



St. Columba's College

Leaving Certificate

**Subject Choice
Information Booklet**

2017 / 2018

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.

We pride ourselves here in St. Columba's on our academic excellence. Our results in the Leaving Certificate have been amongst the highest in the country. In 2016, our pupils achieved an average points score of 478 per candidate. A staggering 44% of candidates achieved 500 points or more. 90% of candidates achieved 400 points or more. 97% of pupils achieved over 300 points or more.. Over the past five years, pupils have achieved an average of 464 points, giving an indication of consistently high scores. We believe that informed subjects choices are crucial to this success.

The remainder of this booklet will try to explain the process involved in making subject choices in St. Columba's and will provide detailed information on each subject available in the school, both compulsory and optional.

Humphrey Jones, Guidance Counsellor

Subject Choice Process in St. Columba'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 addition to the seven main subject groupings pupils also choose one Q-set subject. This subject occurs for a double period each week over the two years. This provides an opportunity for some pupils to study an extra subject for Leaving certificate or University matriculation purposes, while others opt to pursue an area of interest outside the core of examined subjects.

In January all pupils for the upcoming Form V will be given a complete list of the available optional subjects (excluding Q-Set) 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.

In February these final block choices, including Q-set which forms an additional block, will be issued to all pupils entering Form V in September 2017. Pupils then choose one subject in each block. These final choices are then signed off by the pupils and their parents. The entire process must be completed by the end of February in order to facilitate the development of the timetable for the coming year.

Mary Singleton, Registrar and Director of Studies

Subjects in St. Columba's

Compulsory Subjects in Leaving Certificate:

- English
- Irish (*Unless exempt based on a number of criteria*)
- Mathematics

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

- Applied Mathematics
- Art
- Biology
- Business
- Chemistry
- Classical Studies
- Construction Studies
- Economics
- French
- Geography
- History
- Latin
- Music
- Physics
- Spanish

Subjects available in Q – Set (2 Periods per Week):

- Agricultural Science
- Computer Studies (Digital Creator) *
- Advanced Mathematics *
- Design and Communication Graphics *
- Geology *
- History of Art **
- LCVP
- Physical Education *

** These subjects are not examined in the Leaving Certificate*

*** History of Art is compulsory for pupils studying Art*

English

No of Sets in 2016 / 2017: 4

No of Periods per Week: 5

Department Staff: Mr. J. Girdham, Mr. L Canning, Ms A.Donnelly & Ms. K. Smith

Brief Summary of Course Content

English is a compulsory subject at Leaving Certificate in St Columba's.

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, an essay comparing three texts - in the current V form, *The Great Gatsby*, *Foster* and *Antigone*); Poetry (50 - answer on one of eight set Higher Level poets, and 20 - an unseen poem).

The literature texts are almost completely covered in V form, apart from some poems. In VI form these texts are revised in considerably more detail. Language work continues throughout V and VI forms.

The sets are divided largely at random, with a rough mixtures of abilities. Each set is taught by the same teacher for two years, with some swopping between teachers during the revision period before the final exam.

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.

Gaeilge

Líonna sraitheanna i 2016 / 2017: 2

Líonna ranganna I gcaitheamh na seachtaine: 5

Foireann na Roinne: An Dr Bannister, Bean Maybury, an tUas. Clark

Achoimre ar Ábhar an Chúrsa

Leanann an Coláiste siollabas na hArdteistiméireachta mar atá leagtha amach ag an Roinn Oideachais agus Eolaíochta. Cuirtear béim faoi leith ar labhairt na teanga beo agus ar chumas cumarsáide na ndaltaí in ócáidí cainte éagsúla. Is fiú 40% den toradh iomlán an béalscrúdú. Baintear úsáid as dlúthdhioscaí, físeáin, nuachtáin, chláir theilifíse agus neart ábhar teagaisc fóirsteanach eile atá bunaithe ar bhlianta fada de thaithí ghairmiúil sa Choláiste. Tá dhá phaipéar sa scrúdú scríofa. Scrúdaíonn an chéad pháipéar scileanna ceapadóireachta. Scrúdaíonn an dara ceann scileanna léamhthuisceana agus eolas an dalta ar phrós agus filíocht atá leagtha síos ag an Roinn Oideachais.

- **Ardleibhéal 1** – *(do dhaltaí a bheadh go flúirseach sa teanga agus a bheadh ar lorg na grád is airde)*
- **Gnáthleibhéal** – *(do dhaltaí a mbeadh ar intinn acu dul i mbun an ghnáthleibhéil)*

Sa chéad dá shraith (*i. an tArdleibhéal*) ní úsáidtear ach an Ghaeilge amháin sa rang. Sa dara sraith (*i. an Gnáthleibhéal*), úsáidtear meascán den Ghaeilge agus den Bhéarla.

