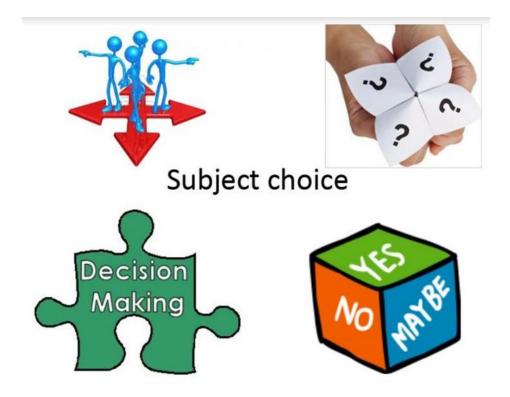
# Subject Choice Information Booklet 2021

# Scoil Uí Mhuirí Career Guidance Department



Contents	
Subject choice	4
Essential subjects/basic entry requirements	5
3 <sup>rd</sup> language	6
How to decide on your subjects	7
Points to consider	8
French	9
German	11
Spanish	13
Biology	15
Chemistry	18
Physics	21
Agricultural Science	25
Accounting	29
Business	32
Art	36
Music	40
Geography	44
History	46
Home Economics	48
Construction	50

Engineering	53
DCG	56
Technology	60
Religion	64
Physical Education	68
LCVP	73

# SUBJECT CHOICE FOR THE ESTABLISHED LEAVING CERTIFICATE IN SCOIL UÍ MHUIRÍ

This is a two year programme of general education. It is not a preparation for any one job or career. Students take 7/8 exam subjects, compulsory - Irish, English and Maths, language and three/four optional.

SUBJECTS:			
<b>Business Group</b>	Language		
Accounting	French		
Business	German		
	Spanish		
<u>Scientific Group</u>	Social/Artistic Group		
Biology	Art, Craft & Design		
Chemistry	Geography		
Physics	History		
Agricultural Science	Home Economics (Social &		
	Scientific)		
	Music		
	PE		
	Religion		

#### **Technology Group**

Construction Studies	Engineering
Design & Communication Graphics	Technology

Students have the option of doing the **Leaving Certificate Vocational Programme (LCVP).** This programme gives a strong vocational dimension to the Leaving Certificate combining the virtues of academic study with a new and dynamic focus on self-directed learning, enterprise, work and the community. See page on Link Modules towards the end of the booklet for further details. Alternatively, you can contact Mrs. Farrell or Mrs. Mc. Cready if you have any further questions on LCVP.

#### ESSENTIAL SUBJECTS/ BASIC ENTRY REQUIREMENTS

*Institutes of Technology* – 2H5 + 4O6/H7 for level 8 Passes in English or Irish, Maths + 3 other subjects, 5 O6/H7 for level 6&7

*UCD / UCG / UCC / Maynooth* – Maths, Irish, English, 3rd Language for some courses, 2H5 + 4 O6/H7

UL – Maths, English, and a language other than English, 2 H5 + 4 O6/H7

*TCD* – Maths, English, and a language other than English 3 H5 + 3 O6/O7

DCU – Maths, English or Irish, 2 H5 + 4 O6/O7

*Primary Teaching* – H4 in Irish, English O5/H7, Maths O6/H7. From 2019: Irish H4, English & Maths O4/H7.

Nursing - 1 Lab Science subject. No 3rd language required

Garda Siochana - Leaving Certificate with 5 passes including English, Irish

or another language and Maths

Cadets – Maths (O6/H7), Irish, English, another Language, 3 H5 in LC.

*Veterinary Medicine (UCD)* – Chemistry H5, O6 Maths, 2H5 + 4O6/H7. Work exp. x2 weeks

*Medicine & Pharmacy* (UCC) – (1) Chemistry H4 (2) Physics or Biology H4 (UCD) – O6/H7 in Science subject, including Physics + Chemistry/Ag. Science

Pharmacy (TCD) - H4 in Chemistry and H4 in Biology or Agric. Science

or

Physics or Maths or Geography or Applied Maths. O4/H6 in Maths.

*Medicine & Dentistry (TCD)* – H3 & H4 in two from:

(1) Physics, (2) Chemistry, (3) Biology (4) Ag. Science. H.PAT for Medicine.

**Radiography** (UCD) – O6/H7 from Physics, Chemistry, Biology or Ag. Science (TCD) – H4 in Physics, Chemistry or Biology

Physiotherapy - O6/H7 in 1 laboratory science subject,

Physics or Chemistry or Biology, or Ag. Science.

TCD H4 Science subjects x2. UL O3/H7 Science subject x1

Dentistry (UCC) - H4 Chemistry, H4 Physics or Biology

If the number of applications does not exceed the number of places on any course, students obtain places with the minimum entry requirements. Where there are more applicants than places, those with the highest grades are selected.

# 3<sup>rd</sup> Language & Science subjects

A decision to drop all Science subjects or continental languages will have major implications on the range of careers open to you later on.

# HOW TO MAKE YOUR SUBJECT CHOICE

- Think about what it is you might like to do when you leave school. If this requires further study look up <u>www.qualifax.ie</u>. Look and see what courses are on offer and do a random check for subject requirements for this type of course. Some courses require you to have studied a particular subject at leaving cert level in order to gain entry into the course. e.g. Medicine requires two science subjects including chemistry.
- **2.** Now look at the list of subjects and pick out the ones you enjoy, then pick out the ones you think you can do well in. Keep in mind that scoring points is important if you wish to go on to third level education.
- **3.** Some students choose to take a broad range of subjects (e.g. one from each area, business, science, humanities and practical) as they are not sure what they want to do. This is not always necessary as most courses do not have subject requirements and even if you do not study the subject at leaving cert you could go on to take it a third level. E.g. you do not need to have studied business to do a business studies degree.
- **4.** It is also wise to do some research as to what subjects entail at leaving cert level. There can be a huge jump in the standards expected of you or the weighting given to the practical side of the subject.

# When choosing subjects remember:

1. Choose subjects that you are interested in and enjoy.

2. Pick subjects that you have an aptitude for and will therefore give you the highest possible grades.

3. Choose subjects where you have achieved good grades.

4. Choose subjects that meet the entry requirements of courses you may be interested in.

• Subjects such as Physics, Chemistry and Accounting require a high level of mathematical aptitude.

5. • It has also been noted that extremely good grades have been achieved in the Applied Sciences, Art, Exam Religion and Music. Students seeking high point's levels often overlook these

# Do not:

- 1. DO NOT choose your subjects based on what your friends are doing.
- **2.** DO NOT choose your subjects based on what teachers you think you might or might not have.
- **3.** DO NOT choose your subjects on what other people tell you about how easy or difficult a subject is. Every person will find different areas easy or difficult according to their ability.
- 4. DO NOT choose a subject without researching what it entails at leaving cert level.

# In conclusion the following considerations must be borne in mind when choosing subjects for Leaving Certificate:

- Basic Entry Requirements for the college in question
- **Specific course entry requirements** H4 in Irish for primary school teaching, H4 Chemistry if considering doing veterinary, H4 in Maths for entry into some Engineering courses.
- Choose subjects on the basis of interest, aptitude, possible career paths and achievements to date in exams or tests.
- Please factor in the practical subjects and the percentage that goes with the practical element of that subject.
- Also look at the deadlines for the projects in these subject areas, as many fall close together and you don't want to be under pressure in finishing these projects, while also having to consider pre-exams, and Oral language exams.
- Consider your time management skills if doing more than one practical subject.

# FRENCH



Leaving Certificate French follows a common syllabus framework for the teaching and examining of modern languages in the Leaving Certificate. The syllabus aims to develop learners' communicative skills in the French, to develop their strategies for effective language learning and raise their awareness of cultural, social and political diversity.

Assessment is by means of a written examination, and an aural and oral examination at two levels, Ordinary level and Higher level.

# If I want to study French for my Leaving Certificate, what aptitudes do I need?

- Be able and willing to develop oral, aural, writing and reading skills in French so that you can develop confidence in a foreign language
- Have interest in the French culture
- Be able to learn independently

# Leaving Certificate French V's Junior Certificate French:

- More focus on oral work
- Continuation of other skills development
- Need to do some work everyday to become very familiar with language

### Assessment:

- Oral Exam 25% in H.L, 20% in O.L.
- Aural Exam 20% in H.L, 25% in O.L.
- Written Exam on reading comprehension and writing ability 55%

#### Assignments during Course:

- Regular participation in oral and aural class work
- · Reading comprehensions and writing exercises

### Career Note:

You must have a foreign language for entry to all colleges of the National University of Ireland i.e.. UCC, UCD, NUI Galway and Maynooth. (However, recently these colleges have dropped that requirement for many of their engineering, science, agricultural and food science programmes. A third language is also not a requirement for nursing programmes. Art is acceptable in place of the language for students entering NCAD.) You also need a foreign language to become a Cadet in the Army or Air Corps. Certain Industries and employers think very highly of candidates with foreign language skills.

#### French can be useful for careers in the following areas:

Air Steward/Stewardess, Air Traffic Controller, Au Pair, Bilingual Secretary, Business, Careers in Export, Chef, Courier, Hotel Management, Hotel Receptionist, Human Resources, International Marketing, Importer, Interpreter, Journalist, Librarian, Translator, International Driver, Ground Hostess, Pilot, Tourism, Travel Agent, Work in the Department of Foreign Affairs, etc.

