### Senior Cycle Subject Choice Presentation



Guidance Department OLSS

### Overview



- Leaving Certificate Subjects
- Options after Post Primary
- Points System
- Useful Websites for research

### Structure of Senior Cycle

- Students study <u>3 Core Subjects</u>: English; Irish; and Maths
- Students choose 4 Option Subjects
- Students study <u>7 Subjects in total</u>

#### Example:

- English
- ☐ Irish (if a DES Exemption is in place an exemption for matriculation purposes can be sought from the NUI's at the time of application)
- Maths
- Option 1 French
- Option 2 Biology
- Option 3 History
- Option 4 Art



# Senior Cycle Subject Option Choices



- Biology
- Physics
- Chemistry
- Agricultural Science
- Geography
- History
- Politics and Society
- Business
- Accounting
- Economics
- Home Economics
- Art
- Music
- PE (Physical Education)
- Construction Studies
- DCG Design Communication Graphics
- French
- German
- Applied Maths

### Things to Consider

- English
- ☐ Irish
- Maths
- Option 1 Language MFL French or German
- Option 2 A Laboratory Science (Biology, Chemistry, Physics, Ag Science)
- Option 3
- Option 4



### MFL French or German



#### A pass in a MFL is needed for

- UCC
- University of Galway
- UCD
- Maynooth University
- Royal College of Surgeons

A third language must be included among the other subjects for *most* degree programmes in Arts, Human Sciences, Law, Social Science, Commerce, Medicine and Health Sciences and some other degrees within these colleges

Entry to the Cadetships in the Defence Forces requires a third Language.

NCAD require a third language or Art.

No Third Language required unless it is a course specific requirement

- DCU
- Trinity College Dublin
- TU Dublin
- University of Limerick
- Atlantic Technological University
- DKIT
- MTU (Munster Technological University)
- Technological University of the Shannon (TUS)
- South East Technological University (SETU)

# A Laboratory Science: Biology; Chemistry; Physics; or Ag Science

A pass in at least one Laboratory Science subject is needed if you are applying for anything in:

Engineering	Pharmacy
Human Nutrition/ Dietician	Medical Laboratory
Paramedical	Podiatry
Radiography	Veterinary
Physiotherapy	Nursing
Medical	Science areas at Universities

# A Laboratory Science: Biology; Chemistry; Physics; or Ag Science

!!! Course requirements should be checked on an individual basis !!!

Physical Ed. + Maths (DCU) Design & Manufacture (UL)

Both require a science subject.

i.e: Biology, Physics, Chemistry or Agricultural Science.

### Chemistry

#### Chemistry is specifically required for:

**Human Nutrition & Dietetics - TUD** 

Dentistry - *UCC* 

Medical & Health Sciences - UCC

Medicine - *UCC* (plus either Physics or Biology)

**Veterinary Science - UCD** 

Pharmacy - UCC & RCSI

Medicine - UCC





### Biology

#### Biology is specifically required for:

**Veterinary Medicine - UCD** 

Elective Biology in Home Ecc. - St Angela's

Genetics - UCC

Human Health & Disease - TCD

Health Science with Dietetics Studies, or Occupational Studies or

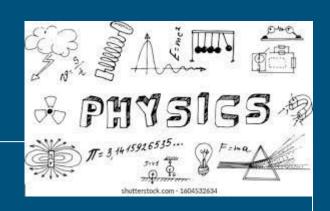
Physiotherapy Studies - ATU

<u>Is very useful for:</u> P.E. teaching with Biology - DCU



### Physics

### Physics is specifically required for:



### Is required for:

Theoretical Physics - TCD

### Is very useful for:

Anyone considering courses in Engineering or Electronics.

### Leaving Certificate Subjects

Before choosing a Subject
Students are encouraged to
understand the:

- Course Content and the
- Exam Structure



### Biology



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.



#### Exam Structure:

Biology	Higher	Ordinary
Written Paper	1 Paper - 100% of Marks	1 Paper - 100% of Marks

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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 on practical activities (answer two) 60 Marks

Section C: Six long questions (answer four) 240 Marks

### Chemistry

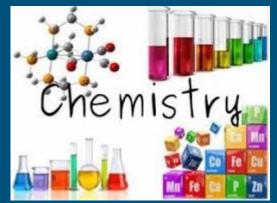
#### **Course Content:**

The syllabus is comprised of all the essential and relevant topics within general chemistry. The major topics involved include the following:

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

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.



