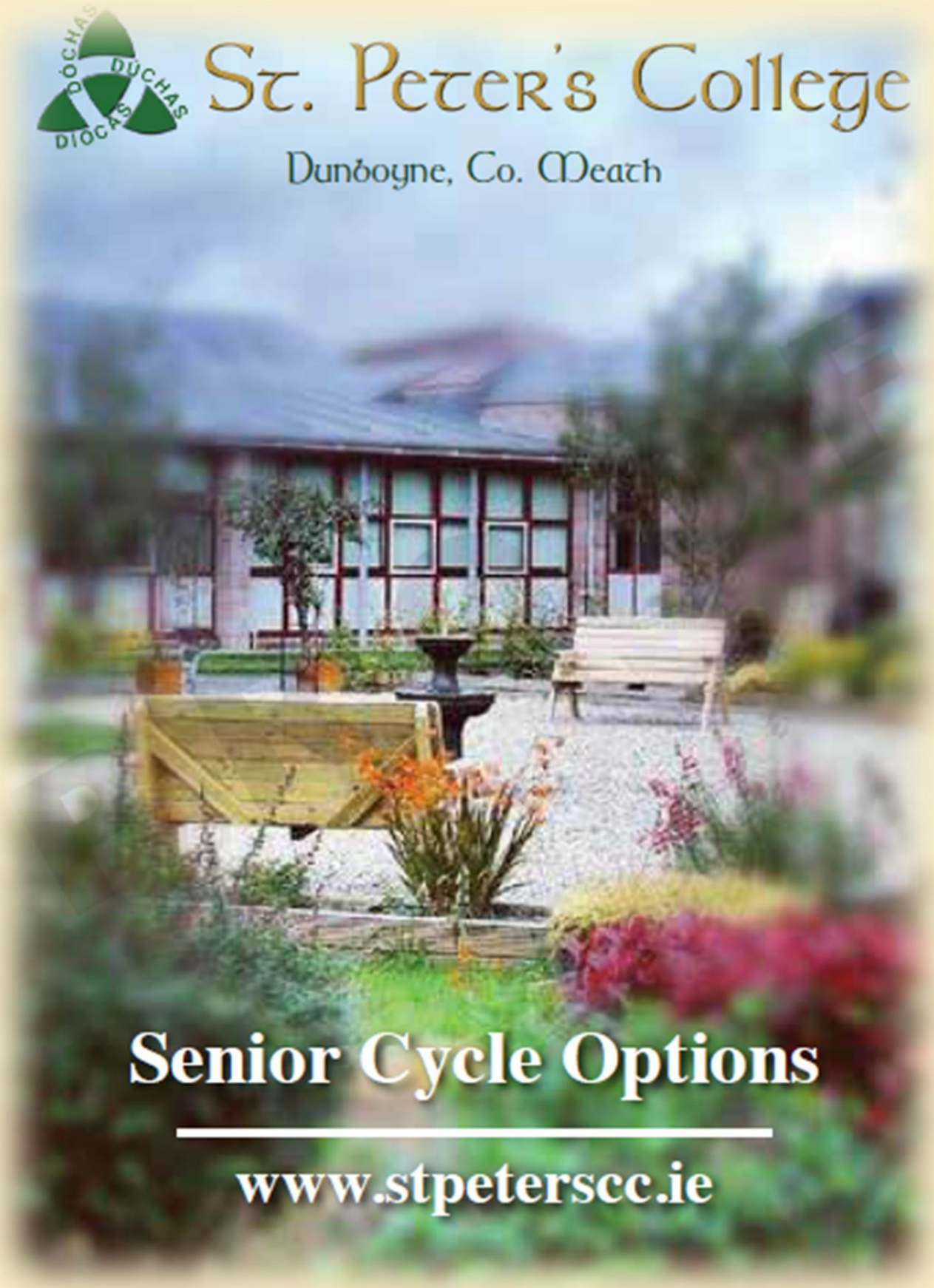

St. Peter's College
Dunboyne, Co. Meath
Senior Cycle Options
www.stpetersсc.ie

Contents

Leaving Certificate Subject Choice

A Guide to Using this Booklet

Dear Students and Parents,

There are a number of very important links below that you should view in conjunction with reading through this booklet.

Mr McNamara gives an outline of the Senior Options process here.

Guidance Counsellors - Mr McCarthy's and Ms Collin's Senior Options presentation.

Third year students can ask questions during their Guidance classes.

Transition Years and Third years can email Mr McCarthy bmccarthy.spc@lmetb.ie or Ms Collins ncollins.spc@lmetb.ie if they have any questions or to request an appointment.

St Peter's College bases the number of classes per optional subject provided based on student preferences. Preferences received after the deadline will not be included in this process.

The first question students and parents should consider is which senior option programme they wish to follow:

Leaving Certificate Established or Leaving Certificate Applied.

There are two options available in St Peter's College for the senior cycle Leaving Certificate Established and Leaving Certificate Applied.

Leaving Certificate Established is the direct route to university, however there are clear pathways to Universities, Institutes of Technology, Apprenticeships and direct routes into the workforce from following the Leaving Certificate Applied Programme.

Parents and students should have a serious conversation about which programme is the best fit. If parents or students are not sure which course is best, please contact the career guidance team via the main office.

Please take some time to watch the following information videos and consult the LCA Hub on www.stpeterscc.ie

Please remember that students apply for a place on the LCA programme and their suitability will be considered following a review of their attendance and assessment of their application to their work in class before a place will be offered.

LCA Information

LCA Overview	**Mr McNamara Deputy Principal**
LCA Careers	**Mr McCarthy Career Guidance**
LCA Pathways	**Mr Denis Leonard Director of Dunboyne College of Further Education**

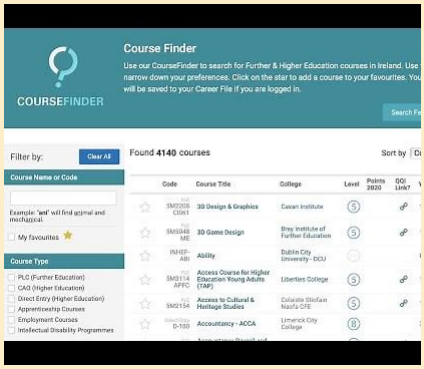
LCA – is it for me?

LCA Assessment

Parents should use the following excellent resources to research all third level courses available.

Careersportal Leaving Cert Subject Guide: CareersPortal.ie

Careersportal Video Course Finder: (339) CareersPortal.ie - How to use the CourseFinder Tool - YouTube



CareersPortal.ie - How to use the Careers Portal Course Search tool

Click on the link below to access the Course Search function on Careers Portal- https://careersportal.ie/courses/simple_search.php?default=1&txt=&cols_in=#results

www.youtube.com

Qualifax: Guide to the new Qualifax experience

Qualifax Search CAO courses

There are several different ways to search for courses on Qualifax. You can search courses from the Home Page or go to the Students Tab, click on Course Finder then choose your Course Type for e.g. Higher Education CAO. This video demonstrates searching Higher Education CAO courses.

vimeo.com

Classroom Guidance Video on Selecting Leaving Cert subjects: (339) Subject Choice for Leaving Cert - YouTube

Subject Choice for Leaving Cert

A full run down of what to consider when choosing subjects for your Leaving Cert. To do the 3rd language or a science subject?

www.youtube.com

Leaving Certificate Applied Programme

The Leaving Certificate Applied is a distinct, self-contained two-year Leaving Certificate programme aimed at preparing students for adult and working life.

The programme sets out to recognise the talents of all students and to provide opportunities for developing personal responsibility, self-esteem, and self-knowledge, and helps students apply what they learn to the real world. It is a practical programme which recognises that individuals differ considerably in the ways they process, assimilate, recall information, and learn.

A student who has been awarded the Leaving Certificate Applied can go on to choose from a wide range of Post Leaving Certificate courses (PLCs). Dunboyne College of Further Education is a popular choice for many of our LCA students. Many PLC courses lead to either a level 5 or a level 6 FETAC award. Whilst students cannot gain direct entry through the Central Applications Office (CAO), in some cases, they can progress with this award to a third level course in higher education institutions such as, institutes of technology and universities. Students may opt to complete a traineeship or apprenticeship programme or enter the workplace directly.

Courses are offered in three principal areas:

· Vocational Preparation

· Vocational Education

· General Education

Each course is made up of a number of modules. Each module takes half a year to complete. There is also a wide range of practical courses, called vocational specialisms, from which the student can choose.

(i) Vocational Preparation

Work experience is essential to this element of the programme. Students are prepared for adult and working life through a range of courses and modules including English and Communication, Guidance, Job Search, Work Experience, Enterprise, Community Work, Work and Living.

(ii) Vocational Education

All students take courses in Mathematical Applications and an Introduction to Information and Communication Technology. They also choose two specialist courses from the following career related areas offered in St. Peter's College.

Childcare/Community Care, Graphics and Construction Studies, Engineering, Hair and Beauty and Hotel, Catering and Tourism and Horticulture. (Options vary annually)

(iii) General Education

Students experience a broader dimension to their education through courses in Arts Education, Gaeilge, Modern Languages, Leisure and Recreation, Social Education.