#### Syllabus outline:

https://curriculumonline.ie/Senior-cycle/Senior-Cycle-Subjects/French/

#### **GERMAN**



Leaving Certificate German follows a common syllabus framework for the teaching and examining of modern languages in the Leaving Certificate. The syllabus aims to develop learners' communicative skills in the German, to develop their strategies for effective language learning and raise their awareness of cultural, social and political diversity.

Assessment is by means of a written examination, and an aural and oral examination at two levels, Ordinary level and Higher level.

# If I want to study German for my Leaving Certificate, what aptitudes do I need?

- Be able and willing to develop oral, aural, writing and reading skills in German so that you can develop confidence in a foreign language
- Have interest in the German culture
- Be able to learn independently

# Leaving Certificate German V's Junior Certificate German:

- More focus on oral work
- Continuation of other skills development
- Need to do some work everyday to become very familiar with language

### Assessment:

- Oral Exam 25% in H.L, 20% in O.L.
- Aural Exam 20% in H.L, 25% in O.L.
- Written Exam on reading comprehension and writing ability 55%

### Assignments during Course:

- Regular participation in oral and aural class work
- Reading Comprehensions and writing exercises

# Career Note:

You must have a foreign language for entry to all colleges of the National University of Ireland i.e.. UCC, UCD, NUI Galway and Maynooth. (*However, recently these colleges have dropped that requirement for many of their engineering, science, agricultural and food science programmes. A third language is also not a requirement for nursing programmes. Art is acceptable in place of the language for students entering NCAD.*) You also need a foreign language to become a Cadet in the Army or Air Corps. Certain Industries and employers think very highly of candidates with foreign language skills.

# German can be useful for careers in the following areas

Air Steward/Stewardess, Air Traffic Controller, Au Pair, Bilingual Secretary, Business, Careers in Export, Chef, Courier, Hotel Management, Hotel Receptionist, Human Resources, International Marketing, Importer, Interpreter, Journalist, Librarian, Translator, International Driver, Ground Hostess, Pilot, Tourism, Travel Agent, Work in the Department of Foreign Affairs, etc.

### Syllabus outline:

https://curriculumonline.ie/Senior-cycle/Senior-Cycle-Subjects/German/

# SPANISH



Spanish follows a common syllabus framework for the teaching and examining of modern languages in the Leaving Certificate. The syllabus aims to develop learners' communicative skills in the Spanish, to develop their strategies for effective language learning and raise their awareness of cultural, social and political diversity.

Assessment is by means of a written examination, and an aural and oral examination at two levels, Ordinary level and Higher level.

# If I want to study Spanish for my Leaving Certificate, what aptitudes do I need?

- Be able and willing to develop oral, aural, writing and reading skills in Spanish so that you can develop confidence in a foreign language
- Have interest in the Spanish culture
- Be able to learn independently

# Leaving Certificate Spanish V's Junior Certificate Spanish:

- More focus on oral work
- Continuation of other skills development
- Need to do some work everyday to become very familiar with language

### Assessment:

- Oral Exam 25% in H.L, 20% in O.L.
- Aural Exam 20% in H.L, 25% in O.L.
- Written Exam on reading comprehension and writing ability 55%

### Assignments during Course:

- Regular participation in oral and aural class work
- Reading Comprehensions and writing exercises

# Career Note:

You must have a foreign language for entry to all colleges of the National University of Ireland i.e.. UCC, UCD, NUI Galway and Maynooth. (*However, recently these colleges have dropped that requirement for many of their engineering, science, agricultural and food science programmes. A third language is also not a requirement for nursing programmes. Art is acceptable in place of the language for students entering NCAD.*) You also need a foreign language to become a Cadet in the Army or Air Corps. Certain Industries and employers think very highly of candidates with foreign language skills.

# Spanish can be useful for careers in the following areas

Air Steward/Stewardess, Air Traffic Controller, Au Pair, Bilingual Secretary, Business, Careers in Export, Chef, Courier, Hotel Management, Hotel Receptionist, Human Resources, International Marketing, Importer, Interpreter, Journalist, Librarian, Translator, International Driver, Ground Hostess, Pilot, Tourism, Travel Agent, Work in the Department of Foreign Affairs, etc.

### Syllabus outline:

https://curriculumonline.ie/Senior-cycle/Senior-Cycle-Subjects/Spanish/

# **BIOLOGY**



Biology is the study of life. Through the study of biology students explore the diversity of life and the inter-relationships between organisms and their environment. They become aware of the use of living organisms and their products to enhance human health and the environment. The Leaving Certificate Biology syllabus is for students in the senior cycle of postprimary education and is assessed at Ordinary and Higher levels. The biology syllabus is currently under review.

### Why Study Biology

- Biology is a popular subject and is the study of life.
- It requires a lot of memory work so is a good choice for students with attention to detail and excellent memory work.
- Many courses require at least one science subject and some even require two (see third level entry requirements). Therefore, it is a good idea to have at least one science subject to keep your options open.
- Those considering medicine, nursing and related courses will find that this subject will be of huge benefit in their studies.

### What kind of student would Biology suit?

The course is a continuation of what was studied at Junior Cycle but in more detail. It is particularly suited to students who have scored highly in the Naturalist and Investigative areas in their interest test.

# **Recommendations/Tips**

- It is recommended that a student taking Leaving Certificate Biology has a good understanding of Junior Science at Higher level.
- Each student must have an aptitude and interest for laboratory work.
- A considerable amount of learning and study is necessary to do well in this subject

# If I want to study Biology for my Leaving Certificate, what aptitudes do I need?

- Be able to learn and understand facts, terms, principles and ideas
- A good command of English is useful
- Be able to carry out practical work Lab and fieldwork safely
- Be able to record and interpret information
- Be able to understand experimental techniques

# Leaving Certificate Biology V's Junior Certificate Biology:

- Much more detail
- A wider range of topics to cove

# Course Content:

The course is divided into three units

- Unit 1 The study of life (ecology and food science)
- Unit 2 The Cell (Genetics, photosynthesis, respiration and enzymes)
- Unit 3 The organism (a study of body systems, plant biology and microbiology)
- There are 22 mandatory practical activities.
- Three of these are examined each year, two of which have to be answered. A laboratory record of these activities has to be kept and available for inspection by The Department of Education. An ecology portfolio must also be completed.

#### Examination:

The examination at Higher and Ordinary level is three hours in duration. The exam paper is divided into three units.

Section A - Six short questions (answer five) 100 marks.

Section B - Three questions on practical activities (answer two) 60 marks. Section C - Six long questions (answer four) 240 marks.

# Career Note:

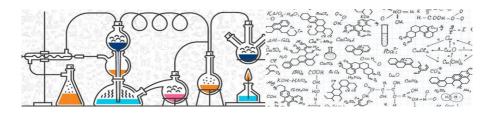
# Biology can be useful or necessary for careers in the following areas:

Agriculture, Agriculture Research, Ambulance Driver, Beautician, Biochemical, Biologist, Biology Teacher, Catering Superintendent, Chiropodist, Conservation Worker, Cosmetic Consultant, Dairy Scientist, Dental Hygienist, Dental Technician, Dentist, Dietician, Doctor, Food Science Technician, Forester, Hairdresser, Health Inspector, Horticulturist, Laboratory Assistant, Marine Biologist, Medical Laboratory Assistant, Microbiologist, Nail Technician, Nurse, Occupational Therapist, Oceanographer, Optician, Pharmacist, Physiotherapist, Psychologist, Radiographer, Speech Therapist, Veterinary Nurse, Veterinary Surgeon, Zoologist, etc.

# Syllabus Outline:

https://curriculumonline.ie/getmedia/0cc3a7ac-fd8c-4612-8e4d-81cd82482abc/SCSEC07\_Biology\_Syllabus\_Eng.pdf

# CHEMISTRY



Leaving Certificate chemistry aims to provide a relevant course for students who will complete their study of chemistry at this level while, at the same time, providing a foundation course for those who will continue to study chemistry or a related subjects following completion of their Leaving Certificate. This syllabus is for students in the senior cycle of post-primary education and is assessed at Ordinary and Higher levels.

#### Why Study Chemistry

This subject aims to provide a relevant course for students who will complete their study of chemistry at this level while, at the same time, providing a foundation course for those who will continue to study chemistry or related subjects following completion of their Leaving Certificate.

Chemistry is considered most useful for careers in Pharmacy, Ag Science, Medicine, Engineering, General Sciences and Biotechnology.

#### What kind of student would Chemistry suit?

- If you enjoyed Junior Cert Science and you have done well in this and in Maths, you should be a good candidate for Leaving Cert Chemistry.
- If you apply attention to detail and are able to describe the procedures of experiments and understand vocabulary.
- Students considering a career in any scientific discipline, such as chemistry, biology, environmental science, medicine, pharmacology, or material science.

# Course Content

The syllabus consists of approximately 70% pure chemistry; the remaining 30% deals with the social and applied aspects of chemistry. The major topics involved include the following:

- Atomic structure
- Volumetric analysis
- Organic chemistry
- Water chemistry
- Reaction mechanisms.

There also is an option to be taken as part of the course which involves the study of atmospheric and industrial chemistry or the study of materials and electrochemistry.

