Tectonics

Composition of the Atmosphere

Uses of Crude Oil

Limestone

Ores and Metals

Vegetable Oil

Chemistry 2

Atomic Structure and Bonding

Structure and Properties of Materials

Rates of reaction

Reversible reactions

Calculations

Acids and alkali's

Chemistry 3

Periodic Table

Water

Energy changes

Test for ions

More acids and alkali's

There are three, 45 minute, exams sat over the two year course.

Chemistry 1 sat in summer of Year 10

Chemistry 2 sat in January of Year 11

Chemistry 3 sat in summer of Year 11

These three exams are worth a total of 80% of the final mark, the remaining 20% comprising of coursework. The coursework comprises of a practical being carried out and the analysis of the results, and finally the evaluation of the practical.

Remember a GCSE in Chemistry is a minimum requirement for AS and A level Chemistry and a definite advantage for the study of Biology at A level. It must be stressed, as pointed out above, that failure to study Chemistry at GCSE can minimize career options.

For any more information ask your chemistry teacher or visit us in chemistry!

DESIGN & TECHNOLOGY

In our lives, we are surrounded by designed objects. Think of all the products you come into contact with in a single day, every one of them has been created as the result of the input of a designer. Their appearance, the way they work, their ability to be used effortlessly is all a result of the designers decisions. In Design & Technology you will learn how to design and make things from a range of Materials and Technologies. If you are the sort of person who enjoys working independently, using ICT, problem solving, creating things and making them; then D&T would be a good subject for you.



The department offers two syllabuses as GCSE options.



Design & Technology: Resistant Materials Technology

This course will involve you learning about materials and how they can be shaped and joined to make the products that surround us. In particular learning about Plastics, Metals and Woods along with other modern materials. You will be expected to design and make items within the workshops using the skills and knowledge taught as well as developing an appreciation for how things are made in industry.

Design & Technology: Electronic Products

This course will involve you learning about the theory of electronics and how this has been applied to the many electronic devices we use every day. Not only will you learn about how electronic components function but also how to design you own circuitry and to package this to do a particular job. You will gain hands on experience of designing and making electronic products within the workshops as well as learning about the materials and methods of production used to make commercial items.



Assessment

The Major Project

Started in the last term of Year 10, the project gives you a chance to undertake a more complex task. You will have to Design and Make a product of your own choice within the school workshops, recording the progress of this using ICT and sketching skills. It is a chance to do something interesting and unique based on your own interests. It does however; require good personal organisation and the ability to work independently.

Theory Examinations

There are two examination papers that will test the theoretical knowledge you have of you chosen area of study.



Why Design & Technology

Design & Technology is a subject that will challenge you in many ways. The practical element, provides challenges that are different from other subjects. It makes extensive use of ICT and requires a consistent methodical approach from the students who study it. It will teach you project management skills that will also prove useful to you in other areas. It prepares you for potential careers in Product Design, Mechanical and Electronic Engineering, Architecture and many other related careers. Students who study Design & Technology are eligible to enter the Young Engineer for Britain and the Crest Award competitions; Trent students have an impressive track record of national success in both these competitions. If you want to know more, ask your Design & Technology Teacher for further details about either of the courses.



DRAMA

Why Study Drama?

The ethos of this course involves the study of drama text and your own devised work. You will learn and write about a broad range of dramatic elements and put them into practice within a performance context. The course is both a challenging and enjoyable one. The assessment has its emphasis upon **practical** rather than written terminal examination providing you with a positive and encouraging assessment experience, regardless of ability. It works in perfect harmony with other arts subjects such as Art and Music and English but also provides a different learning style and experience for those of you who would not necessarily class yourselves as arts orientated.



Studying Drama at GCSE level can be of great use for both a variety of Careers and in Further Education. Drama is useful for any career in the Theatre within the acting, directing and design fields and in all careers that demand a skill in presentation or any kind of public relations. Drama is also useful for careers in Teaching and in Theatre in Education.

