

St. Paul's College

Leaving Certificate

Subject Choice

Information

Booklet

2018 / 2019

Introduction

The purpose of this booklet is to provide pupils with the necessary information to choose the subjects for the Leaving Certificate which suit their needs and interests. Choosing subjects to study in the Leaving Certificate isn't easy, and pupils must consider their possible future careers when doing so. Consultation with teachers, parents, pupils and guidance staff is essential. PUPILS SHOULD READ THIS BOOKLET FULLY! One should never choose a subject without knowing what one will be studying. It is important to note that some future careers require certain subjects at leaving certificate (*e.g. medicine requires a strong knowledge of chemistry*).

As the Guidance Counsellor, I must ensure that each pupil is informed about the subjects available to them. However, pupils must take a certain level of responsibility for their career development also and should speak to their teachers and parents about these choices. There are many factors which must be considered when choosing subjects, most notably whether you like the subject or not and, of course, your ability in the subject. As mentioned earlier, one should consider their possible or preferred future career when making these choices also. Research into college courses which may lead to these careers will reveal the essential subjects required.

It is strongly advised that a student takes at least one science subject, unless there is a good reason not to do so, as this will leave all courses open at third level. View some advice from the front page of [Careers portal](#)

Subject Choice Process in St. Paul's College

In general pupils study seven subjects for Leaving Certificate. English, Mathematics and Irish (unless exempt) are compulsory. The remaining subjects on offer (see page 3) are organised into blocks based on pupil preferences. Much work goes into the development of these blocks in order to best suit the requirements of the pupils. In order to derive maximum benefit from the process it is important that pupils give some thought to their strengths, abilities and, where known, future career and university aspirations in advance of making their subject choices.

In February all pupils for the upcoming Fifth Year will be given a complete list of the available optional subjects and asked to rank them in order of preference. It is very important that any subject which might be important/essential to future university courses is given a high ranking as these initial preferences help determine the contents of the subsequent blocks of subjects from which the pupils make their final choices.

Based on these initial preferences the available subjects are then organised into blocks. These blocks are arranged to best meet the preferences of the majority of pupils. In recent years we have been able to completely satisfy over 95% of pupil wishes, and consistently satisfy the first and second preferences of almost all pupils.

The ranked subject will be examined and students will be allocated places in each subject band. This is done in consultation with the students and any difficulties will be sorted out.

Subjects in St Paul's

Compulsory Subjects in Leaving Certificate:

- English
- Irish (*Unless exempt based on a number of criteria eg. Department awarded exemptions*)
- Mathematics

Optional Subjects available in St Paul's College (5 Periods per Week):

- Art
- Biology
- Agricultural Science
- Business
- Chemistry
- Economics
- Geography
- History
- Music
- Physics
- Design and Communications Graphics
- Foreign Language (French, Spanish and German)

Applied Maths is normally outside of the timetable and takes place during Lunch Period

Leaving Certificate Vocational Programme (LCVP)

Brief Summary of Course Content

. The LCVP course is divided into two modules – '*Preparation for the World of Work*' and '*Enterprise Education*' (more detail on these below) with lessons a mix of academic theory and a practical focus. Over the two years, pupils will explore the world of work and gain an insight into running a business, through company visits, interviews, work experience, visiting speakers, CV's, letter writing etc.

Link Module I – Preparation for the World of Work

Pupils will research and investigate local employment opportunities, develop 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 them.

Link Module II – Enterprise Education

Pupils will be involved in organising 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 teamwork, communication and computer skills.

Assessment of LCVP is based on a portfolio, which is maintained over the two years, and a final (common level) exam in Sixth Year. The portfolio is worth 60% of the final mark – the exam 40%. A period of work experience is compulsory during the two years. LCVP is graded as follows: Distinction (80% to 100%), Merit (65% to 79%) and Pass (50% to 64%).

CAO points are awarded for completing the LCVP: 66 for a Distinction, 46 for a Merit and 28 for a Pass. **Note:** Certain subject combinations are required when studying LCVP so participation in this programme is dependent on the subject choices made by pupils in 'main' subject columns.