LCA Assessment

The two-year programme consists of four half-year blocks called sessions. Achievement is credited in each session on the completion of modules. Each of the courses are designed on a modular basis. A module takes thirty hours to complete. Students must take a total of 44 modules over the two-year programme.

Over the two years, students complete several key assignments. There are several learning experiences that have been selected from the modules as being of key importance. Key assignments plus 90% attendance are a minimum requirement to obtain credit for the module. There are four key assignments for each module.

Seven Student Tasks bring together the different learning experience that the students have gained from the courses.

There is also a final examination in each of the following areas:

- English and Communication
- Two vocational specialisms
- Mathematical Applications
- Language
- Social Education

Credits towards the final award are accumulated throughout the two years of the programme through:

1.) Satisfactory completion of modules. (Maximum of 62 credits)

2.) Performance of student's tasks. (Maximum of 70 credits)

3.) Performance in the final examinations. (Maximum of 68 credits)

Students who successfully complete the programme are awarded a Leaving Certificate from the Department of Education and Science. The certificate is awarded at three levels:

Level	Grade	Credits
Pass	60-69%	120-139 credits
Merit	70-84%	140-169 credits
Distinction	85-100%	170-200 credits

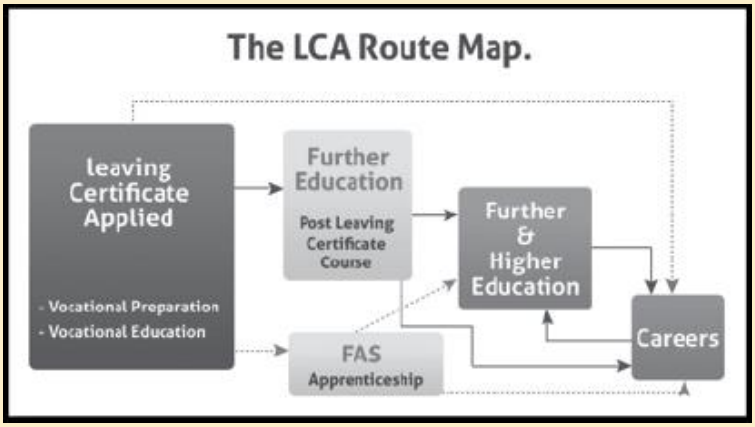
Candidates who get less than 120 credits or who do not complete the course, are awarded a Record of Experience.

Work Experience

Students have a wonderful opportunity to complete work experience one day a week over the two years. The aim of work experience is to provide students with a deeper understanding of the workplace and practical hands-on experience of the working world. It is a wonderful opportunity to try new areas, develop new skills, challenge perceptions and make extremely useful contacts for future endeavours.

Further information:

LCA Hub on the school website, https://dunboynecollege.ie, www.apprenticeship.ie, www.fetchcourses.ie, #thisisfet



Leaving Certificate Subject Choice

This booklet is designed to help students choose the subjects that they will study for the Leaving Certificate and the Leaving Certificate Applied programmes.

The Career Guidance teachers and all staff are available to assist you in this decision. There are a number of considerations that need to be highlighted when choosing your subjects.

- Students following the established Leaving Certificate programme must take the core subjects of English, Maths and Irish (unless exempted by the DES)

- Four optional subjects are selected from the list of subjects outlined in this booklet. We will always endeavour to provide the optional choices requested. However, students and parents should be aware that some subject combinations may not be available due to timetabling constraints.

When choosing your optional subjects consider:

• Subjects you have a history of doing well in

• Subjects you will enjoy

• Subjects that suit the individual student – do not pick a subject because your friends are choosing it

• Talk to your teachers about subject course content for the Leaving Certificate.

• Ask the guidance counsellors for advice on subject choice.

Entry requirements for Courses

Many courses have specific requirements. These should be taken into consideration also when choosing subjects.

Third Language
NUI Colleges require a third language for some courses.

NUI Colleges are

UI Maynooth, University College Dublin, University College Cork, University College Galway, Royal College of Surgeons, National College of Art and Design, St. Angela's College, Institute of Public Administration, Shannon College of Hotel Management and Milltown Institute.

Higher Level Maths
Higher Level maths is very demanding and time consuming. Honours engineering courses require
higher level maths grade H4.

Higher Level Irish

Primary school teaching requires higher level grade H4.

To be certain of both minimum entry requirement and specific subject requirements for a course,
it is **ESSENTIAL** to check with the individual college or course website. Alternatively, ask the guidance counsellors for advice if you are unsure of any details.

The following subjects are offered for study at Leaving Certificate level (subject to demand)

Accounting
Agricultural science
Applied Maths
Art
Biology
Business
Classical studies
Chemistry
Computer science
Construction Studies
Design & Communication Graphics
Economics
Engineering
Geography
History
Home Economics
Modern Foreign Languages
(French, Spanish & German)
Music
Physics
Politics & Society
Religious Education

Each student sits seven subjects and the best six results are used to determine how many CAO points a student achieves.

• The CAO points system is used to determine access to universities and Institutes of Technology.
• Entry to Institutes of Further Education is achieved by consideration of results and interview.
• Subjects at higher level have more points available than subjects taken at ordinary level.

Useful websites and resources

There are many websites which can be used to research subjects, 3rd level courses and careers. Spend some time researching the information available on the sites listed below.

https://www.scoilnet.ie/ Department of Education and Skills official portal for Irish education
https://www.cao.ie/ Central Applications Office
https://www.ucas.com/ UK college application system
https://www.whichcollege.ie/ Information on full-time courses in Ireland
https://careersportal.ie/ Information on career planning, training and employment
https://qualifax.ie The National Learners Database

Subject Guide:

Modern Foreign Languages

Modern Foreign Languages provide students with the skills, knowledge and opportunity to succeed in a global environment and in a multinational workplace.

Note: A modern language is required by both NUI Maynooth and UCD.

However, some NUIM and UCD faculties such as Science, Nursing, Engineering and Agriculture no longer require a modern language. The language requirement for other universities vary e.g. Trinity accepts Irish as a modern language, while DCU and Technical University of Dublin (amalgamation of DIT, I.T. Blanchardstown and I.T. Tallaght) accept English or Irish

How will French/Spanish/German be different after the Junior Cycle?

Modern Foreign Languages (MFL) expands on knowledge gained at Junior Cycle and has the requirement of a compulsory oral examination.

What will I learn in Leaving Certificate French/Spanish/ German?

- **Oral** – talking about yourself and everyday life
- **Aural/Listening**
- **Reading Comprehension** – understanding contemporary issues in texts in the target language
- **Writing** – communicate and express opinions through letters, notes, email, reports, diary entries & responses to current affairs
- **Culture** – gain an insight into the culture and history of French, Spanish or German society.

What other subjects are connected to Modern Foreign Languages?

- Geography
- History
- Science
- English
- Home Economics
- Art
- Music

How will I learn Languages in school?

- Active participation in class
- Watching documentaries and accessing the Internet
- Audio-visual presentations

• Role plays and interviews
• Pair and group work
• Reading texts in the target language
• Take part in an exchange programme.

What careers are linked to Modern Languages?

• Tourism and Travel
• Translation and Interpretation
• Teaching
• Careers with an international or multinational dimension such as:

- Engineering
- Law
- Business
- Customer Service
- Information and Communication
- Technology (ICT)

How will I be able to track my progress?

• Feedback following class tests
• Teacher-student interaction
• Continuous assessment
• Reports
• On-going feedback on oral work in class

How are Modern Foreign Languages useful to me?

Study of a modern language is useful in that it:

- gives you an insight to many different cultures and societies
- improves your communication skills – in both the MFL and English
- improves your career prospects
- improves your independent learning skills and your ability to learn other languages

How can I learn French/Spanish/ German outside of school?

- Watch foreign language films/series
- Read foreign magazines and newspapers
- Watch documentaries on YouTube and TV
- Get a pen-pal
- Travel and use the language of the country on holidays

What is the French/Spanish/ German exam like?

- The written exam is of 2hrs 30mins duration, a separate listening examination is of 40mins duration.
- Reading Comprehension (30% Higher Level & 40% Ordinary Level)
- Written Comprehension (25% Higher Level & 15% Ordinary Level)
- Listening Comprehension (20% Higher Level & 25% Ordinary Level)
- Oral Examination (25% Higher Level & 20% Ordinary Level)
- The oral examination takes place in March or April of 6th year

Subject Guide:

Biology

Biology is the science of life which focuses on living things, organisms, both the visible world of animals and plants as well as the invisible world of micro-organisms such as bacteria and viruses.

The Leaving Certificate course covers a number of branches of Biology. These include botany – the study of plants; zoology – the study of animals; microbiology – the study of micro-organisms, as well as ecology, anatomy, physiology, embryology and biochemistry.

The Biology Course is split into 3 units

Unit 1: The study of Life (e.g., food, ecology)

Unit 2: The cell (e.g., cells, enzymes, photosynthesis, genetics)

Unit 3: The organism (e.g., bacteria, blood, human breathing, excretion, senses, reproduction, plant responses)

Each area is studied in depth. The above is a sample of some of the topics.