Comparáid Thorthaí an Choláiste leis na Céatadáin Náisiúnta

Bíonn torthaí an Choláiste san Ardteistiméireacht ag an Ardleibhéal níos airde ná meántorthaí na tíre i gcoitinne. Tugtar thíos anseo na céatadáin do na gráid A, B, C a fuarthas don bhliain 2014 i gcomparáid leis an mheán náisiúnta:

- A no B - grád 15% (22% - meán náisiúnta)

Gairmeacha Beatha gur féidir a chleachtadh le Cáilíocht san Ábhar Seo

Bunscolaíocht Oideachas (*ag an dara agus tríú leibhéal*), Teileacumarsáid, Iriseoireacht, Státseirbhís, polaitíocht, dlí

Irish

Number of sets in 2016 / 2017: 2

No. of Periods per Week: 5

Department Staff: Dr Bannister, Ms Maybury, Mr Clark

Brief Summary of Course Content

The College follows the Leaving Certificate syllabus as laid out by the Department of Education and Science. Particular emphasis is placed on the spoken language and on developing effective communication skills in diverse speech-events. The oral examination is worth 40% of the overall result. Wide use is made of CD's, films, newspapers, TV programmes along with a number of helpful techniques that have been established over many years of professional teaching practice at the College. There are two papers in the written exam. The first paper tests creative writing skills. The second one tests reading comprehension skills and the pupil's knowledge of prescribed prose and poetry. There are usually between 5 to 10 pupils in each set in the 5 & 6 years:

- **Higher level** – *(for pupils who are fluent in Irish and who want the highest grades in this subject)*
- **Ordinary level** – *(for those pupils who are taking the subject at ordinary level)*

In the first set (*i.e. the Higher level*), Irish is spoken exclusively in the classroom. In the second set (*i.e. the Ordinary level*), both English and Irish are used.

Comparison of Results with the National Figures

The College results in this subject for the Leaving Certificate Higher Level are consistently above the national average. Below is given a comparison of A, B, C, grades as percentages of the national average for the year 2014:

- A or B - grád 15% (22% - national average)

Possible Career Areas for which this Subject is Useful/ Essential

Primary Education**, Education (*secondary & third level*), Telecommunications, Journalism, Civil Service, Politics, Law

**A 'C' grade at Higher Level is required for those wishing to become primary school teachers.

Mathematics

No of Sets in 2016 / 2017: 4 (3 Higher Level, 1 Ordinary) **No of Periods per Week:** 5

Department Staff: D. Higgins, Dr. M. Singleton, J. Robinson, N. Coldrick

Brief Summary of Course Content

The Leaving Certificate Mathematics course builds on the foundation of the Junior Certificate syllabus. The final examination is offered at both higher and ordinary level. The topics covered are the same for both levels, but the depth of treatment is significantly different. The ordinary level course is much more manageable for those who are less mathematically minded. At higher level, pupils will find mathematics a demanding yet satisfying course to undertake. A solid background in mathematics is essential, as there is a large syllabus to cover meaning we move at a quick pace.

The main topics are:

- Algebra
- Trigonometry
- Calculus
- Coordinate and Circle Geometry
- Probability and Statistics
- Geometry

Comparison of Results with National Figures

In 2016, 62% of our pupils sat the higher level course, compared with 28% nationally. In our current Form V 82% are aiming for higher level. In 2016, 19% of all our pupils achieved an A grade in Higher Level (compared with just 3.1% nationally).

Possible Career Areas for which this Subject is Useful/ Essential

A good mathematical ability is essential in nearly all professions. Traditionally, university courses such as engineering and architecture require higher level mathematics for entry but mathematics can be used in a huge variety of careers, from science, criminology, financial to actuary. For more information on careers in maths, visit: www.mathscareers.org.uk

Art

No of Sets in 2015 / 2016: 1

No of Periods per Week: 7 (2 for Art History)

Department Staff: Mr.P. Watts, Ms. D Cullen

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 Form V 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* (See Q-Set History of Art).

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 www.sccart.blogspot.com for examples of previous Leaving cert work.

Comparison of Results with National Figures

Excellent results were achieved which were well above the National Average. Last Year (June 2016) all of SCC Candidates sat the exam at Higher Level compared with 77% nationally. 29% obtained an A grade and 71% achieved a B grade.

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.....

Applied Mathematics

No of Sets in 2016 / 2017: 1

No of Periods per Week: 5

Department Staff: N. Coldrick

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.

The course is taught at Honours Level over two years, for five periods a week, and covers a wide and interesting range of topics including:

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

Comparison of Results with National Figures

The results are consistently good. In 2016 29% of SCC pupils obtained an A grade at higher level compared with 19% nationally.

