Hartstown Community School

5th Year Information Booklet

2012-2015



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Hartstown Community School Senior Cycle Information Booklet

Introduction

Welcome to Senior Cycle and to the start of a two year course of study leading to the Leaving Certificate. It is a time of change - change of class groupings, change of subjects, change of expectations especially in terms of the work and commitment required to successfully complete Senior Cycle.

Most students get a shock in their first few weeks of Senior Cycle - shock at the change in level from Junior Certificate, shock at the work demands by teachers in what students consider should be an 'easy' year. It is true that the pressure is on from the start as teachers try to emphasise the amount of material that must be covered in about 18 months of class contact time. For many subjects long essay style answers have to be produced at exam time and these answers require constant practice and revision of answering techniques.

Subject Choice:

Choice of subject at this stage is very important as this may be decisive later on in determining which course or careers are open to you. It helps greatly if students already have some idea of what they are aiming for after the Leaving Certificate and these students can check with the Career Guidance Department to find out if there are any special subjects or subject level requirements. If students have no particular subject requirements then they should bear in mind that it is easier to learn in a subject that has at least some interest for them, rather than in a subject which they choose only because their friends are in that class! As far as possible choose subjects that you actually like.

Thinking Ahead:

The Leaving Certificate may be the final examination that some students will ever take. For others it is just a stepping stone to further qualifications. There is a huge array of courses on offer at present for those who complete the Leaving Certificate; courses in Universities and Institutes of Technology, and an ever increasing number of Post-Leaving Certificate further education options in other educational establishments. Entry to most of these courses depends on success in the final examination. If you are interested in any particular course check what the points requirements are at present and calculate the levels (higher/ordinary) and the grades you need to achieve to qualify for the course. The Career Guidance Department will have a complete list of courses and point requirements. Students can also access the website www.qualifax.ie for additional information.

Points – Scoring:

1. <u>Irish Leaving Certificate Examination:</u>

Entry to the great majority of courses in the CAO system in 2012 will be determined according to the following common points scale and accompanying conditions:

Accompanying Conditions:

- 1. The six best results, in recognised subjects, in one Leaving Certificate Examination will be counted for points computation.
- 2. One sitting **only** of the Leaving Certificate Examination will be counted for points purposes.

BAND %	GRADES	POINTS HIGHER	POINTS ORDINARY	BONUS* POINTS	MATHS FOUNDATION *
90-100	A1	100	60	40	20
85-89	A2	90	50	35	15
80-84	B1	85	45	30	10
75-79	B2	80	40	25	5
70-74	B3	75	35	20	
65-69	C1	70	35	15	
60-64	C2	65	25	10	
55-54	C3	60	20	5	
50-54	D1	55	15		
45-49	D2	50	10		
40-44	D3	45	5		

• Points for Foundation Level Mathematics will be awarded by certain institutions. Applicants should refer to the HEI literature for full details.

The average Leaving Certificate points score is 300/350. Listed below are some examples of points required for different courses in Institutes of Technology and Universities. There is a course for everyone who passes the Leaving Certificate if they search hard enough.

Remember that these figures are a rough guide only as point requirements do vary from year to year.

For anyone achieving a D3 or higher 25 bonus points will be added to the points score for higher level mathematics in 2012. This scheme will operate on a trial basis until 2016.

In recent years a National Framework of Qualifications has been introduced. There are 10 levels to this framework. A Higher Certificate being level 6, an Ordinary Degree being level 7 and an Honours Degree being level 8. The Leaving Certificate is ranked at level 5.

Level 6 & 7 (Higher Certificates and Ordinary Degrees)

Dublin Institute of Te	9,		
	Journalism Management	• 40	220
	Hospitality Management	240	
	Electronics & Communications engineering		
	Building Services Engineering	180	
	Leisure Management	280	
	Aviation Technology	285	
Tallaght IT:			
	Sports Science & Health	375	
	Computing	255	
	Accounting	220	
	Mechanical Engineering	230	
	Energy and Environmental Engineering	245	
Dundalk IT:			
	Veterinary Nursing	375	
	Engineering (Civil)	110	
	Community Sports Leadership	300	
и в и	1.0		
Honours Degrees - I Blanchardstown IT:	<u>Level 8:</u>		
Dianenarastown 11.	Social Care	355	
	Business	210	
	Business/Information Technology	238	
	Computing	220	
	Engineering (Mechatronics)	200	
	Engineering (Weenationies)	200	
NUI Maynooth:			
	Arts	375	
	Science	375	
	Multimedia, mobile and web developments	355	
	Social Science	390	
NUI Dublin (UCD):			
INOT DUDING (UCD).	Veterinary Medicine	560	
	Engineering	430	
	<u> </u>	500	
	Law with History		
	General Nursing	415	

Dublin City Universi	ty (DCU):	
•	European Business/French	430
	Journalism	440
	Sport Science & Health	455
	Psychiatric Nursing	380
St. Patrick's College,	Drumcondra:	
	Primary Teaching	475
Dublin Institute of Te	echnology:	
	Architectural Technology	320
	Engineering	340
	Music	343
	Computer Science	350
	Marketing	370
	Architecture	525
	Social Care	400
	Forensic and Environmental Analysis	335
Dundalk IT:		
	Intellectual Disability Nursing	360
	Health and Physical Activity	380

Time Commitment:

For students to reach their full potential in the Leaving Certificate they have to understand the investment of time that is necessary. Far from being an 'easy' year fifth year is when the bulk of the content of the Leaving Certificate programmes is covered. Given the speed at which the programmes need to be covered, days missed leave students with large gaps in their knowledge of the subject and the more days missed the further behind they fall. Attendance in school is of vital importance and casual absences can greatly damage students' progress, as they lose the continuity in the development of the subject.

It is understandable with the pressures on students to conform to fashion trends and socialising patterns that they are tempted to take on part-time jobs to earn money to finance their lifestyle. Many employers insist on a minimum number of hours being worked by students and this number of hours is incompatible with school work and study demands. Parents are often relieved to think that their son's/daughter's part-time job will ease the financial burden on the parents themselves but they need to bear in mind that students who work on week nights or all weekend long are not physically or mentally capable of concentrating during the school day or of retaining much of what they are taught in class.

To give some idea of the study time commitment for the Leaving Certificate here is an example of what a typical Leaving Certificate student's timetable should be:

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
25m	Irish	Biology	Home Ec.	French	History	English
45m	Maths	Irish	Biology	Biology	French	Biology
	В	R	Е	A	K	
30m	English	Maths	Irish	Home Ec.	Biology	History
30m	History	English	Maths	Irish	Home Ec.	French
	В	R	E	A	K	
40m	French	History	English	Maths	Irish	Home Ec.
25m	Home Ec.	French	History	English	Maths	Irish
	В	R	E	A	K	
35m	Biology	Home Ec.	French	History	English	Maths

On average Leaving Certificate students should expect to spend 3 to 3 ½ hours six days a week on homework and study if they want to do themselves justice in the final examination. It is important to set up a regular programme of study over this two year period and avoid the many problems and pressures of the period prior to the examination. At Senior Cycle it is necessary to take a break after each study session to facilitate maximum powers of concentration. The key is for students to get themselves into a pattern of study early in fifth year and to develop good study habits.

Study Habits - Some Advice.

Why bother studying?

- to improve yourself
- to qualify yourself for further study/job
- to maintain your self-esteem

How can I develop an interest in study?

- you must understand what you are about to study
- you must have a study plan
- keep goals short-term, class tests etc.
- these lead to long-term goals Leaving Certificate
- success breeds more interest/better motivation

Are there study techniques?

- there are three important elements:
- 1. good reading skills
- 2. concentration
- 3. memory

Where should I study?

- same place if possible every night
- good lighting
- not too comfortable
- avoid background music

How much time?

- 3 to $3\frac{1}{2}$ hours
- if you are a morning person then 1 hour before school is worth two at night.

Should I curtail my leisure time?

- you must get sufficient exercise/sleep
- continue to play games/hobbies etc.
- keep a good balance in your life
- reward yourself with time off

How can I train my memory?

- remember there are no bad memories only untrained ones
- make sure you understand what you wish to memorise
- the root of all 'good' memory is association of ideas
- attach what you want to remember to something you can recall easily
- remember there are different memory skills for each subject
- short time study periods are best 30 to 45 minutes
- be creative use colour in your diagrams
- MNEMONICS make up your own rhyme, word or sentence
- Teach the material to someone else.

How do I improve my long term memory?

- learn the points well, then **OVERLEARN** them
- revise what you have learned at the end of each session
- start your study next day by a quick revision

How important is note-taking?

- good note-taking selects essential points
- makes memorising possible
- makes transfer to long-term memory possible
- makes revision

Effective notes should be:

- carefully laid out
- selected for their significance
- only written up when you have time to select and connect
- well illustrated with diagrams etc. in colour

How can I cope with anxiety?

- remind yourself of two truths:

- 1. all good performers have 'butterflies'
- 2. if you give in to anxiety your performance will suffer. You have had good results before freak failures are rare!

Attitude to school work:

Throughout Senior Cycle there will be people to help you – Year Head, Tutor, Subject Teachers and the Career Guidance Department as well as the Principal and Deputy Principals. If you are having difficulty you should let someone know and ask for the help you need. Obviously, with heavily charged programmes of study to be completed for the Leaving Certificate, teachers expect and demand full co-operation from all students in the classroom. Time at this level should not be wasted on correcting behaviour that students of this age know to be unacceptable or behaviour which interferes with the progress of other students in the class.

Final Achievement

We wish all students commencing Senior Cycle every success in the next two years. We hope that all of you achieve the goals that you set for yourselves and that you give yourselves the opportunity to reach your full potential as both students and human beings. We hope that you will involve yourselves fully in the life of the school and take part in the many extra-curricular activities that are offered to you. The school is a community of which we are all members and it is up to each one of us to play our part. With cooperation and understanding, we should be able to look back with pride in two years time and appreciate the achievements of Senior Cycle.

Guidance

The Guidance department in the school seeks to help students with all aspects of their development as they progress towards the Leaving Certificate. The guidance counsellors are there to direct and advise students either on an individual basis or in a class group. The Guidance Programme covers the following areas:

Educational Guidance:

- motivation and direction of students
- subjects, level and course choices
- psychological testing
- study skills and examination techniques
- counselling for learning problems

Career Guidance:

- learners information management
- pathways to vocational education training, post Leaving Certificate courses/further education etc.
- pathways to higher and technical education
- decision-making skills and planning skills
- unemployment coping skills
- job search skills, interviews, work experience, mock interviews
- aptitude, intelligence, interest testing
- employment opportunities, awareness
- career information

Personal Guidance:

- personal and social programmes

Counselling:

- individual and group counselling is available to all students

Information Management:

Information will be made available to all students in the following ways:

- class/group work
- computer access
- careers' library
- visiting speakers
- college open days
- work place visits

- exhibitions
- parents meetings.

Guidance Programme at Senior Cycle

5th Year – Course Contents

- a. Goal setting
- b. Self esteem and confidence building
- c. Multiple intelligence
- d. Interest Tests various Interest Tests are administered to students in order to help them further their career exploration.

