GOOD COUNSEL COLLEGE

Guidance and Counselling Department

5TH Year

SUBJECT CHOICE

2022

Jane Byrne,

Guidance Counsellor.

INTRODUCTION

This booklet has been compiled in order to assist students in the important decisions they now make regarding subject choice. The aim is to provide a sense of:

The contents of Leaving Certificate subjects

Where it is similar to the Junior Cycle course

Where it is different to the Junior Cycle course

Forms of assessment

Key points that should be considered when thinking about this subject

Careers for which this subject could be useful.

Irish, English and Mathematics are required subjects for all students (unless students have an Irish Exemption), and then 4 subjects must be selected from the following list-

Accounting

Agricultural Science

Art

Biology

Business

Chemistry

Computer Science

Design and Communication Graphics

Economics

Geography

History

Modern Language (Spanish or German)

Technology

Physics

Physical Education

Some subjects may be restricted depending on subjects chosen for Junior Cycle

<u>Repercussions of dropping the continental language:</u>

NUI colleges (UCD, UCC, NUI Galway and NUI Maynooth) require that students have passed a continental language for matriculation purposes. HOWEVER

For entry to:

Faculty of Engineering degrees

Faculty of Science degrees

Faculty of Agricultural Science degrees

Nursing in all Colleges

******NO THIRD LANGUAGE IS REQUIRED******

Trinity College, UL, DCU, TUD and Institutes of Technology do not require a language to gain admission. A language is only required should a student intend to study Languages or International Business etc.

Other Language Requirements

Primary Teaching	H4
Language Degree/With Language Degree	H4 relevant Language
Journalism	H4 English

***** See Guidance Dept. for updates

GUIDELINES TO CHOOSING SUBJECTS

How Important Is the Choice?

- There are very few long-term consequences as a result of making the "wrong" subject choice
- Science subjects should receive careful consideration
- No college requires the following subjects: - Geography, History, Technology, Design and Communication Graphics, Business and Economics.
- The above subjects could be very helpful at third level.
- The above subjects could be very enjoyable for students and allow a student to achieve high grades.

Making the Choice

- Students should choose subjects they like
- Students should choose subjects they are good at
- Students should choose subjects that are required for entry to college
- Students should choose subjects that could be helpful to their learning at third level
- If unsure keep options open and choose a selection comprising of one science, one language one business and one broad subject
- Remember the importance of essential subjects and relevant subjects for third level courses

SCIENCE SUBJECTS

Practically all science and engineering courses require at least 1 laboratory science subject at higher level to gain entry. However, the following needs to be noted:

2 science subjects required for

Dentistry, Medicine & Pharmacy at UCC	2H4 (H4 in Chemistry and H4 Ph or B)
Dentistry at Trinity College	1H3+1H4 (from Ph, Ch, Bi, Ph/Ch) no Ph 04/H6 Ma
Medicine at Trinity College	1H3 & 1H4 (from Ph, Ch, Bi, Ag) no Ph O4/H6 Ma
Physiotherapy, Pharmacy at Trinity Colle	2H4 (Ph, Ch, Bi, Ma, Ag)
Pharmacy at Trinity College	H4 Ch or Ph/Ch & 1H4 (from Ph, Bi, Ma, Ap, Go, Ag, Cs)
Human Health and Disease at Trinity College	H4 Bi & 1 H4 from Ph, Ch, Ph/Ch
Biological and Biomedical Sciences at Trinity	2H4 from Ph, Ch, Bi, Ph/Ch, Ma, Go, Ap, Ag, Cs
Chemical Sciences at Trinity College	2H4 from Ph, Ch, Bi, Ph/Ch, Ma, Go, AP, Ag, Cs
Geography and Geoscience at Trinity College	2H4 from Ph, Ch, Bi, Ph/Ch, Ma, Go, Ap, Ag, Cs
Physical Sciences at Trinity College	2H4 from Ph, Cs, Bi, Ph/Ch, Ma, Go, Ap, Ag, Cs
Science at Trinity College (consult prospectus)	2H4

Please note that for some courses at Trinity College, Geography may be accepted as a Science Subject. Please consult prospectus for individual course requirements.