Students have the option to Choose LCP if they have the following combination of Subjects in their Choices

1. Accounting or Business or Economics (any two)
2. Physics and Chemistry
3. Biology and Chemistry or Physics
4. Art and Business or Accounting or Economics
5. Music and Business or Accounting or Economics

[See Careers Portal for further details.](#)

CONTINENTAL LANGUAGE

The colleges of the National University of Ireland (NUI) have traditionally required a pass in a third language for entry to many courses in the NUI colleges at Maynooth, Dublin, Galway and Cork, and to a range of associated constituent colleges, all of which are listed on the [NUI website](#).

More recently, NUI colleges dropped their third language requirement for engineering and science programmes. UCD also dropped the third language requirement for their agricultural programmes.

Nursing at NUI colleges never required a third language. A third language must be included for arts, human sciences, law, social science, commerce, medicine and health sciences and some other degrees.

This year, the NUI approved the removal of the third language requirement for Maynooth University's Business, Accounting, Finance and Law degree programmes. For entry 2017 and subsequent years, a third language is not required for any of the MH400 and MH500 degrees namely: MH401, MH403, MH404, MH405, MH407, MH411 as well as MH501 and MH502.

[For full details see [NUI Matriculation Regulations](#)]

Trinity College Dublin accepts Irish as a second language requirement. UL, DCU and the Institutes of Technology do not require a continental language for entry purposes to most of their courses, apart from those which involve the study of such a language. Students may qualify for an exemption from these requirements if they have a learning difficulty or if they were born outside of the state.

The **Institutes of Technology** generally expect students to have grade O6/H7 in English and Maths - not choosing a language should have **no impact** on a candidate's ability to get place in one of their programmes.

PLC colleges **do not require** students to have taken a language.

A modern European language will also be required for application to cadetships in the [Defence Forces](#) for the army or air corps.

You must have done the language to Junior Cert level before you can choose it for Leaving Cert.

All students in St Paul's would have studied a European Language until the end of Transition Year. It would be wise, after four years of study, to carefully consider the wisdom of dropping the subject. Many third level Colleges offer opportunities, through the Erasmus Scheme, to continue study in European Universities. There has been a [long discussion](#) about the development of language skills to meet the requirements in companies setting up in Ireland and Irish companies expanding abroad.

[Why is a European language important in the Tec Industry](#)

[See Careers Portal for Further details](#)

Spanish

Spanish as a Leaving Cert subject aims to bring students closer to fluency in the Spanish language, as well as developing a good knowledge of literature, culture, and geography to provide a context for communication. As the second most widely spoken native language, and most widely studied language on the planet, Spanish has widespread use in international business. It also makes travel to Spain, Mexico, and most of South America more accessible.

[See Careers Portal for Further Details](#)

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.

[See Careers Portal for Further Details](#)

German

German as a Leaving Certificate subject aims to bring students closer to fluency in the German language, as well as developing a good knowledge of literature, culture, geography, and national history to provide a context for communication.

Germany plays a major role in the European context, and after English, German is the most spoken language in the European Union and the tenth most spoken language in the world. German offers significant career value for the years ahead.

[See Careers Portal for Further Details](#)

Other Languages

The list of subjects for the Leaving Certificate examination includes the following language subjects: Irish, English, Ancient Greek, Arabic, French, German, Hebrew Studies, Italian, Japanese, Spanish and Russian.

The State Examinations Commission also provides examinations in a range of subjects in the language area referred to as the non-curricular EU languages. These are languages which do not appear as part of the normal school curriculum but which students may opt to be examined in if they meet certain criteria. Chief among these conditions are the requirements that candidates for these examinations :

- Be from a member state of the European Union
- Speak the language in which they opt to be examined in as a mother tongue,
- Have followed a programme of study leading to the Leaving Certificate
- Be taking Leaving Certificate English

Another condition is that candidates may undertake examination in one non-curricular language subject only.