These include - Career Interest Inventory

Career Decision Making

Rothwell Miller Interest Test

- e. Study Skills
- f. Gender Issues
- g. Mental Health Programme
- h. D.A.T.S. Tests (Differential Aptitude Tests)

A series of aptitude tests are administered over a full school day by the school Guidance Counsellors. The purpose of these are to act as another tool for career exploration. They also serve as good practice for students' future job seeking.

- i. Career Project students undertake exploration of two careers. A presentation is then made to their class.
- j. Relationship and Sexuality Education.
- k. Personal Counselling is also available to all students.

6th Year - Course Contents

- a. Study Skills, Time management.
- b. Choosing the right course at 3rd level
- c. Exploration of courses offered by Colleges and Universities
- d. UCAS Exploration of 3rd level system in the United Kingdom
- e. Job Search Skills
 - C.V.
 - Letter of Application
 - Application Forms
- f. C.A.O. (method of applying to all Irish Universities and Institutes of Technology)
- g. Access Programme
- h. Colleges of Further Education
- i. The FETAC Links Scheme
- j. Apprenticeships/FAS
- k. Interview skills
- 1. College Life
- m. Grants
- n. Stress Management

Speakers from the Gardai, Fás and 3rd level Institutions are also invited to talk to 6th year students. Personal Counselling is also available to all students.

English

English at leaving certificate can be taken at either higher level or ordinary level there is no foundation level. Those wishing to take higher level (honours) at leaving certificate must have taken higher level at junior certificate, and ideally should have a C in higher level in the Junior Cert.

In Language:

- 1. Accuracy and appropriateness in language use both oral and written
- 2. Thinking skills: analysis, inference, synthesis and evaluation
- 3. Advanced reading and writing skills: composing in and interpreting a range of genres

In Literature:

- 1. The comparative study of literary texts
- 2. Reading unseen verse
- 3. Approaches to film

Course Contents (Literature):

- 1. One text is chosen for indepth study on its own (the single text)
- 2. Three other texts are chosen for study in a comparative manner, according to the comparative modes prescribed for this course
- 3. Comparative modes at higher level are:
 - a theme or issue
 - a literary genre
 - the cultural context
 - the general vision and viewpoint

Comparative modes at ordinary level are:

- hero/heroine/villain
- relationships
- social setting
- change and development
- specific themes: love, race, prejudice, violence
- aspects of story: tension, climax, ending

For each leaving certificate course only three modes of comparison will be prescribed from year to year as do the texts and poetry.

Shakespearean Drama:

At higher level a play by Shakespeare must be one of texts chosen. This can be studies on its own or as an element in comparative study.

At ordinary level the study of a play by Shakespeare is optional.

Poetry:

A selection from the poetry of eight poets is prescribed for higher level. Students will be expected to have studies at least six poems by each poet.

A total of 36 poems is prescribed for ordinary level.

The Final Examination:

Higher Level

Paper 1: consists of two sections (duration 2hrs. 50mins.)

- comprehending (100 marks)
- composing (100 marks)

The comprehending section comprises three comprehension texts from which students choose two. They must choose Part A from one text and Part B from the other text. The composing section is loosely based on the comprehension texts.

Paper 2: four questions to be attempted (duration 3hrs. 20mins.)

- Section 1: single text 1 question (60 marks)
- Section 2: comparative study 1 question (70 marks)
- Questions on unseen poem all sections (20 marks)
- Section 3: prescribed poetry 1 question (50 marks)

Students must answer on Shakespearean drama in either Section 1 or Section 2

Ordinary Level

Paper 1: consists of two sections (duration 2hrs. 50 mins.)

- comprehending (100 marks)
- composing (100 marks)

The comprehending section comprises three texts on particular themes. Students do Part A from one text and Part B from another text. The composing section has a choice of seven topics from which one is chosen.

Paper 2: four questions to be attempted (duration 3hrs. 20 mins.)

- Section 1: single text 1 question (60 marks)
- Section 2: comparative study 1 question (70 marks)
- Questions on unseen poem all sections (20 marks)
- Section 3: prescribed poetry 1 question (50 marks)

Gaeilge

Irish is a core subject for the Leaving Certificate and is presented at three levels — Ardleibheal, Gnathleibheal and Bonnleibheal. Students wishing to do higher level must have followed the higher level course for Junior Certificate. Students who did foundation level at Junior Certificate can attempt the ordinary level paper at Leaving Certificate level if they are prepared to give the required commitment. Dictionaries are absolutely essential at senior level and progress is impossible without them. As with any language regular homework, regular revision and consistent learning especially for the oral examination is essential. For those hoping to do higher level, a Gaeltacht stay is advisable.

Cluastuiscint: requires students to listen to and answer questions on oral conversations, notices etc.

Scrúdú Cainte: this oral examination carries a large percentage of the marks at both higher level (Ardleibheal), ordinary (Gnathleibheal) and foundation level (Bonnleibheal).

Higher Level:

Breakdown of marks:

Paper 1 2hrs. 20 mins. 160 marks

Aural Comprehension 20mins. 60 marks Written Composition 2 hrs. 100 marks

Paper 2 3hrs. 5mins. 200 marks

Reading Comprehension x 2 100 marks
Prose 30 marks
Poetry 40 marks

Oral Test The duration of the Oral test will be 15 mins. consisting of 4 parts:

a. Reception (5 marks)

b. Poetry Reading (35 marks)

c. Description of picture series (80 marks)

d. Conversation (120 marks)

In total the Oral test is worth 240 marks

Ordinary Level:

Paper 1 1hr. 50mins. 160 marks

Aural Comprehension 20mins. 60 marks

Written Composition 1 hr. 30mins. 100 marks

Paper 2 2hrs. 20mins. 200marks

Reading Comprehension x 2 100 marks Prose x 2 50 marks Poetry x 2 50 marks

Oral Exam: The Oral Irish exam is broken into the same sections as the

honours Oral exam.

Foundation Level:

There is only one paper at Foundation level which is 2hs. 20 mins. duration.

The exam begins with Aural Comprehension (30 minutes).

The written paper consists of two parts, written comprehension and composition.

Reading Comprehension
Written Comprehension
Listening Comprehension
Total
150 marks
90 marks
120 marks
360 marks

Oral Test:

The duration of the Oral exam is between 8-10 mins. and is worth 240 marks, (40% of the overall total of marks.)

The conversation will be based on 4 blocks;

- a. The family and the house
- b. School
- c. Pastimes
- d. Holidays/Work/Weather

Mathematics

Mathematics at Leaving Certificate is presented at three levels: higher, ordinary and foundation. Students wishing to take the higher level course must have successfully completed the higher level Junior Certificate course. Students who took the foundation level course at Junior Certificate level will be required to take the same level at Leaving Certificate. Assessment at Leaving Certificate consists of two written papers of two and a half hours duration. In order to realistically attempt higher level mathematics, students should have obtained at least Grade B at Junior Certificate higher level and be prepared to give the commitment necessary.

Introduction of New Projects Maths

September 2010 saw the introduction of Project Maths into our school. It is presented at only two levels, higher and ordinary level. It represents a significant departure from the traditional process of curriculum and assessment changes in Ireland. All 1st year and 5th year students have been introduced to Project Maths (Strand 1).

It's aim is to make mathematics more relevant to the lives and experience of students and provide an appropriate mathematics education to meet the needs of all learners, encourage more students to study higher level mathematics.

In both Junior and Senior Cycle five strands of mathematics have been identified,

- 1. Statistics and probability
- 2. Geometry and trigonometry
- 3. Number
- 4. Algebra
- 5. Functions

In Project Maths syllabus revisions will be undertaken in each strand on a phased basis over three years.

Strand 1: Statistics and Probability

Strand 2: Geometry and Trigonometry

In the first year revisions in Strand 1 and 2 will be implemented while the remaining areas will stay the same.

Students will continue to use current textbooks, supplemented by resource materials in the relevant strands.

All teachers of mathematics in the school will be supported in implementing and evaluating the changed syllabus strands. They have been provided with classroom resource materials and professional support from a Project Maths Support team.

HIGHER LEVEL:

This course covers six basic areas:

- Algebra
- Geometry
- Trigonometry
- Sequences and series
- Functions and calculus
- Discrete mathematics and statistics

Algebra:

- (a) Algebraic operations on polynomials and rational functions
- (b) Unique solution of simultaneous linear equations
- (c) Inequalities
- (d) Complex numbers
- (e) Proof by induction of certain simple identities
- (f) Matrices

Geometry:

- (a) The line and the circle
- (b) Plane vectors
- (c) Transformation geometry

Trigonometry:

- (a) Trigonometry of the triangle
- (b) Derivation of formulae
- (c) Solutions of trigonometric equations
- (d) Radian measure of angles
- (e) Inverse functions

Sequence and series:

- (a) sums of finite series of telescoping type
- (b) informal treatment of limits of sequences
- (c) sums of infinite series of telescoping type
- (d) recurring decimals a infinite geometric series

Functions and calculus:

- (a) Functions
- (b) Differential calculus
- (c) Integral calculus

Discrete mathematics and statistics:

- (a) Fundamental principle of counting
- (b) Discrete probability

- (c) Statistics
- (d) Difference equations

There are also four optional topics:

- * Further calculus and series
- Further probability and statistics
- Groups
- Further geometry

ORDINARY LEVEL:

The course at this level is divided into seven sections:

- * Arithmetic
- Algebra
- Geometry
- Trigonometry
- Finite sequences and series
- Functions and calculus
- Discrete mathematics and statistics

Arithmetic:

- (a) The operations of addition, subtraction, multiplication and division of rational numbers; practical problems involving counting and measurement; averages; rates; proportion; percentages; money transactions; including compound interest; taxation.
- (b) Estimation and approximation
- (c) Powers and nth roots
- (d) Areas and volumes

Algebra:

- (a) Manipulation of formulae including simple algebraic fractions
- (b) Unique solution of simultaneous linear equations with two unknowns
- (c) Inequalities
- (d) Complex numbers

Geometry:

- (a) Synthetic geometry: theorems
- (b) Co-ordinate geometry
- (c) Enlargements

Trigonometry:

- (a) Trigonometry of triangle; area of triangle; use of sine and cosine
- (b) Definitions of sin x and cos x for all values of x Definition of tan x
- (c) Area of sector of circle; length of arc

Finite sequences and series:

- (a) Informal treatment of sequences
- (b) Arithmetic and geometric sequences
- (c) Sum to n terms of arithmetic and geometric series

Functions and calculus:

- (a) Functions
- (b) Calculus

Discrete mathematics and statistics:

- (a) Fundamental principle of counting; permutations and combinations
- (b) Discrete probability
- (c) Statistics

There are also four optional topics and this level:

- Further geometry
- Plane vectors
- Further sequences and series
- Linear programming

FOUNDATION LEVEL

At this level the course is divided into nine sections:

- Number systems
- * Arithmetic
- Areas and volumes
- Algebra
- Statistics and probability
- Trigonometry
- Functions and graphs
- Geometry
- Investigations

Number systems:

- (a) Development of the systems of natural numbers, of integers, of rational numbers, and of real numbers; inequalities; decimals; powers and roots; scientific notation
- (b) Factors, multiples, prime numbers
- (c) Use of brackets; conventions as to the order of precedence of operations

Arithmetic:

- (a) Approximation and error; rounding off; relative error; percentage error; tolerance
- (b) Substitution in formulae
- (c) Proportion; percentage; averages
- (d) Compound interest fomulae
- (e) VAT; rates of income tax
- (f) Domestic finance and household management; ESB/Gas/Telecom bills
- (g) Currency transactions, including commission

- (h) Costing; materials and labour; wastage
- (i) Metric system

Areas and volumes:

- (a) fundamental principle of counting
- (b) discrete probability
- (c) statistics

Trigonometry:

- (a) sine, cosine and tangent as ratio in a right-angled triangle
- (b) solving for one unknown in a right-angled triangle

Functions and graphs:

- (a) function as sets of couples having different first elements
- (b) detailed study of specific functions
- (c) experimental results; fitting a straight line to a set of experimental data; prediction
- (d) finding the period and range of a continuous periodic function, given its graph on scaled and labeled basis
- (e) interpretation of graphs

Geometry:

- (a) co-ordinate geometry
- (b) geometrical results
- (c) constructions
- (d) enlargements
- (e) nets of rectangular solids, pyramids and right prisms with triangular cross-section
- (f) repeating patterns

Investigations:

- development of concepts and strategies for investigation
- mathematical problems and observing general patterns results

For all Students of Mathematics

It is desirable that students following the course would make intelligent and proficient use of calculators and it is envisaged that calculators would normally be used as a tool during the teaching, learning and examining of the course.

