Ballinode Community College



A Brief Guide to Subject Choice For Incoming First Years



Introduction

The following subjects are compulsory in Ballinode Community College - English, Geography, History, Irish (unless exempt), Maths, CSPE, SPHE, Physical Education, Religion, and Science. There is a new subject called Wellbeing, which includes subjects such as CSPE, SPHE, PE and Guidance. Then there are optional subjects.

This leaflet gives details about all the <u>optional</u> subjects only and is designed to help you decide which of these optional subjects would be best for you. As a general rule the subjects you choose should be ones that you think you will be <u>good at</u> and that you think you will <u>enjoy</u>.

Optional Subjects are

- 1. Home Economics or Wood Technology,
- 2. Visual Art or Engineering,
- 3. Business Studies or Technical Graphics
- 4. Spanish or Applied Technology.

This booklet gives information on the content of the subjects. It should be read several times with your parents/ guardians before coming to a decision on your subjects.

For more information, there are four websites, which you may find useful:

www.ncca.ie
www.curriculumonline.ie
www.qualifax.ie
Click on students then click on Subject Choice
www.careersportal.ie

If parents require more detailed information than the information contained in this short guide, or on these websites, they should contact either the Principal or the Guidance Counsellor in the college.

Visual Art

This subject welcomes nurtures and enables students to learn and explore the creative world of Art, Craft and Design and reach their full potential.

Course Content

<u>Drawing-</u> i.e. drawing people, objects, analytical drawing projects.

<u>Painting and Mixed Media</u>- painting and using a variety of media.

<u>Graphic design</u>- posters, advertising, stamps, book covers.

<u>Craftwork</u>- batik, block printing, calligraphy, embroidery, fabric printing, weaving, puppetry, pottery.

3D work-sculpture, modelling.

Who would this subject suit?

This subject would suit all levels and abilities, especially those with a creative outlook and imagination.

Type of Homework Projects/Assignments

Drawing, design, research and art appreciation.

Other points- students must be enthusiastic, interested and be able to apply themselves to projects when necessary. Natural ability alone is not enough. At Junior Certificate Level students develop their skills, explore their creative side and maximise their possibilities.

Career Note

Not all colleges require art as an essential subject for entry to art courses, however any students considering a career in art & design, graphics, industrial design, craftwork, etc. would be strongly advised to consider it for Junior cert and also for Leaving cert. It is also very useful for Primary school teaching and apprenticeships. Please note that it is a strong advantage to have leaving cert Art when trying to get into Architecture.

Progression after the Junior certificate

To do Art at Leaving Certificate Level it is preferable that the student has studied Visual Art for Junior Certificate.

Engineering

Engineering is a practical hands-on subject which gives students a good foundation in design and technology. Students learn traditional Engineering working skills but also learn how to use modern engineering machinery such as computer numerical control (C.N.C.) and computer aided manufacture. (C.A.M) examples such as Solidworks program, Laser cutter, 3D printer, CNC lathe.

Course Content

There are two sections in the course: Practical Content, Theory content.

Practical Content (70%) This is the practical section of the course, the topics covered in this section include: Bench Work, Machine Work such as Lathe Work, Milling machine Work, Plastics processing, Health and Safety. A project must be presented for assessment. The project work is carried out in class between Nov and April in 3rd year.

Theory Content (30%) This is the theory section of the course, topics covered include the Characteristics of Materials- Metal and Plastics Health and Safety, Mechatronics etc.

Who would this subject suit?

This subject would suit students who might like a subject with a large practical element. Being good with your hands helps, however remember that 30% of the course is based on theory, which must be studies like any other subject. Technical Graphics would also be beneficial but is not necessary.

Career Note

Engineering would be a useful subject if a student is considering studying technology, engineering, plastics, industrial design, engineering technology or Engineering/Metalwork teaching (University of Limerick). It is also useful for many apprenticeships.

Progression after the Junior Certificate

Many Engineering students proceed to Engineering at Leaving certificate level, however, while this is obviously of benefit it is not absolutely necessary.

Business Studies

This subject looks at how businesses are set up, managed and financed. This subject has a very practical and modern approach to business- including setting up your own business.

Course Content

Budgeting, income and expenditure (household/business) consumer's rights, banking, accountancy, (cash books & final accounts) running your own business, industrial relations etc.

Who would this subject suit?

This subject would suit students who are interested in business. It is a basic requirement for anyone who wishes to work in a business environment.

It is also very useful for all students as employment and the world of work is studied in detail. We would recommend business studies to any student who has an interest in setting up their own business. Finally there is also a close link with Home Economics and Geography.

Type of Homework Projects/Assignments

- 10% Classroom based assessment in Business
- Projects, Research, Presentations
- Visits to the bank and local enterprise
- written questions and answers
- Business competitions (smartbusiness)

Other points- Students must remember that in order achieve high grades in the Junior Certificate they will have to work hard.

Career Note

It is particularly useful though not essential for courses in advertising, banking, business, commerce, finance, management (incl. hotel management) marketing, accounting and taxation.

Progression after the Junior certificate

To do Economics, Business, or Accounting at Leaving Certificate Level, it would be beneficial for the student to choose Business for the Junior Certificate, as it provides a basis for the three Leaving certificate subjects, **however this is not essential**.

Technical Graphics(TG)

In Technical Graphics you will learn how to draw precise 3-D objects, logos and plans on paper and on computer. You will think in a more logical way and develop problem solving and creative thinking skills. You will use these skills to create objects on our 3D printer, Laser cutter and CNC machines.