Possible Career Areas for which this Subject is Useful/ Essential

Applied Maths is a real advantage in courses such as Engineering, Science or Architecture. As with Physics, Applied Maths is useful in all forms of engineering, medicine, dentistry, but in general, many science based careers use Applied Maths. The problem solving skills developed through studying Applied Maths are useful across a broad range of other disciplines also.

Biology

No of Sets in 2016 / 2017: 3

No of Periods per Week: 5

Department Staff: Mr. P. Jackson, Ms. L. Harrahill & Mr. H. Jones

Brief Summary of Course Content

Biology is a fascinating, popular and useful subject. In St. Columba'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.

Comparison of Results with National Figures

Biology is continually the most popular of the non-compulsory subjects at Leaving Certificate in SCC, and all pupils are prepared initially for the Higher Level examination (over each of the past 6 years only one or two pupils in each cohort have sat the examination at Ordinary Level). There is a proud tradition in Biology in SCC and over the past 3, years for example, 66% of Higher Level Biology candidates in SCC have achieved an A or B grade (compared with a national average of 28%). Last year, 24% achieved an A grade at Higher Level in the Leaving Certificate compared with 10% nationally. 40% achieved a B grade compared with 20% nationally.

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
- Much more.....

Business

No of Sets in 2016 / 2017: 2

No of Periods per Week: 5

Department Staff: Mr. P. McCarthy & Ms. R. Howell

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

Comparison of Results with National Figures

The vast majority of pupils take the Higher Level paper in the Leaving Certificate examination. Those few who opt for Ordinary Level receive the same level of tuition as Higher Level pupils. The Leaving Certificate results achieved by our pupils compare very favourably with national statistics, with our performance invariably higher in terms of A, B and C grades. In 2016 the Leaving Certificate Results were as follows:

- Higher Level A: 50% as compared with 7.8% nationally
- Higher level B : 28.6% as compared with 21% nationally

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.

Chemistry

No of Sets in 2016 / 2017: 2

No of Periods per Week: 5

Department Staff: Mr. P. Jackson

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. Success depends on working from the start and not allowing oneself to become lost. We start from absolute scratch, so it is possible to start the subject if you have not studied it in form IV providing you are willing to work hard.

The leaving course covers the following topics:

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

Comparison of Results with National Figures

Pupils generally sit the Leaving Certificate at Higher Level. The results have been consistently excellent, well above the national average. In 2016 the results were as follows (national figures shown in brackets):

- Higher Level A - 59% (17%)
- Higher Level B - 14% (24%)
- Higher Level C - 23% (20%)

Possible Career Areas for which this Subject is Useful/ 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 Ireland or the UK. (Pupils who do not study chemistry are required to complete an additional year for some medicine courses).

Classical Studies

No of Sets in 2016 / 2017: 1

No of Periods per Week: 5

Department Staff: Mr. P. McCarthy

Brief Summary of Course Content

The student of Classical Studies does not study the classical languages and so is enabled to engage in a more thorough and wide-ranging exploration of the non-linguistic areas of classical civilisation. This exploration consists of the study of ancient literary, historical, dramatic and philosophical works (in translation) for the Leaving Certificate and also an exploration of various aspects of classical art, architecture, archaeology, sociology, mythology and legend in the junior school.

The topics studied for Leaving Certificate in St. Columba's include:

- Epic Poetry (*Aeneid* and *Odyssey*)
- Alexander the Great
- Greek Drama (*Oedipus the King*, *Prometheus Bound* and *Medea*)
- Philosophy (*Plato's Republic*)

The Leaving Certificate exam is a 3 hour exam. From 2011 pupils have had to answer 6 questions instead of the previous 8, making the exam much more reasonable and fair.

Comparison of Results with National Figures

Our results compare very favourably with the national average: 2016 Leaving Certificate

A grade : 16.6% as compared with 9.7% nationally

B grade: 50% as compared with 21.6% nationally

Nationally, in terms of the numbers who sit the Leaving Certificate Exams, Classical Studies is a minority subject. In St Columba's College it has full subject status, the course is taught fully and properly and this is evidenced in the examination results.

Possible Career Areas for which this Subject is Useful/ Essential

As well as the intrinsic value of developing the mind the subject can be studied as part of an Arts degree. It is very useful for those interested in English and History. Those opting to study law will also find it of use. All prospective employers are impressed by candidates who have studied the ancient world.

Construction Studies

No of Sets in 2016 / 2017: 1

No of Periods per Week: 5

Department Staff: Mr. B. Redmond

Brief Summary of Course Content

The subject has three components: a theory section covering such topics as the construction industry, planning permission, urban/rural development and a section covering building, technical knowledge on insulation, heating, foundations, roofing and services.