Students need to develop familiarity with the use of setsquares, mathematical tables, protractors, compasses etc.

Students are asked to purchase a Casio calculator for uniformity. These calculators are sold through the school.

Final examination:

Higher Level:

<u>Paper 1:</u> Students must answer 6 out of 8 questions, each question being worth 50 marks. The questions cover algebra, complex numbers, matrices, sequences and series, differentiation, integration.

<u>Paper 2:</u> This paper is divided into two sections:

Section A: The 7 questions in this section cover co-ordinate geometry of the circle, co-ordinate geometry of the line, vectors, trigonometry, permutations, combinations, probability, statistics. Students must answer 5 questions (50 marks per question).

Section B: There are 4 questions on the optional topics in this section. Students choose one question.

Ordinary Level:

Paper 1: Students answer 6 out of 8 questions (50 marks per question)

Q.1	Arithmetic
Q.2 + Q.3	Algebra
Q.4	Complex Numbers
Q.5	Sequences and series
Q.6 + Q.7	Differentiation
Q.8	Curve Sketching

<u>Paper 2:</u> Students answer 5 out of 7 questions in Section A and 1 question from the optional topics examined in Section B.

Q.1	Area and Volume
Q.2	Co-ordinate geometry of the line
Q.3	Co-ordinate geometry of the circle
Q.4 + Q.5	Trigonometry
Q.6	Permutations/combinations/probability
O.7	Statistics

Religious Education

Leaving Certificate Religious Education offers continuity and progression from the Junior Certificate programme. The student who pursues this course of study must assume the roles of critical questioner and reflective searcher. Leaving Certificate RE calls for exploration of issues such as meaning and values, the nature of morality, the development and diversity of belief, the principles of a just society and the implications of scientific progress.

Religious Education should ensure that students are exposed to broad range of religious traditions and to the non-religious interpretation of life. It seeks to develop in students the skills needed to engage in meaningful dialogue with those of other or of no religious tradition. The subject is now examinable at Leaving Certificate level but there is also a non-examinable syllabus. While students can draw on their own experience in the examination, their personal faith commitment and/or affiliation to a particular religious grouping with not be open to assessment for national certification.

In summary, Religious Education can justly claim an integral part of any curriculum which aims to promote the holistic development of the individual in the light of the stated aims of education. If parents wish to withdraw students from class for legitimate reasons they should arrange a meeting with the school Principal at the beginning of the school year.

The Religion programme, in conjunction with the school chaplain also includes liturgies, retreats (Personal Development Days), guest speakers, visits, an involvement in fundraising activities.

There are two elements to the assessment procedure for exam based religion.

1. Coursework – 20% of the total mark

2. Terminal written examination

The syllabus consists of ten sections divided into three parts:

Part One: This section is obligatory for all students.

Section A: The Search for Meaning and Values

Part Two: Students must study two sections from the following:

Section B: Christianity: Origins and Contemporary Expressions

Section C: World Religions

Section D: Moral Decision-Making

Part Three: Students must study one of the following for the terminal examination.

The topic selected for examination must be different from those

Designated for coursework each year.

Section E: Religion and Gender

Section F: Issues of Justice and Peace Section G: Worship, prayer and Ritual

Section H: The Bible, Literature, and Sacred Text

Section I: Religion: The Irish Experience

Section J: Religion and Science.

Applied Maths

What is Applied Maths?

- It is a subject for the Leaving Cert **only**.
- Applied Maths is a subject in which students put their maths into action. It is the real solving problem subject.
- Students learn to solve problems (mostly from the world of Physics), using maths as the means. If you are reasonably good at Maths and like problem solving, and have some feel for the world of Physics, then this is a great subject for you.

- It is not necessary to take Physics as a Leaving Cert subject in order to do Applied Maths. If you want to do Higher Level Applied Maths, it is necessary to do Higher Level Maths as well (in order to have the tools to do the job)
- Applied Maths is a wonderful subject. It is a subject, which makes you think. Its
 effects last a lifetime. The skills you learn- to analyse a problem, to put
 mathematics onto it, to solve the maths, and then to see what it means in real lifewill make you useful, intelligent, employable, and glad for a lifetime that you
 chose the subject.
- 27% of students on average receive A's in the Leaving Cert.
- It complements the Maths Course and enables students to obtain the bonus points.
- Good on your CV.
- The Higher Level Applied Maths course consists of 10 topics in total. The examination consists of **one paper** and is **2.5 hours long**. The exam paper contains 10 questions at Higher Level and 9 at Ordinary Level, with students answering any 6 questions in both cases, spending about 25 minutes on each question.
- Enables students achieve employment and career prospects at the top end of the market in Science, Engineering, Computer Software Development, Architecture, Business, Economics, Computer Programming, Actuary, Maths, Pharmaceutical Industry and other areas.
- Applied Maths is like Engineering for beginners. Also Architects must know some applied maths. Degree courses in the Building industry contain applied maths modules. But many Applied Mathematicians get jobs in the Business world, because they have analytical and problem solving skills, which can be applied to the money markets, the stock-exchange, economics etc.
- This is also a great subject for those who plan to study pure maths in university. Indeed many of those who have studied maths at university, say that Applied Maths was a more important preparation than Maths itself!
- You can study Applied Maths itself at third level. It is known as 'Mathsphysics' in NUI universities and as 'Theoretical Physics' in Trinity College.
- Applied Maths is not an easy subject. It is interesting, challenging, educational, and it is good for careers but it is not easy.
- Applied Maths at the Ordinary Level is probably the easiest subject on the leaving cert curriculum. But most students taking applied maths, study it at the Higher level.

Religious Education:

There are also three periods per week of non-exam based Religion. Students follow a set programme where they examine a range of religious and social issues. The programme includes an examination of world religions and various moral issues. Students complete a minimum of 5 assignments each term set by the class teacher.

FRENCH

The study of modern languages at Leaving Certificate builds on the material covered in the Junior Certificate course and, therefore, requires a good understanding of the material covered at junior cycle level. It is not possible to begin French in fifth year.

Course Contents:

The course is summarised under three headings:

- 1. Basic communicative proficiency
- 2. Language awareness
- 3. Cultural awareness

Basic communicative proficiency

Students must be able to complete the following tasks at a high level, both orally and in writing.

- 1. Meeting and getting to know people and maintaining social relationships.
- 2. Making plans and discussing future action
- 3. Understanding, seeking and giving information about climate and weather
- 4. Coping with travel and transport
- 5. Buying goods and services
- 6. Dealing with emergencies
- 7. Facilitating, encouraging or impeding a course of action (permission, suggestion, advice, demands, forbidding, ordering)
- 8. Understanding and expressing feelings and attitudes
- 9. Managing a conversation
- 10. Engaging a discussion (opinions, compromise, confirming, negotiating)
- 11. Passing a message

Language Awareness

- 1. Learning about language from French material (newspapers, magazines etc.)
- 2. Exploring meaning (summaries, guessing meaning from context etc.)
- 3. Relating language to attitude (how attitudes expressed through tone, language use, punctuation)
- 4. Talking and writing about your experiences of learning French.
- 5. Consulting reference material (dictionaries, grammars)

Cultural awareness

- 1. Learning in French about the present day culture associated with the language / country.
- 2. Reading modern literary texts (novels, short stories, poems, plays)

- 3. Describing and discussing everyday life in French speaking communities.
- 4. Understanding, describing and discussing aspects of the relations between French language communities and Ireland.
- 5. Understanding, describing and discussing the general terms issues such as:
 - Teenage culture
 - Generation gap
 - Entertainment
 - Environment and ecology
 - Sexual and racial equality
 - Ethnic minorities
 - Health and lifestyle
 - Human relationships
 - European dimension
 - The developing world

Examination:

The Leaving Certificate examinations consists of:

- An oral examination of 15 minutes duration held in March/ April
- A listening examination of 40 minutes duration
- One written paper of 21/2 hours duration

The mark allocation is as follows:

<u>Higher level</u>	<u>Ordinary level</u>
Oral 25%	Oral 20%
Listening 20%	Listening 20%
Reading 30%	Reading 40%
Writing 25%	Writing 15%

Oral Examination:

The French oral examination consists of a general conversation with the possibility of presenting a prepared support document to stimulate conservation. The document can be a photograph, a picture, an article or a project. The preparation of such a document is highly recommended. At the oral examination students should be able to talk about any issues relating to their own life and experience. The following topics <u>must</u> be prepared:

- Myself and my family
- Home and area including problems in the area
- School: subjects, homework, extracurricular activities
- Free time, pastimes, hobbies, sport
- Pocket money and part-time work
- Entertainment: T.V. radio, reading, cinema
- Holidays (past and future)
- Future plans
- Differences between life in France and life in Ireland

Marks are awarded in the oral examination for good pronunciation so as much exposure to native French speakers as possible is essential whether this be through tapes, television or school arranged exchanges with French schools.

The listening examination takes place immediately after the written paper in June. Students should be aware of the exact starting time of this examination as they may not be admitted if they arrive late.

Written paper:

Higher Level

There are two long reading texts on this paper with six questions asked on each text. Five of these questions are asked (and answered) in French with the final question in English. These questions require the student to show general comprehension of the entire text-content, language, tone. Each comprehension text is worth 60 marks.

In the written section students must attempt three questions. Question 1 is compulsory and is loosely based on the two-comprehension text (40 marks). Students then choose any two tasks from the remaining three questions – only one task per question may be chosen.

Ordinary Level

There are four comprehension texts in the reading section – two texts with questions in English and two questions in French. The first two texts require information retrieval whereas the second two texts require more general understanding of the written texts. There are a total of 160 marks for the reading section.

In the written section students must attempt two out of three questions. Each question contains two options so students do have a good choice. Each written task is worth 30 marks.

German

The German examination at Leaving Certificate consists of three parts:

- 1. The aural
- 2. The written paper
- 3. The oral

The oral examination takes place in late March/early April. The written and aural examinations take place in June. The written paper is two and a half hours long and aural, which takes place 10 minutes after the written paper is of 40 minutes duration.