Other languages were added in 2018, click to [Examinations Commission](#)



English

Brief Summary of Course Content

There are two papers in the terminal exam - Paper I (Language, 2 hours 50 minutes) includes a major composition (100 marks), a comprehension section (50) and a short set composition task (50).

Paper II (Literature, 3 hours 20 minutes) has three sections:- The Single Text (60, almost always a Shakespeare tragedy such as *Hamlet*, *Macbeth*, *King Lear*, *Othello*); The Comparative Mode (70,

Possible Career Areas for which this Subject is Useful/ Essential

English is an essential subject in almost all professions. There are many careers which stem directly from studying English in third level. Career opportunities are abundant to an individual with a degree in English because skills gained from this area of study can be easily applied to many career areas. Individuals possessing the ability to think clearly and critically, to analyse and interpret data, and communicate results are in great demand by employers. Examples include: journalist, novelist, acting, film or stage direction, law, teacher, PR and much more.

[See Careers Portal for Further Details](#)

Art



Brief Summary of Course Content

Art is around us every day from the design of the shoes we are wearing on our feet to the architectural design of the building in which we sit. The Art Programme brings together practical Art with Art History. This curriculum necessitates us to draw on our own experiences of life and to concentrate on the exciting world of art, craft and design around us. The course is broken into two main sections; the *Practical Art Course*, comprised of a chosen craft, a still-life painting/drawing and two

life drawings. and the *History of Art Course*

Section 1: Practical Art Section (62.7% of overall marks)

From 2018 on the Department of Education and Skills have introduced a small, progressive change to the way the Craft and Still-Life/Imaginative Composition sections are both worked on and examined. The Life Drawing and History of Art sections remain the same as before.

From January 2018 both the Craft and the Still-life/Imaginative Composition elements of the L.C. Art Exam will be developed from a chosen theme and worked on from a primary source over the course of ten weeks starting immediately after the Christmas holiday. All of the original concepts, notes and developmental drawings/tests for each of these two sections are to be worked on in a Department of Ed. provided workbook. This workbook along with the two final realised pieces of work will be kept in the school and examined here by a Department of Ed. examiner sometime in June.

1. **Craft** covers crafts such as clay modelling, batik, poster design, pottery, puppetry, block printing. This section accounts for 25% of the overall mark. During Form V all crafts are explored and in the second year of the programme pupils choose one craft which they enjoy and feel most confident in. Drawing skills are developed, and a mature and personal artistic style is encouraged.
2. **Still- Life/ Imaginative Composition**- covers personal interpretation of their chosen theme in order to assemble a still life or compose a strong imaginative composition based on the development work done in their workbook. This aspect of the course develops observational drawing and composition skills worked from a primary source, and aims to enhance their abilities in using various drawing/painting media. This section of the course accounts for 25%.

3. **Life Drawing**- covers elements and principles such as perspective, proportion, composition and scale in order to draw the human figure. Pupils can also opt to draw portraits along with the entire figure. Observational and drawing skills are developed and the use of various media is encouraged. Life drawing is practiced on a regular basis (usually one period a week) throughout the two year course. This section of the course is examined in 1 hour (one 15 minute drawing, and one 30 min drawing). It accounts for 12.7%.

Visits to Galleries and Museums are an integral part of studying this subject along with an opportunity to visit the N.C.A.D. on open day. Drawing trips have also been undertaken when the opportunity has arisen. All Sections of the practical exams take place in early May. This puts more than 60% of the Art exam behind pupils in the run up to all other written exams in June. See the Art Department Blog <https://stpaulscollegeart.wordpress.com/>.

Possible Career Areas for which this Subject is Useful/ Essential

The list is endless! Architect, Industrial Design, Web Design, Graphic Artist, Poster Designer, Book Illustrator, Calligrapher, Advertising, Display Design, Cartoonist, Animator, Camera Operator, Fashion Photographer, Fashion Stylist, Make-up Artist, Special Effects, Stage Design, Photographer, Photojournalist, Forensic Photographer, Fine Artist, Ceramicist, Stained Glass Maker, Jeweller, Tattoo Artist, Printmaker, Sculptor, Textiles, Wood Craft, Educator, Art Therapist, Film Director, Film Editor, Film Set Constructor, Art Historian, Art Critic, Antiques Specialist, Restoration, Gallery Curator.....