Although not essential the GCSE course provides those of you who are considering studying Drama and Theatre Studies at AS and A2 level here at Trent College with an excellent foundation upon which to build and for this reason is considered desirable for those wishing to move more speedily towards the higher grades. For those moving on post GCSE level to other establishments such as Further Education Colleges and Drama Schools studying opportunities exist at all levels in Theatre Studies, Performing and Expressive Arts and more increasingly in Media Studies.



The Course in Detail

Paper 1

Drama Coursework – (60% Internally Assessed and Externally Moderated)

Unit 1 Drama Exploration I – Devising

You will explore, respond to and evaluate a variety of dramatic forms. Issues, themes and texts will stimulate you in your use of the medium of drama to create meaningful work

Unit 2 Drama Exploration II – Play Text

You will interpret, evaluate, develop and apply Drama skills in relation to a full play text. In this unit the emphasis is on your development and understanding of the ways in which playwrights record their ideas in a script and how performers, directors and designers use drama to interpret and realise these ideas in performance.

Paper 2

Drama Performance – (40% Externally Assessed Practical Examination)

Students will draw on their learning about Drama which has taken place in Paper 1 to inform their performance work within a 'real' production process. In this paper students take on the role of actor or designer within a scripted performance group and are assessed upon their work within a live performance context.

ENGLISH



Why Study English?

Almost everything you do in life requires the ability to communicate. An awareness of language, therefore, is one of life's essentials. Every career requires English skills: reading, writing, speaking and listening. For this reason, English is a core subject and, the higher the grade you achieve at GCSE, the better for your future.

So, what happens at Trent?

GCSE LEVEL

Most students will leave Trent with two GCSE qualifications: English and English Literature. During the two-year course you will produce a coursework folder of three major studies of literature and one piece of creative writing.

All the primary skills are assessed at GCSE: reading (comprehension of fiction and non-fiction texts); writing (including writing for specific purposes and the critical analysis of literature) and speaking and listening (a variety of oral tasks, individual and group).

AS AND A LEVEL

English beyond GCSE gives you the opportunity to study either English Literature, or a combined Language and Literature course.

If you study Literature, you will spend the first year of the course exploring the struggle for identity in modern literature, and encountering a range of exciting and provocative novelists, dramatists and poets, for example Carol Ann Duffy, Chinua Achebe, Brian Friel and Margaret Atwood. In Year 13, the theme is "Love through the Ages", and you will study a range of writers from Shakespeare and Chaucer to twentieth century works. Assessment is through a combination of coursework and examination.

If you choose to take the combined course, you will study a range of literary and non-literary texts and examine some of the key linguistic concepts which govern the use of our wonderful language, looking closely at the ways in which language is used to express values and attitudes and also the changes in language use according to time, location and purpose. Assessment is through a combination of coursework and examination.

All groups are taught in seminar style by two teachers, whose specialist areas often complement each other.

If you feel you would like more information on either course or you want to discuss your aptitude for the subject, you are welcome to call in to the English Annexe any lunch time.

GEOGRAPHY

The key issues facing the world; global warming, rich and poor countries, population growth and famine, international migration and globalisation are balanced with national and local issues. These include coastal flooding, river flooding, the ageing population and its impact on tax and pension rates, immigration and economic activities, in this broad, exciting and very relevant GCSE course. Pupils will attend at least one fieldtrip during their GCSE course. Destinations include the Holderness Coast in East Yorkshire in Year 10 and one further location in which to carry out fieldwork in preparation for write up. Great use is made of contemporary examples and sources, and, with an emphasis on trying to make pupils think more independently, this makes Geography a popular choice at GCSE, and later at A level.