HIGHER LEVEL:

1. The aural counts for 80 marks in the final examination. It consists of four different sections.

- ❖ An interview with all questions answered in English
- ❖ Usually a telephone conversation where students fill in required information, some of which must be given in German.
- ❖ A conversation with all questions answered in English
- Three news items which are usually a major event/accident, some topical news item, and a weather forecast.
- 2. The written paper consists of two reading comprehensions, each followed by two tasks and the Schriftliche Production. (written production)

 The reading comprehensions are worth 60 marks each and both will have questions in German and English. Questions asked in German are answered in German and those in English are answered in English. All questions require the student to show they have understood what they have read.

<u>Leseverstandnis 1</u> is usually followed by Angewandte Grammatik (25 marks)There is a test of the students knowledge of German grammer. There are two questions/tasks:

- (a) The first has to do with students identifying grammatical structure from the text of the Leseverstandmis
- (b) For the second task students are required to complete a sentence which contains a word from the text. Students need to show that they understand the word <u>and</u> the context in which it was used in the text.

<u>Leseverstandnis 2</u> is usually followed by Äusserung zum Thema. (It should be noted that Angewandte Grammatik and the Äusserung zum Thema can follow either Text 1 or Text 2)

Äusserung zum Thema consists of two sections, only one of which must be attempted by the student:

- Section (a) is directly related to the previous text and usually required the student to make some analysis of what they have just read. It is usually written in paragraph form but can also take the form of a dialogue.
- Section (b) allows students who may not have understood the reading comprehension to write approximately 100 words on some general topic. These topics can range from school life to Christmas or the role of women. Students are required to give their own opinions and views.

Schrifliche Produktion (50 marks)

In this section students have a choice of (a) or (b):

- Section (a) is most usually a letter. Students will be required to write a reply to a given letter. These letters most often deal with some aspect of German life/make a complaint/make a booking/accept a job offer.
- Section (b) The student will be required to describe a photo on the examination paper and then in paragraph from give opinions on this and other related topics.
- 3. The oral examination takes place in March/April and accounts for 25% of the marks at higher level. The oral consists of three parts:

Section 1: General conversation:

- Personal details
- ❖ Home/Area/Town
- School
- **❖** Learning of German
- Career plans
- Pastimes/hobbies
- Understanding of German culture

Section 2: Project or picture sequence:

- ❖ Uninterrupted narration of picture sequence (10 marks)
- Explanation and/or future projection (10 marks)
- Opinion on related wider issue (10 marks)

Section 3: Role Play

(30 marks - 20 and 10)

From series of pre-pared role plays.

ORDINARY LEVEL:

Total Marks 320

*	Oral	80
**	Reading Comprehension	190
**	Written Production	30
**	Listening Comprehension	100

- 1. The aural examination counts for 100 marks at this level. Students listen to a tape in German and answer questions on what they have hears. All questions are in English. The aural examination takes place 10 minutes after the written paper.
- 2. The written paper consists of 3 reading comprehension passages and written tasks.
- (j) Reading comprehension 1 (60 marks)
 Students read the text and answer questions in English based on the text.

<u>Question 1</u> – usually requires students to match an appropriate heading (these are in German) to the different paragraphs of the text.

<u>Question 2</u> – involves matching sentences/pairing of sentences.

Question 3 and 4 – questions about the text

This is followed by Angewandte Grammatik (15 marks). This section examines students knowledge of basic grammatical structures. Students are required to recognise and identify:

- Verbs/infinitives
- Conjunctions
- Prepositions
- Tenses
- (ii) Reading Comprehension 2 (marks)

This is usually an advertisement or an extract from a brochure

Question 1 – usually True or False

All questions are asked in English and so are answered in English

(iii) Reading Comprehension 3 (60 marks)

Again students are required to read the text and answer the questions

These are followed by Ausserung zum Thema (15marks) in which students answer section (a) or (b).

Section (a) – is based on the text the students have just read and they are required to write a short piece usually in dialogue form about some future/imaginative projection arising from what they have just read.

Section (b) – Write a note. Students are given a number of guidelines and they must write a note ensuring that all the guidelines are covered.

The final section is Schrifliche Produktion (30 marks). Students have a choice between A or B.

- A) Is a letter with some assistance given on the examination paper. The first paragraph of the letter is completed by inserting the correct sentences (given on the examination paper) into the correct order. Students are then required to complete the letter themselves making sure that all the guidelines on the examination paper have been covered (80 to 100 words required)
- B) Students are given a 6 picture sequence. They are given sentences for the first picture and these must be put in the correct order to describe the events of that picture. Students must then write in their own words the sequence of events in the remaining pictures (80 100 words).

Spanish

Subject Overview:

There is a common syllabus framework for the teaching and examining of modern languages in the Leaving Certificate. Syllabus content draws on and develops many aspects of the aims, objectives and content of languages at junior cycle. The aims are:

To foster in learners such communicative skills in the target language as will enable them to:

- Take full part in classroom activities conducted in the target language
- Participate in everyday transactions and interactions
- Extract information and derive enjoyment from mass media
- Consider as a realistic option the possibility of pursuing leisure activities, further study and/or career opportunities through the medium of the target language.
- To give learners a critical awareness of how meaning is organised and conveyed by the structures and vocabulary of the target language, and thus to contribute to their understanding of the working of human language in general.

Content

The three broad components of the syllabus are:

- Basic Communicative of the syllabus are:
- Language Awareness
- Cultural Awareness

An integrated approach to these components is recommended.

• *Basic Communicative Proficiency* builds on the repertory of communicative targets established by the Junior Certificate Programme. The communicative skills required in the Junior Cycle will be maintained and continually reactivated during the Senior Cycle.

The objectives specified in this section relate to:

- Practical challenges that might be faced by the learner when operating in the target language community for example.
- Meeting and getting to know people and maintaining social relations
- Coping with travel and transport
- Buying goods and services
- Dealing with emergencies
- Activities and discussion that are likely to take place through the target language in the classroom for example
- Understanding, seeking and giving information about climate and weather
- Understanding, expressing feelings and emotions
- Engaging in discussion
- Passing on messages

• Language Awareness

Aspects of the Junior Cycle syllabus referring to the development of learners' language awareness are further in Leaving Certificate syllabus

The objectives specified in this section relate to:

- Raising the learner's awareness about the workings of the target language
- Raising awareness about the learner's own encounter with the language
- Fostering effective use of the language
- Developing awareness of relevant aspects of the mother tongue and other languages known to the learner
- Cultural Awareness

Aspects of the Junior Cycle syllabus referring to the development of learners' cultural awareness are further developed in the Leaving Certificate syllabus. The objectives in this section should contribute to cultural and intercultural education generally. The focus is on:

- The target language community and
- Its relationship to Ireland and the Irish way of life

Issues referred to go beyond cultural divisions.

The objectives specified in this section relate to:

- Learning in the target language about the present-day culture associated with the target language
- Reading modern library texts in the target language
- Describing and discussing aspects of the relations between the target language community and Ireland
- Understanding, describing and discussing in general terms issues that transcend cultural divisions.

Assessment

Assessment is by means of a written examination at two levels, Ordinary level and Higher level. There is also an aural and an oral examination at both levels.

Examination:

The Leaving Certificate examination consists of:

- An oral examination of 15 minutes duration held in March-April
- A listening examination of 40 minutes duration
- One written paper of 2.5 hours

The mark allocation is as follows:

Higher Level		Ordinary Level	
Oral	25%	Oral	20%
Listening	20%	Listening	20%
Reading	30%	Reading	40%
Writing	25%	Writing	15%

Oral Assessment:

The oral component of assessment consists of a general conversation, based on the syllabus content and a role-play situation. The following topics must be prepared:

- Myself and my family
- Home and neighbourhood, including problems in the area
- School subjects, homework, extracurricular activities
- Free time hobbies, sport, music, cinema
- Holidays present, past and future
- Future plans
- Differences between life in Spain and Ireland

Fifteen minutes will be allotted per candidate

Written Assessment:

Higher Level

There are two long comprehensions and two short comprehensions in the paper. The short comprehensions are answered in English while the majority of questions on the long comprehensions are answered in Spanish. There is an essay question loosely based on the second long comprehension.

Students then answer two further questions in the style of a dialogue or a formal letter and a diary entry or a note.

Ordinary Level

There are five comprehensions to be answered, one of which must be answered in Spanish. Students must then write a letter in Spanish and choose between writing a note or a diary entry.

Japanese

Proposal

To provide a 2 year leaving certificate programme at both higher and lower level in Japanese for students who have completed a one year Transition programme in Japanese at Hartstown Community School.

Introduction

Since its introduction into secondary schools less than 8 years or so ago, Japanese has year after year become increasingly more popular among Transition Year students, so popular in fact that for the past five years, Japanese has been tested as a Leaving Certificate paper at both higher and ordinary level. The number of students taking

Japanese for Leaving Certificate at present, number in the hundreds but every year this number has seemed to double if not treble exponentially and this year looks like no exception.

So, why has Japanese become so popular among students?

One of the reasons is that as more and more students go through Transition Year programmes like the one offered at Hartstown become exposed to Japanese, many of the myths surrounding the 'difficulty' of the language quickly evaporate. For sure, students do encounter some difficulties in Japanese language study but once started, the idea of an incomprehensible code of squiggles and lines soon gives way to clarity, comprehension and delight at overcoming the seeming impossible.

Another reason for the success of Japanese is the interest so many students have in the vast and colourful culture of Japan. It is certainly one of the highlights for me as a teacher of Japanese to be able to draw from such a well of fascinating history and culture and use it in my classes. It seems I never have a shortage of interesting things to cover and explore with my students: everything from computer games and technology to calligraphy and origami, sumo to baseball, samurai to geisha, from ancient and recent history to modern day Japan with its Karoke rooms, sushi bars and fashion streets. So who are the students who opt for Japanese as a Leaving Certificate subject and what reasons help them make the choice?

Why Japanese?

Both boys and girls of all nationalities are sitting their Japanese Leaving Certificate this year. In one Japanese class alone, there are Chinese, French, Nigerian, Korean and Irish students all studying side by side. Those who study Japanese are as varied as the reasons why they have chosen to study Japanese in the first place. Here are some of the main reasons why students study Japanese for Leaving Certificate:

- 1. Japanese as a language has little similarity to French, German, English or any other Latin based language. Far from daunting, students find this lack of familiarity both appealing and refreshing. Starting from a place of no previous experience makes language learning for those students more interesting than something more 'familiar' such as traditional French or German. Also, for students who find these languages difficult to grasp, the completely different approach to language that is Japanese helps them to succeed and flourish in an area where they had previously great difficulty or concern.
- 2. The variety of nationalities sitting Japanese for the Leaving Certificate is a measure of how important Japanese is to the world community in areas such as business, work opportunities, travel and further education. Japan is the world's second largest economy. Japanese ability allows direct access to many work opportunities in fields as diverse as IT, Technology, Printing, Pop Music,

Translation, Diplomatic Work, Business, Fashion, Design and Manufacturing not only in Japan but also in Ireland, North America, Europe, China and Australia.