Required for 3rd Level?

For most level art and design courses, a portfolio is required as well as the Leaving Cert.

Note: Each college has its own date for submission of a portfolio and you will not be notified by the college or the CAO, you will need to research the deadline yourself.

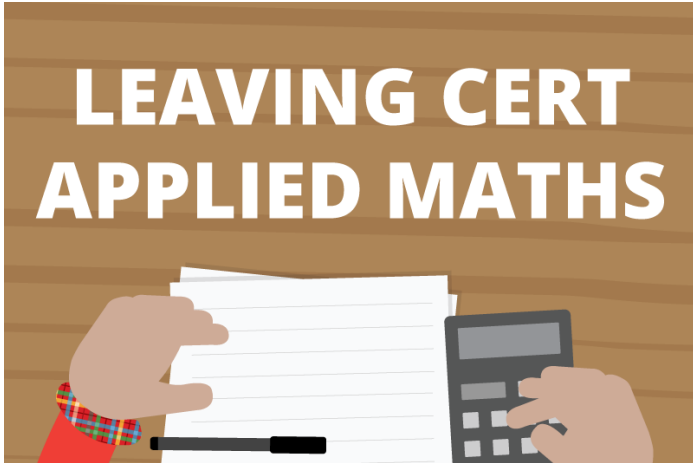
Portfolios take a lot of time to complete and so some students take night classes, summer courses to complete them. There are also a number of portfolio preparation courses offered through PLC colleges.

This subject may be essential for entry into some Third Level courses. Click on the link below to view courses that may require this subject for entry. It is vital that your choice of an art course be submitted on your list of choice by Feb 1st on the year of your application to college.

[See Careers Portal for further details](#)

Applied Mathematics

Brief Summary of Course Content



Applied Mathematics is a beautiful and challenging subject. It can be the most satisfying subject on the Leaving Certificate. It serves students well because it gives them a skill – to solve real life problems using mathematics as the tool – which they can later apply to any other field such as medicine, architecture, economics, pharmacy, engineering, design, technology, business and actuarial studies.

Applied Mathematics or Mathematical Physics studies the application of Mathematics to problems in STATICS (Bodies at rest) and DYNAMICS (Bodies in Motion).

In particular, it is an ideal subject choice for those intending to study Engineering, Architecture, Physics or Mathematics at 3-level and particularly appeals to the abler student who enjoys solving challenging and complex problems.

Applied Mathematics complements the Honours Leaving Certificate courses in Mathematics and Physics. Students taking the subject find that their grades in Mathematics and Physics improve and that their time studying Applied Maths is enjoyable, motivating and intellectually stimulating.

- Vectors □ Impacts and Collisions (Direct
- Accelerated Linear Motion □ & Oblique)
- Projectiles on a Horizontal and □ Motion in a Horizontal and
Inclined Plane □ Vertical Circle
- Relative Motion □ Simple Harmonic Motion
- Forces (Newton's Laws, □ Statics and Hydrostatics
Normal Reactions, Friction) □ Moments of Inertia
- Connected Particles □ Differential Equations □ Work, Power, Energy, Gravity and
Mathematical

Modelling

[See Careers Portal for further Details](#)

Business

Brief Summary of Course Content

The Leaving Certificate course involves the study of topics such as industrial relations, taxation and insurance, sources of finance, marketing, contract law and the role of the EU in the business world.

The course is divided into a number of modules

including:

- Consumerism:
- World of Work:
- Finance
- Insurance
- Advertising
- Marketing
- Enterprise

Possible Career Areas for which this Subject is Useful/ Essential

Any career requires an understanding of the principles of business. Whether employer, employee or consumer, a pupil will benefit greatly from studying this course. It gives information which is practical and relevant to everyone's daily life. While Business is not necessary for any course in College it is a useful subject if only to discover where your aptitude lies.