There is a practical woodwork component during which the student makes an article that has dovetail, mortise, tendon and halving joints, along with chamfers, curves and drilling holes for dowels in wood. The main practical part is a building project which is backed up with a written report. The project can be a piece of furniture, a model or a wet trade such as a lean-to roof, concrete garden seat, chimney at roof level or other such building component. The old fives courts at the end of the Art Centre is now the construction studies yard where the students have a practical hands-on experience of mixing mortar and block and brick laying, mixing concrete and casting. The marking out and cutting roof rafters, felting and covering is also carried out. In the workshop the plumbing involves each student learning to cut, bend and join copper piping. As a team they have to install a working wash hand basin.

Assessment is split in half with 50% of the total mark based on an examination of theory and 50% for practical work project.

Comparison of Results with National Figures

Most pupils generally sit the examination at Higher Level. In 2016, 100% of pupils achieved an honour at higher level in the Leaving Certificate compared to 83% nationally.

Possible Career Areas for which this Subject is Useful/ Essential

Studying Construction Studies is of general use in everyday life as well as suitable for specific careers including:

- Architecture
- Engineering
- Landscaping
- Construction trades
- Design and manufacture careers.

Economics

No of Sets in 2016 / 2017: 2

No of Periods per Week: 5

Department Staff: Ms. R. Howell

Brief Summary of Course Content

Why do we buy Coke over 'cola flavoured' carbonated water? How will YOU fare in the Ireland of the future? Ever wondered why the price of oil bounces up and down?

If these questions interest you and you want to be stimulated and challenged, then economics is the subject for you. Economics is the study of how people manage limited resources such as money to meet their goals. By understanding the reasons why people spend their money in certain ways, economists can try to introduce incentives to change their behaviours. Economics is divided into two broad categories:

Microeconomics considers how individual people decide what goods they are willing to buy or not buy based on maximising their personal 'utility' (getting as much benefit as possible from their money), and how firms and businesses will try to take advantage of consumers' habits to maximise profit.

Macroeconomics then considers how governments handle the economy as a whole, and how they select policies which meet their goals, such as stable economic growth (avoiding recessions), minimising the national debt, and encouraging employment. How the government handles issues such as fiscal policy (how much money flows in the economy), international trade, and banking all have implications for economics stability and growth.

In class, we will explore the economic theories and then apply them to current world issues, with a focus on Ireland in particular. It is a subject that keeps itself fresh and interesting and is very rewarding as a result. It is recommended that pupils should be interested in current affairs. It would be important to be listening to the news and reading the daily papers.

Comparison of Results with National Figures

In 2016, 44% of pupils achieved an A or B grade in the Leaving Certificate (compared to just 34% nationally) .

Possible Career Areas for which this Subject is Useful/ Essential

Economics is useful in a wide range of career areas including but not exclusively:

- Teaching and Lecturing
- Journalism
- Media Studies
- Politics
- Business enterprises.
- International Studies
- International Relations.
- Law

French

No of Sets in 2016 / 2017: 3

No of Periods per Week: 5

Department Staff: Mr M. O'Shaughnessy, Mr F. Morris, Mr T. Clark, Ms A. Kilfeather

Brief Summary of Course Content

The study of a Modern Language for Leaving Certificate is obligatory and the majority of pupils study French, though some opt for Spanish. The examination can be taken either at Higher Level or Ordinary. Typically, we will have two sets at Higher and one at Ordinary, with classes ranging from six to seventeen pupils.

TEACHING

The Leaving Certificate course begins in the Fifth Form and pupils are assessed on their progress at end of term exams. Assessment is made by means of prep, class work, class tests, effort marks and term exams. All exams at all levels include an oral and aural component. Our teaching centres on developing the four main skills: listening, speaking, reading and writing. Lessons are conducted predominantly in the target language, but with an understanding of each pupil's specific needs. We aim to involve linguists as much as possible in the learning process, thus maximising their enthusiasm and confidence. All topics studied are firmly rooted in the contemporary culture of the language in question and we expect students to be able to communicate successfully with native speakers within a short period of time. High expectations are also set regarding accuracy of the written language. ICT is fully integrated into the curriculum, serving both to consolidate material covered and give a fresh perspective. Five lessons of forty-five minutes a week are given and, in the Sixth Form, pupils have a weekly oral class with our French assistante.

THE LEAVING CERTIFICATE EXAM

Below is an outline of the components:

• <i>Oral Examination</i>	<i>15 mins</i>	<i>25%</i>
• <i>Listening Comprehension</i>	<i>40 mins</i>	<i>20%</i>
• <i>Reading Comprehension &</i>	<i>2h 30mins</i>	<i>30%</i>
<i>Writing Paper</i>		<i>25%</i>

The senior course is however not just about exams. We also aim to give pupils a cultural appreciation of the Francophone world and an understanding of contemporary society and politics. We regularly take pupils to see the latest French films at the IFI, TCD or the Mermaid Theatre in Bray and study songs, poetry and short pieces of literature. Our aim is to give pupils an abiding and life-long interest in all things French.