- 3. Japanese is recognized by the Department of Education and most 3rd level institutions in Ireland as a second language on a par with those who have qualifications in French, German, Spanish or Italian at Leaving Certificate level. Students therefore have a greater freedom in their second language choice and do not have to continue with one of the more established languages in order to gain entry to their cert, diploma or degree choice. This relates to reason one where a completely different approach to language learning allows some students to succeed in language learning without having to add to their workload by being required to study the more established languages. Further, they do not jeopardize their chances of entry into 3rd level course of choice by having only Japanese as their second language and not having for example French or German.
- 4. Japanese is not only a useful language in terms of future business or work opportunities. Travel with the object of further education and learning are also major reasons that many students adopt to qualify in Japanese. Far beyond access to jobs, it is the culture of Japan which attracts many students. Language allows deeper understanding of a completely different culture which once experienced, educates not only the mind but the character of the student creating greater understanding of one-self and ones world. Teaching students to count is fine but teaching them what counts is better. For those who wish to experience a completely different way of looking at the world and its people, there are few places in the world so readily accessible and yet so completely foreign than Japan.

Japanese for Leaving Certificate

Basic Outline

- 1. Japanese for Leaving Certificate is a 2 year programme.
- 2. Over a school year the minimum class time required is 3 hrs. per week. As most schools have periods of 40 to 45 minutes, this usually takes the form of two doubles and one single class per week. In Hartstown it is our ambition to allow students who are successful thus far in another modern language such as Spanish to have the option of continuing with their study of this and Japanese if they so wish.
- 3. There is no cost to either the school or the students save for text books. Several textbooks have been designed and published by the Linguistics Institute of Ireland as part of the Post-Primary Languages Initiative specifically for teaching Leaving Certificate Japanese in Ireland. This has been done under the guidance of the Japan Foundation and the ICCA.

- 4. Japanese is available to all students embarking on their Leaving Certificate. No previous experience of Japanese language or Japan is required.
- 5. As a recognised Leaving Certificate subject, Japanese is tested in exactly the same way as French, German and other languages. Both Higher and Lower level examinees are tested in their written, spoken, reading and listening abilities. An A1 in a Higher Japanese paper is awarded the same number of points as any one of the other subjects offered at Leaving Certificate level.

Geography

Geography at Leaving Cert. is presented at Higher and Ordinary Level. Ordinary Level students will study core and elective units, while Higher Level students study core, elective and optional units. All students presubmit an original Geographical Investigation Report worth 20% of the terminal exam. Students wishing to take Higher Level Geography should have obtained at least a 'C' Grade at Higher Level Junior Cert.

Units of Study – Higher Level

Units of Study Ordinary Level

Higher level students are required to study Ordinary level students are required to study

Core Unit 1	Patterns and processes in the	Core Unit 1	Patterns and processes in the
	Physical environment		Physical environment
Core Unit 2	Regional geography	Core Unit 2	Regional geography
Core Unit 3	Geographical Investigation	Core Unit 3	Geographical Investigation
	And skills.		And skills.

One of the following two electives;

One of the following two electives;

Elective Unit 4	Patterns and processes in	Elective Unit 4	Patterns and processes in
	Economic activities		Economic activities
Elective Unit 5	Patterns and processes in	Elective Unit 5	Patterns and processes in
	The human environment		The human environment

One of the following four optional areas of study

Optional Unit 6	Global interdependence
Optional Unit 7	Geoecology
Optional Unit 8	Culture and identity
Optional Unit 9	The atmosphere – ocean
	environment

Geographical skills

The learning, use and application of geographical skills are central to a student's experience of Leaving Certificate geography. The student's competency in the

application and use of geographical skills will be examined in the context of the terminal written examination and the geographical investigation.

The Geographical Investigation.

The geographical investigation is a core of area of study and as such is compulsory for all students. Field studies and investigations using primary and secondary sources are central to the geographical education and experience of all students. The investigation will allow the student to experience the practical application of the core geographical skills that are central to all units of the syllabus. The geographical investigation will allow the student to experience the key aims of the syllabus in the context of their own environment. The investigation also encourages students to develop positive attitudes by both experiencing and questioning relationships and issues in their own environment. The investigation represents the practical application of the core geographical skills listed in the syllabus. The students, having studied and practised the geographical skills listed, will then apply the appropriate skills to the investigation topic. In the process of completing the geographical investigation students will be required to

- Devise a strategy and identify aims, objectives and hypotheses to allow for the effective investigation of the topic.
- Select methods of collection and gathering appropriate to the investigation topic
- Use appropriate methods of gathering and collection of information
- Prepare a report
- Analyse and interpret results and draw valid conclusions.

ASSESSMENT

Assessment will take the form of a terminal written examination and a report on the geographical investigation. There will be a separate written examination for Higher level and for Ordinary level students. The terminal written examination will have an assessment weighting of 80%. The report on the geographical investigation will have an assessment weighting of 20%. The two forms of assessment will reflect the syllabus content and the learning outcomes specified in each unit of the syllabus. The terminal written examination will consist of questions requiring short answers and multi-part questions requiring more developed answers. Longer essay-style discursive answers will be required only in the assessment of the optional units. All questions will contain stimulus material and a geographical skills element, where appropriate. The report on the geographical investigation will be assessed outside of the terminal written examination.

History

History is presented at two levels in the Leaving Certificate, higher and ordinary level. Students at both levels will study the same topics. For ordinary level students the emphasis will be on key personalities and case studies associated with their topics. Higher level students will be expected to study all aspects of topics to a greater depth and to develop a greater level of conceptual understanding. All students must pre submit an original research study worth 20% of the terminal exam. Students wishing to take higher level history should have obtained at least a 'C' grade at higher level Junior Cert. A good standard of English is essential.

Syllabus Framework

Working with evidence:

- a. Introduction: history and the historian
- b. Documents-based study
- c. Research study

Topics for study

Early Modern Field of Study 1492 - 1815

- This field of study comprises *twelve* topics
- Six topics relate to Irish history and six to the history of Europe and the wider world
- *One* topic will be prescribed by the examining authority for the documents-based study
- When that topic is from Irish history, choose *one* other topic from Irish history plus *two* topics from the history of Europe and wider world.
- When the topics is from the history of Europe and the wider world, choose *one* other topic from the history of Europe and the wider world and *two* topics from Irish history.
- Students study *four* topics in all.

OR

Later Modern field of study 1815 – 1993

- This field of study comprises *twelve* topics
- Six topics relate to Irish history and six to the history of Europe and the wider world.
- *One* topic will be prescribed by the examining authority for the documents-based study.
- When that topic is from Irish history, choose *one* other topic from Irish history plus *two* topics from the history of Europe and the wider world.

- When that topic is from the history of Europe and the wider world, choose *one* other topic from the history of Europe and the wider world and *two* topics from Irish history
- Students study *four* topics in all.

Early Modern Field of Study

Irish History, 1494-1815

- 1. Reform and Reformation in Tudor Ireland, 1494 1558
- 2. Rebellion and conquest in Elizabeth Ireland, 1558 1603
- 3. Kingdom versus colony the struggle for mastery in Ireland, 1603 1660
- 4. Establishing a colonial ascendancy, 1660 1715
- 5. Colony versus kingdom tensions in mid-18th century Ireland, 1715-1770
- 6. The end of the Irish kingdom and the establishment of the Union, 1770 1815

History of Europe and the wider world, 1492-1815

- 1. Europe from Renaissance to Reformation, 1492-1567
- 2. Religion and power politics in the later sixteenth century, 1567-1609
- 3. The eclipse of Old Europe, 1609-1660
- 4. Europe in the age of Louis X1V, 1660-1715
- 5. Establishing empires, 1715-1775
- 6. Empires in revolution, 1775-1815

Later Modern field of study

Irish History, 1815-1993

- 1. Ireland and the Union, 1815-1870
- 2. Movements for political and social reform, 1870-1914
- 3. The pursuit of sovereignty and the impact of partition, 1912-1949
- 4. The Irish diaspora, 1840-1966
- 5. Politics and society in Northern Ireland, 1949-1993
- 6. Government, economy and society in the Republic of Ireland, 1949-1989

History of Europe and the wider world, 1815-1992

- 1. Nationalism and state formation in Europe, 1815-1871
- 2. Nation states and international tensions, 1871-1920
- 3. Dictatorship and democracy, 1920-1945
- 4. Division and realignment in Europe, 1945-1992
- 5. European retreat from empire and the aftermath, 1945-1990
- 6. The United States and the world, 1945-1989

Assessment:

There will be two assessment components:

- 1. A report on the research study
- 2. A terminal examination

Report on the research study

The research study will be assessed through the medium of a report. The report will be pre-submitted to the examining authority.

Mark allocation

The percentage of the total marks to be allocated to this component is 20%. The marks are to be weighted as follows:

Outline plan	3%
Evaluation of sources	5%
Extended essay	12%

Authentication procedures

The report must be the candidate's own work. Authentication procedures will be put in place to ensure compliance with this requirement. These will include a protocol in relation to the use of internet-sourced material.

The terminal examination

Mark Allocation

The percentage of the total marks to be allocated to this component will be 80%

The Higher Level paper

- Candidates will answer four questions, one on each of the four topics studied. All four questions will be of equal value. One of the questions will be documents-based.
- With the exception of topics nominated for the documents-based study, a specified number of questions will be asked on each of the topics.
- In the case of each topic, at least two of the three perspectives will be examined each year.

The Ordinary level paper

- Candidates will answer four questions, one on each of the four topics studied. All four questions will be of equal value. Three of the questions will be general questions, while one will be documents-based.
- One question will be set on each topic.
- An element of choice will 'built in' to each of the general questions.
- A common format will apply to each of the general questions and each will be stimulus-driven. The stimulus is intended to facilitate candidate recognition of the

topic and as a reasonably gentle lead-in to more testing examination of knowledge and understanding. The common format will include stimulus-driven questions (testing comprehension and/or identification) and paragraphs or short essays linked to the key personalities and case studies.

The documents-based question:

- Documents chosen will relate to **ONE** of the listed case studies. Documents may be either visual or written. ('Written' is defined as including transcripts of radio and television interviews and oral testimony.)
- The format of the documents-based question will be as follows:

Section 1: Comprehension

Section 2: Comparison

Section 3: Critism

Section 4: Contextualisation

- It is envisaged that the documents-based question will involve the use of a number of short, thematically-linked and 'pointed' extracts that will test candidates' ability to interrogate, correlate and evaluate a particular body of evidence.
- The contextualisation section is designed to ensure that candidates can relate the subject matter and provenance of documents to the general themes of the topic and specific issues and events therein, as asppropriate.
- In the allocation of marks, there will be a higher weighting for the comprehension section at Ordinary level and a higher weighting for the contextualisation section at Higher level.

Biology

This subject at Leaving Certificate level looks at human, animal and plant biology and is examined at both higher and ordinary level.

The subject involves quite a lot of rote learning with definitions in particular being important. Reproduction of diagrams, involving drawing and labelling, is also of great importance. The same topics are covered at both higher and ordinary level but higher level does require a more in-depth study of all these topics and the inclusion of some additional topics, which are indicated below. A good standard of English is required to understand the subject mater and to interpret and answer the questions properly (particularly at higher level). An interest in the living world gives a distinct advantage in the subject.

Due to the length of this course regular attendance, good homework and constant revision are very important.