[See Careers Portal for further details](#)



Accountancy



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.

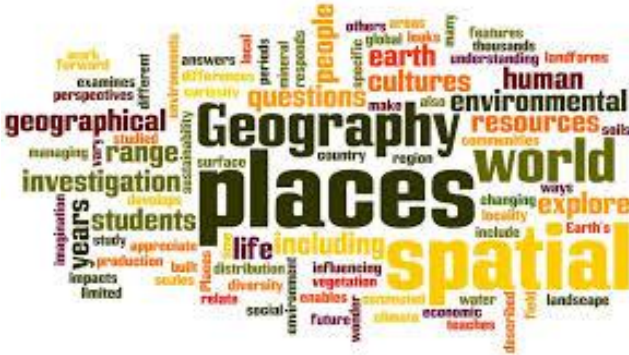
Topics covered include:

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.

[Careers Portal For Futher Information](#)

Geography

Brief Summary of Course Content



Geography has strong links with other subjects such as biology, maths, history, geology, environmental science, economics, and business studies. It develops a range of enquiry, scientific and analytical skills, and encourages more independent approaches to learning through your own research.

Who is it for?

Geography is for YOU if you are interested in issues of current relevance and concern like natural hazards, physical geography, globalisation, poverty, inequality and sustainable development.

Brief Summary of Course Content

The coursework consists of core modules, elective modules and an optional module. There is also a series of coursework activities

Core Material:

- Physical Geography- hazards, plate tectonics, landslides etc.
- OS maps, Aerial and Satellite photos & Weather charts
- Regional geography –Ireland, Southern Italy, Paris Basin, India
- Elective topic– Economic Geography (Developmental issues)
- Option topic – Geo-ecology
- Fieldwork – Bull Island

University & Career Prospects

It's **highly valued** by universities and employers. Top universities named Geography as one of the eight facilitating subjects. Many students move on to higher education to do geography or related subjects. Geography leads on to many career opportunities and is in demand in such areas as marketing, tourism, agriculture, outdoor leisure, human resources, oceanography, travel, economics, environmental science, engineering, teaching, anthropology, development studies, earth studies and many, many more.

Coursework

Primary and secondary research for the coursework section is a core aspect of Leaving Certificate geography and counts for a total of 20% of the overall mark. Pupils must be willing to work independently and in groups and will be assessed on their fieldwork experience by writing up their results in a structured form.

Assessment

Leaving Certificate- Written Examination (80%) and a written section for their coursework (20%).

[See Careers Portal for further details](#)

History



Brief Summary of Course Content

In the course we study modern European, US and Irish history and 20% of the course is coursework in which each pupil prepares work on a subject of their choice well in advance of the final examination.

The Leaving Certificate course consists of five modules. In the Fifth Form we study ***'Dictatorship and***

Democracy in Europe, 1920-1945' which essentially consists of studying the fascist regimes of Mussolini and Hitler, Stalin's totalitarian state, the Second World War and Britain in the inter-war period. This is a popular and interesting part of the course. It is sometimes possible to visit relevant places of historical interest: e.g. this year we visited the British Museum in London as well as the Cabinet War Rooms and the Churchill Museum. We then look at ***The History of the United States 1945-1989*** which covers topics such as American foreign policy, the civil rights movement and the

U.S. economy during the period.

At the end of the Fifth Form we begin work on the ***Research Study Report***; pupils undertake to write a report on an area of independent research and topics have ranged from the historical importance of Anna Parnell to the Battle of Stalingrad. Essentially students can choose any historical topic they wish (within very broad parameters) and produce an essay of 1500-1800 words reporting on the results of that research. Students have performed very well on this module, generally securing in the range of 97-100% in a module which is worth 20%. In the Sixth Form we will study a course on Modern Irish history – ***Sovereignty and Partition - 1912 - 1949***. Finally we study a document-based module of modern Irish history which examines very limited aspects of Irish history in depth with a view to developing document analysis skills (it is referred to as the DBQ – or ***Documents-based question***)

Possible Career Areas for which this Subject is Useful/ Essential

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 and able to put together logical arguments. History training imparts vital transferable skills. Typically historians are to be found in the law, teaching, museums, journalism and the media, business, commerce, finance, sales and marketing, the armed forces, diplomacy, the Civil service and the Church.