Exam Structure:

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.

### Physics

#### **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)

**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

**Options: Particle Physics and Applied Electricity** 



**Exam Structure:** 

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

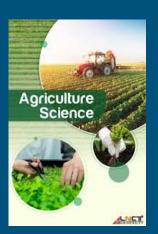
280 marks: 56 marks per question

### Agricultural Science

#### **Course Content:**

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

- Scientific Practices
- Soils
- ☐ Grass and Other Crops
- Animals



Agricultural Science	Higher	Ordinary
Written Paper (1 paper 2.5 Hours)	75%	75%
Project	25%	25%

### French

#### **Course Content:**

Modern languages require students to be proficient in the following skills:

- Oral/Speaking Written
- Aural/Listening
- Reading

A wide variety of themes are covered, for example:

- Family
- School
- Hobbies
- Sport
- Current Affairs

Grammar and Cultural Awareness are essential elements of these course.



French	Higher	Ordinary
Written Paper (2.5 Hours)	1 Paper 55%	1 Paper 55%
Oral (13 Min with Examiner)	1 Paper 25%	1 Paper 20%
Aural (40 mins)	1 Paper 20%	1 Paper 25%

### German

#### **Course Content:**

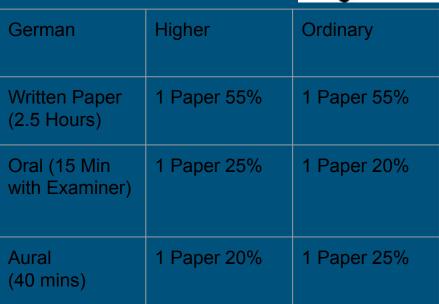
Modern languages require students to be proficient in the following skills:

- Oral Proficiency
- Aural Proficiency
- Comprehension Proficiency
- Written

A wide variety of themes are covered, for example:

- □ Family
- □ School
- Hobbies
- Sport
- Current affairs

Grammar and Cultural Awareness are essential elements of these courses.n Production Proficiency





### Business

Course Content:

There are 7 core units covering the following topics:

- ☐ Introduction to people in business
- Enterprise
- ☐ Managing 1 & 2
- Business in action
- Domestic Environment
- International Environment.

There is a common syllabus covering Higher and Ordinary level, which will fulfil the aims and objectives of the course.



Business	Higher	Ordinary
Written	1 Paper 100%	1 Paper 100%
Paper	Marks	Marks

### Accounting:



#### **Course Content:**

#### Topics covered include:

- ☐ 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.

Accounting	Higher	Ordinary
Written Paper (3 Hours)	1 paper 100% of marks	1 paper 100% of marks

### Economics:



#### **Course Content:**

Leaving Cert economics consists of eight main examination question areas:

#### Subject content

- ☐ Demand, supply, equilibrium, utility and elasticity
- Costs and market structures
- ☐ Factors of production (including economists)
- □ National income and the multiplier
- ☐ Inflation, money, banking and monetary policy
- International trade, balance of payments and the euro
- ☐ Fiscal policy and taxation
- ☐ The Government in the economy (including economic development and growth, population and emigration)

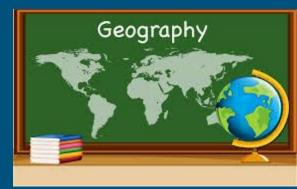
Economics	Higher	Ordinary
Written Paper	1 Paper - 80% of Marks	1 Paper - 80% of Marks
Project	1 Paper - 20% of Marks	1 Paper - 20% of Marks

### Geography



The syllabus is divided into 4 main units. All students study the Core Units 1-3 and Elective Unit 4:

- Core Unit 1 Patterns and processes in the physical environment
- This unit examines the relationship between the tectonic cycle, the rock cycle and the processes of landform development.
- Core Unit 2 Regional geography This unit examines how economic, human and physical processes interact in regional settings.
- Core Unit 3 Geographical investigation and skills This unit encourages the development of skills in handling spatial information leading to the completion of an individual geographical investigation.
- Elective Unit 4 Patterns and processes in the economic environment This unit examines patterns in economic development and the growth of a single interdependent global economy.



