

Scoil Aireagail 5th Year Optional Subjects Booklet

5th Year 2023/24

	Subject
1	Engineering
2	Music
3	Biology
4	Home Economics
5	Construction Studies
6	Geography
7	History
8	Design & Communication Graphics
9	Agricultural Science
10	Art
11	Business
12	French
13	Leaving Certificate Vocational Programme (LCVP)
	All students follow this course

Students who are going into 5th Year are surveyed on their preferences of the optional subjects above. The results of this survey will help determine which of the above can be offered for that year group, and what subjects are blocked together (timetabled at the same time). Every effort will be made to arrange subject blocks in a way that suits as many students as possible

Introduction:

Scoil Aireagail strives to provide its students with the broadest possible curriculum at junior and senior level, by timetabling as many subjects as resources allow. Prior to entering 5th Year our students are encouraged to put careful consideration into the subjects they would ideally like to pursue for the Leaving Certificate course.

Transition Year. One of the advantages and benefits of Transition Year is that it provides our students with experiences of so many subjects. This puts students in a better position to make more informed choices, as they would have experienced many of the subjects offered at Leaving Certificate level.

Presentations. Each year a date and time is set aside for individual teachers to make a brief presentation to students on their subject at Leaving Certificate level. This provides students with an important opportunity to understand clearly what is involved in each subject, and how subjects are assessed. Students can also question teachers on any aspect of the subjects.

Information Booklet. This information booklet has been put together by the teachers of the various subjects at Leaving Certificate level. Its purpose is to help provide students with all the necessary information when making important decisions on subjects. Students and parents can browse through this document, which gives an outline on each subject. Details on each subject include topics, course components (written examinations, project, oral, interview etc), assessment weightings, possible career options and other relevant details.

Careers. The timetabled subject of Careers helps students understand about the best fit for them in terms of subject options and progression onto third level or employment.

Information Night: Parents, together with students, are invited into an information session in the school to explain the process of subject choices to all. This is an opportunity for anyone to ask questions.

Engineering



Component		Higher Level	Ordinary Level
		Weighting	Weighting
1	Written Examination	50%	50%
2	Practical Test	25%	25%
3	Project	25%	25%

- 1. Written Examination: 3 hours at H.L. and 2.5 hours at O.L. All aspects of the Engineering world are covered, including properties of materials, their constituents and how they react in certain situations. Machining of Materials, Mechanisms, Welding, Polymers, material testing, and cooling curves of materials. At Ordinary level Furnaces and alloys are also studied, whereas a Special Topic with relevance to modern day Engineering The theory exam is worth 50% of total marks in both Higher and Ordinary level.
- 2. **Practical Test:** A 6 hour practical test in the Engineering Room, held in May of Year 2. An artefact is made which will involve use of hand and machine tools in making a number of parts which will assemble together to make a mechanism. This is where the students' accuracy and ability is tested. The artefact is sent to the State Examination Commission for assessment and is worth 25% of total marks.
- 3. **Project:** The project will take several weeks to complete, and is done in Year 2. A brief will be sent by the State Examinations Commission is sent to the schools in October of Year 2 and students will design and make a project to fulfil the criteria of the brief. The project is supplemented by a portfolio, which must document in great detail all aspects of the project. All research work, investigations, photographs, diary of manufacture, drawings and sketches must be included in the portfolio. Considerable time will be needed at home to complete portfolio to the required standard. The Project is work 25% of the overall mark with 8% of this for the portfolio.

Careers related to Engineering

- Mechanic
- Plumber
- Electrician
- Panel Beater
- Machine Technician
- Architect

- Fitter
- Engineer-Mechanical & Electrical
- Engineer Industrial & Production
- Teacher
- Industrial Designer
- Toolmaker
- Welder

Music



Component		Higher Level	Ordinary Level	
		Weighting	Weighting	
1	Performance	50%	50%	
2	Listening	25%	25%	
3	Composing	25%	25%	

1. Performance: Examined in April of 6th Year

Examined on two instruments, performing four pieces of music on each instrument at Higher Level. Worth 50% of total marks.

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.

Or

You can perform six pieces on one instrument.

2. Listening: Examined in June of 6th Year - 90 minutes duration.

The Listening component provides for rich aural experiences through exposure to music of different periods, styles and genres. You will study four set works, Irish music and general listening skills.

3. Composing: Examined in June of 6th Year - 90 minutes duration.

The Composition Paper comprises of one melody writing and one harmony.