[See Careers Portal for Further Details](#)

Music

Brief Summary of Course Content



The Leaving Cert Music course is divided into THREE sections - **Performance**, **Listening** and **Composition**.

The **Performance** counts for 50% of the overall mark and takes place in March. Each student must perform FOUR pieces or songs on their instrument or voice, and these account for 25%. We also do the **Music Technology** option which involves knowing your way around a very straightforward music computer programme. This counts for 25%, and it is possible to score full marks in this section. Performance is an integral part of music making, both for enjoyment, and academic success. There are many opportunities for performance in the College with informal soirees and larger concerts held at regular intervals throughout the term.

The **Listening** consists of the study of FOUR Set Works, which for next year will be by Mozart, Berlioz, Deane and The Beatles. There is also an Irish Listening question and essay. The **Composition** consists of writing a melody and a harmony question, both of which are quite straightforward.

This course is very suitable and enjoyable for anyone who likes music and who has reached a reasonable standard of performance in their instrument (approx Grade 5). It is a chance for these students to reach a high standard of musicianship, and to score highly in this subject. See College Music Website for Further Information <http://stpaulscollege.ie/Music>

Possible Career Areas for which this Subject is Useful/ Essential

A degree in Music can lead to a career in Performance, Teaching, and other music associated areas such as Arts Administration. Music can also be taken as a module subject in a General Arts Degree.

[See Careers Portal for further details](#)

Science Group

- Physics
- Chemistry
- Biology
- Agricultural Science

It is recommended that students take at least one science subject as this will leave all third level option open. Science is an essential requirement for most course in technology, engineering, science, medicine, nursing etc. It is essential to view [Qualifax](#) to view where the requirements are. Specific science choice are required for some courses, such as Chemistry for Veterinary, Pharmacy, Dietetics DIT and some medicine courses .

Some Points to Note

- Physics would present some difficulties if you do not have a decent Honours Maths Result from Junior Cert.
- If any student is thinking of pursuing a career in Science it is strongly recommended that they choose Chemistry as an option as this seems to be the best foundation for any science programme at third level.
- Biology is a popular choice among our students, however many seem to find difficulty with the length of the course, its language and vocabulary. Well suited to those who are good at languages and have a developed memory.

Physics

Brief Summary of Course Content




Physics is the study of the physical world in which we live and the forces and interactions which govern it. Physics is all around you and the aim of the course is to explain and understand things which you observe in everyday life. The subject is practically based with a large number of mandatory pupil experiments. There is a new and increasing emphasis on understanding and developing an appreciation for the influence of science and technology in the modern world. All pupils would have done a module in TY which gave this an appreciation of Physics and Engineering the module may have introduced them to some of the maths concepts of physics. It is recommended that any student considering Physics should have achieved Honours Maths standard for Junior Cert. It is a 2 year course covering the topics of optics, mechanics, heat, sound, static electricity, current electricity, magnetism, semiconductors, radioactivity, nuclear physics and particle physics. Almost all of these topics have been touched on in junior cert science; the leaving cert course is simply a more in depth study. Experiments form the backbone of the course and are, to a large extent, performed by the pupils in small groups (usually 2 or 3 per group), Most of the experiments are completed in Fifth year. Questions based on these experiments form a significant part of the final exam 30% We normally complete two thirds of the course in Fifth year, aiming to finish the course by February of the leaving cert year, thus leaving plenty of time for revision.

[See Careers Portal for further details](#)

Chemistry

Brief Summary of Course Content



Chemistry is essential for those intending to study medicine or indeed any science course at university. Mathematical ability is not essential but it is helpful in some sections of the course. It is strongly recommended that students achieve honours at Junior Cert Science. Over the course of the two years some 28 experiments are completed forming an important source of information for the exam questions. It is hoped that all of the course would be covered before the Mocks in sixth year leaving some months for revision. Success depends on working from the start and not allowing oneself to become lost. We start from absolute scratch.