Geography	Higher	Ordinary
Written Paper	1 Paper - 80% of Marks	1 Paper - 80% of Marks
Project	1 Paper - 20% of Marks	1 Paper - 20% of Marks

### History



#### **Course Content:**

The Leaving Certificate History Syllabus gives teachers a choice of 4 topics which will be studied from a selection of 12 topics in modern Irish and modern European history.

The topics are arranged in two discrete fields of study:

- ☐ Early Modern, 1492-1815
- □ Later Modern, 1815-1993

Students will study topics from one of the fields of study.

Within each field of study, there are six topics from Irish history and six from the history of Europe and the wider world.

Students will study two topics from Irish history and two from the history of Europe and the wider world from the selected field of study.

History	Higher	Ordinary
Written Paper	1 Paper - 80% of Marks	1 Paper - 80% of Marks
Project	1 Paper - 20% of Marks	1 Paper - 20% of Marks

### Politics and Society

#### Course Content:

The Politics & Society course consists of 4 main areas covered in topics as follows:

#### Power and decision-making:

- Topic 1 Power and decision-making in school Topic 2 Power and decision-making at national and **European level**

#### **Active citizenship:**

- Topic 3 Effectively contributing to communities
  Topic 4 Rights and responsibilities in communication with others

#### **Human rights and responsibilities:**

- Topic 5 Human rights and responsibilities in Ireland
- Topic 6 Human rights and responsibilities in Europe and the wider world

#### Globalisation and localisation

- **Topic 7 Globalisation and identity**
- **Topic 8 Sustainable development**



Politics and Society	Higher	Ordinary
Written Paper	1 Paper - 80% of Marks	1 Paper - 80% of Marks
Project	1 Paper - 20% of Marks	1 Paper - 20% of Marks



### Art



**Course Content:** 

**Exam Structure:** 



All students, both ordinary and higher level, follow a common course. The practical work can include Life Sketching, Still Life, Imaginative Composition, Design and Craftwork.

The History of Art and Appreciation is a broad course covering Irish and European Art, and also Art Appreciation. It requires looking at artworks through the use of reproductions, slides and art galleries, reading books and

writing essays on different subjects.

Art	Higher	Ordinary
Written Exam	1 Paper - 30% of Marks	1 Paper - 30% of Marks
Practical Exam	1 Paper - 20% of Marks	1 Paper - 20% of Marks
Practical Coursework	1 Paper - 50% of Marks	1 Paper - 50% of Marks

### Music

Course Content:

The course consists of three main components:

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

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.



Music	Higher	Ordinary
Written Paper		
Composing	25%	Choice of 50% / 25% of Marks
Project	(Higher Level Elective) - 25%	
Oral		
Aural	25%	Choice of 50% / 25% of Marks
Performance	25%	Choice of 50% / 25% of Marks

### Home Economics

#### **Course Content:**

The syllabus consists of Core Areas and Three Electives:

#### The Core Areas

- ➤ 1. Food Studies 45%
- 2. Resource Management and Consumer Studies 25%
- > 3. Social Studies 10%

#### **Electives**

1. Home Design and Management - 20%

or

2. Textiles, Fashion and Design - 20%

or

3. Social Studies - 20%



Home Economics	Higher	Ordinary
Written Paper	1 Paper - 80% of Marks	1 Paper - 80% of Marks
Project	1 Paper - 20% of Marks	1 Paper - 20% of Marks

### Design Communication Graphics

#### **Course Content:**

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



Design & Comm Graphics	Higher	Ordinary
Written Paper	1 Paper - 60% of Marks	1 Paper - 60% of Marks
Project	1 Paper - 40% of Marks	1 Paper - 40% of Marks

### **Construction Studies**

#### **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





Construction Studies	Higher	Ordinary
Written Paper	1 Paper - 50% of Marks	1 Paper - 40% of Marks
Practical	1 Paper - 25% of Marks	1 Paper - 30% of Marks
Project	1 Paper - 25% of Marks	1 Paper - 30% of Marks

### PE: Physical Education

#### **Course Content:**

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.

Strand 2 Contemporary issues in physical activity

Students learn about the culture of sports, it's role in society and how people experience physical activity and sport. There are six possible topics, but only four are set for each Leaving Cert cycle.

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.