Careers relating to Music

- Sound engineering
- Media studies
- Music therapy
- Music Education

- Music Performance
- Arts administration
- Music Journalism
- Composer/songwriter

Biology



- 1 Written Examination: 100% of the mark, three hour exam H.L. and O.L.
- 2 Practical Copy: Worth 0% but is mandatory that you complete one to sit the exam.
 The course includes 23 MANDATORY EXPERIMENTS
- 3 **Course Content:** The course is broken into three sections

<u>Unit 1</u>: The study of life which includes Scientific method, nutrition, Characteristics of life and Ecology

<u>Unit 2</u>: The Cell including structure, reproduction, inheritance, energy, photosynthesis and respiration

<u>Unit 3</u>: The organism including human systems, plant systems, diversity of living organisms including the five kingdoms

Careers related to Biology

- Medicine
- Engineering
- Agriculture
- Leisure and Health
- Veterinary
- Nursing
- Veterinary Nursing
- Medical Nursing

- Food Science
- Teaching
- Food Technology Industry
- Biochemical Industry
- Food Safety
- Horticulture
- Forestry

Home Economics



Component		Higher Level Weighting	Ordinary Level Weighting	
1	Written Examination	80%	80%	
2	Assignments/Practical Cookery	20%	20%	

Written Examination: 2.5 hours at H.L. and O.L. Worth 80% of total.

Compulsory Areas:

<u>Food Studies:</u> Food Science, Nutrients, Diet and Health, The Irish Food Industry, Food Preparation and Cooking, Food Testing, Microbiology, Food Spoilage, Food Preservation, Food Safety.

<u>Consumer Studies:</u> Resource Management, Household finances, Household Technology, Housing in Ireland, Textiles, Consumer Choice, Consumer Rights and Responsibilities, Consumer Protection, Environmental Awareness.

Social Studies: The Family, Marriage, The Family as a Caring Unit, Family Law

Elective Areas (1 of the Following Two Area is Studied)

<u>Home Design and Management:</u> Housing Styles, Housing Provision, Interior Design, Energy Efficiency, Electricity, Water Supply and Storage, Heating, Insulation, Ventilation, Lighting

<u>Advanced Social Studies:</u> Social Change, Education, Work, Unemployment, Leisure, Poverty

Assignments/Practical Cookery: The State Examinations Commission issues the Assignments each year in September/October of 5th Year. They differ each year and are based on the Food Studies area of the course. Students carry out research in relation each assignment and carry out the corresponding practical cookery. These assignments are mainly completed in 5th Year as they are due the October of 6th Year. They are worth 20% at H.L. and O.L.

Careers related to Home Economics

- Dietitian
- Nutritionist
- Chef
- Hotel Management
- Health Promotion
- Food Technologist
- Catering
- Teacher

- Nursing
- Social Care Worker
- Childcare
- Fashion Designer
- Tailor
- Interior Designer
- Tourism

Construction Studies



Component		Higher Level Weighting	Ordinary Level Weighting	
1	Written Examination	50%	40%	
2	Practical Test	25%	30%	
3	Project	25%	30%	

- 4. Written Examination: 3 hours at H.L. and 2.5 hours at O.L. All aspects of the modern domestic dwelling are covered such as Conservation of Buildings, Planning Permission, Materials, Structure, Safety, Soils, Foundations, Walls, Roofs, Floors, Fireplaces, Chimneys, Windows, Doors, Stairs, Water, Drainage, Heating, Insulation, Sound, Electricity, Rendering. Worth 50% of total marks at Higher Level, 40% of total marks at Ordinary Level.
- 5. **Practical Test:** 4 hour practical test in the Construction Studies Room, held in May of Year 2. An artefact is made which will involve use of hand tools in making a number of wood joints and processes. The artefact is sent to the State Examination Commission for assessment. Worth 25% of total marks.
- 6. Project: The project will take several weeks to complete, and is usually done in Year 2. Each student will decide on the type of project, and must first be agreed with the teacher before work begins. Projects typically include furniture or scaled models. The project is supplemented by a portfolio, which must document in great detail all aspects of the project. All research work, investigations, photographs, diary of manufacture, drawings and sketches must be included in the portfolio.

Careers related to Construction Studies

- Carpenter
- Plumber
- Electrician
- Blocklayer
- Surveyor
- Architect
- Building contractor
- Engineer

- Graphic Designer
- Teacher
- Specialist in Heating/Ventilation/Insulation Systems
- Site labourer
- Site Safety Specialist

Geography



A Geography degree provides students with strong research and analytical skills, which are highly regarded by many employers.

Geography offers opportunities to offer solutions to some of the most pressing issues for modern society, including Climate change, natural disasters, overpopulation, urban expansion and multicultural integration....... Geography is seen as a bridging subject between the Arts and the Sciences and during senior cycle Geography you will study a broad curriculum which will bridge both areas and include History , Natural Science , Social Science and Economics . The study of Geography offers great insight into our changing world.