Chemistry required for

Dentistry, Medicine & Pharmacy at UCC	H4 plus 1 H4 other science subject
Veterinary Medicine at UCD	H5
Human Nutrition and Dietetics at TU Dublin	H4
Pharmacy at Trinity College	H4 plus 1 H4 other science subject
Pharmacy at RCSI	O6/H7 in Ph, Ch, Bi, Ph/Ch or Ag

Biology required for

Genetics at UCC	H4
Human Health and Disease at Trinity	H4 plus 1 H4 other science subject
Health Science with Dietetics Studies at LYIT	H5
Health Science with Occupational Therapy Studies	H5
At LYIT – Letterkenny	
Health Science with Physiotherapy Studies	H5

Physics required for

Theoretical Physics at Trinity	H3

Computer Science required for

Computer Science LYIT	H6 / O4

Students are advised to **always check** the exact **requirements** for courses that interest them as they can vary from college to college, and may change from year to year.

OTHER CHANGES

Technology now satisfies the science requirement in certain colleges including UL, UCC, TU Dublin (formally DIT), NUI Galway, Maynooth University. Please check college and course requirements carefully on college websites for further updates. Consult www.qualifax.ie for further information.

Career Websites

More career related information may be found on individual college websites or some of the following may be useful:

www.qualifax.ie contains extensive information on courses available and also other careers related information for students and parents. This also contains a full list of career events such as college open dates and closing dates etc.

www.careersportal.ie contains information regarding courses and also labour market information for students and parents.

www.careersnews.ie contains articles about careers and education for students and parents.

www.examinations.ie contains past exam papers and marking schemes.

******* Detailed information on all Leaving Cert subjects is available on www.ncca.ie and www.curriculumonline.ie *******

ACCOUNTING

Accounting involves the preparation, recording, extraction, presentation and analysis of financial information for the purpose of making economic decisions.

Content:

- Conceptual Framework & Regulatory Framework, Accounting Records, Bank Reconciliation, Control A/C, Suspense A/C, Final A/C Sole Traders, Co. A/C, Ltd. Co. Financial A/C, Annual Reports PLC, Manufacturing /Club/Departmental/Farm A/C, Incomplete Records, Cash Flow, Analysis & Interpretation of Financial Statements, Management A/C, Budgetary Planning & Control, IT & Computer Applications in Accounting.

Similar /different to Junior Cycle:

- Business Builds on Final Accounts knowledge from JC and Books of first, ledger and trial balance (though not a question at LC)
- Question 9 at LC is on Business Budget.

Assessment:

- 100% Final Exam

Key Points to consider:

- Business Studies at Junior Cycle is a requirement for LC Accounting
- Largely, practical based. Approx. 85% is completing Accounts (Enjoy working with figures)
- 100% Exam based may be a challenge for some student

Careers for which Accounting is useful:

Accountancy, Finance, Hotel Management, Banking, Farming, Quantity Surveying or running any business.

AGRICULTURAL SCIENCE

Agricultural science is the study of the science and technology underlying the principles and practices of modern agriculture, a scientific approach to the knowledge and understanding, skills and attitudes that affect the sustainability of natural resources.

Content:

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

Scientific process, Soils, Grassland, Crops, Animals.

Similar /different to Junior Cycle:

- Similar emphasis on scientific practice, sustainability and environment, health and safety.
- Different in terms of crop management, soils, grassland and animal management.

Assessment:

- Coursework: Portfolio of activities and experiments & Project on specific theme (over 2 years) 25% **current weighting*
- Exam: 2.5 hours written exam 75% **current weighting*

Key Points to consider:

- This is not farming. A good understanding of scientific process is required. Access to a farm or agricultural industry is a benefit but not a requirement.
- Great subject for students with an interest in agriculture and the environment with many career options.

Careers for which Agricultural Science is useful:

Farming, Environmental Research, Food Science, Agri-Business (sales, nutrition, marketing), Teaching, Veterinary, Medicine, Zoology etc.

ART

Practical and theoretical study of visual art and design.

Content:

Imaginative Composition or Still Life, Design or Craftwork, Life Sketching, History & Appreciation of Art.