Experimental investigations are an essential part of the leaving certificate course. **Each student must complete at least 28 experiments** over the duration of the course.

Experimental work is examined as part of the leaving cert exam and forms the basis for a minimum of three questions on the exam paper.

# *.If I want to study Chemistry for my Leaving Certificate, what aptitudes do I need?*

- Have adequate practical skills in order to carry out the mandatory experiments
- Be able to work safely in the laboratory
- Be able to draw graphs and diagrams
- Familiarity with calculator use
- Be able to learn and understand facts and terms
- Be reasonably good at maths

# Leaving Certificate Chemistry V's Junior Certificate Chemistry:

- Much more detailed
- Much more practical work and related theory

• New topics e.g. Organic Chemistry, Thermo chemistry

### Assessment:

- The leaving cert exam is three hours in duration. Each candidate must answer at least two questions from Section A (experimental section) and a maximum of six questions from Section B.
- There are eleven questions in total on the exam paper, each carrying 50 marks.
- There is no element of continuous assessment but experimental copies must be available for inspection by the State Examinations Commission. Students taking chemistry have to memorize the chemical components of a series of prescribed experiments. They will need to present the elements of four such experiments in their exam

# Career Note:

Chemistry can be useful or <u>necessary</u> for careers in the following area: Archaeologist, Brewing Technology, Chemistry Teacher, Cosmetic Science, Dairy Scientist, Dental Craftsperson, Dental Hygienist, Dentist, Doctor, Dietician, Engineer, Food Science Technology, Forensic Scientist, Forestry Inspector, Health Inspector, Industrial Chemist, Laboratory Work, Nurse, Optician, Pharmacist, Physiotherapist, Pilot, Radiographer, Speech Therapist, etc.

# Syllabus outline:

https://curriculumonline.ie/Senior-cycle/Senior-Cycle-Subjects/Chemistry/

# PHYSICS



Leaving Certificate Physics aims to give students an understanding of the fundamental principles of physics and their application to everyday life. It offers a general education in physics to all students, enabling them to develop an understanding of the scientific method and their ability to observe, to think logically and to communicate effectively. Science technology and society (STS) is an integral part of the syllabus so that students can be aware of the principles of the applications of physics in the everyday world.

This syllabus is for students in the senior cycle of post-primary education and is assessed at Higher and Ordinary level

### Why Study Physics

Physics contributes to a student's future career in many ways. It helps, in conjunction with the other Leaving Certificate subjects, to provide a broad, balanced education for any student. Physics teaches students to think logically and enables them to express their thoughts in a concise manner. The skills and knowledge developed through their study of physics can be useful in a wide variety of situations.

# What kind of student would Physics suit?

- Students who wonder why and ask how?
- Students who are interested in the following careers would be advised to study Physics: Electrician, Optician, Doctor, Dentist, Engineer, Computer Technician and Programmer.

# **Recommendations/Tips**

- While there is an element of maths in the physics course, honours maths is not a requirement to do honours physics.
- Students should not avoid physics on the basis of not having honours maths.
- It is entirely possible to get on well in honours physics without honours maths.
- Pupils should become capable at drawing and reading graphs and competent in using a calculator through the course.
- The physics syllabus has strong links with the other science subjects, especially chemistry.
- There are strands of physics which overlap with woodwork and construction, especially the electricity and heat sections.
- Pupils who will gain the most from studying physics are those who have an interest in science at Junior Cert level and those who enjoy learning about how things work.
- The science, technology and society section allows students the chance to see where the physics they are learning applies as in TVs, car motors and electricity in the home and also, to see some of the industrial applications of certain topics.
- For students who are interested in proceeding further with physics, check out our sector on <u>Physical and Mathematical Sciences</u>, and also the <u>Institute of Physics</u>, which provides information on the range of career options that students can follow after physics at third level.

# Course Content:

The study of Physics for Leaving Certificate is broken down into **eight** sections or topic areas:

(a) Six compulsory sections (b) Two option sections (Higher paper only, one to be done and this is depending on option subject teachers addresses) **Compulsory sections** 

• Optics / Waves: the study of light and sound and real life applications of the theory.

- Mechanics: time, space, distance, speed and acceleration.
- Heat: changes of state, energy conversions and mathematical problems.
- Electricity: develops on from simple circuits to more detailed concepts.
- Electricity and Magnetism: gravity, relationship between electricity and magnetism, study of how a motor works, ac. and dc. circuits and phenomena with real world applications.
- Atomic Physics: cathode rays, x-rays, radioactive decay, fission and fusion, nuclear reactors and real world applications.

**Higher Level only:** (one to be done and this is depending on teachers selection). At Higher Level, there is a deeper, more quantitative treatment of physics. The two option sections are omitted from the Ordinary Level Leaving Certificate course.

- **Particle Physics:** recent type of physics, delving into the new discoveries leading to a better understanding of the formation of the universe and where we came from.
- **Applied Electricity:** detailed study of electricity and the working of a motor developing from electricity already studied.

The course also consists of **24 core mandatory experiments** complementing each section in an aim to develop students' technical skills and enhance understanding and reinforce key concepts.

### Examination:

The leaving cert exam is three hours in duration. A total of 400 marks are available for the exam.

### Section A:

- Students must answer 3 out of 4 questions
- 120 marks: 40 marks per question

• Questions are based on experimental procedures and use of results **Section B:** 

- Students must answer 5 out of 8 questions
- 280 marks: 56 marks per question
- Questions are more broad and theory based

Leaving Certificate Physics is assessed by means of one terminal examination paper at each level. Students are required to keep a record of their practical work over the two years of the course.

# If I want to study Physics for my Leaving Certificate, what aptitudes do I need?

- Be able to measure physical quantities
- Be able to work safety in a lab
- Be able to use a calculator properly
- Be able to present information in a tabular, graphical, written and *diagrammatical* form
- Be able to learn experiments and use data appropriately
- Be fairly good at maths (B at O.L or above)

# Leaving Certificate Physics V's Junior Certificate Physics:

- More practical work, which makes the theory come alive
- More focus on how physics relates to ordinary and familiar things

# Career Note:

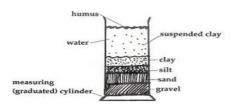
# *Physics is useful for careers in the following areas* : Architecture, Biophysicist,

Computer Careers, Dentist, Doctor, Engineering, Health Inspector, Marine Radio Operator, Medical Laboratory Technician, Meteorologist, Naval Service, Nurse, Pharmacist, Physicist, Physics Teacher, Photographic Technician, Pilot, Radiographer, Scientific Laboratory Technician, Scientific Research, etc.

# Syllabus outline:

https://curriculumonline.ie/Senior-cycle/Senior-Cycle-Subjects/Physics/

# AGRICULTURAL SCIENCE





Leaving Certificate agricultural science involves the study of the science and technology underlying the principles and practices of agriculture. It aims to develop knowledge, skills and attitudes that promote the sustainability of agricultural resources, and places emphasis on the managed use of these resources. Plants and animal types associated with agriculture are studied, and investigations are undertaken into such aspects as soil, ecology, plant and animal physiology, farm crops, farming practices, genetics and microbiology.

### Why Study Agricultural Science?

Agricultural Science remains a very popular subject among students in Ireland and reflects our agricultural background. This subject proves popular among students who are planning to study Veterinary Science, Science or Medicine in college. Many students also go on to study Agricultural Science at third level, or some students find work in the farming industry upon completion of secondary school.

### What kind of Student would Agricultural Science suit?

Some experience of farming would be desirable but is not a requirement for the course.

The course consists of the study of a variety of aspects of agriculture and is divided into four main strands.

#### **Scientific Practices:**

- Hypothesising
- Experimenting
- Evaluating Evidence
- Communicating
- Working Safely

#### Soils:

- Classification & formation
- Properties (Chemical, Physical, Biological)
- Management

#### Plants:

- Plant Structure
- Genetics
- Classification/Identification
- Grassland Production
- General/Cereal Crop Production
- Catch Crops

#### Livestock:

- Animal Physiology
- Nutrition and Reproduction
- Genetics
- Classification/Identification of Livestock Breeds
- Livestock Production (System/Enterprises, Management, Animal Husbandry and Health)

#### Examination:

The assessment in Agricultural Science consists of:

(a) a terminal examination paper (75%), at both Higher and Ordinary level, lasting 2 and a half hours, examining the following:

- knowledge and recall of facts related to the principles and practices of Agricultural Science
- application of knowledge and understanding from different areas of the specification to familiar and unfamiliar situations

- scientific inquiry, formulation of hypotheses and design of investigations
- critical thinking, the ability to analyse and evaluate information and to form reasonable and logical argument, based on evidence
- problem solving based on integration, analysis and evaluation of qualitative and quantitative information and data
- understanding of the ethical, historical, environmental and technological aspects of science, and how it contributes to the social and economic development of society.

(b) a student project (25%), through which a topic of agricultural significance is investigated and researched in greater depth. This will be based on a theme, which will be set annually by the State Examinations Commission.