Course Outline: Higher and Ordinary level.

- Physical Geography
- Regional Geography
- Economic Geography(Elective)
- (Higher Level)The Tropical Rainforest Biome.(Geo-Ecology Option.)

All students must also complete a <u>Leaving Certificate Geographical Investigation</u> Project which accounts for **20%** of the overall subject.

Students typically visit local coastal areas of Tramore and Kilfarrasy in Co Waterford to carry out these studies. These visits are done during the school day, where every Geography student must attend.

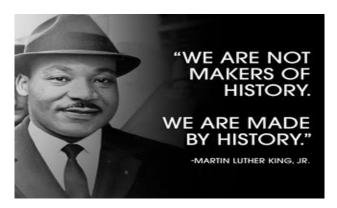
Scoil Aireagail Geography students typically achieve very high grades in this investigation.

Careers related to Geography

- Cartographer
- Environmental Consultant
- Town planner
- Geographical Information Systems Officer

- Conservation Officer
- Landscape Architect
- Recycling Officer
- Teacher
- Lectur

History



National Statistics

History compares very favourably with other subjects when it comes to grades and points at Leaving Certificate level. In 2022, 22% of students taking Higher Level were awarded a H1 or H2 and of those taking ordinary Level 55% received an O1 or O2.

Historians are regarded as having had an education that trains their minds to assemble, organise and present facts and opinions and this is a very useful quality in many walks of life and careers. History is an excellent preparation for very many other jobs.

- Leaving Certificate History is assessed at two levels, Ordinary level and Higher level.
- There are two assessment components: <u>a research study report</u> (submitted prior to the examination) and <u>a written examination</u>.
- Students submit their research study report around Easter before the June exam, thus having the opportunity to gain up to 20% of the overall mark before sitting the terminal exam. The teacher will help and oversee the work but the subject matter is that of the student_allowing you the opportunity to report on a subject that is of particular interest to you.
- Leaving Cert history allows you to study two topics from Irish history and two from the history of Europe and the wider world.
- <u>Communication skills</u> The study of history is not just about interpreting the past but also presenting your thoughts • History helps you to write in an organised, coherent, logical way, supporting your views with evidence • This will help you in your other subjects, as well as in life and work later.
- <u>Research skills</u> By exploring various types of evidence you will enhance your research skills You will become skilled at locating historical data from different sources, evaluating it and recording and presenting your findings You will also realise the importance of looking at issues from more than one point of view.

- Analytical skills You will also develop your ability to think critically, to evaluate
 the usefulness of sources, to detect bias or propaganda These skills are very
 useful in many careers and in everyday life
- <u>ICT skills</u> History allows you to access ICT, developing skills that are relevant to
 life and work today The Internet offers a huge range of appropriate historical
 web sites Many other electronic resources also exist for the study of history, such
 as CD-ROMs, library databases and catalogues The use of modern digital media
 makes studying history very enjoyable and stimulating.

Relevance to Life: Leaving Certificate History 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.

Careers related to History

Choosing Leaving Certificate History will allow you to acquire a unique combination of skills and insights that will develop you as a person and help to prepare you for a future career and to participate fully in society. Employers tend to see those with a history education as:

- Independent thinkers
- Open-minded and objective
- Disciplined
- Good communicators
- Able to analyse issues and problems

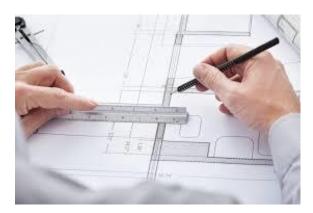
An interest in and knowledge of History is relevant to any career related to current affairs such as:

Journalism Politics
Local / National Radio and T.V. Economics
Law Sociology
Town Planning Library work.

Architecture

Studying History also provides good training for work in administration, management and business and is an excellent basis for a career in Tourism, Government and Teaching.