Physical Education	Higher	Ordinary
Written Paper	1 Paper - 50% of Marks	1 Paper - 50% of Marks
Project	1 Paper - 20% of Marks	1 Paper - 20% of Marks
Performance	1 Paper - 30% of Marks	1 Paper - 30% of Marks

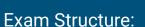


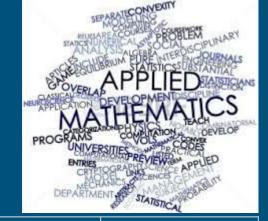
### Applied Maths:

#### **Course Content:**

The course essentially 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, immersed in fluids, or swung around on a rope. There are 10 questions on the exam paper, each covering one of these topics in detail.

However, the exam only requires the student to complete six questions, so it is not uncommon for teachers to focus on six or seven topics, which makes the course and workload more manageable.



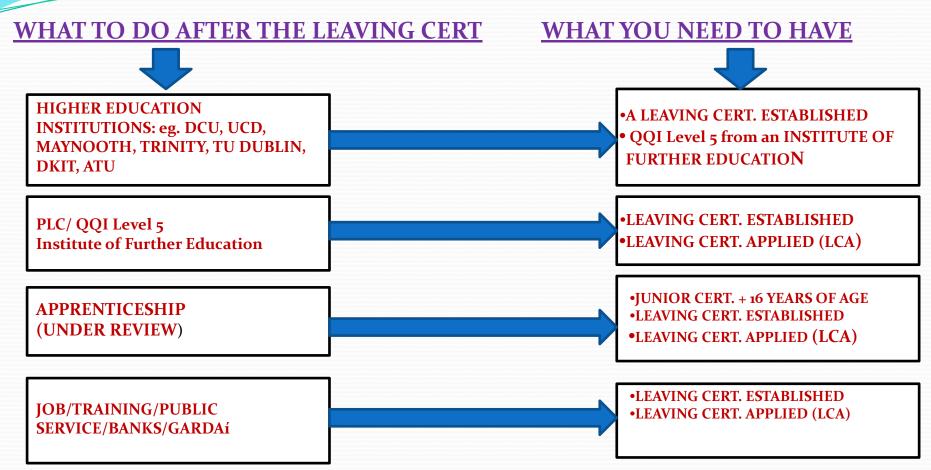


Applied Maths	Higher	Ordinary
Written Paper	1 Paper - 80% of Marks	1 Paper - 80% of Marks
Practical	1 Paper - 20% of Marks	1 Paper - 20% of Marks

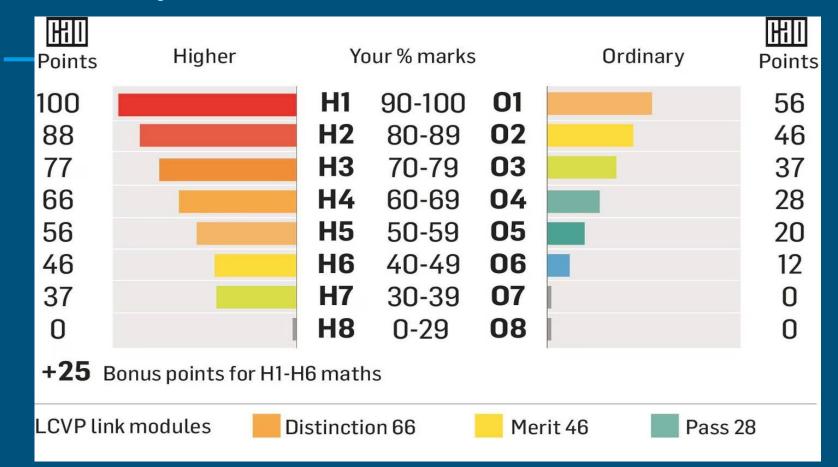
### Options after Post Primary: NFQ



## A QUICK GUIDE TO WHAT IS AVAILABLE AFTER THE LEAVING CERT AND WHAT IS NEEDED TO DO THESE



### Points System:



### **Useful Websites:**

- www.qualifax.ie
- www.careersportal.ie
- www.cao.ie
- <u>www.ucas.com</u>
- www.apprenticeships.ie
- www.susi.ie
- www.monaghaninstitute.ie

### Thank you

Please feel free to contact either

- C McSorley <u>cmcsorley@olss.ie</u>
- W Geraghty <u>wgeraghty@olss.ie</u>

If you have any further queries