Project in 6th Year (10 weeks): 2 Art pieces & preparation drawings to be completed **in school** in booklet provided.

Similar /different to Junior Cycle:

Format of the practical project is similar to Junior Cycle Project in content.

Assessment:

- 37.5% of Leaving Cert is written (3 questions: 2 History & 1 Appreciation)
- Project 50% (Practical), Life Drawing 12.5% (Practical), History 37.5% (Theory)

Key points to consider:

- Very difficult to obtain H1 at Higher Level.
- Few, if any, fail.
- Good average literacy skills required, particularly for Art History section. (Most students do well in the project, however, essays determine the highest marks).

Careers for which Art is useful:

Advertising, Graphic Design, Illustrator, Animator, Game Design, Art Teacher, Web Design, Photography, Architecture, Landscape Designer, Product Design, Interior Design etc.

BIOLOGY

Biology is the study of life. 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.

Contents:

- The Study of Life
- The Cell
- The Organism

Similar /different to Junior Cycle:

- Builds on some of the topics from J.C. Biology
- New topics e.g. Lymphatic System, Vegetative Propagation, Cell Division.
- Much greater detail than J.C. and greater depth of knowledge required.

Assessment:

- 100% final exam (Leaving Cert).

Key points to consider:

- Some crossover with Chemistry
- Latin & Greek terms and medical terminology can be challenging.
- Good language, reading and comprehension skills required (scientific language).
- The course is more about how Body / Cell Systems work than about dissecting animals.
- Biology is a very long course which is completed until after the Mocks in 6th Year.

Careers for which Biology is useful:

All Science Courses and Sports related courses. Medical, Dental, Biotechnology, Health Care, Environmental Officers, Veterinarian, Zoology, Education etc.

BUSINESS

Leaving Certificate Business is concerned with the understanding of the environment in which business operates in Ireland and the wider world. It equips students with a positive view of enterprise and its applications in the business environment in both public and private sectors.

Contents:

- People in Business (Stakeholders, Contract Law, Consumer Law, Employment Law & Industrial Relations)
- Enterprise (Entrepreneurial skills & characteristics, Intrapreneurship)
- Managing 1 (Leadership, Motivation, Communication, Planning, Organising, Controlling)
- Managing 2 (Insurance, Finance, Tax, Human Resource Management, Managing Change, Ratio Analysis).
- Business in Action (Identifying Opportunities, Marketing, Getting Started, Expansion)
- Domestic Environment (Categories of Industry, Types of Business Organisation, Community development, Business & the Economy, Government & Business, Social Responsibilities of Business).
- International Environment (International trading environment, European Union, International Business)

Similar /different to Junior Cycle:

- No final accounts, budgets or books of first entry
- Mainly theory.

Assessment:

- 100% Final Exam.
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Key points to consider:

- Business can be taken up as L.C. subject without having completed Junior Cycle Business Studies.
- 100% exam based.

Careers for which Business is useful:

Accounting, Banking, Management, Insurance, Sales, Marketing, Taxation, Teaching, Law.

Any other business-related careers, starting/ running your own business etc.

CHEMISTRY

Chemistry gives students an excellent training for many jobs, both scientific and non-scientific. To be successful in the subject you need to be able to think logically, to be creative, numerate and analytical.

Content:

- Students will study the structure of the atom and how it combines to produce new substances.

Similar /different to Junior Cycle:

- It is similar to the Chemistry component of J.C. but it is more focused on understanding how reactions occur, instead of just what happens.

Assessment:

- 100% Final Exam.

Key Points to consider:

- Ordinary Math's at Leaving Cert is adequate to support this subject.
- Requires understanding of some complex ideas and may be considered difficult by some. Use of scientific language and precise language is required.
- Chemistry is included in all Science and most Engineering Courses as a First Year Module, students lacking Chemistry at Leaving Cert level find this a big disadvantage.
- Entry requirement for Veterinary and a number of other courses

Careers for which Chemistry is useful:

Pharmacy, Chemical Engineering, Pharmaceutical Industry, Veterinary Science, Medicine, Applied Science, Dentistry, Agriculture, Teaching, Environmental Protection and Health Care.