# If I want to study Agricultural Science for my Leaving Certificate, what aptitudes do I need?

- Have an interest in animals
- Have access to a farm, although beneficial for project completion but not a requirement
- Biology though not essential, would be very suitable as a second Leaving Certificate Science Subject
- Be able to learn and understand terms and definitions

# Leaving Certificate Agricultural Science V's Junior Certificate Science:

- Much more detailed than the Junior Certificate Science
- Many of the skills needed for the parts of the Agricultural Science course which relate to experiments, data analysis, research, communication, and safety link directly to skills which are developed and examined in Junior Certificate Science, especially via CBAs
- Topics such as sustainability, climate change, measurement, and multiple Biology topics which are learned in Junior Certificate Science are investigated, researched, and discussed in more detail in Leaving Certificate Agricultural Science

- The student project component 25% of the final exam requires similar skills as the investigation components (CBAs 1 and 2) in Junior Certificate Science
- The exam format is quite different to that of the other Leaving Certificate Science subjects more writing!

# Career Note:

Agricultural Science can be useful for careers in the following areas: Agriculture, Agri-Business, Agri-Journalism, Brewing Technology, Dairy Scientist, Dietician, Environmental Inspector, Farmer, Farm Manager, Food Science Technology, Forestry Inspector, Horticultural Work, Laboratory Work, Renewable Energy, Science Teacher, Veterinary Nurse, Veterinary Surgeon, etc.

#### Syllabus outline

https://curriculumonline.ie/getmedia/9ad3071d-b58d-4988-9afcf4e229ceb864/NCCA-Specification-for-Leaving-Cert-Agricultural-Science.pdf

### ACCOUNTING



Leaving Certificate accounting provides students with the knowledge, understanding and skills in accounting and financial management necessary for managing personal and basic company accounts. The learning experiences in accounting develop students' organisational, logical thinking, planning and problem-solving skills for their future life, work and study. It also develops their numeracy skills within the context of business and enterprise. The syllabus is for students in the senior cycle of post-primary education and is assessed at Higher and Ordinary levels.

### Why Study Accounting

For those considering studying accounting, actuarial studies or finance after the Leaving Cert it would be unwise to leave accounting out of their subject choice. It is also be an important subject choice for those thinking of starting their own business.

While not required specifically for studying any third level college course, it is recommended if Accountancy is the career path you want to follow.

### What kind of Student would Accounting suit?

Commonly seen as the mathematical side of business, accounting attracts the more numerate student. It teaches students the bookkeeping side of business but delves deeper, teaching you to analyse and interpret the figures. Once you can understand and adhere to the basic rules of accountancy, it is a subject that you can do very well in.

#### **Recommendations/Tips**

• The course is numerically based but theory and procedures must be learned also.

- While the student needs to be comfortable with numbers he or she does not need to be at higher maths level.
- While the Junior Certificate Business Studies Course provides a foundation for this course, it is not essential and it is possible to take accountancy up at senior cycle.
- This course offers a hard working student the real possibility of high grades because of the unambiguous nature of the questions. An organised student who likes order will be particularly suited to this course.

#### Course content:

Financial Statements Preparation, Farm Accounts, Club Accounts, Company Accounts, Manufacturing Accounts, Financial Statements Analysis and Interpretation, Budgeting, Break-even Analysis, Cost Classification, Accounting Theory and Principles.

# . If I want to study Accounting in my Leaving Certificate, what aptitudes do I need?

- Problem solving skills
- Good time management
- Good attention to detail
- Good organisational skills
- Like figures and numbers NB: you do not have to do higher level maths to do higher level accounting

#### Assessment:

The subject is examined at higher and ordinary level. Both levels involve one exam of three hours duration. The exam paper is made up of three sections, the first two are based on the Financial Accounting section of the course and the third covers the Management Accounting section. Questions must be answered from all sections of the exam paper.

#### Career Note:

Accounting is good preparation for business related occupations, but is not essential.

## Accounting can be useful for careers in the following areas:

Accountancy, Administration, Advertising, Anybody Self Employed, Auditing, Banking, Book-keeping, Building Society Work, Business, Business Law, Business Teacher, Cashier, Clerical Work, Farming, Hotel Management, Insurance, Marketing, Market Research, Production Management, Purchasing Work, Quantity Surveyor, Receptionist, Sales Representative, Store Management, Taxation Work, Tourism, etc.

#### Syllabus outline

https://curriculumonline.ie/getmedia/1cc50fb4-90da-428c-83d4df53c8f49dd9/SCSEC01\_Accounting\_syllabus\_English.pdf

# BUSINESS



Leaving Certificate business creates an awareness of the importance of business activity and develops a positive and ethical attitude towards enterprise. The learning experiences in business develop students' critical thinking, creative and organisational skills while enhancing literacy and numeracy skills using real-life examples. Business provides students with a learning foundation for a wide range of careers in business, marketing, law, enterprise and management.

This syllabus is for students in the senior cycle of post-primary education and is assessed at Ordinary and Higher levels.

### Why Study Business

Business is not specifically required for entry into any third level course but it would certainly be beneficial for candidates who might be interested in courses or careers in the area of finance, enterprise, law and communications.

### What kind of student would Business suit?

- Business will suit a candidate who is interested in current affairs and listens to the news, reads the papers and stays alert to what is happening in the general business world.
- While there is a fair share of learning of key concepts the ability to apply these concepts in everyday life will be the difference between passing the subject and getting a good mark.

- While the business concepts are easy to understand, it will be important to show that you can apply the concept to everyday business life.
- This subject suits someone who has an organised mind and likes to answer questions in bullet points, rather than in long essay format.
- This subject would be useful to anyone thinking of starting his or her own business in the future.

#### **Recommendations/Tips/Comments**

The subject is suited to students who are willing to work hard and caters for all abilities.

- It is not necessary for students to have studied Junior Certificate Business Studies, but this would be a help.
- Not necessary to write long essays, answers are presented in bullet points.
- Course content is factual and requires a lot of learning, containing only a few mathematical elements.
- Ideally, students would have an interest in business and current affairs and would have an up to date knowledge of economic environment.
- An organised and consistent attitude to homework and study would be essential in this subject.

#### **Course Content**

- This subject is concerned with understanding the environment in which business operates in Ireland and in the wider world.
- It also involves equipping the students with a positive view of enterprise and its applications in the business environment, in both the public and private sectors.
- There are 7 core units covering the following topics: Introduction to people in business; Enterprise; Managing 1 & 2; Business in action; Domestic Environment and International Environment.
- There is a common syllabus covering Higher and Ordinary level, which will fulfil the aims and objectives of the course.
- A flexibility of design that caters for present day Irish business education and yet is capable of adaptation to future developments in a structured and efficient way.

- It assists students to develop their education for adult and working life including the creation of positive attitudes towards self-employment.
- From time to time there may be field trips or guest speakers where the course allows. These are not a compulsory part of the course and are organised at the teachers' discretion.

#### Exam Structure - Higher & Ordinary Level

#### Higher Level – 1 x 3 hour paper (400 marks); 3 sections.

Section 1 – Short questions (8/10) 80 marks.

Section 2 – Applied Business Question – 80 marks (compulsory).

Section 3 – Long Questions (60 marks per question (4/7))

#### Ordinary Level – 1 x 2.5 hour paper (400 marks); 2 sections.

Section 1 – Short Question (10/15) 100 marks. Section 2 – Long Questions (75 marks per question (4/8)).

# If I want to study Business for my Leaving Certificate, what aptitudes do I need?

- Have an interest in Business and Enterprise
- Be able to analyse and interpret data

# Leaving Certificate Business:

Syllabus at LC touches on every aspect of modern human society. Topics include Contract & Consumer Law, Insurance, Banking & Finance, Stakeholders in Business, Management Activities & Skills, Marketing, Human Resource Management, International Trade, Global Businesses, The EU & EU policy, Taxation, analysis of financial performance of Business, case studies on Irish and International companies.

#### Business can be useful for careers in the following areas:

Accounting, Administration, Banking, Book-keeping, Business, Clerical work, Company Secretary, Economics, Hotel Management, Industry, Insurance, Law, Management, Marketing, Purchasing, Sales, Self Employment, Taxation, Entrepreneurship, Human Resource Management, etc.

# Transferable Skills from Business subjects:

- Strong communication skills (oral and written)
- Analytical and critical thinking
- Problem solving, Decision making, Logical thinking
- Presentation and report writing skills
- Numeracy and an understanding of how to interpret and use financial data
- Self-motivation, initiative and effective time management

# Syllabus outline:

https://curriculumonline.ie/Senior-cycle/Senior-Cycle-Subjects/Business/

# ART, CRAFT & DESIGN



Art is both creative and expressive and it provides an opportunity for the development of the skills necessary for creative engagement with the world.

The specification sets out clear expectations for students, across three interrelated and inter-dependent strands: Research, Create and Respond. To access the online specification, guidelines, the current Leaving Certificate Art syllabus, which will end in 2021.

For full details please check for clarity on

### Syllabus outline:

https://curriculumonline.ie/Senior-cycle/Senior-Cycle-Subjects/Art/

The practical work can include Life Sketching, Still Life, Imaginative Composition, Design and Craftwork. Students also study the History and Appreciation of Art, which covers Irish and European Art, and Art Appreciation.

This syllabus is for students in the senior cycle of post-primary education and is assessed at Ordinary and Higher levels.