Course Content

This course consists of practical drawing skills, sketching skills and computer skills. Students are taught how to use skills to solve visual problems graphically on paper and with 3D computer graphics and will create a project in third year worth 30% of their grade. Some of the things you will learn include:

- how to read and interpret drawings and diagrams
- how to produce neat drawings using drawing equipment
- how graphics relate to the design and manufacture of products.
- how to create models of objects on the computer using Solidworks and manufacture them on the 3D printer, Laser Cutter and CNC as appropriate
- How to use freehand sketching and shading to represent objects
- make paper/cardboard cut-outs and use these to model items in 3-D
- Use programs such as Word and Powerpoint to present a neat project

Who would this subject suit?

This subject would suit students who have a love of drawing and problem solving. Being able to draw neatly and clearly is essential. It would help students with their Maths due to the strong link between concepts in these subjects.

Skills Developed in TG

•Communication skills •Problem solving skills • Computer skills

Creative thinking skills
 Maths skills

Career Note

Technical graphics is useful in any career where problem-solving or visualisation of 3D objects is needed. It is not essential for architecture, engineering, construction, product design or apprenticeships but any student thinking of a career in these areas would benefit much from the skills learned.

Progression after the Junior certificate

To do Design & Communication Graphics (formerly technical drawing) at leaving certificate level the student should do TG for the Junior certificate.

Home Economics

This subject is a combination of theory and practical elements which are food and health studies, consumer studies, textiles and sustainable living.

Course Content

The theory involves food and nutrition, consumer studies, health studies, social studies, home management, textiles and food and cookery skills. The practical textiles section involves needlework, sewing, and embroidery, with both the hand and with the sewing machine. The practical food studies section looks at cooking and baking simple to prepare dishes.

Who would this subject suit?

This is a subject that can be very interesting and relevant for all students. Practical work is an essential element of this subject. The course is assessed on the basis of a written examination and a practical exam in food and culinary skills. The written exam will be on a common level paper worth 50% and a practical cookery exam worth 50% also assessed at common level.

Type of Homework Projects/Assignments

There are written homework assignments and class tests on a regular basis.

Other points-

Business and science are two subjects that complement Home Economics.

Career Note

It is desirable, though not a required subject for further study in teacher training for Home Economics. It will also be useful in the following career areas: childcare, nursing, fashion, social care and tourism courses.

Progression after the Junior certificate

To do Home Economics (Social & Scientific) at leaving certificate level it is advisable for the student to have completed Home Economics at Junior Certificate.

Wood Technology

Wood Technology is a practical hands-on subject which aims to give students a good foundation in practical woodcraft and design skills, by using a wide range of hand and power tools to create useful and attractive wooden items.

Course Content

Project work (where students design and make an item) is complemented by written work. This involves sketching and drawing, research and investigation, figuring out how to make and evaluating their completed work. Practical work is integrated with written and drawn elements of the course.

Assessment

Students work is assessed on an ongoing basis, however in 3rd year students must create a project (70%) and do a written exam in Summer (30%) as part of their Junior Cycle.

Who would this subject suit?

This subject would suit students who like a subject with a practical and creative element. Students who like working with wood and using their hands would enjoy this subject. It is not necessary for students to study Graphics for the Junior-Cycle, but these subjects do complement each other.

Career Note

Wood Technology would be of benefit to those hoping to study Architecture, Engineering, Surveying, or any other Technical occupation. It is particularly useful for working in the building trades and can be a useful life skill.

Progression after the Junior certificate

Construction Studies at Leaving Certificate Level is the natural follow-on from Wood Technology.

Spanish

Course Content

Students will learn to read, write, speak and understand Spanish. Students will also learn about life culture in Spain and in other Spanish speaking countries.

Who would this subject suit?

This subject would suit students who have a love of languages and who are willing to work hard. Spanish is already one of the most widely spoken languages in the world. It is the official language of more than 20 countries.

Type of Homework/Projects/Assignments

Using vocabulary correctly and appropriately with the help of dictionaries. Talking and writing about yourself and your experience of Spanish. Reading Spanish magazines, newspaper articles. Listening to tapes and videotapes.

Career Note

Graduates with degrees in computers and languages are currently very much in demand. Business dealings between Ireland and South America (in particular Argentina), where Spanish is the main language of communication are increasing. A third language, other than English and Irish is necessary for entry to the National University of Ireland (NUI) – UCD, UCC, NUI Galway, Maynooth University, St. Patrick's College Maynooth and the Royal College of Surgeons. However, in recent years exceptions to this rule were introduced, particularly for Science, Technology, Engineering and Maths degrees.

Applied Technology

Applied Technology is about using a design process to solve technological problems. You will work through a task or problem in order to arrive at a solution, which is usually in the form of an artefact or finished product. You will learn how to, safely use, the tools, materials and equipment necessary to make this product.

Course Content These are some of the topics you will learn about:

| Hand and Power Tools | Design and Problem Solving |
|---------------------------|------------------------------------|
| Materials and Processes | Technology, Society and Innovation |
| Sketching and Drawing | Computer Aided Manufacture |
| Using Computers | Electronics and Circuits |
| Coding and Programming | Mechanisms and Mechatronics |
| Hydraulics and Pneumatics | Technology and our Environment |

Examination

Students work is assessed on an ongoing basis, however in 3rd year students must create a project (70%) and do a written exam in Summer (30%) as part of their Junior Cycle.

Who would this subject suit?

Technology would suit those who like working with their hands and are curious about how things work. It is closely related to, Wood Technology, Engineering and Graphics. The subject teaches you to problem-solve using the knowledge and skills learned in class.

Career Note

Technology would benefit those who wish to study Mechanical, Electrical & Electronic Engineering and even Space Science & Technology.

Progression after the Junior certificate

Leaving Cert Technology follows on from Junior Cycle. It builds on many of the topics covered in Junior cycle and expands on these even further.