The assessment of Geography at GCSE is divided into three sections and will follow the AQA Specification A:

- A **Physical Geography paper** lasting 1 hr 30 mins and counting for 37.5% of the marks. This paper consists of both long and short answers, incorporates skills learnt throughout the course and will consist of the following topics:
 - The Restless Earth;
 - The Living World; and
 - The Coastal Zone.
 -
- A **Human Geography paper** lasting 1 hr 30 mins and counting for 37.5% of the marks. This paper consists of both long and short answers, incorporates skills learnt throughout the course and will consist of the following topics:
 - Tourism;
 - Population Change;
 - Changing Urban Environments.
 -
- A **Local Fieldwork Investigation** counting for 25% of the marks. This investigation consists of fieldwork carried out with others in the year, followed by a write up, some of which will be done as a controlled assessment. It is very likely that the coursework will support the Physical Geography topic, The Living World.



Teaching and learning methods are varied, but the department places great store by examination preparation and thus all pupils receive as many past papers as possible and questions to support their learning. Those who take Geography tend to enjoy it very much. As for the use of Geography in terms of careers, Geographers enter a diverse range of careers because of the combination of analytical, communication, problem solving and synthesising skills developed when studying the subject. Degrees in Geography lead to careers in accountancy, management consultancy, graduate training schemes in business multinationals such as Unilever, BP and ICI, the services, and a number of property linked careers, to name but a few.

Please do ask your Geography teacher, or Mrs Hayward, Head of Geography for more details.

HISTORY

History is packed with incredible stories about pivotal events, people and machines. We learn about the past so that we might better understand the present. By understanding why events happened we can try to stop them happening again or try to repeat them! In this course we aim to study some of the most momentous events of the 20th Century.

Is History GCSE the right choice for everyone?

GCSE History is NOT taught in sets according to ability. Candidates of all abilities can and do succeed in this course as long as they are motivated by and interested in the course material. Those who are have been very successful in this subject.

The study of History will improve your written and verbal communications skills. It will improve your ability to argue, to defend your opinion and to present a well supported case to others. The skills taught through History are highly valued in careers in Management, Commerce, Law, Journalism, Politics as well as many jobs directly related to History like Teaching, Archaeology or working with Antiques. For many however History is studied simply because it is interesting.

OCR GCSE History syllabus. *The Modern World.*

The course is divided into three parts:

Paper 1: International Relations 1919–1975 (45% of the exam)

The Cold War. This course investigates the development of the Cold War between the Superpowers of America and Russia analysing the causes of tension. These include the development of atomic weapons, the race to control Space, the dramatic standoffs between east and West in Berlin and potential triggers for nuclear war such as the Cuban Missile Crisis and the Vietnam conflict. Before the current shadow of the War on Terror the world dealt with the threat of nuclear annihilation.

Included in Paper 1 is a depth study of the USA 1919–1941. This paper includes an investigation of the economic and social causes and consequences of the Great Depression. Roosevelt's dynamic attempts to fix the depression are examined in his 'New Deal'. All of this paves the way to better understand the current threat of economic depression caused by the 'Credit Crunch'.

Paper 2: British Depth Study 1890–1918 (30% of the exam)

This consists of a source -based investigation into the changes and developments in British society before, during and as a result of World War One. In particular this is an analysis of women's struggle for the vote and the importance of their role on the Home Front during the war. Did Emily Davison intend to die for the suffragettes under the hooves of the King's horse at the Derby?

Coursework: Mao's China 1930–1976 (25% of the exam)

Candidates complete one 2000 word assignment set by the exam board but on a topic of our choice which you will be taught in class. The current favourite is an examination of Mao's China from 1930–1976. It is widely predicted that within our lifetime China will overtake America to become the most powerful economy in the world.

ICT (Short Course)



All our Year 10s are expected to take this basic grounding ICT course. The emphasis is very much on using ICT as a tool, rather than an end unto itself. In the pupils' future careers, whatever the discipline may be, they will be increasingly called upon to use new and challenging technology. Developing skills in ICT involves exciting the children so that they want to learn. If you can create the desire for information, then the skills will follow.