The leaving course covers the following topics:

1. Atomic Structure and Periodic Table
2. Bonding
3. Stoichiometry [calculations]
4. Volumetric analysis
5. Fuels and heats of reaction
6. Reaction rates
7. Organic chemistry
8. Equilibrium
9. Environmental chemistry
10. Atmospheric chemistry
11. Industrial chemistry

Possible Career Areas for which this Subject is Useful/ Essential

For any student who is considering Science as a college course, I would suggest that the subject is essential. Any science area, industry, pharmaceuticals, fire service, teaching, health and safety, medical – those who do chemistry have a good versatile brain which is adaptable to go into any work environment. **Chemistry is essential for pupils who wish to study medicine in TCD, UCC, UCG but not UCD.**

[For Further Information See Careers Portal](#)

Biology

Brief Summary of Course Content



Biology is a fascinating, popular and useful subject. In St Paul's we aim to enthuse, inform and raise awareness about all aspects of the living world – and about the functioning of our own bodies. In so doing we also aim to prepare pupils for their certificate exams to as high a level as possible, and to prepare them for their roles as decision-making, responsible and interested members of society. The course is divided into three units. Unit 1 looks at living things and how they interact and feed. Unit 2 looks closely at the cell, its structure, function and biochemistry. Unit 3 looks at the organism

and extensive study of both animal and plant physiology is carried out. The course content is broad, challenging yet interesting and rewarding. As part of the course of study, there are also 24 mandatory laboratory investigations to be carried out.

Possible Career Areas for which this Subject is Useful / Essential

Biology is a broad subject and pupils will find it particularly useful no matter what area of study is pursued at higher education. Biology is useful for any course of study especially in the area of science, engineering or medicine:

- Research / Laboratory Work
- Further Education
- Teaching
- Zoology
- Environmental Careers
- Medical / Drug Research
- Microbiologist
- Veterinary Medicine
- Doctors / Nurse

[See Careers Portal for further Details](#)

Agricultural Science

Agricultural science is the study of the science and technology underlying the principles and practices of agriculture. 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.



Course Content

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

- Soils
- The general structure and function of plants
- Farm crops - cereal and roots
- Farm crops - grassland
- Trees and shelter
- Structure and function of the animal body
- The cow, the sheep, horse, and pig
- Farm buildings (for school assessment only)
- Farm-house environment (for school assessment only)

[Syllabus information](#)

[See Careers Portal for further details](#)

Design & Communication Graphics



Brief Summary of Course Content

The course is based on the Leaving Certificate syllabus which comprises three fundamental areas of study:

- Plane and Descriptive Geometry
- Communication of Design and Computer Graphics
- Applied Graphics.

The core areas of study (Part One) comprise *Plane and Descriptive Geometry* and *Communication of Design and Computer Graphics*. *Plane and Descriptive Geometry* provides students with knowledge of essential graphic principles while *Communication of Design and Computer Graphics*

introduces students to the use of graphics in a wide variety of design situations. It also encourages the development of the critical skills of design analysis and creative problem solving through the exploration of a variety of design problems and situations.

The optional areas of study (Part Two) are offered within *Applied Graphics* where students are introduced to graphic applications in the fields of engineering, science and the human environment.

These optional areas of study are:

- Dynamic Mechanisms
- Structural Forms
- Assemblies
- Geologic Geometry
- Surface Geometry

Students are required to study the core and two optional areas within *Applied Graphics*. Essentially, Design & Communication Graphics comprises computer aided design (CAD), freehand drawing and designing objects.

Possible Career Areas for which this Subject is Useful / Essential

The course is of general use in everyday life but directly related to careers in architecture, engineering, landscaping and all construction trades as well as design & manufacture careers.

One Terminal Exam Paper: 60%
Student Assignment: 40%

[See Careers Portal for further details](#)