What other subjects are connected to Biology?

- Geography
- Chemistry
- Home Economics
- Graph work in Maths
- Physical Education

How will I learn Biology?

- Active participation in class
- Linking the theoretical elements to the practical's undertaken.
- Home study of class notes and answering exam papers
- Practical work within and out of the classroom

- Recording experiments into a Laboratory book

What careers are linked to Biology?

- Nursing
- Veterinary & Veterinary Nursing
- Health Care
- Environmental Management
- Education
- Biotechnology
- Forensic Science
- Beauty Therapy
- Biomedical Engineering
- Medicine / Doctor
- Lab Technician

How will I be able to track my progress?

• Feedback following class tests
• Teacher-student interaction
• Continuous assessment
• End of terms tests and reports

What is the Biology exam like?

The exam is of 3hrs for both the higher and the ordinary paper

Section A: Short Questions; Answer 5 out of 6 questions, each carrying 20marks

Section B: Experiment Questions; Answer 2 out of 3 questions, each carrying 30 marks

Section C: Long Questions; Answer 4 out of 6 questions, each carrying 60 marks
Questions are taken from all sections of the course.

How is Biology useful to me?

Biology is the study of life; it will allow you to:

• explore the diversity of life and the interrelationship between organisms and their environment
• gain an insight into the function and role of organisms
• become aware of how humans use other living things and their products to enhance human health and the human environment

How can I learn about Biology outside of school?

• Watch scientific documentaries on YouTube and TV
• Reading relevant newspaper articles on science research and its findings
• Visit museums that have areas linked to science findings
• Read relevant books about topics that are of interest to you

We offer both Biology at higher and ordinary levels.

It is recommended that anyone considering higher level biology should have achieved a minimum of a merit or higher in Junior Cycle Science.

Students with a lower grade should consult subject department before selecting subject.

Subject Guide:

Chemistry

Chemistry is concerned with the structure and composition of materials and the changing of one substance into another. It is often referred to as the 'central science' as it bridges natural sciences, such as physics, geology and biology with each other. Everything around us is made up of chemicals from the foods we eat to the clothes we wear and the air we breathe. It influences our lives in many ways and is also concerned with improving health and increasing life expectancy.

The Chemistry course is designed to help students achieve a very good understanding of major chemistry concepts and develop laboratory techniques. It is regarded as a foundation course for students hoping to study science in third level colleges.

How will Chemistry be different after the Junior Cycle?

Chemistry is a very important choice for Leaving Certificate. It continues on from the Junior Cycle course and is examined in a single written 3 hour exam at the end of the Senior Cycle.

There is an increase in the mathematics content and students who did not study Junior Cycle honours maths should consult a science teacher before selecting Chemistry.

What will I learn in Leaving Certificate Chemistry?

- History of the atom
- History of the periodic table
- Titrations – Volumetric Analysis
- Organic families and their reactions
- Fuels, petrol and catalytic converters
- Environmental Chemistry
- Rates of reactions and chemical equilibrium
- Acid, Bases, pH and Indicators

• Bonding and how it affects our everyday lives

What other subjects are connected to Chemistry?

• Physics
• Biology
• Maths
• Geography

How will I learn Chemistry in school?

• Active participation in class
• Calculations
• Hands on laboratory classes while covering the many mandatory experiments
• Manipulation and graphing of results
• Learning of definitions
• Problem solving
• Drawing diagrams

What careers are linked to Chemistry?

Analytical chemist • Atmospheric chemist • Biochemist • Biotechnologist • Chemical engineer Cosmetic scientist • Doctor • Environmental scientist • Food scientist / dietician • Materials scientist
Formulation chemist • Health and safety advisor • Crystallographer • Forensics • Pharmacy Toxicologist • Vet • Dentist Marine scientist • Molecular biologist • Nuclear scientist • Patent attorney Med lab scientist • Research and development chemist

How will I be able to track my progress?

- Feedback following class tests
- Teacher-student interaction
- End of term tests and reports
- Online collaboration between students and teachers using websites e.g. “One Note”, “Quizlet”.

What is the Chemistry exam like?

The exam is of 3hrs duration
Section A: 3 experiment questions
Section B: 8 theory questions
Students must do at least 8 questions, with a minimum of 2 from section A

How is Chemistry useful to me?

Research carried out by the Association of Graduate Recruiters shows that employers put a high value on transferable skills such as

• logical thinking
• team working
• communication
• problem-solving
• organisation
• time management

All of these skills are an integral part of the study of chemistry. A qualification in chemical science can open up a whole range of careers that may not require detailed knowledge of chemistry but require many of the skills chemical scientists develop during their studies.

How can I learn about Chemistry outside of school?

- Pay attention to TV and newspaper articles about fossil fuels, greenhouse gases and carbon emissions
- Look at the ingredients in cosmetics, medicines, hygiene products, etc.
- Watch experiments on YouTube
- Cook or clean, chemistry is all around you in the home!
- Search science websites for up-to-date discovering

Chemistry is a subject that is associated with providing a range of exciting career opportunities in the Science field. The chemical industry represents an important economic activity in Ireland, especially in research and development.
Chemistry places a huge emphasis on experimental work and scientific methods.
If you are logical, observant and curious about the world around you,
Chemistry requires your consideration as a subject for the Leaving Certificate

Subject Guide:

Physics - advice from Mr Metcalfe

Physics (Ancient Greek 'phusikë') is the original science. All science and technology have its roots in Physics as everything in the world, indeed the universe, can be explained through Physics. Without Physics you would not have your phone, tablet, 3D movies and microwaves. An understanding of physics helps to solve environmental, social, health and technological challenges. Physics is at the heart of everything, from the tiniest sub-atomic particle right up the universe (which encompasses all space-time!)

To study Physics is to learn about and undertake practical work involving elementary particles, nuclei, atoms, molecules, solids, liquids, gases, plasmas, the brain, complex systems, supercomputers, the atmosphere, planets, stars, galaxies, the universe itself and the energy which interacts with all of them. If you are curious about how things work and love solving problems then Physics is for you.

Note: a science subject (occasionally two) is a requirement for many third level courses in the medical, engineering and science areas.

How will Physics be different after the Junior Cycle?

The Leaving Certificate course follows directly from Junior Cert Science covering more topics in greater depth. The course is heavily based around experiments and you will learn how to accurately record and analyse results, and how to minimize and accommodate for experimental errors. You will learn how to think and work through problems logically to arrive at an answer. The laboratory experiments and theory will be tested in a written examination. There is an element of maths in this course, but if you can plot a graph, find the slope, re-arrange equations and are confident in using a calculator, then you should be capable of keeping pace with the class.

What will I learn in Leaving Certificate Physics?

- Mechanics and Motion
- Temperature and Heat
- Waves, Sound and Light
- Optics
- Electricity and Magnetism
- Semiconductors
- Atomic Physics and X-rays
- Nuclear and Particle Physics

What other subjects is Physics connected to?

- Chemistry/Biology
- Maths
- Technology
- Applied Maths
- Construction
- DCG
- Geography

How will I learn Physics in school?

- Active participation in class
- Experimental work
- Data logging with digital sensors
- Analysing data and graphs
- Writing laboratory reports
- Class discussions
- Demonstrations in class/on-line/documentaries
- Using computer simulation software
- Class trips

What careers are linked to Physics?

- Engineering and technology
- Meteorology
- Software and Game design
- Physics Teacher/Lecturer
- Telecommunications
- Astrophysics
- Physics Teacher/Lecturer
- Film, TV and Radio Production
- Telecommunications

The following courses have physics included in their first-year modules:
Medicine, radiography, medical scientist, physiotherapy, midwifery, nursing, dental science, forensics, architecture.

How will I be able to track my progress?

- Feedback following class tests
- Teacher-student interaction
- Continuous assessment
- Reports
- Ongoing feedback on laboratory write-ups

What is the Physics exam like?

The exam is of 3hrs duration

Section A: Mandatory Experiments answering 3 out of 4 questions – 120 marks

Section B: In-depth questions answering 5 out 8 – 280 marks

These In-depth questions are broad and theory based.

How is Physics useful to me?

• The study of Physics helps to create an awareness of the environment, both built and natural.

• You will learn practical techniques and use modern scientific equipment.

• It teaches you to think logically and express your thoughts in a concise manner.

• You will learn to solve problems and think creatively.

• You will be able to use mathematics in real life situations.

• You will be able to observe events and ask sensible questions about them.

• Many employers prefer Physics students because of the logical and numeracy skills developed.

How can I learn about Physics outside of school?

• Myth-busters, anything on T.V. with Brian Cox or Richard Hammond, engineering programs, Dara O'Briain, The Big Bang Theory!
• Science and technology articles in newspapers and magazines
• Google 'How stuff works'
• YouTube
• If anyone tells you how something works – remember what they say is based on some physics principle!

It is recommended that anyone considering higher level Physics should have achieved at least a merit in the higher-level Junior Cycle Science and Higher-Level Maths.

Students with a lower grade should consult subject department before selecting subject.