COMPUTER SCIENCE

Content:

- Computational thinking.
- A problem solving process involving taking complicated problems and logically breaking them down into more achievable tasks.

- Programming languages including:
- Python
- Javascript
- HTML/CSS

- Design and collaboration
- Computers and society.

Assessment:

- Assessment consists of project 30% and final exam 70%
- 4 Applied learning tasks (mini projects) carried out over the 2 years make it quite a practical subject and prepare students for their final project in 6th year.
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Key points to consider:

- It is structured to enable all students, of all abilities, to study the course.
- Students need only essential Maths, and an open, creative mind.
- Computer Science can be studied at Ordinary and Higher level within the same class.

Careers for which Computer Science is useful:

- All career areas require some level of computer literacy
- Skills gained in this subject can help in both college and further careers even if the student does not go into a computing related discipline.

DESIGN & COMMUNICATION GRAPHICS

DCG involves comprehending, analyzing and communicating information presented verbally or graphically. It develops student comprehension, problem solving and creative thinking.

Content:

The main areas of study are: Plane and Descriptive Geometry, Communication of Design and Computer Graphics, and Applied Graphics.

Similar /different to Junior Cycle:

- All of the skills which are developed to Junior Cycle are continued and enhanced to Leaving Cert
- DCG goes into much greater detail on ellipses and parabollas etc.
- DCG involves use of CAD, drawing only at Junior Cycle TG.
- Advanced problem solving and visualization skills required for Leaving Cert.
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Assessment:

- Final Exam 60% 3-hour Drawing Exam.
- Project Assignment 40% Research, Sketching, Solidworks involved. (Sept –Jan 6th Year)

Key Points to Consider:

- An ability to visualize an object from different angles is important in this subject.
- Accuracy and neatness of great benefit.
- Ability to sketch and enjoyment of CAD are an advantage.
- Successful completion of TG at Junior Cycle is a requirement for DCG.

Careers for which D.C.G. is useful:

Mechanical Engineering, Construction, Architecture, Design Engineer, Product Design, all trades and technicians.

ECONOMICS

Economics is a broad business subject. It looks at the workings of the Economy through Government involvement, Budgets, Taxation and Economic Policy providing students with a broad knowledge of how the Economy functions.

Contents:

- Macro Economics deals with matters affecting the whole society/economy.
- Micro Economics is the study of individual Firms and the running of Individual Markets.

Assessment:

- The new Economics Syllabus beginning in Sept 19 will comprise 20% Project submitted in April of 6th Year.
- Final Exam 80%

Key Points to consider:

- Great all-round business subject which is relevant to all students in the modern world.
- While it is not a course requirement for entry to 3rd level business courses it is of major benefit to students to have taken Economics at LC.

Careers for which Economics is useful:

Ideal for students with Entrepreneurial ambition, Journalism, Social Work, Law, Politics, Stock-Broking, Advertising, Quantity Surveying, Auctioneering, Education and all Business areas.

GEOGRAPHY

Geography is concerned with the study of people and their environments. Students of Geography develop an understanding of their physical and human surroundings. It examines the changing inter-relationships between the physical and human worlds. Students will develop geographical skills which will help them make informed judgements about issues at local, national and international levels.

Content:

Students study <u>all</u> 3 core units

- Core Unit 1 Patterns and Processes in the Physical Environment
- Core Unit 2 Regional Geography
- Core Unit 3 Geographical Investigation (Field study)

And <u>one</u> of the following

- Elective Unit 4 Patterns and Processes in Economic Activities
- Elective Unit 5 Patterns and Processes in the Human Environment

And <u>one</u> of the optional areas of study

- Option Unit 6 Global Interdependence
- Option Unit 7 Genecology
- Option Unit 8 Culture and Identity
- Option Unit 9 The Atmosphere-Ocean Environment

Similar /different to Junior Cycle:

- Analysis of Ordinance survey maps and aerial photographs
- Study of the physical landscapes e.g. weathering/erosion
- Description and explanation of population trends e.g. Migration patterns
- Much greater in-depth study of above topics and more detailed case studies.