It is desirable, but not essential, that a student would have taken science as a subject in their Junior Certificate. It is expected that a student wishing to take this subject at higher level would have achieved a grade C or better at Junior Certificate higher level.

Course Content:

UNIT ONE; BIOLOGY - THE STUDY OF LIFE

- 1.1. The Scientific Method
 - Biology
 - Scientific Method
 - Experimentation
- 1.2 The Characteristics of Life
 - A search for a definition of life
 - Definition of life
 - Characteristics of life

1.3 Nutrition

- Function of food
- Chemical elements
- Bimolecular structures
- Bimolecular sources and the components of food
- Energy transfer reactions
- Structural role of biomolecules
- Metabolic role of biomolecules
- Minerals
- Water

1.4 General Principals of Ecology

- Ecology
- Ecosystem
- Biosphere
- Habitat
- Environmental factors
- Energy flow
- Niche
- Nutrient recycling
- Human impact on an ecosystem
- Pyramid of numbers (higher only)
- Ecological relationships (higher only)
- Population dynamics (higher only)
- 1.5 A Study of an Ecosystem
 - Board overview of a selected ecosystem
 - Observation and scientific study of a selected ecosystem
 - Organism distribution
 - Choice of habitat
 - Organism adaptations
 - Organism role in energy transfer
 - Analysis

UNIT TWO: THE CELL

2.1 Cell Structure

- Micoscopy
- Cell structure and function
- Cell ultrastructure
- Prokaryotic and eurkaryotic cells (higher only)

2.2 Cell Metabolism

- Cell Metabolism
- Enzymes
- Photosynthesis
- Respiration
- Movement through cell membranes
- Enzymes extended study (higher only)
- Role of adenosine and nicotinamide adenine dinucleotide (higher only)
- Photosynthesis extended study (higher only)
- Respiration extended study (higher only)

2.3 Cell Continuity

- Cell continuity and chromosome
- Haploid, diploid
- The cell cycle
- Mitosis
- Function of mitosis
- Meiosis
- Function of meiosis
- Stages of mitosis (higher only)

2.4 Cell Diversity

- Tissues
- Organs
- Organ system

2.5 Genetics

- Variation of species
- Heredity and gene expression
- Genetic code
- DNA structure, replication and profiling
- Protein synthesis

- Genetic inheritance
- Causes of variation
- Evolution
- Genetic engineering
- Origin of the science of genetics (higher only)
- Law of segregation (higher only)
- Law of independent assortment (higher only)
- Dihybrid cross (higher only)
- Nucleic acid structure and function (higher only)
- Protein synthesis extended study (higher only)

UNIT THREE: THE ORGANISM

3.1 Diversity of Organisms

- Diversity of organisms
- Micro organisms
- Monera, e.g. bacteria
- Fungi
- Laboratory procedures when handling micro- organism
- Protista, e.g. Amoeba
- Plant e.g. the flowering plant
- Animal, e.g. the human
- Nature of bacteria and fungi (higher only)
- Growth curves (higher only)

3.2. Organisation and the Vascular Structures

- Organisational complexity of the human
- Blood cells extended study (higher only)
- Heartbeat extended study (higher only)

3.3. Transport and Nutrition

- Nutrition in the flowering plant
- Modified plant food storage organs
- Nutrition in the human
- Human digestive system
- Blood transport of nutrients
- Balanced human diet
- Cohesion tension model of xylem transport (higher only)

3.4. Breathing System and Excretion

- Homeostasis
- Necessity for homeostasis
- The structure of an exchange system in flowering plants

- The breathing system in the human
- Plant excretion
- The excretory system in the human
- Carbon dioxide: a controlling factor in gaseous exchange (higher only)
- The nephron as a unit of kidney function (higher only)

3.5 Responses to Stimuli

- Structures for response
- Responses in the flowering plant
- Responses in the human
- Viruses
- Auxins (higher only)
- Plant growth regulators and animal hormones (higher only)
- Human immune system(higher only)
- Growth and development in bones (higher only)

3.6 Reproduction and Growth

- Sexual reproduction of the flowering plant
- Sexual reproduction in the human
- Sexual reproduction of the flowering plant extended study (higher only)
- Human embryo development extended study (higher only)

Sexual reproduction in the human – extended study (higher only)

Final Examination:

This consists of one three hour examination with the paper divided into three sections.

- Section A is based on six short questions taken from the content of units one, two and three. Students must answer five questions from this section (25%).
- Section B is based on experiments and contains three questions. Students must answer two of these questions (15%).
- Section C. contains six questions based on course work from all three units. Students must attempt four questions (60%)

List of prescribed Experiments

- 1. Conduct a qualitative test for: starch, fat, a reducing sugar, a protein.
- 2. Identify any five fauna and any five flora using simple keys. Identify a variety of habitats within the selected ecosystem.
- 3. Identify and use various apparatus required for collection methods in an ecological study.

- 4. Conduct a quantitative study of plants and animals of a sample area of the selected ecosystem. Transfer results to tables, diagrams, graphs, histograms or any relevant mode.
- 5. Investigate ant three abiotic factors present in the selected ecosystem. Relate results to choice of habitat selected by each organism identified in this study.
- 6. Br familiar with and use the light microscope.
- 7. Prepare and examine one animal cell and one plant cell unstained and stained using the light microscope (x100,x400).
- 8. Investigate the effect of pH on the rate of one of the following: amylase, pepsin or catalase activity.
- 9. Investigate the effect of temperature on the rate of one of the following: amylase, pepsin or catalase activity.
- 10. Prepare one enzyme immobilisation and examine its application.
- 11. Investigate the influence of light intensity or carbon dioxide on the rate of photosynthesis.
- 12. Prepare and show the production of alcohol by yeast.
- 13. Conduct any activity to demonstrate osmosis.
- 14. Investigate the effect of heat denaturation on the activity of one enzyme.
- 15. Isolate DNA from a plant tissue.
- 16. Investigate the growth of leaf yeast using agar plates and controls.
- 17. Prepare and examine microscopically the transverse section of a dicotyledonous stem (x100,x400)
- 18. Dissect, display and indentify an ox's or sheep's heart.
- 19. Investigate the effect of exercise on the breathing rate or pulse rate of a human.
- 20. Investigate the effect of water, oxygen and temperature on germination.
- 21. Use starch agar or skimmed milk plates to show digestive activity during germination.

Chemistry

Chemistry at Leaving Certificate level is offered at higher and ordinary level and is examined in one three hour written paper. The course at this level includes a lot of rote learning of formulae and definitions and also involves the conducting of set experiments which are examined in the written examination. The course at higher and ordinary levels covers the same subject areas but higher level candidates are required to go into much more detail in their study of these areas.

Course Contents:

- 1. Periodic table and atomic structure
- 2. Chemical bonding
- 3. Stoichiometry, formulae and equations
- 4. Volumetric analysis
- 5. Fuels and heats of reactions
- 6. Rates of reaction
- 7. Organic chemistry

- 8. Chemical equilibrium
- 9. Environmental chemistry: water

Option 1.

- 1a. Additional industrial chemistry
- 1b. Atmospheric chemistry

Option 2.

- 2a. Materials
- 2b. Additional electrochemistry and the extraction of metals

Mandatory Experiments:

Ordinary level: 20 experiments examined on written paper

Higher level: 28 experiments examined on written paper

- 1. To identify some elements using flame tests
- 2. (a) To investigate some redox reactions of the group V11 elements (b)To investigate the displacement reactions of some metals
- 3. To test for anions in aqueous solutions.
- 4. To determine the relative molecular mass, M, of a volatile liquid such as ethanol.
- 5. To prepare a standard solution of sodium carbonate

Ordinary Level Only:

- 6. To prepare a salt by neutralising dilute sodium hydroxide with dilute hydrochloric acid
- 7. To determine the concentration of ethanoic acid in vinegar (higher)
- 8. To standardise an approximately 0.2 mol 1 HCI solution using a standard solution of sodium carbonate
- 9. To determine the amount of water of crystallisation in a compound (higher)
- 10. To standardise a potassium manganate (V11) solution using potassium iron (11) sulphate solution (higher)
- 11. To calculate the percentage of iron in iron tablets (higher)
- 12. To standardise a sodium thiosulphate solution (higher)
- 13. To determine the percentage (w/v) of hypochlorite in bleach by means of an iodine/sodium thiosulphate solution (higher)
- 14. To determine the heat of reaction of hydrochloric acid solution with sodium hydroxide solution.
- 15. The preparation of ethyne and examination of some of its properties
- 16. To measure the rate of production of oxygen from hydrogen peroxide using manganese dioxide as a catalyst
- 17. A study of the reaction between sodium thiosulphate solution and hydrochloric acid to determine the effect of (a) concentration and (b) temperature on the rate of a chemical reaction.
- 18. To recrystallise benzoic acid and determine it's melting point.
- 19. To prepare soap in the laboratory.

- 20. The laboratory preparation and some properties of ethane.
- 21. (a) Preparation of ethanol and (b) examination of some of its properties.
- 22. To prepare ethanoic acid and examine some of its properties.
- 23. Extraction of citrus oils from fruit peel (and clove oil from cloves) by steam distillation.
- 24. To separate some indicator dyes using paper chromatography.
- 25. To illustrate Le Chatelier's principle.
- 26. (a) To estimate the total suspended solids in a water sample.
 - (b) To estimate the total dissolved solids in a water sample
 - © To determine the pH of a water sample
- 27. To determine the total hardness of a water sample using EDTA (higher)
- 28. To determine the amount of dissolved oxygen in a water sample using Winkler method. The value obtained can be used to calculate the biological oxygen demand (BOD) of the sample (higher).
- 29. To estimate the amount of chlorine in a swimming pool using a calorimetric method.

Final examination:

This consists of one three hour examination with the paper divided into two sections. Section A is based on experiments and contains three questions. Students must attempt at least two of these.

Section B contains eight questions based on other course work. Students must attempt at least five of these.

Each question is worth 50marks

Physics as a Leaving Certificate option

Physics is a study of energy and the effects that different types of energy have on objects. It is the oldest of the science subjects, previously referred to as Natural Philosophy and has provided the basis for the other science subjects over its history. Far from being fully described, the demand for physicists to continue the exploration of natural and contrived phenomena, as well as the design of devices that use the applications of the physical world is great. A knowledge of physics is fundamental to an understanding of the world around us.

There is an accepted body of knowledge, which can be tested by experiment and verified or disproved. The "facts" are an agreed presentation of our current understanding of the Universe. This understanding can be questioned and adapted if necessary. The presentation of the facts is adapted to the students' level of comprehension. It is all too easy for students to think that there is only one "right" answer to each problem, and that physics has nothing to do with people. The opposite is the case: the study of physics is a social activity, and the facts need to be verified.

The aims and objectives of the syllabus provide a clear specification of the ethos of the syllabus. The syllabus emphasises the experimental nature of physics and its applications, thus highlighting the vocational aspects of the subject.

The syllabus has the following components: pure science 70% applications of science 22.5% science for citizens 7.5%

These provide a context which facilitates students in understanding and applying physical laws and theories. Exemplars relevant to their own lives are included wherever possible. This approach ensures that physics contributes to a broad, balanced education.

Physics helps students understand the world in which they live. The concepts of physics explain many of the wonders of our everyday lives. It is the role of physics in the general education of Leaving Certificate students that is emphasised in the syllabus and is supported, in particular, by the science, technology and society component of the syllabus.