#### Why Study Art

If you want to study more in an artistic area, you can continue in Fine Art and specialise in painting, sculpting or printmaking. Alternatively, you could go into the design area and specialise in areas such as fashion, graphic, interior or furniture design. Studying art, as the title suggests, allows students to be creative and explore their desire for self-expression and develop an appreciation for artistic work of others, including the work of famous artists and the history of art.

## What kind of Student would Art suit?

- Students who have shown an aptitude for art, such as by getting high grades in Junior Cert Art.
- Anyone considering a career in a creative discipline such as Architecture, Marketing, Film and Entertainment, Web Design, Fashion, Game Design, or Advertising.
- Students who have strengths in the practical subjects may be more suited to Art.
- Students who enjoy expressing themselves through art and like to sketch and doodle.
- Students who are prepared to work hard at developing their artistic talent.
- Students who are looking for a break from intensive memory-work in their other subjects, or to reduce pressure on themselves in June by having a subject with exams in April/May.

### Assessment Component: To be introduced 2021.

Practical coursework 50% Level: Higher and Ordinary level Practical Examination 20% Level: Higher and Ordinary level Written examination 30% Level: Higher and Ordinary level.

# Coursework (a) Imaginative Composition or Still Life and (b) Design or Craftwork

The Imaginative Composition or Still Life component and the Craft or Design component is executed as coursework in schools. This coursework is to be completed from Jan- April of 6th year.

These two components will be based on a single set of stimulus materials issued annually by the State Examinations Commission. Based on these

materials, the candidate will choose one theme from which both components will be developed.

Each candidate will be required to create and submit a realised work for the Imaginative Composition or Still Life component and a realised work for the Craft or Design component, as well as preliminary and preparatory material.

## (c) History of Art Exam

The art course also features a written examination on History and Appreciation of Art, which counts for 30% of the marks.

## The exam is divided into three sections,

- one on Irish art,
- one on European art,
- and a final section on artistic appreciation.

The course content is extremely broad ,and covers everything from prehistoric art to the modern day, but students are free to focus their studies on a few narrow areas of interest such as renaissance or Celtic art. Diagrams and illustrative sketches are encouraged in the exam.

# If I want to study Art for my Leaving Certificate, what aptitudes do I need?

- Be able to give a personal response to experiences, ideas and pieces of art
- Be able to write a discursive essay
- Be able to work from memory, imagination and direct observation
- Be able to use and understand the art and design elements
- • Be able to use a variety of topics, materials, media and equipment

# Leaving Certificate Art V's Junior Certificate Art:

• The main difference is the opportunity to study Art History and Appreciation

- Practical work expands and develops on from work undertaken in Junior Certificate
- Drawing skills are emphasised and developed to a more professional level

#### Career Note:

# A portfolio will probably be needed for entry to a Third Level Art Course.

Art is acceptable in place of the language requirement for students entering NCAD. Art is either necessary or useful for the following careers: Advertising, Art Teacher, Architecture, Beautician, Cosmetics Consultant, Crafts, Fashion, Florist, Furniture Design, Gallery and Museum Work, Graphic Design, Hairdresser, Interior Design, Marketing, Occupational Therapist, Painting and Decorating, Photography, Picture Restorer, Primary Teacher, Printing and Publishing, Sign Writer, Textile Design, Television work, Video Production.

# **MUSIC**



Leaving Certificate Music involves a series of interrelated musical activities within each of the three core areas of musical experience - performing, composing and listening. In performing, students choose from a variety of individual and/or group performing activities. In composing, students develop an understanding of musical structure and form, and the necessary skills to bring this to realisation, while the listening component provides for rich aural experiences through exposure to music of different periods, styles and genres.

This syllabus is for students in the senior cycle of post-primary education and is assessed at Higher and Ordinary level.

### Why Study Music

- Students can get up to 50 per cent of the total marks in the musical activity that best suits their talent before they even sit the written papers
- In music you can develop your talent and knowledge in this area and continue your studies in a wide range of college

#### What kind of student would Music suit?

- Students who have shown an aptitude for music, such as by getting high grades in Junior Cert Music and are keen to develop and practice more.
- If you can read music and have a competence in singing or playing an instrument

- Anyone considering a career in a creative discipline such as singing, playing in a band, music production and performance technology and management.
- Those interested in the rock and pop areas of music can develop their talents in a number of PLC courses in Rock and Jazz Music, including management.
- Students who might wish to sit Ordinary Level Music can take a user-friendly technology option as their performance option, where they input notes into musical software and make some simple edits to it. It is a very accessible option.

## Course content:

The course consists of three main components:

(1) Composing (2) Listening (3) Performance

# **Ordinary level**

Students will choose one of the three activities to represent 50 per cent, e.g. Performing 50% Composing 25% Listening 25% or...

Performing 25% Composing 50% Listening 25% or...

Performing 25% Composing 25% Listening 50%

# Higher level

Students will undertake additional studies (a Higher level elective in one of the three activities, e.g.: Performing 25% Composing 25% Listening 25% + One Higher level elective 25%.

This will allow Ordinary level and Higher level students to gain up to 50 per cent of the total marks in the musical activity that best suits their talent.

# Musical Performance:

As mentioned above, you can choose to designate 50% of your assessment to musical performance. If you choose this option you have a few further options open to you:

Perform 6 pieces of music on one instrument

Or

You can be examined on two instruments. If you choose this option you are required to perform fours pieces of music on each instrument. Or

You can choose to perform four pieces of music (25%) and be examined in Music Technology (25%). Music Technology involves inputting music into a software package on the computer and being able to perform music edits on it, e.g. add dynamics or tempo markings, or transpose the music. If you have good computer skills, this could be a nice option for you

## Examination:

## Listening Paper

Examined in June of 6th year 90 minutes duration Four set works, Irish music and general listening skills.

## Composition Paper

Examined in June of 6th year 90 minutes duration Melody writing and harmony

### Performance

Examined in April of 6th year Candidates may perform as a soloist or as part of a group or both. The technology option is a solo activity.

### **Ordinary Level:**

• 2 pieces on one instrument and one unprepared test.

Higher Level @25%: 3 pieces on one instrument and one unprepared test OR 2 pieces on each of two instruments and one unprepared test

**Electives for extra 25%: Higher Level only** Each candidate must choose one of the above components to study for this extra credit. The majority tend to opt for a Performance elective.

Listening Elective: The candidate must work on a music project over the course of 5th and 6th year. They must submit some work to the State Examinations Commission and sit an extra written paper in June.

**Composition Elective:** The candidate must undertake a large scale composition to be submitted to the Examinations Commission in their final year.

**Performance Elective:** This involves a more substantial performance during the examination period in April of 6th year where students perform either 6 pieces, rather than 3, or 4 pieces in one activity and 4 in another activity, rather than 2 and 2, or 4 pieces in one activity and a technology option.

# Leaving Certificate Music V's Junior Certificate Music:

- The course follows on from the course at Junior Certificate level.
- You may use Music Technology in your practical.

# Career Note:

# Music is useful for careers in the following areas:

Actor, Aerobics instructor, Arranger, Composer, Dancer, Disc Jockey, Entertainment, Film Studies, Folklore Studies, Instrument Maker, Library Work, Music Shop Sales, Sound Engineering, Speech Therapy, Music Therapy, Occupational Therapist, Physical Education, Primary/Secondary Teacher, etc.

# Syllabus outline:

https://curriculumonline.ie/Senior-cycle/Senior-Cycle-Subjects/Music/

## **GEOGRAPHY**



Leaving Certificate geography will help students develop an understanding of the changing relationships between the physical and human worlds. Through their study of geography, students will develop geographical skills that will help them to make informed judgements about issues at local, national and international levels.

Leaving Certificate geography may be studied at Ordinary or Higher level. The course is divided into core, elective and optional units of study. Geography is assessed at Ordinary and Higher level. Students are expected to complete a report on a geographical investigation and to sit a written examination.

What kind of student might Geography suit?

Students considering further study in areas such as geography, economics, environmental science, or politics.

Students who achieved solid results for Junior Cert Geography.

# If I want to study Geography for my Leaving Certificate, what aptitudes do I need?

- · Be able to develop geographical and vocational skills
- Be interested in active citizenship
- Be able to use information and communications technology

# Leaving Certificate Geography V's Junior Certificate Geography:

- Builds on the experience of the student at Junior Certificate, introducing Geographical Investigation
- Develops the limited experience of regional Geography at Junior Cycle and allows the student and teacher to specialise on a number of regions

#### Assessment:

- Ordinary Level: short answer questions and multi part questions
- Higher Level: short answer questions, multi part question and essay type questions
- Both levels will have separate written exam papers -80%
- 20% for report on Geographical Investigation

## Assignments during Course:

- · Class work and homework assignments
- Fieldwork
- Writing up of field work

### Career Note:

NB: Geography is presently accepted as a Science subject at Trinity College Dublin for both Science and Pharmacy.

## Geography is useful for careers in the following areas:

Agriculture, Air Traffic Controller, Anthropologist, Architecture, Archaeology, Cartographer, Civil Engineering, Construction, Conservation Work, Courier, Development Work Abroad, Estate Agent, Forestry, Geologist, Geography Teacher, Guide, Horticulture, International Driver, Market Research, Marine Officer, Meteorology, Mineralogy, Pilot, Statistics, Surveying, Town and County Planning, etc.