Assessment:

- Geographical Investigation 20%
- Terminal Written Exam 80% (2 hours 50 mins)

Key points to consider:

- Final exam of 2 hours 50 min can be challenging for some students (10 short questions, 3 multi part questions and 7 essays to be completed)

Careers for which Geography is useful:

Cartographer, Environmental Protection, Town planner, Geographical Information Systems Officer, Meteorologist, Transportation, Conservation, Recycling, Landscape Architect, Sea Fisheries Protection, Irish Naval Service, Tourism, Estate Agency, Surveying, Agriculture, Forestry, Teaching etc.

HISTORY

History is a subject that embraces the world of politics, economics, religion and philosophy. It requires critical thinking skills in identifying main issues of a topic. Access to such knowledge will enable a student to throw light on other subjects especially art, literature and language.

Content:

The study of the nature of History through the following topics:

- **Later Modern History** 1815 – 1993 (Select 2 of 6 Irish Topics and 2 of 6 European & World Topics)
- A compulsory, Prescribed **Documents Based Study**. (Questions in this section will based on the case studies in a particular topic and on a wider knowledge of the topic overall).

- A **Research Study** involving the study of Historical Significance chosen by the student under the direction of the teacher. The study aims to develop a spirit of enquiry about the past and a range of skills that will help with the enquiry. (20% of L.C.)

Different to Junior Cycle:

- A very in-depth study of the topics required.
- Very detailed case studies
- Focus on new concepts and terminology.
- Good level of language ability and skill at analyzing information required.
- Ability to work independently on Research Study.

Assessment:

- Research Study 20%
- Final Exam 80% (3 essay style answers and 1 documents-based answer)

Key points to consider:

- Student should enjoy the subject and have a good level of comprehension and writing skill.
- While students at both levels will study the same topics, **Ordinary Level** will place more emphasis on Key Personalities and Case Studies associated with topics. Questions on the Ordinary Level Paper will be stimulus driven –photos, maps, charts as well as essay style questions.
- **Higher Level** students will be expected to study all aspects of topics to a greater depth and a higher level of conceptual understanding. Exam question are essay style requiring higher order thinking and essay writing skills.

Careers for which History is useful:

Politics, Archaeology, Museum Curator, Archivist, Historian, Teacher, Law, Journalism and Media, Advertising, Work in Development Sector, Global Charity Work, Public and Civil Service, Researcher, Broadcaster, Librarian.

MODERN LANGUAGE Spanish or German

As stated earlier a modern language is a requirement for entry into the NUI colleges and their affiliates (except to study Engineering, Science, Agricultural Science and Nursing). TCD, UL, DCU, Technological University Dublin and all the Technological Universities and the Institutes of Technology have no language requirement for entry purposes. However, a language is required if a student wishes to study a Language or International Business at third level.

Content:

- Oral Assessment
- Listening Comprehension (Aural)
- Reading Comprehension
- Written Procedures

Similar /different to Junior Cycle:

- Builds on Junior Cert knowledge, vocabulary and grammar.
- J.C. has only Aural and Written components at present while Leaving Cert includes an Oral Examination also.

Assessment:

- Ordinary Level – Oral 20%, Aural 25%, Written 55%
- Higher Level - Oral 25% Aural 20% Written 55%

Key points to consider:

- Consistent effort required to build on skills gained at Junior Cycle (vocabulary, grammar etc.)
- Entry requirement for some 3rd level courses.
- The importance of full commitment to independent learning as well as learning material covered in class.
- The language must have been studied for Junior Cycle before continuing to Leaving Cert.
- Useful for international business or travel abroad.
- German is the most widely spoken language in the EU.
- Spanish is the 2nd most widely spoken language worldwide.
- Not everyone is gifted with languages and if a student struggling to pass at Ordinary level at Junior Cycle then he will find Leaving Cert level very difficult.

Careers for which a continental language is useful:

Tourism, International Business, Translating, Teaching, Administration roles in the EU, Customer Service etc.

PHYSICS

Physics is the study of the physical world, different forms of energy and how they interact. It includes a section called STS (Science, Technology & Society).

Content:

- Mechanics, Temperature, Heat, Waves, Vibration and Sound, Light, Electricity, Modern Physics, Particle Physics or Applied Electricity.