Subject Guide:

Applied Maths

Applied Maths is the study of practical applications of mathematics to the real world and physical problems. It is typically associated with engineering and physics but is also used in economics, finance, business, environmental studies, even chemistry and medicine. Applied Maths covers the mathematics behind the behaviour of objects when placed in various situations such as being thrown as projectiles, bounced off walls or other objects, swung around on a rope or balanced against a wall.

If you need high points to get into college and are good at maths and physics, Applied Maths has the highest H1 percentage in the leaving certificate. 27% of approximately 1280 students who sit the higher-level exam receive a grade of H1 or H2.

How will Applied Maths be different after the Junior Cycle?

Applied Maths is only taught in the senior cycle but if you are strong at maths and physics you should get similar grades in this subject. It is recommended that if you chose to do Applied Maths that you do physics due to the strong overlap between the two subjects. If you are considering doing any kind of engineering in college Applied Maths is very important as it will be done as part of the first-year course in college. A lot of students do Applied Maths to increase their points in the Leaving Certificate and it is ideal if you are weak at other subjects such as languages but good at maths. It will also give you a better understanding of some parts of the higher-level maths course especially trigonometry, calculus (differentiation and integration) and linear motion.

What will I learn in Leaving Certificate Applied Maths?

New specification to launch in September 2021. The new specification will provide for an even broader application of mathematics.

What is applied Math's?

Deals with solving real-life problems, giving a deep understanding of the application of Math's

Explores boundaries between Math's and other disciplines.

Use to model projections and create solutions in a wide variety of sectors such as the sciences, finance, medicine and engineering.

Very beneficial in third-level enabling students to think creatively and to problem solve.

What other subjects are connected to Applied Maths?

- Physics
- Maths

How will I learn Applied Maths in school?

- Active participation in class
- Class discussions
- Watching java applets
- Applying problem solving skills

What careers are linked to Applied Maths?

- Engineering and Technology
- Science – Physics, Mathematical Physics
- Physics Teacher/Lecturer
- Aerospace
- Finance and economics
- Investment management
- Mathematical modelling

How will I be able to track my progress?

- Feedback following class tests
- Teacher-student interaction
- Continuous assessment
- Reports

Applied Maths exam and coursework

- Written exam = 80% [At end of 6th year]
- Modelling project = 20% [This project is completed during 6th year and will focus on the application of modelling skills]

Full specification is available here

How is Applied Maths useful to me?

- It teaches you to think logically and express your thoughts in a concise manner.
- You will learn to solve problems and think creatively.
- You will be able to use mathematics in real life situations.
- There is a public perception that only the top students in the country do Applied Mathematics. This perception will stand favourably to students when attending

interviews for high-profile jobs in the near future.

• It is excellent for developing problem solving skills which are very valuable for future employment.

How can I learn about Applied Maths outside of school?

• Knowing how to balance a ladder against a wall so that it doesn't slip.
• Using a pulley system to reduce the applied force needed to lift a heavy load.
• Knowing the maximum angle to kick a ball so that it goes the furthest distance.
• Keeping the right distance behind the car in front so that if it stops suddenly you won't crash into it.

All of the above are examples of things that are done unconsciously (no numerical calculations), Applied Maths just gives you the numbers involved e.g., amount of friction needed so the ladder won't slip, the number of pulleys needed to lift the load, the maximum angle to get the greatest distance and the minimum distance that you need between your car and the car in front. You use it every day.

It is recommended that anyone considering Applied Maths should have achieved at least a merit in the higher-level Junior Cycle Maths.
Students with a lower grade should consult subject department before selecting subject.

Subject Guide:

Agricultural science

Agricultural science is the study of the science and technology underlying the principles and practices of agricultural. It aims to develop knowledge, skill and attitudes concerning the factors that affect the long-term wellbeing of agricultural resources, and places emphasis on the managed use of these resources.

What will I learn in leaving certificate agricultural science?

The course consists of the study of a variety of aspects of agriculture under the following headings:

- Soils
- The general structure and function of plants
- Farm crops – cereal and roots
- Farm crops – grassland
- Trees and shelter
- Structure and function of the animal body: the cow, sheep, horse and pig
- Farm buildings
- Farm-house environment

What other subjects are connected to agricultural science?

- Biology
- Geography

How will I learn agricultural science in school?

- Active participation in class
- Experimental work
- Analysis of data and graphs
- Writing laboratory reports
- Farm visits
- Project work

What careers are linked to agricultural science?

- Horticultural
- Food science
- Green keeping
- Agricultural advisors
- Environmental science
- Forestry
- Farming
- Marine science
- Sports turf management
- Renewable energy
- Teaching

What is the agricultural science exam like?

The examination in agricultural science consists of

a) A terminal examination paper – 75%

b) An assessment of the work of the candidate during the course – 25%

Assessment will be under the headings:

- identification of plant and animal types associated with agriculture
- practical experience with crops, livestock, house and farmyard layouts
- investigations carried out related to ecology, soil science, animal physiology, plant physiology, genetics and microbiology

How can I learn about agricultural science outside of school?

- Take an active interest in local and national agri-industries
- Food industry visits
- Farm visits
- Listen to radio programmes such as Countryfile – RTE Radio 1
- Watch TV programmes such as 'Ear to the Ground'
- Read newspapers such as 'The Farmers Journal' and 'The Farming Independent'.
- Contact organisations such as the IFA, Macra na Feirme.

Subject Guide:

Art

Art is the process of human creativity and imagination.

How will Art be different after the Junior Cycle?

Art is a very popular choice for Leaving Certificate.
It expands on the Junior Cycle course with the added component of History of Art which is worth 37.5% at higher level and ordinary level.

What will I learn in Leaving Certificate Art?

- Painting
- Drawing
- Graphic Design
- Craft Design
- History and Appreciation of Art
- Life Drawing

What other subjects are connected to Art?

- Science
- Maths
- Religion
- Woodwork
- Construction
- Music
- History
- English & languages
- Computers

How will I learn Art in school?

- Active participation in class
- Practical experience and exploration of different materials, approaches and applications of Art
- By further developing knowledge, understanding and skills acquired in Junior Cycle

What careers are linked to Art?

- Urban Planning, Landscape and Interior Design
- Architecture, Advertising
- Museum Curator
- Primary & Secondary School Teacher

• Artist, Craft Design Maker
• Industrial Design
• Photography, Make-up Artist, Fashion Design
• Film, Animation, Game Design and Multi-media

How is Art examined in the Leaving Cert?

• 12-week project (comprising of 2 elements) starting in January of 6th year. Completed in class time.
Still Life/Imaginative Composition: 100 marks
Design/Craftwork: 100 marks
• Life Drawing Exam (1 hour) in May: 50 marks
• History of Art & Appreciation (2.5 hours) written exam in June: 150 marks

How will I be able to track my progress?

• Feedback following class assessment
• Teacher-student interaction, personal critiques
• Continuous assessment
• Reports
• On-going feedback on project work
• Feedback from peers & school community

How is Art useful to me?

• The study of Art helps to create an awareness of the environment, both man-made and organic
• Helps to develop an understanding of various cultures and aesthetics
• Enables the student to understand and appreciate the creativity of others
• Helps students express themselves in visual form
• Helps with problem-solving, decision-making and develops reflection, analysis and evaluation skills.

How can I learn about Art outside of school?

- Visiting galleries and museums
- Keeping informed of fashions and trends and
- IT developments
- Watch art programmes on TV and online player
- Observe landscape, and architecture in the
- environment
- Watch how people express themselves through
- their visual appearance
- Keep a drawing/observational diary

It is recommended that anyone considering higher level in this subject should have achieved a merit grade in the higher-level Junior Cycle. Students with a lower grade should consult subject department before selecting subject.

Subject Guide:

Music – advice from Ms Morris

Music provides students the opportunity to expand their cultural and musical knowledge through the practice, composition and listening to a variety of musical disciplines and styles.

How will Music be different after the Junior Cycle?

Music at Leaving Certificate level is composed of three main sections – Practical (worth 50% and includes music technology and performance on one or two instruments), Listening (worth 25%) and Composition (worth 25%).

The curriculum is completely different to Junior Cycle Music in terms of material outcomes and experience.

What will I learn in Leaving Certificate Music?

- Composition
- Practical performance
- Irish music
- 20th Century Music – Queen, The Beatles, Jazz, etc.
- Analysis of four orchestral works
- Music Analysis (describing music you hear)

What other subjects are connected to Music?

- English
- Irish
- Maths
- History
- Religion

What careers are linked to Music?

- Music producer
- Professional musician (e.g., in an orchestra)
- Music theatre or a band
- Music teacher
- Music publisher
- Music manager – event manager
- Musical director
- Music editor
- Music journalist for theatre & shows
- Sound technician
- Music librarian

How will I be able to track my progress?

• Formative feedback following class tests and compositions
• Teacher-student interaction
• Continuous assessment
• Reports
• Ongoing feedback on laboratory write-ups
• Peer assessment and reaction

What is the Music exam like?

The music exam has four different components.