Comparison of Results with National Figures

Our results are consistently above national figures, with about double the percentage of As. Here are our results from 2016:

- Higher Level As – 16% (8% Nationally)
- Higher Level Bs - 21% (17% Nationally)
- Higher Level Cs – 26% (19% Nationally)

Possible Career Areas for which this Subject is Useful / Essential

Speaking a foreign language such as French is a very useful tool for any business career that has an international dimension, for example working for a multinational company, be it accountancy, banking or retail. It is a huge asset for any post in the European Union. Other areas: translating, international law, teaching / lecturing, tourism industry.

Geography

No of Sets in 2016/2017: 2

No of Periods per Week: 5

Department Staff: Mr. S. Duffy, Mr. P. Stevenson

Geography is the subject which holds the key to our future. Michael Palin

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, which are undertaken in the Trinity Term of Form V in the Burren, Co. Clare. This means you will be able to complete 20% of the course in class in form V. The department will also be running expeditions abroad.

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 – Burren Expedition*

Results Analysis:

The vast majority of our pupils take geography at higher level. Our 2016 cohort continued the trend of achieving excellent grades in geography: 96% of our pupils achieved an A or B at higher level (20% achieved an A grade), with 100% getting a C1 and above. This is exceptional compared to national statistics.

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.

Weekly commitment

You can expect to have five lessons per week, with private study, research and background reading expected of you.

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 in June of VI form (80%) and a written section for their coursework completed in form V (20%).

Further information contact:

Mr. S. Duffy

History

No of Sets in 2016/2017: 2

No of Periods per Week: 5

Department Staff: Mr. Barry Finn & Miss Emma Duggan

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***)

Comparison of Results with National Figures

The overwhelming majority of students sit the final examination at Higher Level (100% compared with 71% nationally in 2016). Again, the results have been consistently excellent in recent years (88% achieving A or B grade compared with 32% nationally in 2016), with 100% of our student scoring an A, B or C at Higher Level in 2016.

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.



Latin

No of Sets in 2016 / 2017: 1

No of Periods per Week: 5

Department Staff: Mr. R. Brett

Brief Summary of Course Content

Not only was Latin the language of the Roman Empire but it was also the language of all important European writings for the bulk of the time from the fall of the Empire until the early modern period. In St. Columba's, Latin is taught to all forms. In the Leaving Certificate, the Latin course is organised as follows:

- Latin Grammar & Syntax
- Literary study of various writers including:
 - Cicero
 - Livy
 - Sallust
 - Seneca
 - Pliny
 - Tacitus
 - Vergil
 - Catullus
 - Ovid
 - Horace
 - Juvenal
- Latin Composition i.e. translation into Latin.
- Translation of Texts from Latin to English
- Historical Study (44 B.C to 117 A.D)
- History of Roman Art & Architecture

Comparison of Results with National Figures

While the number of pupils studying Latin is quite small, the results have been higher than national averages.

Possible Career Areas for which this Subject is Useful/ Essential

Latin will be of benefit to any career concerning language, linguistics or literature. Additionally, a Latin would be useful for a career in Law, the church or for the completion of a general Arts degree. Pupils interested in a career in art or architecture may also find the course useful. Many original documents throughout Europe exist only in Latin: research students in History and other disciplines find a knowledge of the language extremely useful.

Music

No of Sets in 2016 / 2017: 1

No of Periods per Week: 5

Department Staff: Geraldine Malone Brady & Tristan Clarke

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 wiring 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.

Comparison of Results with National Figures

Our results have been extremely high in recent years; in 2016, 50% of our students scored an A at Higher Level. National figures show 8% scoring As.

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.

Physics

No of Sets in 2016/2017: 2 (10 – 15 pupils on average)

No of Periods per Week: 5

Department Staff: Dr. Mary Singleton

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. We start from scratch in form V so it is not necessary to have taken physics in form IV. It is an advantage from the point of view that the pupils are familiar with the jargon and will have the basic concepts fresh in their minds, however long term it makes no difference. 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). In form V and the first term of form VI an experiment is performed almost every week during the double class. Questions based on these experiments form a significant part of the final exam. We normally complete two thirds of the course in the form V, aiming to finish the course by February of the leaving cert year, thus leaving plenty of time for revision.

Comparison of Results with National Figures

The results are consistently good. In 2016 74% of our pupils obtained A or B at higher level compared with 35% nationally. All our candidates took the higher level paper as compared with 77% nationally. Of course this takes lots of hard work throughout the two years!