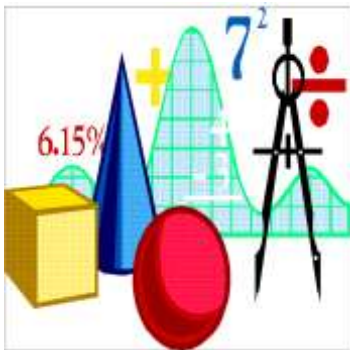
The course centres on an assignment with three or four tasks, based on a real life situation. In the past it has ranged from sandwich bars to health clubs to pet shops. The students are expected to analyse and solve problems using the basic word processor, web design, spreadsheet, database and publishing packages

For the first part of the course the students will alternate between brief theory sessions and independent learning, where the classroom environment can appear relaxed but is actually quite challenging for the pupils. The teacher involved provides support according to the needs of the pupil. This part of the work is centre assessed, usually after the Easter Holidays.



The remaining 40% of marks for the course comprise a single 1½ hour written paper to be undertaken in the summer of Year 10. During the late Lent/Summer term class time will be put aside to cover the theory work and to undertake a revision programme for the final examination.

Although this course only runs for Year 10 it will provide the depth of experience to equip the students for using ICT in future study and as a general life skill. There are opportunities to develop ICT skills through other activities in Year 11 and beyond.



MATHEMATICS

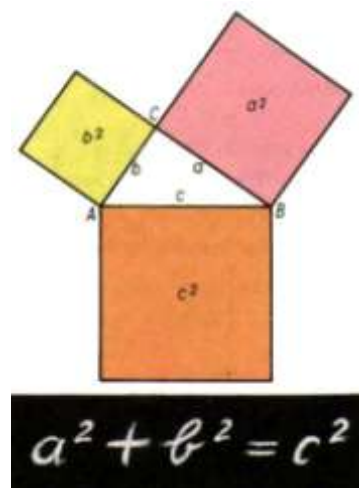
Mathematics is a vital, compulsory subject for all students up to GCSE. Not only is it viewed as a necessary subject by most employers, studying mathematics has very tangible benefits.

Mathematics promotes logical reasoning, clear presentation and argument. It encourages precision in both written statements and in mental processes and its study develops a methodical and systematic approach to solving problems. It is an important tool in modelling real-world situations and analysing their behaviour.

Pupils are taught mathematics in sets at a pace and a level appropriate to their developing abilities. A variety of syllabuses are used to enable students to work to their full capacity while increasing in mathematical confidence. We currently enter our students for one of three examinations; the IGCSE at Extended Level, the GCSE at Higher Level and the GCSE at Foundation Level. In matching a programme to a student, our aim is simply to provide the 'best fit' for each student that takes into account his/her aptitude, interest and future ambition in Mathematics.

The IGCSE is generally recognised as a rigorous, demanding course which is most appropriate for students who find higher level work particularly engaging and who are intending to study Mathematics beyond GCSE level, at AS or A2. Many of these students will also be considering following the Further Mathematics course in Year 13 and/or a career involving further study of the subject. The IGCSE examination, from Cambridge International Examinations (CIE), consists of two written papers with calculators permitted in both papers. The first paper (short answers) is 1½ hours long and the second paper (structured questions) is 2½ half hours.

The majority of our students, however, are now prepared for the two GCSE syllabuses from Edexcel. Many of these students will be working to secure an A or A* in Mathematics from the Higher tier course, while others, being less confident in the subject, will be aiming to secure a sound C grade 'pass' as a terminal qualification. Both of these syllabuses cover a combination of traditional and modern topics, with an emphasis on the development of Mathematics that can be used in everyday situations. The GCSE examination consists of two written papers, each of 1¾ hours (Higher tier) or 1½ hours (Foundation tier) duration, and calculators are only permitted in one of the two papers.