Similar /different to Junior Cycle:

- All topics in Junior Cert Physics are carried through to Leaving Cert Physics
- Greater detail for Leaving Cert. and some new topics.
- More emphasis on experimental work and analysis of results.

Assessment:

- Experiments 30%
- Final Exam 70%

Key Points to Consider:

- Students should have a good understanding of Math's. Ordinary Level Math's competency is sufficient.
- Course is very long, students must be prepared to make a big effort in this subject.
- Useful for Science based courses in college.
- Suitable for students who like practical work and experiments.
- Rewarding subject.

Careers for which Physics is useful:

Engineering - especially electrical and electronic -, Science, Architecture, Astronomy, Biophysicist, Computer Careers, Dentist, Doctor, Radio Operator, Medical Laboratory Technician, Meteorologist, Navy, Optician, Pharmacist, Physicist, Pilot, Radiographer, various Trade Apprenticeships, Scientific Research.

PHYSICAL EDUCATION

Leaving Cert PE in a new subject and is designed to appeal to a broad range of learners, whether they excel in sport or have a keen interest in physical activity and sport either as a performer and/or as a coach/ choreographer...

The subject consists of;

1. A final written examination worth 50% of the marks,
2. A physical activity project to be completed under the supervision of the class teacher, worth 20% of the marks.
3. A performance assessment to be completed under the supervision of the class teacher, worth 30% of the marks available for this subject.

Careers for which Physical Education is useful:

PE teaching, Sports Science, Recreational and Well-Being Management, Strength and Conditioning, Performance Analysis, Sports Nutrition, Event Management, and Sports Administration

TECHNOLOGY

Technology provides students 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.

Content:

- **Core** A Process of Design, Project and Quality Management, Materials and Production, Communications and Graphic Media, Information and Communications Technology, Structures and Mechanisms and Energy, Electricity and Electronics.
- **Options** Select 2 of following: Electronics and Control, Applied Control Systems, ICT, Manufacturing Systems, Materials Technology.

Similar /different to Junior Cycle:

- Similar topics to J.C. though much greater detail on the theory of Electronics, Mechanisms, Project Planning and Management.

Assessment:

- Project 50% (Artefact 25% and Folder 25%)
- Final Exam 50%

Key points to consider:

- Project requires greater work and time commitment than J.C. Project.
- Consistent work and ability to work independently required.
- Must have successfully completed Technology at J.C. to embark on L.C. subject.

Careers where Technology is useful:

Engineering (Mechanical and Electrical), Product Design, Construction, Project Management etc.

ENGLISH

Higher Level English involves **Shakespeare** which is compulsory for either Single Text Study or as part of Comparative Study of Texts.

Content:

Paper 1- Essay, Reading & Writing Skills

Paper 2- Single Text, Comparative Texts (3), Poetry (6 Poets 30-40 poems)

Assessment:

- Final Exam 100% (Lengthy, essay style answers - 5 A4 pages average)

Challenges:

- Students need to read widely as 40% of all marks are based on expression/language.

****Basic entry requirement for majority of courses** and therefore essential to pass this subject****

MATHS

L.C. Math's aims to develop Mathematical knowledge, skills and understanding required for continuing education, life and work. Algebra, Trigonometry etc. studied at J.C. developed to higher level. New topics e.g. Financial Math's included for L.C. Higher Level Math's at L.C. is much more difficult than Higher Level Junior Cycle.

Assessment:

- Final Exam 100% (2 Papers)

Key points / Challenges:

- Higher Level Math's is a long course and requires a lot of time and effort.
- Extra points for college entry are awarded at H.L. if 40% plus is achieved but this should not be a deciding factor in taking H.L.
- Basic entry requirement for many college courses.

Careers for which Math's is useful:

- Math's as a basis for logical thinking is used in almost all careers.
- Essential for Science or Finance-based careers, Actuary etc.

IRISH

At Leaving Cert level, most aspects of the course are common for Higher and Ordinary Levels.

Common Oral Exam 40% of the final mark.

Listening comprehension 10%

Terminal Written Exam 50%

The Irish Department encourages anyone interested in doing Higher Level to try it in 5th Year.