# Syllabus outline:

https://curriculumonline.ie/Senior-cycle/Senior-Cycle-Subjects/Geography/

# HISTORY



Leaving Certificate history deals with the experience of human life in the past. The study of history involves an investigation of the surviving evidence relating to such experience. It brings students into contact with human experiences that are often very different from their own and fosters their developing understanding of the human condition and human motivation. Through its focus on the evaluation of evidence, it contributes significantly to the development of students' skills of critical thinking. Through its focus on research, it allows students the opportunity to develop their skills of independent learning.

Leaving Certificate history is assessed at two levels, Ordinary level and Higher level. There are two assessment components: a research study report (submitted prior to the examination) and a written examination.

# If I want to study History in my Leaving Certificate, what aptitudes do I need?

- Be able to analyse and interpret facts and opinions and use them to support your own views
- Be able to discuss a statement taking into account arguments "for and against"
- Be able to learn facts, statistics and legal clauses /acts
- Be able to learn how to extract information from primary documents/ maps
- Be able to write a concise, clear, logical and interesting argument

# Leaving Certificate History V's Junior Certificate History:

- Junior Certificate looked broadly at History from the Stone Age to the 20th century. Leaving Certificate will focus on the late 19th and 20th century.
- The course will cover both Irish and European History looking at personalities, events and their influences especially European wars. Motives will be analysed and alternative actions sought.
- American, African and Asian history will also be looked at.
- More focus will be placed on improving writing skills.

### Assessment:

- A Project on a special topic will be completed and returned to the Department before students sit their final exam worth 20%
- Final Exam documents (prescribed case studies) similar but more complex to the Documents Section of the Junior Certificate; map work and essay style questions at H.L or Paragraphs at O.L.

## Assignments during Course:

- Essay writing
- Project for exam
- Summary writing
- Map work

# Career Note:

# History is useful for careers in the following areas:

Archaeology, Barrister, Broadcaster, Civil Service, English Teacher, Garda, History Teacher, Historian, Journalism, Judge, Law, Librarian, Museum Work, Researcher, Politics, Prison service, Sociology, Tourism, Trade Union Official, University Professor, Writer, etc.

### Syllabus outline:

https://curriculumonline.ie/Senior-cycle/Senior-Cycle-Subjects/History/

### HOME ECONOMICS - Social & Scientific



Leaving Certificate home economics provides students with knowledge, understanding, skills and attitudes necessary for managing their own lives, for further and higher education and work. The learning experiences in home economics develop flexibility and adaptability in students, prepare them for a consumer-oriented society and provide a learning foundation for a wide range of careers in food, textiles, science, design, social studies and tourism. This syllabus is for students in the senior cycle of post-primary education and is assessed at Higher and Ordinary levels.

# If I want to study Home Economics for my Leaving Certificate, what aptitudes do I need?

- Be able to research, study, analyse and interpret material
- Be able and willing to learn Nutrition and Culinary skills
- Be able to communicate well
- Be organised
- Be able to discuss topics and work in teams

# Leaving Certificate Home Economics V's Junior Certificate Home Economics:

- Practical cookery assessed through written exams only
- Electives social studies, home design and management

- There is a lot more Sociology e.g. Family /marriage/ relationships/ family problems e.g. alcoholism, gambling, the elderly, housing, problems facing teenagers/ child care development
- In-depth Study of Nutrition, Resource Management and Consumer Studies

#### Recommendation to consider:

There is very little cookery involved at senior cycle.

#### Assessment:

- Written exam 80% of final exam marks
- Practical assessment in Elective 20% of final exam marks

#### Assignments during Course:

- Practical work
- Experiments
- Study of various topics
- Group work/ Discussion work
- Project work.

### Career Note:

This subject provides a foundation for a wide range of careers in food, textiles, science, design, social studies, tourism, and areas such as: Culinary Arts, Catering, Chef, Child Care, Consumer Adviser, Confectionery, Dietician, Environmental Designer, Food Science, Hairdressing, Health Inspector, Home Management, Home Economics Teacher, Nursing, Social Work, Social Care, etc.

### Syllabus outline:

https://curriculumonline.ie/Senior-cycle/Senior-Cycle-Subjects/Home-Economics/

## **CONSTRUCTION STUDIES**



Leaving Certificate construction studies provides students in the senior cycle of post-primary education with an introduction to the knowledge and skills involved in construction technology and construction materials and processes. Students develop their ability to communicate ideas and information and to apply accurate observation and scientific investigation through exploring materials and processes.

### Why Study Construction Studies

This practical subject gives students hands-on experience working with tools and machinery. Students also undertake theoretical and background work for their final examinations which provides the students with useful skills for working in the sector.

### What kind of Student would Construction Studies suit

It is recommended that a student taking Leaving Certificate Construction Studies has a general interest in buildings and the built environment. Each student should have an aptitude for, and an interest in design and practical work.

#### Course Content:

The course is essentially about the study of buildings and the built environment. The theoretical part of the course examines all parts of building from the planning stages to the completed building. The course is studied under the following main headings:

- Planning and Design
- Drawings and Documents
- Site Preliminaries and Foundations
- Walls, Partitions
- Floors, Roofs
- Fireplaces
- Windows and Doors
- Stairs
- Plastering and Painting
- Plumbing and Heating
- Services Drainage

# If I want to study Construction studies for my Leaving Certificate, what aptitudes do I need?

- Experience of Technical Graphics, Materials Technology (Wood),
- Metal Work and/or Art would be useful, but not essential
- Ability to work safely in a workshop
- Ability to take clear instructions
- A genuine interest in the Built Environment

# Leaving Certificate Construction Studies :

- This subject does not have a Junior certificate equivalent. Some see it as a follow on from Materials Technology (Wood).
- The subject deals with all aspects of building a home
- Covers renewable resources energy efficient homes, insulation, damp proofing, forces and loads, etc.

# Assessment:

Construction Studies is assessed at two levels, Ordinary level and Higher level. There is a written examination, a practical test, and an assessment of student project work. The examination at both Higher and Ordinary level has three separate components:

**Section A** Three hour **written paper** worth 300 marks. The exam consists of 10 questions out of which five have to be attempted. Question 1 is a compulsory drawing question of a building detail.

**Section B** 4-hour **practical woodwork exam** where the student makes a small item out of timber under exam conditions. The exam normally takes place in May. This accounts for 150 marks.

**Section C Building Project** where the student makes a building detail, a scale model of a building or a craft piece. The student also produces a portfolio to accompany the project that they make. Ideally this project must be completed by Christmas. This accounts for 150 marks.

### Career Note:

*Construction Studies can be useful for careers in the following areas* : Architecture, Auctioneering, Bricklaying, Construction Studies Teacher, Building Management, Carpenter, Civil and Structural Engineer, Electrician, Environmental Designer, Fire Fighter, Heating and Ventilation Technician, Insurance, Metal Work Teacher, Painter and Decorator, Plasterer, Quantity Surveyor, Site Clerk, Technical Sales, Town and County Planning, etc.

### Syllabus outline:

https://curriculumonline.ie/Senior-cycle/Senior-Cycle-Subjects/Construction-Studies/



# ENGINEERING



Leaving Certificate engineering is the study of mechanical engineering for students in the senior cycle of post-primary education. Students develop the skills and initiative in the planning, development and realization of technological projects in a safe manner. Practical resourcefulness, creativity and design in the planning and development of technological projects are emphasised. There are two main areas of study: workshop processes, and materials and technology.

Engineering is assessed at two levels, Ordinary level and Higher level, by means of a written examination, a project and a practical examination.

#### Why Study Engineering

This practical subject gives students hands-on experience of working with tools and machinery. Students also undertake theoretical and background work for their final examinations which provides useful skills for those considering a career in the sector.

#### What kind of Student would Engineering suit

Each student should have an aptitude for and an interest in design and practical work. This subject follows on from Junior Cert metalwork.

#### Course content:

- Health and Safety
- Benchwork

- Classification and Origin of Metals
- Structure of Metals
- Iron and Steel
- Non-Ferrous Metals
- Heat Treatment of Metals
- Fabrication and Finishing of Metals
- Corrosion of Metals
- Plastics Processing
- Machining
- Materials and Technology
- Materials Testing
- Joining of Materials
- Metrology
- Manufacturing Processes
- Technology

# If I want to study Engineering in my Leaving Certificate, what apttudes do I need?

- Problem solving skills
- It would be an advantage to have studied Metal Work to Junior Certificate Level, but not a necessity

### Leaving Certificate Engineering V's Junior Certificate Metal Work :

- Builds on the skills acquired at Junior Certificate
- Same topics covered in greater depth
- Theory is more detailed in Leaving Certificate

#### Assessment:

Written exam - 50% in H. L., 40% in O. L.

Project - 25% in H. L., 30% in O. L. - completed during November to March of 6th year

Practical Exam in May of 6th year - 25% in H. L., 30% in O. L

#### Career Note:

The subject is very useful, but not essential for Engineering at Third Level.

#### Engineering is useful for careers in the following areas:

Aircraft Technician, Army/Air Corp, Apprenticeships, Engraver, Engineering Teacher, Fabricator, Fitter, Industrial Design, Industrial Operator, Mechanics, Mechanical Production, Metal Work Teacher, Service and Maintenance Personnel, Structural and Civil Engineer, Technicians, Technical Sales, Toolmaker, Welder, etc.