• **Listening [25%]** – Set works, Irish traditional music and Aural skills
• **Composition paper [25%]** – Melody composition & Harmony composition
• **Practical exam [50%]** - to include combination of instrument, voice and music technology or solo

How is Music useful to me?

Study of music is useful to me in that it:

- develops my personality through an enhanced understanding of many different musical styles
- provides an opportunity to develop my creativity
- develops my critical and imaginative skills by utilising musical elements learned in class to analyse songs and other music
- develops my confidence in my own abilities and how to appreciate other people's talents
- encourages my social awareness and understanding of the artistic views of others
- provides me with the opportunity to learn how to play a musical instrument

How can I learn about Music outside of school?

- Listen to a wide variety of musical styles, e.g., on radio, internet and CDs
- Attend church when there is a choir singing or musicians performing
- Take music lessons
- Attend live performances/concerts
- Many free events in your area broaden your music education
- Watch music documentaries on TV or YouTube
- Explore your resources - National Concert Hall,
- RTE Proms, etc.
- Join a music group, choir, band, instrumental grou

Subject Guide:

Geography

Geography is an important part of your life. The subject develops an understanding of the changing relationship between your physical and human surroundings. Each decision you make has consequences linked to an aspect of Geography; from your mode of transport to school to the choices you make as a consumer. Through the study of Geography students will develop skills that will help make informed decisions at local, national and international levels.

How will Geography be different after the Junior Cycle?

Geography is a very popular choice for Leaving Certificate. It expands on the Junior Cycle course with the added requirement of a Field Study which is worth 20% at higher level and 25% at ordinary level.

What will I learn in Leaving Certificate Geography?

- Weather forecasting
- Map Reading
- Photograph interpretation
- How the world around us was formed
- Where people live and why
- What type of jobs people work at
- The study of the movement of people

How will I learn Geography in school?

- Active participation in class
- Watching documentaries and accessing the Internet
- Fieldtrips and project work

What other subjects is Geography connected to?

- Science
- Maths
- Religion
- Business Studies
- Economics
- Art
- History
- English

What careers are linked to Geography?

- Urban Planning
- Surveyor, Cartographer, Ordinance Survey
- Climatologist, Geologist
- Park Ranger, Office of Public Works
- Naval service, GIS Analyst
- Tourism
- Teaching
- Environmental Resource Management, Recycling

How will I be able to track my progress?

- Feedback following class tests
- Teacher-student interaction
- Continuous assessment
- Reports
- Ongoing feedback on project work and field study

What is the Geography exam like?

The exam is of 2hrs 50mins duration

- **Section One:** Short questions – 80 marks
- **Section Two:** 4 long questions 80 marks each – 320 marks
- **Field Study** (20% Higher Level, 25% Ordinary Level)

The field study is submitted early in 6th year
Questions are taken from a broad spectrum of the course

How is Geography useful to me?

- The study of geography helps to create an awareness of the environment, both built and natural
- Helps to develop an understanding of various cultures and economies
- Creates understanding of climates and regions
- Develops map reading skills and statistical analysis
- Incorporates project work and group work
-

How can I learn about Geography outside of school?

- Geographic events tend to be world news, so listen to and read reports of earthquakes, volcanoes, etc.
- Watch documentaries on YouTube and TV
- Observe landscape on walks and drives
- Watch the weather forecast

It is recommended that anyone considering higher level Geography should have achieved at least a merit grade in Junior Cycle.

Students with a lower grade should consult subject department before selecting subject.

Subject Guide:

History

Senior Cycle History explores the Later Modern period from 1815 to 1993 in a European, Irish and world context. History gives us an understanding of the modern world. The students develop an appreciation of the society in which they live and other societies past and present. History develops students' analytical and interpretive skills while also promoting independent and critical thinking.

How will History be different after the Junior Cycle?

History is a very popular choice for Leaving Certificate. It expands on the Junior Cycle course with the added requirement of a research project which is worth 20% at higher level and 20% at ordinary level. The website www.hist.ie provides a comprehensive overview of the course.

What will I learn in Leaving Certificate History?

- Modern Ireland 1815-1993
- Modern Europe 1815-1992
- United States and the wider world 1945-1989

Students develop skills in research, analysis, evaluation, synthesis and essay writing. During the course, students are required to appreciate concepts that are fundamental to the study and writing of History e.g., source/evidence, bias/objectivity, fact/ opinion and cause/consequence.

What other subjects are connected to History?

- English
- Economics
- Art
- Geography
- Religion

What careers are linked to History?

- Civil service
- Journalism
- Politics
- University lecturer
- Tourism
- Archaeologist
- Teaching
- Historian

How will I learn History in school?

- Active participation in class
- Watching documentaries and accessing the Internet
- Tours and project work

How will I be able to track my progress?

- Feedback following class tests
- Teacher-student interaction
- Continuous assessment
- Reports
- Ongoing feedback on project work and research study
- Pre- Leaving Certificate Examination

What is the History exam like?

The exam is of 2hrs 50mins duration

- **Section 1:** Document based questions – 100 marks
- **Section 2, 3, 4:** Essay (Higher)/Paragraph (Ordinary) based questions – 300 marks
- **Research Project** (20% Higher Level, 20% Ordinary Level) Submitted in 6th year and can be on any topic of historical significance with the course guidelines (1815-1993) e.g. 'The Life of Explorer Tom Crean'

How is History useful to me?

- Helps develop understanding of the contemporary world through the study of the past.
- Develops conceptual understanding and the ability to think independently and critically.
- Develops an appreciation of the society in which they live and other societies past and present.
- Develops document reading skills.
- Incorporates project work and group work

How can I learn about History outside of school?

- Watch current affairs/news programmes.
- Watch documentaries on YouTube and TV.
- Observe/visit historical sites.
- Internet research.
- Visit local and national museums.

It is recommended that anyone considering higher level History should have achieved at least a merit grade in Junior Cycle History & English.

Students with a lower grade should consult subject department before selecting subject.

Extra-curricular reading is at times required to develop the student's understanding of course material.

Subject Guide:

Religious Education

Religious Education requires students to engage in the exploration of a range of issues e.g., nature of morality, principles of a just society and the diversity of belief. Students will develop the ability to articulate their faith experience and to engage in dialogue with those of different faiths.

How will Religious Education be different after the Junior Cycle?

Religious Education expands on the Junior Cycle syllabus. Students are encouraged to take an active role in discussion and to explore their own views and beliefs. The structure of the course allows students to explore current affairs. Students are required to complete a course work journal which accounts for 20% of the overall result.

What will I learn in Leaving Certificate Religious Education?

- The Search for Meaning & Values Christianity: Origins & Contemporary Expressions
- World Religions
- Moral Decision Making
- Religion & Gender
- Issues of Justice and Peace
- Worship, Prayer & Ritual
- The Bible: Literature & Sacred Text
- Religion: The Irish Experience

What other subjects are connected to Religious Education?

- English
- Music
- History
- Science
- Art
- Geography

How will I learn Religious Education in school?

- Active participation in class
- Group work and pair work
- Classroom discussion
- Through use of critical thinking skills and reflective searching.

What careers are linked to Religious Education?

- Teaching – primary and post-primary
- Media
- Diplomacy
- Counselling
- Law
- Human Resources

How will I be able to track my progress?

- Feedback following class tests
- Teacher-student interaction
- Continuous assessment
- School Reports

What is the Religious Education exam like?

- The Honours Level paper is 2.5 hours long & the Ordinary Level paper is 2 hours long.
- Candidates must answer questions from 4 sections of the course.
- Honours students are required to write developed essay style answers.
- Ordinary Level students are required to answer through paragraphs rather than essays.

How is Religious Education useful to me?

- Religious Education can contribute to the development and enrichment of a person. This can be achieved through an appreciation of other faith traditions and beliefs.
- The course of study can assist the student reflect on their own human and life experiences. Such experiences can be interpreted and understood though considered reflection.

How can I learn about Religious Education outside of school?

- Involvement in local parish.
- Novels, dramas, music and films which reflect on moral, ethical & religious issues.
- Observe national and international media related news items which relate to moral and ethical issues.
- Follow national referendum debates which involve state & religious perspectives.

Religious Education in St Peters

- All students participate in religious education in St Peters
- We offer both exam and non-exam religion in

School

- The students' involvement in religious education ranges from discussion and debate to research which builds on their knowledge

It is recommended that anyone considering Religious Education at higher level should have achieved at least a merit grade in the Junior Cycle. Students with a lower grade should consult subject department before selecting subject.

Subject Guide:

Accounting – advice from Ms Melia

Doing accounts is an important part of your life. Each decision you make has financial consequences; from your household budget to calculating the profit made in your business.

How will Accounting be different after the Junior Cycle?

Accounting is a popular choice for Leaving Certificate. It expands on the Junior Cycle Business Studies Book-keeping element and introduces new terms such as published accounts, tabular statements, incomplete records, suspense accounts and costing. Accounting requires continuous practise of questions, therefore there is very little learning of theory.

What will I learn in Leaving Certificate Accounting?