A further aim is to help them develop the ability to understand certain social issues that they, as citizens, may encounter in their lives. The aims to interest them in proceeding with further studies in physics or the technical areas of engineering and applied physics. Physics contributes in an important way to providing students with a broad general education, as well as preparing them for further education.

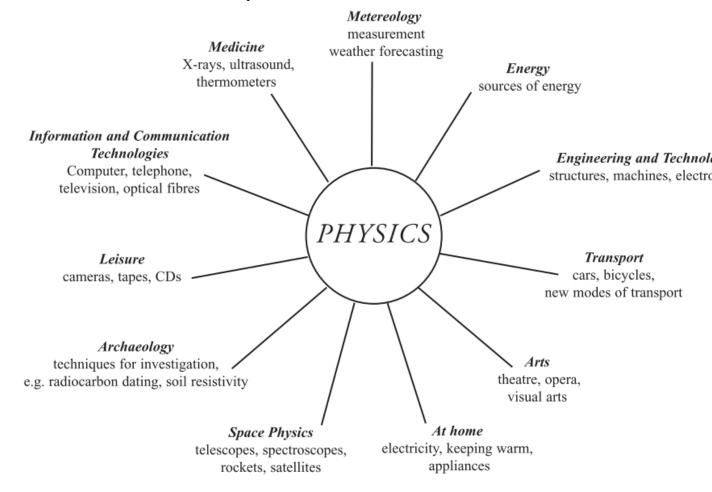
A student wishing to do well in the subject should feel comfortable with mathematics but it should be noted that higher level Leaving Certificate mathematics is *not* required for physics.

Students undertaking the physics syllabus for the leaving certificate will cover a multitude of topics that include

- Work, Energy and Power
- Force & Motion
- Pressure
- Heat
- Optics
- Waves
- Light
- Sound
- Atomic & Nuclear Physics
- Electricity including Electronics
- Particle Physics,

Skills of careful observation of phenomena and the manipulation of data will provide any student with lifelong abilities. Studying physics for the Leaving certificate will empower the student with an ability to logically look for solutions to problems, and to reason causes for effects witnessed.

Physics is a core subject in engineering, architecture, computer applications in third level colleges. Students that study medicine will also have to deal with physics courses in order to use modern medical techniques.



Accounting

Accounting at Leaving Certificate level is offered at two levels, higher and ordinary and is assessed by one final written paper of three hours duration. Higher level students must cover extra material and display a greater understanding of the concepts and issues as well as a greater proficiency in skills, applications and analysis. Students taking accounting do require a high level of mathematical reasoning and for students attempting higher level Junior Certificate Business Studies is a preferred but not essential requirement. There are good career prospects with accounting in business (bookkeeping,

accounts, payroll, and administration) and the subject is also prerequisite for many third level courses.

Course Content

- 1. The conceptual framework of accounting
- 2. The regulatory framework of accounting (higher level only)
- 3. Accounting records:
 - double entry bookkeeping
 - bank reconciliation statement
 - control accounts
 - suspense accounts
- 4. Sole traders
 - final accounts
- 5. Company accounts
 - share capital, reserves and loan capital
 - financial statements of limited companies
 - appreciation of annual reports of public limited companies(higher level only)
- 6. Specialised accounts:
 - manufacturing accounts
 - stock valuation
 - club accounts and accounts of services firms
 - departmental accounts
 - farm accounts
- 7. Incomplete records
- 8. Cash flow statements
- 9. Analysis and interpretation of financial statements
- 10. Management accounting

Final examination:

Both the higher and ordinary level papers have the same layout and both examinations last for 3 hours. The papers are divided into three sections and students answer either four or five questions

<u>Section 1 (Financial accounting)</u>: Students answer either question 1 (120 marks) or two out of 3 other questions (60 marks per question)

Section 2 (Financial accounting): Students answer two questions out of 3 (100 marks per question)

Section 3 (Management accounting): Students answer one of two questions (80 marks)

Business

Leaving Certificate Business provides students with a general introduction to business and it sows the seeds of initiative and enterprise. It contains elements of law, finance, and economic issues. This enables students upon leaving school to choose from a variety of disciplines in third level. Leaving Certificate Business also provides students with business start-up knowledge and skills, which then allows self-employment to become a positive career option. Business is presented at two levels in the Leaving Certificate, higher and ordinary level. Both courses cover similar material but higher level students

are required to answer in much greater depth. A good standard of English in necessary for higher level business. Junior Certificate Business Studies is not a pre-requisite for this subject but it is preferable. Students are advised about relevant business publications/magazines aimed at senior cycle and are encouraged to purchase these, especially those intending to do higher level.

Course Contents

The syllabus is broken down into three sections: A, B, and C.

- 1. Section A: People in Business
 - Unit 1. Introduction to people in business
 - People and their relationships in business
 - Conflicting interests and how they are resolved
- 2. Section B: Enterprise
 - Unit 2. Enterprise
 - Introduction and definition of enterprise
 - Entrepreneurs and enterprise skills
 - Unit 3 Managing 1
 - ❖ Introduction and definition of management
 - Managers and management skills
 - Management activities
 - Unit 4 Managing 2
 - Household and business manager
 - ❖ Human resource management
 - Changing role of management
 - Monitoring the business
 - Unit 5 Business in action
 - Identifying opportunities
 - Marketing
 - Getting Started
 - Expansion

Section C: <u>Environment</u>

Unit 6 Domestic environment

- Categories of industry
- Types of business organisation
- Community Development

- **&** Business and the economy
- Government and business
- Social responsibilities of business

Unit 7 International environment

- ❖ Introduction to the international trading environment
- European Union
- International business

Final examination

Higher Level (3hours):

<u>Section 1:</u> This section is compulsory and covers the whole course. Students answer 8 out of 10 questions (80 marks).

<u>Section 2:</u> This section is also compulsory. Students answer one question on applied business (80 marks).

<u>Section 3</u>: This section covers the whole course and students must attempt 4 out of 7 essay style questions from the section (60 marks per question)

Ordinary Level 2 ½ hours:

<u>Section 1:</u> This section covers the whole course and is compulsory. Students answer 10 out of 15 questions (100 marks).

<u>Section 2:</u> Students must attempt 4 out of 8 essay style questions from this section (75 marks per question).

Economics

This subject covers a wide range of topics including inflation, banking, international trade, the E.U., the role of the Government in the control of the economy, competition and markets. It is also a good preparation for entry to many third level business or journalism courses.

Art

There are both higher and ordinary level courses offered in Art. Each has the same requirements, the only difference being how it is marked at the end. Art is divided up into four main sections:

- 1. Craftwork(100marks) Practical
- 2. Still Life or Imaginative Composition(100 marks) Practical
- 3. Life Drawing(50marks) Practical
- 4. History and Appreciation of Art(150marks) Theory/Written

Out of the four exams, the three practical exams will be completed in May before the Leaving Cert exams start. The practical exam papers are given to students 3 weeks in advance allowing them time to prepare. There is no project for Leaving Cert Art as in the Junior Cert. The History and Appreciation of Art exam falls in with the regular Leaving Cert timetable in June.

1. Craftwork (100marks) – 5 hour exam, split into morning and afternoon session.

There are several options to choose from including Posters, Embroidery, Puppetry, Modelling, Carving, Calligraphy, Pottery, Weaving and Book craft. Students make their choice out of their studied areas at the time of the exam. The paper is given out a week in advance of the exam, giving the student time to prepare a sheet of drawings and ideas to help them in the exam. In the exam, the student completes a quick preliminary sheet to tease out ideas leading to their finished craft piece. This Craftwork section carries 100 marks which is equivalent of 25% of the total marks for Art.

2. Still Life or Imaginative Composition (100 marks) - 2 ½ Hours

This is based on a passage received a week before the exam.

The options are:

- 1. Draw or paint a still life group of objects contained in or suggested by the passage
- 2. Create an abstract composition suggested by the passage
- 3. Draw or paint a picture you have in mind after reading the descriptive passage.

This still life or imaginative composition section is worth 100 marks and is equivalent of 25% of the total marks for Art

3. Life sketching (50 marks) – 1 Hour exam

This exam lasts one hour and consists of two different figure poses:

- Pose 1: 15 minute pose capturing the whole figure
- Pose 2: 30 minute pose, choosing either head and shoulders or the full figure, having more time to complete a more detailed drawing.

This section, Life Drawing is worth 50 marks and is the equivalent of 12 ½ % of the total marks for Art.

4. History and Appreciation of Art (150 marks) – 2 ½ Hour exam

The History and Appreciation of Art paper is broken down into 3 different sections

- Irish Art (50 marks)
- **t** European Art (50 marks)

❖ Art Appreciation (50 marks)

Three questions must be answered out of a possible 23 options, one question being taken from each section. These questions require essay style answers of approximately 2 ½ - 4 foolscap pages each. Students must illustrate their answers. The exam lasts for 2 ½ hours allowing 45-50 minutes per question. This is the only section of Art that happens with the regular Leaving Cert timetable in June. All the other Art exams are finished by this time. This section is worth 150 marks and is the equivalent of 37 ½ % of the total marks for Art.

Attendance for practical and theory classes is absolutely vital. Homework will be given in both practical and theory. It is advisable to have an aptitude for art if you opt for this subject. It is not an 'easy' subject, but is a break from the more academic subjects as it uses a different part of the brain.

Any students with allergies especially to dust should advise their Art teacher before working with pottery clay. There are huge and varied career options open to Art and Design students.

Suitability for Art.

If a student has not previously taken Art to Junior Certificate level, then their suitability to 5th year Art will be accessed by Art assessment teaching to gauge their suitability. This means that any student who has not previously studied Art in school must produce a body of Art Work, (drawing, painting etc.) to be examined by by the Art department teachers before they can take on the subject.

Music

The normal requirement for students doing music in Leaving Certificate is the completion of the Junior Certificate programme. Students considering taking up music in 5th Year who have not studied it for Junior Certificate need to have an instrument and knowledge of staff notation. Applicants who have not studied Junior Certificate music will be considered on an individual basis. Music for the Leaving Certificate consists of three essential activities:

- 1. Performing
- 2. Composing
- 3. Listening

The assessment allows for a good deal of flexibility of choice for students of music as shown below.

Ordinary level: Students don't chose an elective. They are marked out of 50% on the best skill i.e. their entire examination is marked and then whatever they did best on is then marked out of 50%

Performing: 25%
 Composing: 25%
 Listening: 25%

Higher level: 1. Performing: 25%

2. Composing: 25%

3. Listening: 25%

One higher level elective in one of the above activities makes up the final 25%.