There is no coursework assessment in any of the programmes. Students in Set 1 may also follow a more advanced programme during Year 11. The final decision on entry tier for each set will be left as late as is practicable.

MODERN LANGUAGES



When you're away on holiday and your parents are struggling to order something in a restaurant, the Spanish, German or French that you learn for your GCSE at Trent might just help you out. Let's face it, if *¡dos cervezas por favor!* is the extent of mum and dad's holiday Spanish, then it's time for you to show them that you don't have to struggle to be understood when you're travelling abroad. If you enjoy travel, holidays, culture and communicating, you should not consider doing just one language for GCSE. Indeed a good number of Trent students take two languages at GCSE.

By the end of Year 9, pupils will have achieved a good grounding in Spanish, and most will have extended their contact with a foreign language by way of a two year course in either French or German. The GCSE language courses offered at Trent build on and extend this knowledge, as well as providing an insight into the culture of language studied.

All pupils are required to take a minimum of one Modern Foreign Language, and in fact a healthy number take two to GCSE level. Spanish may be taken in conjunction with either French or German.

We follow the OCR syllabus, with assessments in all four language skill areas, namely Listening, Speaking, Reading and Writing. The following topic areas are covered:

- Home and local area
- Health and sport
- Leisure and entertainment
- Travel and the wider world
- Education and work

We enter candidates for either Higher Tier or Foundation Tier. If you want to aim for the A* you must take all four skills at Higher Tier. For those who find languages challenging, taking all the skills at Foundation Tier may offer you the best chance of scoring a C grade, which is the highest grade attainable at this level. For more information on the Modern Languages GCSE courses we offer at Trent, speak to any member of the Department, or go to www.ocr.org.uk

Seeing and experiencing a language is the best way to learn, and hence we aim to consolidate and improve language skills by way of trips abroad. A trip for Spanish students is offered to Cantabria, whilst German students are visiting Langen later in the academic year.

Those pupils who study Languages at AS and A2 level often continue with their studies at university, where they find that Language graduates have one of the highest employment rates, bettered only by Medicine, Education and Law graduates (University of Wales).

MUSIC

Why do Music GCSE?

1. If you play a musical instrument, it can enhance your enjoyment and understanding of the music that you play.
2. If you are anticipating a musical or an artistic career of some kind, it could obviously be a very useful subject to know about.
3. Performance counts for 40% of the total GCSE grade so if you play an instrument to approximately Grade 3/4 standard you are almost halfway to an A/A* grade already.
4. If you want to be a rocket scientist, GCSE music may not be a particularly useful subject for you. However, if you want to be a *cultured* rocket scientist...!

Requirements

1. You need to be a minimum of Grade 3 standard on an instrument/voice, have lessons on the instrument/voice and be committed to continuing with those lessons.
2. You must be able to read and follow music notation in treble or bass clef.

The Course

The course is split into the following four sections:

- **Listening (20%)** In this part of the course you learn about music through exploring music from three strands:
 - ✓ *Western Classical Music* – Baroque Orchestral Music, The Concerto, Music for Voices, Chamber Music, The Sonata
 - ✓ *Popular Music in the 20th and 21st centuries* – Blues, Popular music of the 1960s, Rock Music, Rhythm and Bass, Hip-Hop, Music Theatre, Film Music
 - ✓ *World Music* – Music of the Caribbean, Africa and India

You are prepared for a listening examination which you sit at the end of year eleven, where you listen to musical extracts and answer questions about the music you hear.

- **Composing and Appraising Music (20%)** You need to submit a composition which must be linked to one of the three strands listed above (the particular strand is specified by the examining board). Composition is a challenging skill, but you do receive teaching on how to do it, and the computer software in the music department is of great assistance. When you have completed your composition you have to appraise the success of the process of composing and the outcome (the finished recording). The composition and the appraisal are each worth the same number of marks.
- **Performing (40%)** You need to submit **two** recorded pieces, one of which is a solo, and the other of which is an ensemble. You can record these pieces at any time during the GCSE course. The pieces need to grade four standard or above to get an A/A* grade. The pieces do not have to be classical, and you do not have to perform your final assessment to an examiner – just a teacher and a microphone! If you don't believe you have done yourself justice the first time around, you simply record it again.
- **Composing (20%)** You need to submit a composition which can be in any style or genre.