- Final Accounts of a Sole Trader, Company
- Cash Flow Accounts
- Adjustments to accounts
- Published Accounts
- Control Accounts
- Accounts from incomplete records
- Suspense Accounts
- Analysis of accounts
- Farm accounts
- Management Accounting
- Club and Service Firms

What other subjects are connected to Accounting?

- Maths • Business
- Economics • ICT

What careers are linked to Accounting?

- 3rd Level Degrees
- Advertising
- Accountant
- Auctioneering
- Teaching
- Actuary
- Financial Advisor/ Consultant Banking
- Insurance
- Tax Advisor/Consultant

How will I be able to track my progress?

- Feedback following class tests
- Teacher-student interaction
- Reports
- On-going feedback using marking schemes

What is the Accounting exam like?

The exam is of 3 hours duration at Higher level and 2.5 hours at Ordinary Level

Higher Level and Ordinary Level

Section 1 - Financial Accounting [30%]

Section 2 - Financial Accounting [50%]

Section 3 - Management Accounting [20%]

Questions are taken from a broad spectrum of the course

How is Accounting useful to me?

- The study of accounting helps to develop an analytical mind for the student
- Helps to develop an understanding of various accounting concepts
- Creates understanding of various book-keeping procedures
- Develops mathematical skills and statistical analysis
- Incorporates pair work and group work

How can I learn about Accounting outside of school?

- Attend college open days to find about the entry requirements
- Participate in work experience in an accounting firm
- Read the business section of the newspapers
- Watch the business section of the news to keep up to date with current events.

It is recommended that anyone considering Accounting at higher level should

have achieved at least a merit grade in the Junior Cycle.

Students with a lower grade should consult subject department before selecting subject.

While Higher Level Maths is recommended it is not essential.

Subject Guide:

Business

Business is an important part of your life, from understanding how to set up your own business to understanding key aspects of business concepts such as your consumer rights and calculating your taxes. A very large and significant number of Business courses are available to study at 3rd level.

How will Business be different after the Junior Cycle?

Business is a very popular choice for Leaving Certificate. It expands on the Junior Cycle course by introducing the concepts of enterprise (setting up your own business) and management (running your own business). Case studies are examined at Higher Level and account for 20% of the subject.

What will I learn in Leaving Certificate Business?

- People in business
- Enterprise
- Management Skills & Activities
- Financing a business
- Identifying opportunities
- Marketing
- Business, Economy & Government
- Business Ethics

What other subjects are connected to Business?

- Economics
- Geography
- Home Economics
- English

How will I learn Business in school?

- Monitor current business trends
- Active participation in class
- Discussion about contemporary business issues
- Project work

What careers are linked to Business?

- Accountant
- Banking
- Tax consultancy
- Insurance agency
- Marketing
- Entrepreneurship
- Management
- Teaching

How will I be able to track my progress?

- Feedback following class tests
- Teacher-student interaction
- Continuous assessment
- Reports
- Ongoing feedback on project work/ case studies

How is Business useful to me?

- Helps to develop an understanding of setting up and running a business
- Creates understanding of finance, insurance and taxation
- Develops business skills and statistical analysis
- Incorporates project work and group work
- Encourages and promotes an enterprise culture e.g., setting up your own business

What is the Business exam like?

The exam is of 3 hours duration at higher level and 2.5 hours at ordinary level

Higher Level

Section 1 Short Questions 20%

Section 2 Case Study 20%

Section 3 Long Questions 60%

Ordinary Level

Section 1 Short Questions 25%

Section 2 Long Questions 75%

Questions are taken from a broad spectrum of the course

How can I learn about Business outside of school?

- Business events tend to be world news, so listen to and read reports on the world economy
- Engage in giving advice on your rights as a consumer and employee
- Watch documentaries on YouTube and TV

- Observe businesses in action in the local community
- Watch the business news on TV/Read business supplements in newspapers

Leaving Certificate Business builds on the three Junior Cycle Business course. Students who have not studied Business Studies at Junior Cycle may be at a distinct disadvantage.

It should be noted that the course is a long and detailed one requiring significant learning and as such is demanding of both student time and effort.

Subject Guide:

Economics

Economics is a social science and a method of thinking that studies how decisions are made and how people interact with society.

It is a dynamic subject with which students are already familiar. Daily our attention is drawn to a wide range of economic issues such as environmental sustainability, employment and job creation, the EU, taxation and government economic policies to name but a few. It examines how income is generated and how scarce resources are allocated. Students of economics are encouraged to develop skills in critical and creative thinking relating to contemporary economic, political and societal issues.

How will Economics be different after the Junior Cycle?

Leaving Certificate Economics builds upon Strand 3 in the Junior Cycle Business Studies course.

This strand deals with Our Economy and covers

topics such as scarcity and choice, circular flow of income, supply and demand, government and the economy, economic growth and sustainability and the EU and the global economy.

The Leaving Certificate course expands significantly on these areas while introducing new topics

What will I learn in Economics?

The course is divided into 5 strands:

• Strand 1 Economics as a way of thinking, the concept of scarcity and choice and economic, social and environmental sustainability

• Strand 2 How are economic decisions made?

The market economy, supply and demand and government intervention in the market

• Strand 3 What can markets do? Market structures, the labour market and market failure • Strand 4 What is the relationship

between policy and economic performance? National income, fiscal policy and the budget framework, employment and unemployment, monetary policy and the financial sector.

• Strand 5 How is the economy influenced by international economics? Economic growth and development, globalisation and international trade and competitiveness.

What other subjects are connected to Economics?

• Business
• Home Economics
• Geography
• English
• History

How will I learn Economics in school?

• Active participation in class
• Group work and pair work
• Classroom discussion
• Through use of critical thinking skills & reflective searching
• Accessing business related websites
• PowerPoint presentations
• Researching and analysing economic data from a variety of sources

What careers are linked to Economics?

• Economist
• Investment Analyst
• Market Research Analyst
• Management Consultant
• Banking Credit Analyst
• Financial Controller
• Journalist
• Teacher/Lecturer

How will I be able to track my progress?

• Feedback following class tests
• Teacher-student interaction
• Continuous assessment
• School Reports

What is the Economics exam like?

There are two assessment components at both Higher and Ordinary level:

• Written examination (80%)

This is a two-and-a-half-hour long exam. It will have two sections:

Section A: Short answer questions

Section B: Long answer questions.

• Research study (20%) This is based on a brief issued annually by the State Examinations Commission and outlining a number of different topics and the

parameters for the research. Students choose one topic for their research study.

How is Economics useful to me?

- Understand the economy within which people act- locally, nationally and globally
- Build a knowledge and understanding of economic terminology, concepts and principles.
- Develop skills in critical and creative thinking
- Learn to research and analyse economic information and data from various sources, present and justify conclusions and make informed decisions
- Provide students with a learning foundation for a wide range of careers in business, economics, enterprise and management

How can I learn about Economics outside of school?

Economics is "the study of man in the ordinary business of life" according to Alfred Marshall. Follow current affairs, watch business reports and review relevant Irish economic statistics on websites such as www.cso.ie.

It is recommended that anyone considering Economics should have achieved at least a merit grade in the Junior Cycle Business Studies course. Students with a lower grade should consult subject department before selecting subject.

Subject Guide:

Home Economics (Social & Scientific)

Home Economics is an applied subject combining theory with practice in order to develop an understanding of the key areas of individual and family life. The course of study is primarily focused on diet, lifestyle, nutrition and health matters, as well as consumer and social awareness.

How will Home Economics be different after the Junior Cycle?

Home Economics builds on the content of the Junior Cycle programme with the added requirement of a practical coursework journal which is worth 20% at both higher and ordinary levels.

The syllabus consists of Core and Three electives. The Core covers three areas: Food Studies (45%), Resource Management (25%), and Social Studies (10%). There are three electives to choose one from: home design and management, textiles fashion and design or social studies. Each elective is worth 20%.

What will I learn in Home Economics?

- Food Science and Nutrition
- Diet and Health
- Food Commodities & their role in health
- Food processing and packaging
- Family Resource Management
- The Family in Society
- Social issues & how they affect families
- Microbiology & Food Safety
- Practical food preparation skills

What other subjects are connected to Home Economics?

- Science
- Maths
- Religion
- Business Studies
- Accounting
- Art
- S.P.H.E.
- English

How will I learn Home Economics in school?

- Active participation in class

- Assignment work
- Practical cookery
- Demonstrations

What careers are linked to Home Economics?

- Home Economics Teaching
- Health promotion
- Dietetics and Nutrition
- Consumer advice
- Hotel and Catering Industry
- Bakery/Cake design/Pastry arts
- Fashion Industry
- Chef
- Interior Design
- Childcare/Communitycare/Sports nutrition

How will I be able to track my progress?

- Feedback following class tests
- Teacher-student interaction
- Continuous assessment
- School Reports
- On-going feedback on practical food studies journal.

What is the Home Economics exam like?

The exam is of 2hrs 30mins duration

- **Section One:** Short questions – 60 marks
- **Section Two:** Q1. Compulsory question 80 marks, Two Core Q.'s 50 marks each,
- Group Work/Peer teaching
- Audio Visual
- Field trips

- **Elective** 80 marks.
- **Practical Food Studies Journal** (20% Higher Level, 20% Ordinary Level)

The journal is submitted early in 6th year

Questions are taken from a broad spectrum of the course

How can Home Economics be useful to me?