Assessment is based on - a practical examination

a written examination an aural examination

COURSE CONTENTS

1. <u>Performing</u> (at both levels)

A. singing and / or playing individually

or

singing or playing as a member of a musical group

AND

B. singing or playing sight-reading test

or

Singing or playing an aural memory test

or

Singing or playing an unprepared improvisation

Performing requirements:

A. Ordinary level: (1) 2 prepared songs

and

(2) 1 unprepared test

B. Higher level: 3 songs or pieces

and

1 unprepared test

C. Higher level can also choose:

2 ordinary level performing activities

and

higher level unprepared test

For students wishing to take the higher level elective in performing they must perform two ordinary level skills (4 pieces x 4 pieces) or one higher level skill (6 pieces)

2. <u>Composing requirements:</u> Melody writing / harmony exercises)

Understanding the rudiments of music:

- treble and bass staves
- common diatonic intervals
- rhythmic values
- common time signatures
- elementary chard progression

Higher level (in addition)

- compound duple time
- major and minor keys up to 4 sharps and 4 flats
- inversion chords
- V7 and cadential 6/4 chords in stock phases
- Modulations to the dominant and non-chord notes in a melodic context

3. Listening

This involves the study of

- (a) prescribed works
- (a) Irish music
- (b) Aural skills

Prescribed works:

- understand, identify and describe the range of musical
 - Features used.
- study musical style and place it in its historic context
- be able to analyse and describe patterns of repetition and change within music

- Higher-level students must also make comparative judgement and evaluate interpretation and performance.

Irish Music - understand, identify and describe

the range and variety of Irish music heard today

- (1) Irish musical idioms and influences higher level students must also perceive aurally and describe
- (2) Traditional and modern-day performing styles
- (3) The contribution Irish music has made to folk music in other countries, especially North America.

Aural skills: - students must have

- (1) A working knowledge of musical notation
- (2) An ability to perceive aurally and identify melody and rhythm, vocal and instrumental timbres as well as simple musical structures.

Higher level students must also

- (3) follow music with semiquaver movement / music in compound time
- (3) perceive aurally certain stylistic features
- (4) identify perfect, imperfect, plagal and interrupted cadences.

Final examinations:

Higher Level

Paper 1 (Composition) Two questions to be answered, one from each section.

Section 1 – Melody writing – choice of three questions (40 marks)

Section 2 – Harmony – choice of three questions (60)

<u>Paper 2 (Listening)</u> Six questions are given – one on each of the four set works, one on Irish music and one unheard piece.

Ordinary Level

The layout of the two papers is the same for higher level, only the level questioning differs.

It should be noted that the duration of both papers depends on the specialism chosen by the student for the music examination.

Home Economics

The syllabus contains four main sections: Food Studies, Resource Management and Consumer Studies, Social Studies and one Elective area. These sections will be examined by a written paper and an assessment of practical work. This subject will be examined at higher and ordinary level with practical element submitted at the end of 5th year receiving an allocation of 20% of the aggregate marks. Both higher and ordinary levels follow a common syllabus but some material has been designed for higher level only and this material is an extension of the ordinary level. Students need to be willing to read outside their textbooks, researching and investigating core sections of the course.

COURSE CONTENTS

1. Food Studies: this accounts for 45% of the marks in this subject and is divided into three sections.

A. Food Science and Nutrition

- Food choices
- Proteins
- Carbohydrates
- Lipids
- Vitamins
- Mineral elements
- Water

B. Diet and Health

- Energy
- Dietary guidelines
- Dietary and food requirements
- The Irish diet

C. Preparation and Processing of Food

- the Irish food industry
- food commodities
- meals mangement and planning
- food preparation and cooking process
- food processing and packaging
- food additives
- food legislation
- food spoilage
- preservation
- food safety and hygiene

2. Resource Management and Consumer Studies: this accounts for 25% of the marks and divided into two main areas.

A. Family Resource Management

- components of managements
- attributes affecting management
- management of household financial resources
- housing
- household technology
- textiles

B. Consumer Studies

- consumer choices
- consumer responsibility
- consumer protection
- 3. **Social Studies :** this accounts for 10% of the marks in this subject.

The Family in Society

- introducing sociological concepts
- defining the family
- family structures
- marriage
- family as a caring unit
- family law

Electives: there are three electives, <u>only one</u> is chosen by students for presentation in their examination. The elective accounts for 20% of the marks.

The three electives are as follows:

1. Housing

- home design and management (housing styles and provision)
 - house building and design
 - designing the house interior
- the energy efficient home
- systems and services electricity, water, heating, insulation, ventilation, lighting.

OR

2. Textiles, fashion and design

- contemporary clothing and fashion
- textile science

- design evaluation and garment construction
- the clothing and textile industries

OR

3. Social Studies

- social change and the family
- education
- work (concepts of work, reconciling employment with the family responsibilities)
- leisure
- unemployment
- poverty (concepts of poverty, causes and effects of poverty) statutory and community responses to creating employment and eliminating poverty.

Construction Studies/Architectural Technology

This is a practical subject suited to students who have an interest in house construction and D.I.Y. Students who have studied Junior Cert. Materials Technology (Wood) have an advantage in the woodwork section.

The subject comprises of three elements:

- 1. A theory course
- 2. A substantial piece of project work
- 3. A practical carpentry examination

The substantial project work and the practical woodwork exam are completed during sixth year, and together count for 50% of the course (40% at higher level). The practical woodwork exam lasts for four hours and takes place in the month of May. The theory exam takes place in June and consists of one 3 hour paper.

Course contents:

- 1. Build Heritage
- 2. Conservation of buildings
- 3. Sustainable development
- 4. Drawings and documents

- 5. Site preliminaries and foundations
- 6. Materials
- 7. Structural concepts
- 8. Walls: materials and construction
- 9. Roofs
- 10. Floors
- 11. Light
- 12. Heat and thermal insulation
- 13. Sound and acoustic insulation
- 14. Internal walls and partitions
- 15. Fireplaces Flues Chimneys
- 16. Windows and doors
- 17. Stairs
- 18. Provision for services
- 19. Drainage
- 20. The provision of domestic electrical services
- 21. Plaster finishes
- 22. Painting
- 23. Recycling
- 24. Environmental issues
- 25. Health and safety in the workshop

Project work is carried out in school time over a number of weeks so attendance is of the upmost importance.

The breakdown of marks is as follows:

	Higher	Ordinary
Theory Examination	60%	50%
Project	20%	25%
Carpentry Examination	20%	25%

The class time spent on each of these three areas reflects the breakdown of marks.

Theory Examination:

This takes place in June.

Higher level: Students must attempt five out of the ten questions on this paper. Question 1 is compulsory and deals with drawing, building details and sections of a house.

Students may choose any four questions. This examination lasts 3 hours.

Ordinary level: Students must attempt four out of nine questions. Question 1 is compulsory and deals with drawing, building details and sections of a house. Students may choose any three other questions.

Carpentry Examination:

This takes place in May and lasts 4 hours. Several weeks beforehand students receive a list of pieces to prepare for examination. These pieces are necessary for the practical and must be prepared before the exam date.

Project:

This must be submitted in May and must be accompanied by a brief. The brief is a step by step account of manufacturing and without this brief the project cannot be properly assessed and marked.

Engineering

Engineering is described as "the application of scientific and mathematical principles to problems in order to find a practical solution. It is concerned with creating or building things or systems in the service of mankind.

Engineering deals with finding solutions to problems that matter to ordinary people, from hip replacements to microwaves, from roads to natural gas, from machinery to a cleaner environment, from the Internet to pop videos, engineers are always involved. Engineering is the hidden face of public utilities, transport systems, buildings, computers and the Internet, food production, diamond rings, racing cars and fizzy drinks – we all know the end product but never see the engineer working in the background.

The Leaving Certificate engineering course is divided into three sections:

- 1. To design and make a project
- 2. To make a practical mechanism
- 3. Theory of engineering
- 1. Projects that have already been assessed on the Leaving Certificate include a model of a golf buggy with a millennium theme and a model crane that can lift its own weight. It assesses pupil's design and manufacturing capabilities.
- 2. The practical mechanism assesses pupils ability to mark out and finish pieces to a good standard in a specified time.
- 3. The theory part of the course deals with:
- (a) the history of engineering

- (b) Materials used in engineering
- (c) Machining processes Testing
- (d) Manufacturing processes
- (e) Welding, soldering, joining processes
- (f) Computers in technology
- (g) Electronics and pneumatics
- (h) reading and understanding drawings
- (i) the design process

Project 25% Practical 25% Theory 50%

Examination:

Project: This is submitted in March and must be accompanied by a brief. The brief is a step by step written report on the project and is essential for the project is to be assessed by examiners.

Practical: This takes place in May and lasts for 6 hours. Several weeks' beforehand students receive a list of materials to be prepared for the practical examination. They have the intervening time to prepare their materials, which they will need on the day of the examination. Without this preparation it is impossible to do the examination.

Written Paper: This takes place in June.

Higher Level: There are eight questions on the paper and students must answer five. Question 1 is <u>compulsory</u> and contains short questions covering the whole course and a section on a specialised topic. Any four other questions can be chosen. The paper lasts 3 hours.

Ordinary Level: There are seven questions on the paper and students must answer four. Question 1 is compulsory and students must do part A and B of this question. Any three other questions can be chosen. The paper lasts $2\frac{1}{2}$ hours.

Design & Communication Graphics (DCG) formerly Technical Drawing

The Leaving Certificate course is divided into a Written Examination (60%) and a Computer Aided Design Modelling Project with accompanying Portfolio (40%). The course covers a Plane and Solid Geometry, Plane Geometry, Conic Sections, Descriptive Geometry of Lines and Planes, Intersection and Development of Surfaces. The Subject has been restructured from the old Technical Drawing and now consists of just one written exam, combining Dynamic Mechanisms, Structural Forms, Geologic Geometry, Surface Geometry & Assemblies.

Students will be given a Design Brief Project in September of their 6th year and will have until January to complete the Design Portfolio. This will involve the sketching of an article and the modelling of it in Computer Aided Design software Solidworks. Students will also be asked to make modifications to the article or design their own article with sketch work and a Solidworks model. Past examples of this have included Sat Nav's, Docking station and a Perfume bottle.

Final Written Examination

60% Written Examination in June, consists of a 3 sectioned exam paper covering all elements of the course and students must have a wide knowledge of the entire course to attempt the exam

40% Submitted Project work, due in January of 6th year

Physical Education

One of the constant battles at Senior Cycle is to convince the students of the value of Physical Education, not only as an integral part of the school curriculum, but also as something valuable that will stand to them in life. Though plans are afoot to make it examinable in an option form sometime in the future, the reality is that, for now at least, it is not an exam subject and this has caused some to question it's place on the school timetable. So what merit does P.E. have at Senior Cycle?

If a function of education is to develop both the mind and body, then Physical Education is an important to the school curriculum as Maths, Science or English. With surveys indicating an alarming rise in levels of obesity and a sharp drop in the exercise habits of Irish teenagers, Physical Education has a vital role to play in educating and encouraging our students in all aspects of a healthy lifestyle. To underline the significance which the school places on Physical Education and to foster among the students an understanding of the need for physical activity in a healthy lifestyle, P.E. is a compulsory part of all pupil's timetable and participation is mandatory.

The P.E. programme at Senior Cycle attempts to educate the students in all aspects of healthy living by providing as wide a range of sports as possible, from Outdoor Pursuits, to the traditional Games modules, Athletics and Health & Recreation. The emphasis is on education, enjoyment of the sport and providing a stress-free environment for physical activity away from the strict confines of the classroom, which can become an issue as exam time draws near.

With top class facilities and equipment and by it's compulsory status on the timetable the school is committed to providing each student with the opportunity of a complete and well-rounded education and in this respect Physical Education has a pivotal rile to play in helping them towards a healthy and successful life after school.