Possible Career Areas for which this Subject is Useful/ Essential

Physics is a very helpful course for a whole range of careers and university courses and is essential for many. All forms of engineering, medicine, dentistry, as well as many science based careers use physics. All university engineering courses, medicine, dentistry and many science courses will require you to study physics for at least the first year, so clearly you are at an advantage if you have studied it in school. In the case of engineering courses it is essential in most cases. Employers view a background in physics as an indication of strong academic ability and high intellect.

Spanish

No of Sets in 2016 / 2017: 1

No of Periods per Week: 5

Department Staff: Ms. A. Kilfeather & Mr. M. O'Shaughnessy

Brief Summary of Course Content

The Leaving Certificate Programme starts in Form V. All areas of the syllabus are covered (i.e. Speaking, Reading, Writing, Oral etc) These areas are enhanced by means of CDs, DVDs, TV footage, radio extracts and authentic Spanish reading materials (newspapers & short stories). ICT is fully integrated into the course. The majority of the lessons are conducted in Spanish and whilst the programme is pretty intense, there is always an opportunity to dip into Spanish history, culture, arts and literature. Pupils are expected to have completed at least a year's study of Spanish by the beginning of Form V.

Below is a breakdown of the Leaving Certificate components:

• Oral Examination	15 mins	25%
• Listening Comprehension	40 mins	20%
• Reading Comprehension & Writing Paper	2h 30mins	35%
		25%

Comparison of Results with National Figures

The results for Spanish in the Leaving Certificate are consistently higher than national averages. In 2016

- Higher A's – 29% (11% nationally)
- Higher B's – 30% (20% nationally)
- Higher C's – 18% (20% nationally)

Possible Career Areas for which this Subject is Useful/ Essential

While a competence in Spanish can allow for many specific language careers (such as journalism, politics, translation, teaching, hospitality etc), an ability to speak Spanish is of huge benefit to any industry that is involved in importing or exporting. A large world population is Spanish speaking, so any business needing a foothold in that market must be able to speak the local language. Other career areas where Spanish would be useful include:

- | | |
|--------------------------|---------------------|
| • Telecommunications | • Banking |
| • International Business | • Retail Industries |
| • International Law | • Education |
| • Politics | • Lecturing |

Q – Set: Advanced Mathematics Course

No of Sets in 2016 / 2017: 1

No of Periods per Week: 2

Department Staff: D Higgins, N Coldrick

Brief Summary of Course Content

This challenging, yet interesting course, will give pupils the chance to expand on the Irish Leaving Certificate Maths course. Areas such as calculus and algebra will be developed to an A-Level standard, and topics such as vectors, which are not on the LC syllabus, will be introduced. Pupils with a high ability in maths will find this course complementary to their higher level maths LC. Although there will be no formal examination at the end of the two-year programme, the work covered will aid potential A grade pupils to achieving their goal.

Pupils with interests in any mathematical fields at university, such as engineering, will find the topics covered invaluable, as they will have a head start when they start third level.

$$e^{i\pi} + 1 = 0$$

$$e^{iu} = \cos(u) + i \sin(u)$$

$$\gamma = \lim_{n \rightarrow \infty} \left(1 + \frac{1}{2} \dots + \frac{1}{n} - \log(n) \right)$$

$$V - E + F = 2$$

$$S - I = \sum_{k=1}^p \frac{B_{2k}}{(2k)!} (f^{(2k-1)}(n) - f^{(2k-1)}(0)) + R$$

Q – Set: Computer Studies

No of Sets in 2016 / 2017: 1

No of Periods per Week: 2

Department Staff: Mr. S. Crombie

Brief Summary of Course Content

Forms V and VI attempt to complete the Digital Creator course, the new and exciting way to learn how to create and share Digital Media, such as making and editing your own films and producing podcasts. Pupils create real life digital media projects that build into an innovative digital assessment e-portfolio.

Digital media is evident in almost every aspect of our daily lives. We carry music, photos, videos on our mobile phones and portable music players. Digital Creator is a creative and interactive way to learn about the techniques and technologies involved in manipulating and making the most of these kinds of devices and of our computers.

Digital Creator is broken down into 8 units. 5 concentrate on creativity and the other 3 units concentrate on how to share your work. Successful completion of 4 modules will earn the participant a level 4 on the Irish national framework for qualifications (NFQ) and completion of 8 modules is the equivalent to 2 GCSE's at Grade B.

Creative Units:

Unit A - Digital Audio

Learn what digital audio is, what the different formats mean and how things like mp3's work and can be shared. You will also learn how to create and edit your own music from scratch, without having to play an instrument. You will also learn how to share all your completed work in different ways (like on your iPod).

Unit B - Digital Still Images

Get a better understanding of how digital photo's work and how you can improve the way you take them. You'll learn how to enhance, edit and play with your photo's with some great and often funny techniques, from the simple to the sublime.