- Helps to create an awareness of the importance of a healthy diet and lifestyle, as well as the role of foods in disease prevention, health promotion & physical fitness.
- Develops life skills in food preparation and food safety.
- Illustrates the economic significance of the food industry & importance of promoting food enterprises.
- Helps to develop Consumer and Family Resource Management Skills including money management, consumer rights awareness and environmental sustainability.
- Creates understanding of the Family and the Society we live in.

How can I learn about Home Economics outside of school?

- H.S.E. Health Promotion Campaigns
- Farmers Journal Home Economics supplement
- Watch documentaries and cookery programmes on YouTube and TV
- Food and Consumer magazines
- Exhibitions /farmers markets /food demonstrations.

It is possible to study Social & Scientific at Leaving Certificate without having studied Home Economics at Junior Cycle.

It is recommended that anyone considering higher level Home Economics for Leaving Certificate should have achieved at least a merit grade in the Junior Cycle. Students with a lower grade should consult subject department before selecting subject.

Subject Guide:

Engineering

Engineering represents a study of a wide range of mechanical engineering materials, processes and technological applications.

How will Engineering be different from Metalwork after the Junior Cycle?

Engineering continues from Junior Cycle with a much more in depth look at manufacture and Design with the addition of a full Design and Make Project forming part of the final exam. The course content is quite science and technology based with the goal of preparing students for a variety of first year Engineering degree courses.

What will I learn in Leaving Certificate Engineering?

- Safety in a Manufacturing environment
- Materials Science
- Polymer technology
- Machining
- Computer Aided Design/Manufacture
- Materials Joining
- Applied Dynamics
- Design and realisation

What other subjects is Engineering connected to?

- Physics
- Chemistry
- Maths
- Applied Maths
- Design and Communication Graphics
- Technology
- Construction Studies
- Business Studies
- Economics
- Art
- History
- English

How will I learn Engineering in school?

- Active participation in class
- Completion of class projects
- Independent research topics
- Field trips to relevant industries
- Video tutorials and demonstrations
- Design and realisation of personal projects

What careers are linked to Engineering?

- Manufacturing Engineering
- Mechanical Engineering
- Electrical Engineering
- Production Management
- Industrial Design
- Environmental engineering
- Biomedical Engineering
- Teaching and many more.

How will I be able to track my progress?

- Feedback following class tests and practical exercises
- Teacher-student interaction
- Continuous assessment
- School Reports
- Completion of class projects and research exercises.

What is the Engineering exam like?

The exam is of 3hrs duration

- **Section One:**

Higher level short questions – 50 marks

Research question 50 marks.

Ordinary level – 65 marks

- **Section Two:**

Higher level Topic questions – 200 marks.

Ordinary level Topic questions – 135 marks

- **Project November – March** 150 marks
- **6-hour practical exam** May final year

150 marks (Common level)

How is Engineering useful to me?

- The study of Engineering helps to create an awareness of the technology and its importance to us.
- Helps to develop an understanding of electronics and how they aid us in everyday life.
- Creates understanding of machines materials and mechanisms and there uses in the world around us.
- Develops and challenges student creativity and problem-solving abilities as well as critical analysis.
- Incorporates teamwork and group planning to complete and improve task.

How can I learn about Engineering outside of school?

• Engineering tends to surround us in everything we do on a daily basis, observation while living as well as looking at how things might be improved are essential aids outside of school.
• Engage in fixing and taking apart simple machines at home that are no longer working.
• Watch documentaries on YouTube and TV
• Look at the internet to find information and other solutions to problems you have been set.
• Take an interest in new technologies and see what can be achieved once imagined.

It is advised that students would have studied Materials Technology Metal at Junior Cycle level. Discuss with teachers of the subject before making a decision. It is recommended that anyone considering higher level subjects should have achieved at least a merit grade in the Junior Cycle.

Students with a lower grade should consult subject department before selecting subject.

Subject Guide:

Construction Studies

Construction studies is the study of building and the built environment. It is not a continuation of Junior Cert woodwork although it does involve an element of woodworking within the syllabus.

Generally, students taking Construction have completed the Junior Cert woodwork course. Students study the knowledge and skills involved in Construction Technology and Construction Materials and Practices, through theoretical study and integrated practical projects.

Subject Content

The subject can be broken down into 3 parts.

1. A practical project and portfolio worth 25% of the total mark and completed in 6th year.
2. A 4-hour practical woodwork exam worth 25%.
3. A theory examination worth 50%.

What will I study in Construction class?

- Learn how typical Irish houses are built including areas such as Planning Permission, foundations, plumbing and heating.
- Draw Building Details to scale.
- Learn woodwork skills
- Study the built environment
- Learn about contemporary issues such as recycling, green homes and renewable energies.

How will my class time be broken down?

- Typically, class time is broken down to half theory and half practical depending on the needs of the student.
- In 5th year students learn to draw elements of a building to scale, written theory and practical woodwork classes.
- Drawings are done with a board, tee square and drawing equipment.
- In 6th year a large part of class time is spent making the project and portfolio. The project must be the students own design and work.

What careers are linked to Construction?

- Architecture
- Mechanical, Structural or Construction Engineering
- Carpenter,
- Plumber,
- Electrician
- Building Surveyor
- Quantity Surveyor
- Building Technician
- Interior Designer
- Cabinet maker
- Furniture Designer

How will I be able to track my progress?

- Feedback following class tests
- Teacher-student interaction
- Continuous assessment
- School Reports

What is the Construction exam like?

- The exam is 3 hours long at Higher level and
2½ hours at Ordinary level
- The first question on each paper is a compulsory drawing question that involves drawing part of a building to scale using a board, tee square and drawing equipment.
- The remaining questions are based on written and drawn subject matter taken from the theory section of the syllabus. Higher level students answer 4 more questions, ordinary level must complete 3 more questions.

What does a typical project involve?

- The project must be the student's own design and accompanied by a portfolio which details the process.
- Students must choose to complete a project from one of the following areas of study:
    - A craft-based project, for example, a chair or table
    - A project on the built environment or built heritage, for example, Newgrange or a famous bridge
    - A building science project, for example, a solar panel or green energies project.

How can I learn about Construction outside of school?

- Watch TV documentaries on the Discovery Channel
- Observe building work in the local community
- Read local and national publications.

It is advised that students would have studied Materials Technology Wood at Junior Cycle level.

Subject Guide:

Design & Communication Graphics (DCG)

Design and communication graphics has been developed to replace technical drawing, with the addition of contemporary communication methods such as 3D Parametric (CAD) at its core.

How will DCG be different after the Junior Cycle?

DCG expands on the Junior Cycle Technical Graphics course with the added requirement of a course assignment which is worth 40% at both higher level and ordinary level.

Core Elements:

The core will give students a thorough understanding of the principals of "plane and description" geometry and the communication of "Design and Computer Graphics".

Optional Modules:

Five optional modules give the student the opportunity to study particular aspects of the course in more detail. Students study 2 of the 5 optional modules in addition to the Core.

What will I learn in Leaving Certificate DCG?

- Plans & Descriptive Geometry
- Solidworks 3D
- Freehand drawing
- Communication of design & graphics
- Applied graphics

What other subjects are connected to DCG?

- Computers
- Maths
- Engineering
- Art
- History
- English
- Technology
- Construction Studies
- Business

How will I learn DCG in school?

- Active participation in class
- Independent study and practice
- Group work/assignments
- Peer Learning

How will I be able to track my progress?

- Feedback following class tests
- Teacher-student interaction
- Continuous assessment
- School Reports
- On-going feedback on project work

What is the DCG exam like?

The exam is of 3hrs duration

Section One: Short questions – 60 marks

Section Two: Long Questions – 180 marks

Student assignment (40%)

The student assignment is submitted after Christmas in 6th year

Questions are taken from a broad spectrum of the course

What careers are linked to DCG?

- Engineering
- Production Management
- Graphic design
- Production Development
- Architecture
- Teaching

How is DCG useful to me?

- DCG helps with the production of a portfolio for college courses
- DCG allows the student to develop information technology (I.T.) skills such as:
    - File management and organisation
    - File formats and extensions
    - Image processing, transfer and manipulation
    - Web research
    - Presentation techniques using ICT and CAD software

How can I learn about DCG outside of school?

- Web research
- Use of CAD at home
- Information on school website and other relevant websites (www.t4.com)

Students who did not study Technical Graphics at Junior cycle should
not take up the subject before discussing it with teachers of the subject

Subject Guide:

Classical Studies

Classical Studies, or Greek and Roman Civilisation Studies, is the study of the ancient world of Greece and Roman, covering the period from roughly 1200 BC to 400 AD.

What will I learn in Classical Studies?

Strand 1: The World of Heroes.

· You will study the Greek and Roman ancient epic poems, Homer's The Odyssey and Virgil's The Aeneid.

· You will examine that they reveal about their respective cultures and values as framed through their respective writers.