PHYSICS

The study of Physics at GCSE appeals particularly to those pupils with a curiosity about how things work, but success depends on the ability to think logically and to cope with numerical work.

The course involves less knowledge of actual facts than perhaps found in other subjects. Instead it depends on the **understanding** of ideas and their application to numerical and practical problems. As such a firm grasp of mathematics is useful.

The course continues to include practical work which will be assessed by terminal exam in practical skills.

The theory builds on previous work, but the main topics of mechanics, electricity, light, heat, waves and modern physics will be comprehensively covered in the two years of the GCSE course.

This course is not for everyone but once dropped it is very difficult to pick up again. However for the right candidate it is a subject with high academic standards which has an everyday relevance as well as having the capacity to explain some of life's big mysteries.

If a candidate were to continue studying beyond GCSE to AS and A level then the mathematical demands become greater. It is advised that only the best GCSE candidates continue to A level. However an A level in physics is widely recognised as a high academic achievement due to the perception of it as a "hard" subject. An A level in physics would allow you access to many university courses other than straight physics. Such courses include many areas of Engineering and Technology, Electronics, Computer Science, Material Science, Biophysics and Bio-engineering. All of these are very highly regarded and rewarding subjects.

To find out more feel free to discuss your thoughts with any member of the physics department.

RELIGIOUS STUDIES

Philosophy of Religion & Ethics

AQA Specification A, Religious Beliefs and Lifestyles

The RS GCSE consists of two units, each accounting for 50% of the total marks. There are two written examinations at the end of Year 11, each lasting one and a half hours. There is no coursework.

Unit 1 Christianity: Ethics

For this unit Candidates should know and understand the reasons for different opinions and practices among Christians.

Topics for study:

1. The Right to life: Abortion & Euthanasia
2. The Use of Medical Technology: Fertility Treatments, Gene Therapy, Genetic Engineering and Cloning.
3. Personal Responsibility: Sexual Relationships & Drugs.
4. Social Responsibility: Marriage & Prejudice & Discrimination
5. Global Concerns: The Environment & World Poverty.
6. Conflict: War & Peace, Crime & Punishment.

Unit 2 Philosophy of Religion

In this unit candidates study the philosophical arguments that relate to religion and to belief systems. Candidates will focus on ultimate questions and will be encouraged to think about how the different answers that are given in relation to a particular issue may challenge religious beliefs and practices.

Topics for study:

1. The Existence of God
2. The Characteristics of God
3. Revelation and Enlightenment
4. The problem of Evil
5. The Compatibility of Science and Religion
6. The Afterlife

SCIENCE **(Single award)**

Science continues to play a vital part in all our lives and it is becoming increasingly important to continue its study up to the end of year 11. This course (AQA Science B 4461) provides a valuable, balanced science education. The emphasis is on how science works and its implications to society.

It is equivalent to a single GCSE. The coursework will consist of a practical skills assessment and written test.

There will be one exam paper in Biology, Physics and Chemistry units. These can be taken in June of Year 10 and January and June of Year 11. There is an element of practical coursework that will be tested internally and moderated externally. AQA will set the coursework and test.

The topics covered, which are a subset of those studied in the separate sciences, are:

Biology: Human Biology, Evolution and Environment

Chemistry: Oils, Earth and Atmosphere, Products from Rocks

Physics: Energy and Electricity. Radiation and the Universe

Although the method of assessment (25% each for the three units, 25% practical coursework/test) and the standard of the course content can be considered to be equivalent to the separate sciences, there is insufficient content to allow the study of a separate science at A level.