Unit C - Moving Image Language

Become a budding film maker or just dazzle your friends by learning all about the language used in film production, from finding out about camera movements and positions to the different colours and effects that can be added with real creativity.

Unit D - Digital Video

Learn all about digital video and how it works - including how to capture, store, edit and share your videos. Learn some great editing techniques and you'll have great fun creating your films for family, friends or to start your way on a career in film.

Unit E - Storytelling with Animation

Take on Wallace and Gromit by learning the secrets of creating impressive animations - we'll show you all you need to know about timing, movement and combining sound so you can create something you are really proud of!

Sharing Units

Unit F - Sharing with Optical Media

With all the great stuff you have created you will want to show it off! We'll teach you about different optical media, such as DVD and Blu-Ray and how you can publish your work onto them so they can be played on a computer or DVD player.

Unit G - Sharing on the Internet

We'll also show you how to share your work on the internet, by putting your projects onto websites, setting up links to your work, downloading podcasts, etc. We'll also teach you about different file sizes to help you around any difficulties you could experience.

Unit H - Sharing using Multimedia Presentations

Presentations can be boring, but yours certainly won't be! We'll show you how you can use your own creations for making a presentation to different groups of people - but don't worry, this doesn't mean you actually have to stand up and make a presentation (unless of course you want to!!)

Possible Career Areas for which this Subject is Useful/ Essential

Almost every single career now requires some literacy in computing and the Digital Creator course can provide the students with these skills and others. Computer related careers include:

- Computer Programming
- Computer Science
- Computer Graphics
- Architecture
- Journalism
- Media
- Education
- Much more!

Q – Set: Geology

No of Sets in 2016 / 2017: 1

No of Periods per Week: 2

Department Staff:Dr. Tom de Brit

Brief Summary of Course Content

Geology (or 'Earth Science') is the scientific study of planet Earth. It involves trying to work out the events occurring over the past 4,600 million years – largely from looking at clues contained in the rocks and fossils laid down through time. Different areas of Geology involve aspects of Chemistry (e.g. igneous rocks), Physics (e.g. structural geology) and Biology (e.g. palaeontology), but Geology is very much an old-established science in its own right. In Forms V and VI pupils can take Geology as a 'Q Set' option. In effect this means a 2 year course involving just 2 lessons per week (1 x double period). The subject is examined in the Easter holiday of Form VI (i.e. well before the Leaving Certificate proper), in a three hour exam held in Trinity College. Over the past five years 80% of SCC candidates have achieved an A or B grade in the exam. The course is broken into the following sections and includes Geology field trips:

- The Structure of Planet Earth
- The Earth in Space
- Geological Time
- Plate Tectonics
- Minerals
- Igneous Rocks
- Weathering
- Sedimentary Rocks
- Metamorphic rocks
- Structural Geology
- Palaeontology
- Fossil fuels
- Stratigraphy of Ireland

Geology is not assessed as part of the established Leaving Certificate, but CAO points accrued from the completion of the course can be put towards a place in Trinity College, UCAS and many international colleges.

Possible Career Areas for which this Subject is Useful / Essential

Traditionally, geological jobs have been in the oil industry, mining / mineral exploration, engineering, hydrology, academic jobs, and in Geological Survey departments around the world. However, geology can open the doors to professions in all areas of science, geography and archaeology.

Q – Set: *History of Art*

No of Sets in 2016 / 2017: 1

No of Periods per Week: 2

Department Staff: Ms. Derarca Cullen

Important

History of Art must be selected at Q-Set by individuals choosing Art as one of their elective subjects as it contributes to 37.3% of the overall mark for in Leaving Certificate Art. However, it is also available to pupils to study as a non examination subject.

Brief Summary of Course Content

Three Sub - Sections: *Irish Art, European Art and Art Appreciation:*

In Form V we begin the course by studying aspects of ***Irish Art***. We study the art of pre-Christian Ireland examining such aspects as Newgrange, the art of the Bronze Age and the Iron Age. We then study the art of Christian Ireland looking at illuminated manuscripts, Christian metal-work, stone crosses etc. in addition to regular essay practice we attempt to visit significant sites such as Newgrange, The Book of Kells and the National Museum in Dublin.

In the Hilary and Trinity terms we begin our study of ***European Art***. The syllabus includes aspects of Romanesque and Gothic architecture and sculpture, the early Renaissance (we explore the work painters such as Giotto, Masaccio, Piero della Francesca, Botticelli etc and the work of sculptors such as Ghiberti and Donatello). We end the year by looking as the artists of the High Renaissance such as Leonardo, Michelangelo and Raphael. Pupils are encouraged to visit museums and galleries both at home and abroad in order to complement their studies. We are lucky enough to have important and relevant works of art in our National Gallery in Dublin which pupil visit with the College.