Strand 2: Drama and Spectacle

· You will read a Greek tragedy, understand its cultural significance, and the importance of theatre in the ancient world

· You will study the Colosseum and Circus Maximus, their purpose and the architectural features of both.

Strand 3: Power and Identity

· You will learn about Alexander the Great or Julius Caesar.

· You will examine their life, the political landscape of the period and cultural values demonstrated in their interactions with those outside of their respective empires.

·**Strand 4**: Gods and Humans

· You will learn who the Greek gods were (and their Roman counterparts).

· You will learn about the temples in which some of those gods were worshipped, their social and civic significance and their key architectural features.

· You will learn about Greek and Roman funerary practices.

· You will learn what it meant to live well and morality in the ancient world.

Will this subject suit me?

This subject will suit you if you're interested in history, particularly ancient history. It would also suit you if you've an interested in literature, due to the nature of the number of ancient texts you will study. This subject would also suit you if you enjoy studying different cultures and societies.

How will I be assessed?

You will be assessed via and exam and a project.

· You will sit final exam at the end of your two-year Leaving Certificate course in June worth 80% of your grade.

· You will complete a research project worth 20% of your grade at the beginning of 6th Year.

How will I learn Classics in school:

· Active participation in class

· Completion of class projects

· Independent research topics

· Field trips to relevant locations

How does Classical Studies relate to other subjects

English:

You will examine a number of literary texts, like The Odyssey and The Aeneid, and a Greek tragedy in a similar manner to how you approach the study of literary texts in your English course. Both subjects will give you a skillset focused on critical analysis of texts which will

History: You will learn about earlier significant events, and influential figures that changed the course of history. You will also complete a research project, as you would in history.

Theology: Both subjects will give you an insight into different cultural values and ethics, as well as an understanding of the vast amounts of different beliefs around morality, the divine and the afterlife.

How will it be useful to me later?

Careers linked to Classical Studies:

· Academic career pursuing research at university level

· Art-trade including auction houses and other firms dealing in antiquities.

· Cultural organisations

· Heritage organisations including museums, libraries, and business organisations.

· Archaeology.

Subject Guide:

Politics & Society

A new subject has been developed for Leaving Certificate called Politics and Society.

What will I learn in Politics and Society?

Few subjects are as relevant to our everyday lives as Politics and Society. Among other things, students will learn about the social systems within which people act locally, nationally and more widely, the concepts underpinning contemporary systems of government and the roles of groups such as multinational companies, non-governmental organisations (NGOs) and intergovernmental bodies in shaping the world we live in. Teachers and students will work with key themes and ideas in the social and political sciences. They will apply these to their schools,

to the local environment, as well as exploring how they apply in the wider world. For example, through looking at the changes in their own local community over the last few years, students will have an opportunity to discuss whether or not these changes constitute development, and whether or not they are sustainable.

Will this subject suit me?

It is highly recommended that students have a high standard of English with an interest in History and current affairs. Politics and Society is a challenging and rewarding subject that suits any student who

is interested in human rights, equality, diversity, sustainable development, power and democratic decision-making. If you want to become a more informed and active global citizen then this subject will be of interest to you. Studying Politics and Society gives students a real insight into people, power and how society works.

How will I learn?

Students will learn about social and political theories and how these theories relate to current issues. There will be lots of classroom discussion, debate and reflection on the different ideas and perspectives. Through this, students will develop valuable analytical and evaluation skills as they debate topical and sometimes controversial issues, study different viewpoints and form their own political opinions.

How will I be assessed?

Politics and Society will be assessed at two levels, Ordinary level and Higher level. There will be two assessment components at each level – a written examination which accounts for 80% of the final grade and a citizenship project which accounts for 20%. The citizenship project enables students to research a topic of interest to them and then apply their learning in action.

How does Politics and Society relate to other subjects?

Some of the learning in Politics and Society will be useful if you also study Geography, History, Economics or Religious Education for the Leaving Certificate.

How will it be useful to me later?

You will find Politics and Society useful if you want to study politics or sociology or other courses such as law, anthropology, philosophy, development studies, media studies, and many more. The skills of critical thinking and active citizenship that you will develop through this subject will be useful to you in any future learning and in your everyday life.

The topics students' study in Politics and Society:

Topic 1	Power and decision-making in school.
Topic 2	Power and decision-making at national and European level.
Topic 3	Effectively contributing to communities.
Topic 4	Rights and responsibilities in communication with others.
Topic 5	Human rights and responsibilities in Ireland.
Topic 6	Human rights and responsibilities in Europe and the wider world.
Topic 7	Globalisation and identity.
Topic 8	Sustainable development.

Computer Science

Studying computer science is an excellent opportunity for school students to gain valuable skills for the future. By learning how to think logically, solve problems, and program computers, students will be well-prepared for a variety of rewarding careers in technology.

What will I learn in Leaving Certificate Computer Science?

The Leaving Certificate Computer Science course introduces students to problem-solving using programming and computational knowledge. The course develops an understanding of fundamental concepts of computer science and technology's role in modern day society.

The objectives of Leaving Certificate Computer Science are to enable students to:

- develop an understanding of how computing technology presents new ways to address problems; and to use computational thinking to analyse problems and to design, develop and evaluate solutions.
- read, write, test, and modify computer programs in Python, Javascript and HTML/CSS.
- develop an understanding of how computers work; the component parts of computer systems and how they interrelate, including software, data, hardware, communications, and users.
- appreciate the ethical and social implications relating to the use of computing technology and information and identify the impact of technology on personal life and society.
- understand how information technology has changed over time and the effects these changes may have on education, the workforce, and society.
- evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of online information sources.
- work independently and collaboratively, communicate effectively, and become responsible, competent, confident, reflective, and creative users of computing technology.

The Applied Learning Tasks

Learning in computer science needs to be applied to problem solving, design and programming tasks. There are four applied learning tasks that are completed collaboratively by students working in teams. The team create a computational artefact and write a report on their work and the process involved.

Over the course of the two years of computer science students will:

1. Create an artefact or website that can display information from a database.
2. Create an interdisciplinary artefact using some form of data analytics.
3. Develop a computer system that simulates or models a problem that is difficult to solve analytically.
4. Implement an embedded system that uses sensors and controls digital inputs and outputs.

What is the Computer Science exam like?

Examinations are at two levels – Ordinary and Higher level, with two components to the assessment of Leaving Certificate Computer Science

(i) **An end of course examination (70%)**
End of course examination takes place on the last Wednesday of May in 6th year.
This consists of two papers sat on the same day.
- 1 hour 30 minute Theory Exam
- 1 hour Python Programming Exam

(ii) **Coursework (30%)** The coursework takes place over a 10 week period from January to March in 6th year. This assessment will require students to demonstrate proficiency in course content and skills that are not easily assessed by the end-of-course examination. The assessment will require students to create a computational artefact, such as a program, game, web pages, digital animations, robotic systems or app. The student must also write a report on their work and process involved.

What careers are linked to Computer Science?

Computer Science is relevant to all sectors of the economy, from banking to pharmaceutical and everything in between. You could be a computer science specialist looking at medical images like brain scans, predicting what might happen for those patients, or a cyber specialist who uses computer forensics to solve crime. A foundation in this discipline will introduce you to the excitement and opportunities afforded by this growing and dynamic field, as well as preparing you for a range of rewarding careers, including:

- IT Consultant
- Games Designer

- Data Analyst
- Digital Media Designer
- Software Engineer
- Web Developer
- Network Engineer
- Programmer

You do not need to have completed coding / computers before to take Computer Science for the Leaving Certificate.

Options After the Leaving Cert

When you leave school there are many different options open to you, ranging from apprenticeship training to P.L.C. courses to Honours Degree programmes. Under the National Qualifications Framework students can study for level 5, 6, 7 or 8 qualifications.

• **Level 5:**

One or two year Post Leaving Cert courses.

Available in Dunboyne College of Further Education and other schools and colleges around the country

Can lead on to level 6 courses in Technical University/Institutes of Technology

• **Level 6:**

Two-year Higher Certificate Courses available in the Technical University/ Institutes of Technology. Can lead on to Level 7 and 8 courses in the same field.

• **Level 7:**

Three-year Ordinary Degrees available in the Technical University/ Institutes of Technology.

Can lead on to Level 8 courses in the same field.

• **Level 8:**

Three- or four-year (with some exceptions such as medicine) Honours Degrees available in all of the Universities and the Technical University/ Institutes of Technology.

Having completed Level 8 students can continue on to Level 9 (Postgraduate Masters) and Level 10 (Doctorate)

New Common CAO Points Scale

Higher Grade	Points	Ordinary Grade	Points
H1 *90-100%*	100	O1 *90-100%*	56
H2 *80<90%*	88	O2 *80<90%*	46
H3 *70<80%*	77	O3 *70<80%*	37
H4 *60<70%*	66	O4 *60<70%*	28
H5 *50<60%*	56	O5 *50<60%*	20
H6 *40<50%*	46	O6 *40<50%*	12
H7 *30<40%*	37	O7 *30<40%*	0
H8 *0<30%*	0	O8	0