Design & Communication Graphics



Component		Higher Level Weighting	Ordinary Level Weighting	
1	Drawing Examination	60%	60%	
2	Solidworks Project	40%	40%	

- 1. **Drawing Examination:** 3 hours duration. The subject Design, Communication Graphics is the development and modernisation of the subject Technical Drawing. Students will understand, visualise and then present information graphically. The course has two main areas
 - **a.** Plane and Descriptive Geometry; dealing with shapes and the lines which intersect with these shapes
 - **b.** Applied Graphics; problem solving engineering and architectural problems using graphical methods.
 - The completion of the course is supported by the use of freehand sketching and Information Technology, specifically, Solidworks Computer Aided Design (CAD). The drawing exam is worth 60% of total marks in both Higher and Ordinary level.
- 2. **Project:** The project will take ten weeks to complete, and is done in Year 2. A brief will be sent by the State Examinations Commission to the schools in September of Year 2 and students will design and make a project using 3D modelling Solidworks software to fulfil the criteria of the brief. The project is supplemented by a portfolio, which must show in great detail of the project, and include detailed sketches of proposed design alterations. Considerable time will be needed to complete the portfolio to the required standard. The Project is worth 40% of the overall mark.

Careers related to DCG

- All trades to related to technical drawings
- Carpentry
- Product Designer
- Engineering Technician
- Architect

- Solidworks design Technician
- Construction
- Engineering
- Teacher
- Industrial Designer
- Toolmaker

Agricultural Science



COMPONENT HIGHER LEVEL		ORDINARY LEVEL
Written Exam	75%	75%
Coursework	25%	25%

There are 4 major areas of study:

- Soils
- Crops
- Scientific Practices
- Animals

Also, the following areas of study will be studied: Health & Safety, Technology, Breeding & Genetics, Sustainability, Policy and Economics, Environment, Nutrition and Food Production.

Written Examination

This will be a 2.5 hour written examination with a separate Higher and Ordinary level paper.

Coursework

- · Portfolio of Specified Practical Activities: This is similar to an experiment copy. Records kept of some of the more important experiments done in class.
- · Individual Investigative Study (IIS): A brief is set out by the Dept. and the student will complete this over the 2yrs. This is the project part of the course. A different topic is decided by the SEC (State Examinations Commission) every year and students then discuss this topic and relate it to an experiment they will do over the course of 5th and 6th year.
- · Farm related visits

Careers related to Agricultural Science

- Medical Nursing
- Veterinary Nursing
- Dental Nursing/Hygienist
- Farmer
- Agricultural Consultant/Advisor
- Forestry Manager
- Farm Management
- Teaching

- Food Technology Industry
- Biochemical Industry
- Food Safety
- Food Science
- Zoology
- Clinical Research Officer
- Landscape Gardener
- Horticultural Consultant

Art



The Leaving Certificate Art course is a two-year course taught in 5th & 6th Year.

The Leaving Certificate Examination is made up of three components.

- 1. Project (a minimum of 30 hours of classroom contact time 12 weeks). Students complete a sketch book of ideas and research based on a Theme and primary source material. From ideas in their sketch book students complete two finished realised pieces A imaginative composition or still life i.e. a painting and a craftwork piece usually a Lino print or clay modelling. This coursework project is completed from January to April in 6th Year. 200 marks are assigned to the coursework component, i.e. 50% of the total marks for Art.
- 2. **Life Drawing Examination** this exam takes place in early May Students get exam papers a week before and on the day complete two life drawings. 50 marks are assigned to this exam i.e. **12.5%** of total.
- 3. Art History and Appreciation. This is the only part of the course that involves a written exam and it is held in June. It carries 150 marks i.e. 37.5% of the overall marks for Art. The exam is made up of 3 long questions, one on Irish Art History, one on European Art History and one on Art Appreciation, each question carries 50marks. Students do a Gallery visit as part of their study of the Appreciation section.

The study of Art develops the holistic education of students. The world needs creative people. Those who have studied art and have a wide skill set have an advantage in any career. Art enhances creative thinking, fine motor

skills, hand eye coordination, problem solving, lateral thinking, complex analysis and critical thinking.

Careers related to Art

So many people work in Art related roles that are embedded within other professions. The internet has created an explosion of opportunity for digital designers and multimedia artists – all businesses have an online presence. Art education offers foundation knowledge for many career opportunities, such as:

- Graphic designers
- Web designers
- Digital illustrators
- Video producers
- Animation artists
- Game designers (and designers in jobs that may not even exist yet!)
- Painter/Fine art/Photography
- Interior designer
- Fashion designer
- Make-up artist
- Architect

The list is endless for creative people.

If you have the ability to be creative – grasp it – let it shine – find an outlet for your creative side and be a learner for life!

Business



Course Content

Business is a very practical course which looks at how a business is run on a day to day basis.

Everything that we study in business is seen in real life and we look at lots of case studies in the business world such as:

- -What it's like for an employee to work at Facebook
- -What rights workers have in the workplace
- -What rights consumers have when they buy goods
- -Why nurses went on strike
- -What makes Richard Branson one of the world's greatest entrepreneurs
- -What makes a manager a good leader
- -How Google motivate their workers to work hard
- -Why are more and more companies moving towards using FAIRTRADE
- -Why do Coca-Cola/Nike spend millions on marketing their products

What kind of students might like business?