In the Sixth Form we begin the year by exploring Georgian architecture and again we are fortunate to be able to organise expeditions to such places as the Casino at Marino and Castletown House. Our study of European art then continues with an examination of the work of some of the masters of the Baroque including Bernini, Caravaggio, Vermeer, Rubens and Rembrandt. The final aspect of the course is entitled '***Appreciation***' where students look critically at such diverse subjects as product design, interior design, poster design, theatre design etc. as well as looking at the built environment. Pupils are required to critically analyse the setting up of an art or craft exhibition and this requires visiting to various types of exhibits from painting to ceramics. The examination contains an extremely large choice and students can essentially specialise in their favourite topics. The exam for this section of the course takes place in June with all the other written exams.

Q-Set: Agricultural Science

No of Sets in 2016 / 2017: 1

No of Periods per Week: 2

Department Staff: Mr. H. Jones

Brief Summary of Course Content

The Leaving Certificate Agricultural Science syllabus is designed to provide pupils with the necessary skills, practical experience and knowledge in a range of agricultural and scientific principles. The broad course takes in a wide array of topics including Soil Science, Animal Enterprises, Tillage, Plant Physiology & Animal Physiology.

The course is typically aimed at pupils with an interest in Agriculture and Horticulture or those who wish to pursue a career in Veterinary Medicine. An agricultural background is not a necessity, and the course covers a wide variety of topics.

The subject is based on the principles and practices of Irish farms and deals in detail with *Sheep Management and Production, Beef Production, Dairy Farm Management, Pig Production, Grassland Management and Tillage Crop Growth & Harvesting*. Additional topics include *Forestry, Soil Science and Farm Safety*. It also covers *Animal Biology and Taxonomy, Plant Biology and Classification* as well as *Soil Science*.

As well as being classroom and lab orientated, a number of field trips and excursions to farms, universities and laboratories will allow those undertaking the course see the practical applications of their learning. Throughout the two year course the pupils will keep a portfolio of their practical experience, which will be assessed and contribute to their overall grade in the Leaving Certificate.

Comparison of Results with National Figures

The vast majority of pupils sit Agricultural Science in St. Columba's sit the exam at Higher Level. The exam results have been consistently good over the past number of years. In 2016, 80% of pupils sat the exam at Higher Level with 10% receiving an A and 40% achieving a B grade.

Possible Career Areas for which this Subject is Useful / Essential

Pupils completing a course in Agricultural Science may wish to pursue further scientific study at university. Courses such as Veterinary Medicine, Medicine, Horticulture, Equine Science, Zoology or General Science are complimented by the topics covered in the course. Obviously, pupils may wish to study areas of agricultural such as agri-business or farm management at third level also.

Q-Set :Design & Communication Graphics

No of Sets in 2016 / 2017: 1

No of Periods per Week: 2

Department Staff: Mr. B. Redmond

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.

Q – Set: Leaving Certificate Vocational Programme (LCVP)

No of Sets in 2016 / 2017: 1

No of Periods per Week: 2

Department Staff: RS

Brief Summary of Course Content

The *Leaving Certificate Vocational Programme* or LCVP is new to St. Columba's in 2014. 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 May of Form VI. 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.

Possible Career Areas for which this Subject is Useful / Essential

Pupils completing LCVP will gain a lot of necessary skills for their future working life and is applicable to a wide range of career areas.

Q – Set: Physical Education

No of Sets in 2016 / 2017: 1

No of Periods per Week: 2

Department Staff: Ms. S.J. Johnson

Brief Summary of Course Content

Physical Education (PE) at St. Columba's College aims to educate young people in and through the use of the body and its movements. It aims to develop physical competence so that pupils are able to move efficiently and safely and understand what they are doing. Developed in accordance with the Leaving Certificate Physical Education Curriculum, St. Columba's seeks to advance the social, emotional, intellectual and physical development of the child through an appropriate range of physical activities delivered through a spectrum of teaching styles. In Q – Set, Physical Education takes place during a double lesson each week and is mainly practically based with occasional classroom lessons on theoretical aspects such as health related fitness and drugs in sport. A wide variety of sports are covered in practical lessons incorporating all areas of activity including:

- Invasion, Net & Fielding Games
- Aquatics
- Athletics

Full use is made of the school's excellent facilities, which include a large sports hall, 4 full size grass playing fields, two full size synthetic playing fields, 6 tennis courts, grass tennis court a weights room, 15 metre outdoor pool and dance studio.

Possible Career Areas for which this Subject is Useful / Essential

Physical Education can provide opportunities and resources for a range of careers including but not exclusively:

- Professional Sports
- Gym Instructor
- Sports Coach
- Physiotherapy
- Medicine
- Dietician
- Sports Management