#### Syllabus outline:

https://curriculumonline.ie/Senior-cycle/Senior-Cycle-Subjects/Engineering/

# **DESIGN & COMMUNICATION GRAPHICS**



Leaving Certificate design and communication graphics involves comprehending, analysing and communicating information presented verbally or graphically. Problem solving and creative thinking skills are developed through the analysis and solution of problems in both two and three dimensions graphics. Graphics and design are communicated using a variety of media, including computer-aided design (CAD).

The main areas of study are: Plane and Descriptive Geometry, Communication of Design and Computer Graphics, and Applied Graphics. Design and Communication Graphics is assessed at two levels, Ordinary level and Higher level, by means of two assessment components: a student assignment, of which CAD forms a significant and compulsory element, and an examination paper.

### Why Study Design and Communications Graphics

• DCG helps to further students' cognitive and practical skills with modules like graphic communication, problem solving, spatial visualisation, design capabilities, computer graphics and much more.

#### What kind of student would DCG suit?

• Students who have taken Tech Graphics to Junior Cert level.

• Students who have a keen interest in further studies in practical areas of engineering and construction, or in apprenticeships which include the study of technical drawings.

### **Recommendations/Tips**

- It is an advantage to have studied Technical Graphics at Junior Cert. level.
- Free-hand sketching is a main component of the core topics.
- Therefore, Junior Cert Art, Materials Technology or Wood Technology would serve as an advantage in this area.
- A basic knowledge of ICT skills is also beneficial.
- Students must also appreciate that work completed must conform to a high standard of neatness and craftsmanship.

#### Course Content:

The course is comprised of two parts; Core areas of study and Optional Areas of Study

#### Part One - Core Areas of Study

#### **Plane and Descriptive Geometry**

- Project Systems
- Plane Geometry
- Conic Sections
- Descriptive Geometry of Lines and Planes
- Intersection and Development of Surfaces
- •

#### **Communication of Design and Computer Graphics**

- Graphics in Design and Communication
- Communication of Design
- Freehand Drawing
- Information and Communication Technologies

### Part 2 – Optional Areas of Study

You will be required to study two of the optional areas listed below:

- Applied Graphics
- Dynamic Mechanism
- Structural Forms
- Geological Geometry
- Surface Geometry
- Assemblies

#### Examination:

One Terminal Exam Paper: 60% Terminal Exam: 3 hours duration. Student Assignment: 40%

Student Assignment Emphasis on:

- 1. Elements of design
  - 2. Communication graphics
  - 3. Use of ICT in design

Different theme for Higher and Ordinary level

May take the form of:

-A design investigation and modification

-A concept design

# If I want to study Design & Communication Graphics for my Leaving Certificate, what aptitudes do I need?

- Problem Solving Skills
- Be able to work in a structured and methodical way
- Be organised
- Be able to work safely in a work shop

## Leaving Certificate Design & Communication Graphics V's Junior Certificate Technical Graphics:

- Continuation of work studied at Junior Certificate level.
- Building and Engineering Applications.

### Career Note:

Design & Communication Graphics is very useful, not essential, for Architecture or Engineering Courses.

# Design & Communication Graphics is useful for careers in the following areas:

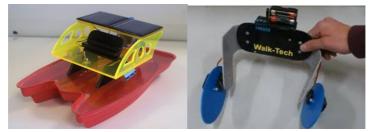
All Engineering and Technical Careers, Aircraft Technician, Architecture, Army, Air Corp, Bricklayer, Carpenter, Cartographer, Construction Studies,

Draughtsman, Fitter, Industrial Designer, Maintenance and Service Personnel, Mechanic, Plumber, Structural Design, Technical Sales, Toolmaker, Town Planner, Welder, etc.

# Syllabus outline:

https://curriculumonline.ie/Senior-cycle/Senior-Cycle-Subjects/Designand-Communication-Graphics/

# TECHNOLOGY



Leaving Certificate technology provides students in the senior cycle of post-primary education with knowledge and skills associated with technology education. Students apply their knowledge and skills creatively in a design-based approach to solving everyday technological problems, mindful of the impact on natural resources and on the environment. The syllabus comprises core areas of study, which are mandatory, and five optional areas of study, from which students choose two.

Leaving Certificate Technology is assessed at two levels, Ordinary level and Higher level, by means of an examination paper and a student project.

The syllabus comprises core areas of study, which are mandatory, and five optional areas of study, from which students choose two.

### Why Study Technology?

Given the current accelerated advances in technology, this is a very cutting edge subject.

- The subject technology combines knowledge, understanding, skills and attitudes, and empowers students to become autonomous problem solvers.
- Students apply their knowledge and skills creatively in a designbased approach to solving everyday technological problems, mindful of the impact on natural resources and on the environment
- It uses a design and make approach where students learn to think through a structured approach which encourages creativity in

response to needs and opportunities, with sensitivity to its impact on society and on the environment.

- Technology uses an activity-based environment where students work and learn as individuals and in groups, and where they integrate problem solving and practical skills in the production of useful artefacts and systems.
- Technology allows for the foundation skills developed in Junior cycle to be developed further.
- Students develop a good understanding of robotics and control within technological devices and throughout everyday life.
- Students will develop design solutions drawing on experience and using evidence, reasoning, and decision making to create high quality projects.

#### Course Content:

The core of the programme is a broad general introduction to the nature of technology that provides students with a consolidation, extension and refinement of the knowledge, skills and techniques acquired in the Junior Certificate. It is intended that all elements in the core are learned in an integrative manner by means of a 'design and make' approach in the context of safety and the impact of technology on society.

- A Process of Design
- Project & Quality Management
- Materials and Production
- Communication and Graphic Media
- Information & Communications Technology
- Structures and Mechanisms
- Energy, Electricity and Electronics

#### **Optional Modules**

The optional modules allow students to undertake a more in-depth study of specific elements within the core. Each student will study two options in addition to the core. Reference should be made to the syllabus document for more detailed information.

#### **Electronics and Control**

- Electrical Measurement
- Components and Circuit Design
- Power Supplies and Safety
- Electric Motors
- Assembly of Pre-designed Circuits
- Logic Circuits
- Counters and Sensors

#### **Applied Control Systems**

- Robotics
- Robotic Control
- Control
- Programmable Devices
- Pneumatics

#### Information & Communication Technology

- Computer Architecture
- Data Communications
- Computer Networks
- Internet
- Multimedia Design

#### Manufacturing Systems

- Context of Manufacturing
- Quality Management
- Project Management
- Concurrent Engineering
- Manufacturing Systems Design & Control

#### Materials Technology

- Classification of Materials
- Properties/Structure of Materials
- Materials Processing
- Skills Development
- Quality Assurance
- Production Techniques

## What kind of Student would Technology suit?

Students do not need to have taken Technology at Junior Cert to do this course. It would however be an advantage if students had taken one of Tech Drawing, Wood Technology or Technology, as this subject consolidates, extends and refines knowledge, skills and techniques acquired at Junior Cert. level in these subjects

## Examination:

Technology is assessed by means of a terminal exam and a project – both are equally weighted, 50% each.

Terminal Exam - 50% marks

At both Higher and Ordinary levels, the terminal exam is made of two sections:

Section A: Core Section B: Options. Project – 50% marks

Students will be required to undertake a project, based on a specified thematic brief and within stated parameters. The project involves the design and production of an artefact and an accompanying folder. The project should integrate the various elements of the study of technology and should represent the highest standard of knowledge and skills attained by the student. The folder should reflect all stages of the student's work from design to realisation, and should include an overall evaluation.

# Syllabus outline:

https://curriculumonline.ie/Senior-cycle/Senior-Cycle-Subjects/Technology/

## **RELIGION**



Leaving Certificate religious education calls for the exploration of issues such as meaning and value in life, the nature of morality, the development and diversity of belief, the principles of a just society, and the implications of scientific progress in the 21st century. Leaving Certificate religious education promotes an exploration and appreciation of various religious faiths and non-religious worldviews and does not involve faith formation.

This syllabus is for students in the senior cycle of post-primary education and is assessed at Higher and Ordinary levels.

#### Why Study Religious Education

- To equip students with knowledge, understanding, skills and values to support their life journey
- To enable students to participate in their communities and in the world as informed, respectful, responsible and caring members of society.
- To appreciate the richness of religious traditions and to acknowledge the non-religious interpretation of life.
- To foster an awareness that the human search for meaning is common to all peoples of all ages and from all cultures.

- To contribute to the spiritual and moral development of the student
- To support their development of the inquiry, thinking, and problem-solving skills.

What kind of student would Religious Education suit? Religious Education suits the student who is interested in enquiring about the meaning of life, philosophy, arts, other cultures including religious and non- religious world views, justice, ethics, moral decisions, civil land natural law, history and current affairs.

#### Course content:

*I*. Search for Meaning and Values' (philosophy from Ancient Greece to today)

**2.**World Religions (the five major faiths, ancient faiths from China, Japan, Mexico, Peru, New Zealand and Ireland as well as new religious movements; cults and sects).

3. Moral Decision Making (ethics)

**4.**Issues of Justice (human rights)

Assessment: Assessment consists of two components

1. Coursework 20% (journal work)

2. Written paper 80% (Course content)

Why study Religious Education?