- Business would suit someone who has an interest in what is going on in the world and keeps up to date with news.
- It would also suit someone who would like to find out more about what their rights are when they start working, understand a bit more about how insurance works and how to work out are they paying the right amount of income tax.
- There are very few maths calculations in the business exam.
- There is a lot of theory and learning in business but answers are factual and kept to the point so good writing skills are an advantage.

Examination Structure

Business has a final written examination in the Leaving Certificate Higher level-3 hours Ordinary Level-2.5hours

Leaving Cert National Statistics

- In **2021** 33% of students who sat the **Higher** Level Business exam achieved a H1&H2, 41% got a H3&H4
- In **2021** 17% of students who sat the **Ordinary** Level Business exam achieved a O1&O2, 41% got a O3&O4

Business is a very popular career area. In Ireland 20% or 1 in 5 students list a business related course on the CAO at ordinary degree and higher cert level.

Careers related to Business

Banking	Teaching	• Law
• Insurance	 Tradesperson working for themselves 	Hotel Management
Office work	Human Resources	• Real Estate
 Marketing 	• Sales	• Retail
 Management 	Event Planning	• Public Relations

What 5th Year Business students say about the course

"It's easy to understand" "It's really interesting"
"It helps you when applying for jobs to write a CV, email, letters"
"It gives you a general knowledge of news that's happening in the world"
"It's very useful for the future""There is lots of writing"
"There is a lot of theory to learn

French



French as a Leaving Certificate subject aims to bring students closer to fluency in the French language, as well as developing a good knowledge of literature, culture, geography and national history, in order to provide a context for communication. Senior Cycle French builds on the knowledge acquired for the Junior Certificate. Course content for Higher and Ordinary levels is similar. However, oral and written skills are particularly important at higher level. Modern languages require students to be proficient in the following skills:

Oral/speaking Aural/listening

Written Reading

A wide variety of themes are covered, for example:

Family Hobbies

School Sport
Current affairs

Mark Allocation for Leaving Certificate French:

Section	Higher Level	Ordinary Level
Speaking	25%	20%
Listening Comprehension	20%	25%
Reading Comprehension	30%	40%
Writing	25%	15%

Why Study French

- This subject may be a requirement for entry to third level and can be used as a third language for entry to a number of courses. See entry requirements for individual colleges.
- This subject is a useful foundation for students with an interest in studying French in third level, or considering a career in a French speaking environment or country.

What kind of student would French suit?

- Anyone with an interest in French culture, history, and language.
- Students who are considering working in France, Canada, the EU or in the area of international relations in the future.

The Oral Exam This takes place in March/April of 6th Year.

12 - 15 minutes for French - French Interview with examiner. Students may prepare a document.

Aural/Listening Exam (40 mins) This exam takes place after the written examination in June. It involves listening to a variety of dialogues and news items in the target language and then answering in English.

Written Exam (2½ hours) Reading Comprehension is worth 30% of total exam at Higher Level and 40% at Ordinary Level. There are literary and journalistic passages.

For Higher Level the written section involves formal and informal letters, diary entry, message/fax/email, expressing an opinion, and personalised writing.

Careers related to French

Teaching
Linguistics

Translation
Localisation
Interpreting
Journalism and media

Leaving Certificate Vocational Programme



Two Link Modules

- 1. **Preparation for the World of Work:** This module is designed to develop students' general understanding of the world of work, introduce them to career research and provide them with the knowledge and skills to find employment.
- 2. **Enterprise Education:** This module aims to develop creativity, resourcefulness, self-confidence and initiative. Students are encouraged to interview enterprising people, investigate local enterprises and to set up their own enterprise projects.

For the purposes of LCVP, students are required to study a European Language (French in Scoil Aireagail) for one class period a week at conversational level. This is not one of their Leaving Certificate subjects and is not formally assessed as an exam.

Two Assessment Components:

Written Exam 40%

- Held in May in 6th Year (before other Leaving Certificate Exams)
- Includes a video, case study and general questions

Portfolio Coursework 60%

- Assembled over the two years
- Includes a CV, Career Investigation, Recorded Interview, etc (6 items in total)

Certification

Grade	Number of Points
Distinction (80-100%)	66
Merit (65-79%)	46
Pass (50-64%)	28
Unsuccessful (0-49%)	0

LCVP can be used as a **replacement** subject for points.

^{**}Please note that students are required to take part in Work Experience/Shadowing Placement in 5th Year (dates will be decided by the school).