- You studied it for the JC so you have a good base knowledge to begin with.
- • To explore philosophy which is relevant for future studies in education, TV and media, law, medicine, psychology, social care, social studies, as well as in the world of work and travel.

- • To engage in meaningful dialogue with people of other religious faiths and non-religious world views.
- • To understand the variety of religious traditions in Ireland and globally and on diversity and mutual respect is of particular relevance for national and global citizenship.
- • To explores issues of relevance in an informed and academic way e.g Morality; death penalty, cloning, euthanasia, abortion, refugees, minorities, war.
- To offers deep insight into the evolution of religion since ancient times thus informing your understanding of modern culture

## Some of the skills you will learn on this course include:

• Analysis of topics

• Engagement in extended research – including using computers, libraries, surveys, interviews, media, drawing conclusions

- Critical thinking questioning the authority of different sources, distinguishing fact from bias
- Reflection on your learning and its effect on your ideas, attitudes and experience
- Ability to interpret, contrast and evaluate different opinions/approaches to a topic
- Ability to develop counter-arguments

Studying R.E. does not limit you to studying theology at college. The philosophy on the LC course has strong links with 1st year college philosophy which is found on many humanities, arts and psychology courses.

The skills that you learn in R.E. help you adapt to a huge range of college choices as well as careers - in many ways the skills you learn are as important as the content.

### Career possibilities:

Possible future courses/career areas: Arts, Law, Journalism, Education, Teaching, Theology, Philosophy, Religious Vocations, Social Work and Career Guidance among other

#### Syllabus:

https://curriculumonline.ie/Senior-cycle/Senior-Cycle-Subjects/Religious-Education/



## **PHYSICAL EDUCATION**



Physical education in senior cycle aims to develop the learner's capacity to participate in physical education and physical activity in a confident and informed way. As a result of their learning in physical education, young people can increase their enjoyment, confidence and competence in a range of physical activities.

### **Objectives**

The objectives of Leaving Certificate Physical Education are to develop the learner's:

- Performance in physical activity
- Ability to reflect on performance in physical activity
- Knowledge and understanding of the factors which influence performance and participation in physical activity
- Appreciation of the benefits of physical activity for lifelong health and wellbeing
- Capacity to undertake different roles in physical activities
- Understanding of the principles underlying ethical participation in physical activity

• Understanding of the role of physical activity and sport in the social and cultural life of Ireland.

### Why Study Physical Education?

• For students with a talent for a physical activity, the course could be a valuable source of leaving cert points.

- However, students will need good attention to detail to work on the required skills for the physical assessment and a willingness to study the classroom sections of the course.
- For students faced with sacrificing sports or other activities to make time for their leaving cert preparation, the Physical Education course offers a way to balance the two.

## What kind of student might Physical Education suit?

- The course should suit physically active students who are engaged in individual or team sports as well as activities such as dance and gymnastics.
- Students who plan to pursue a career in sports and fitness occupations, such as physiotherapy, physical training or sports coaching, will benefit from the course.
- Sports need not be a career goal to justify taking the course, the course content will benefit any student for whom participation in sports or dance makes up a significant part of their day to day lives.

#### **Recommendations:**

- It is important that students participate in a physical activity/sport or are involved in sports teams outside of school.
- It will be key also to explain to those who wish to take up PE that 50% is theory and based on an exam so an interest in learning about physical performance is important when considering the subject.
- A background in science or home economics at junior cycle level would be beneficial to students taking up the subject.

### Learning:

The theoretical section is separated into two strands, students will study 4 topics in each strand for a total of 8 topics studied.

# Strand 1

#### **Towards optimum performance**

In this set of topics students study the factors that influence physical performance, including how they can be applied to their own performance.

- 1. Learning and improving skill and technique
- 2. Physical and psychological demands of performance
- 3. Structures, strategies, roles and conventions
- 4. Planning for optimum performance

# Strand 2

# Contemporary issues in physical activity

• 5. Promoting physical activity

• 6. Ethics and fair play In addition, two of the following topics will be prescribed each year

- : 7. Physical activity and inclusion
- 8. Technology, media and sport
- 9. Gender and physical activity
- 10. Business and enterprise in physical activity and sport

For the physical section students will select three activities. There are 6 categories of physical activity and students must select one from three different categories.

# The six categories of physical activity are:

- Adventure activities Orienteering, Kayaking, Rock-climbing, Sailing, Rowing/Sculling
- Artistic and aesthetic activities Artistic gymnastics, Rhythmic gymnastics, Dance
- Athletics Running, Throwing, Jumping
- Aquatics Lifesaving, Survival swimming, Two swimming strokes, Water-polo, Synchronised swimming
- Games Gaelic football, Hurling/Camogie, Rugby Union, Soccer, Basketball, Hockey, Netball, Olympic handball, Badminton,

Tennis, Volleyball, Table tennis, Handball, Squash, Cricket, Softball, Rounders

- Personal exercise and fitness training, aerobics, spinning, indoor rowing, weight training, core stability, circuit training
- Students will focus on three goals in the three selected physical activities.
- Develop the standard of their performance
- Be creative in their personal performance as an individual performer and/or as a member of a team/group.
- Be consistent in the quality of their performance.

# Learning Outcomes

The objectives of Leaving Certificate Physical Education are:

- to develop the learner's performance in physical activity
- ability to reflect on performance in physical activity
- knowledge and understanding of the factors which influence performance and participation in physical activity
- appreciation of the benefits of physical activity for lifelong health and wellbeing capacity to undertake different roles in physical activities
- understanding of the principles underlying ethical participation in physical activity
- understanding of the role of physical activity and sport in the social and cultural life of Ireland.

### Assessment:

There are three assessment components in Leaving Certificate Physical Education: A physical activity project, performance assessment and written examination. Differentiation at the point of assessment will be achieved through examinations at two levels, Ordinary level and Higher level. The performance assessment will be at a common level. The learner will be required to complete the physical activity project and performance assessment in two different activities.

# **Possible Career Options:**

Leaving Certificate Physical Education provides opportunities for learners to prepare for further study in a range of areas, for example, in the teaching, coaching and healthcare professions.

#### Syllabus:

https://curriculumonline.ie/Senior-cycle/Senior-Cycle-Subjects/Physical-Education-Framework/

## LINK MODULES (LCVP)



*Requirements for the Leaving Certificate Vocational Programme, which is of two years duration, are as follows:* 

- Students take 7 Leaving Certificate subjects, including Irish.
- Two of Leaving Certificate subjects must be selected from one of the designated Vocational Subject Groupings these are groups of Leaving Certificate subjects which link naturally together. They must follow a recognised course in a Modern European Language, other than English or Irish.
- They must study two additional Link Modules, Preparation for the World of Work and Enterprise Education.

# Preparation for the World of Work:

Research and investigate local employment opportunities; develop your job seeking skills such as letter writing, CV presentation, interview techniques; gain valuable practical experience of the world of work; interview and work shadow a person in a career area that interests you.

#### Enterprise Education:

Organise study visits to local business and community enterprises; meet and interview enterprising people on site and in the classroom; plan and undertake interesting activities that will build self-confidence, creativity, initiative and develop your teamwork communication and computer skills.

#### Assessment:

- Written Examination in May (40%)
- Portfolio of Coursework (60%)

#### Career Note:

The Link Modules are activity-based units of study which are designed to help students make connections between school and community, study and future career, enterprise and the business of making a living. They are recognised in points terms by Institutes of Technology and Universities:

#### LCVP LINK MODULES

Grade:	Points	
Distinction	66	
Merit	46	
Pass	28	

# Qualifying Subjects for LCVP

#### Vocational Subject Groupings (VSGs) 2012/2013

- Specialist Groupings
- 1. Constr Studies; Engineering; Design and Comm Graphics Any Two
- 2. Physics and Construction Studies or Engineering or DCG
- 3. Agricultural Science and Construction Studies or Engineering or DCG
- 4. Agricultural Science and Chemistry or Physics
- 5. Home Economics; Agricultural Science; Biology Any Two
- 6. Home Economics and Art Design Option or Craft Option
- 7. Accounting and Business-
- 8. Physics and Chemistry
- 9. Biology and Chemistry or Physics
- 10. Biology and Agricultural Science
- 11. Art Design Option or Craft Option and DCG

#### Services Groupings

- 1. Engineering or Construction Studies or DCG and Accounting or Business
- 2. Home Economics and Accounting or Business
- 3. Agricultural Science and Accounting or Business
- 4. Art and Accounting or Business
- 5. Music and Accounting or Business
- All subjects must be studied in same centre as Link Modules (i.e. in school)

# LEAVIG CERTIFICATE POINTS SCORING SYSTEM:

Grades and points introduced in 2017:

-	ertificate Grading cale	New Points at HiGHer LeveL	New Points at OrdiNary LeveL
90 - 100	H1 / O1	100	56
80 - 89	H2 / O2	88	46
70 – 79	Н3 / ОЗ	77	37
60 – 69	H4 / O4	66	28
50 – 59	н5 / О5	56	20
40 - 49	H6 / O6	46	12
30 - 39	H7 / O7	37	0
0 – 29	H8 / O8		

(Additional information from Irish Universities Association: www.iua.ie)

Higher Maths grade H1 – H6 will gain an additional 25 points.





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