

Senior Phase Learner Pathways



Course Descriptors: Advanced Higher



Hamilton Grammar

Working together as a
community of learners
to inspire, motivate
and achieve.



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Please Note:

AH classes will only run if there is sufficient demand for a viable class.



Art and Design – Advanced Higher

Aims of the course

Candidates will choose to pursue either the **Expressive** or **Design** course.

The Advanced Higher Art and Design (Design) Course provides opportunities for learners to;

- Develop their creativity
- To apply their understanding of design practice, function and aesthetics
- This involves exploring and researching challenging design contexts, issues and opportunities
- Evaluating and synthesising visual stimuli and other information from a variety of sources

The Advanced Higher Art and Design (Expressive) Course provides opportunities for learners to

- Develop their creativity, visual awareness and aesthetic understanding while exploring how to communicate their personal thoughts, ideas and opinions through their expressive artwork.
- Visually exploring and responding in an individual way to their stimuli
- Researching challenging expressive art contexts and the ways that artists respond creatively to stimuli,
- Evaluating and synthesising visual and other information from a variety of sources.

Course Content and Methodology

Candidates will choose to pursue either the **Expressive** or **Design** course

Expressive Course

Art and Design (Expressive): Expressive Studies (Advanced Higher)

In this Unit, learners will work in a self-directed manner to investigate the working practices and creative approaches of others. They will analyse artists' work and practice, analysing and evaluating the impact of external factors on their creative work. They will communicate informed and supported personal views, opinions and judgements on the artists' work.

Art and Design (Expressive): Expressive Enquiry (Advanced Higher)

This Unit helps learners to work independently in a self-directed manner to plan, develop and produce a range of related development lines of creative enquiry and expressive art work. Learners' expressive art work will be inspired and influenced by their investigative research into expressive art practice. Learners will experiment with and creatively explore how materials, equipment, techniques, composition and/or technology can be used. They will use these in sophisticated and expressive ways to communicate and realise their ideas in 2D and/or 3D formats.

Design Course

Art and Design (Design): Design Studies (Advanced Higher)

In this Unit, learners will work in a self-directed manner to investigate the working practices and creative approaches of others. They will analyse designers' work and practice, analysing and



evaluating the impact of external factors on their creative work. They will communicate informed and supported personal views, opinions and judgements on the designers' work.

Art and Design (Design): Design Enquiry (Advanced Higher)

This Unit helps learners to work independently in a self-directed manner to plan, develop and produce a range of related development lines of creative enquiry and design work. Learners' design work will be inspired and influenced by their investigative research into design practice. Learners will experiment with and creatively explore how materials, equipment, techniques, layout and/or technology can be used. They will use these in sophisticated ways to communicate and realise their ideas in 2D and/or 3D formats.

Skills

- producing analytical drawings and investigative studies in response to stimuli
- using visual elements expressively, showing clear understanding of the subject matter
- producing focused investigative studies and market research for a complex design activity
- skills in using a range of art and design materials, techniques and/or technology creatively and expressively
- developing and progressively refining a variety of personal and creative ideas for art and design work in 2D and/or 3D formats
- analysing and critically reflecting on artists' and designers' use of materials, techniques and/or technology
- analysing the impact of social, cultural and other influences on artists' and designers' work and practice
- using a range of complex problem solving, planning and self-evaluation skills within the creative process

Assessment

Unit assessment takes the form an extended visually annotated report for the study unit and a sketchbook of practical work for Enquiry unit.

Candidates then produce a portfolio of further developed Enquiry work for course assessment.

Homework

This is a self-directed course and much of the work should be undertaken outside of school hours.

How can you help?

Encourage the candidate to show you their practical work and to the best of your ability make helpful suggestions. Make it possible for the candidate to be able to work at home, in terms of available space, lack of distractions and suitable materials to extend what can be brought from the school. Visits to suitable artistic venues will also help to foster enthusiasm.



Drama - Advanced Higher

Aims of the Course:

The aims of the Course are to enable learners to:

- develop autonomy and independent thinking skills
- develop skills in performing within their chosen area of acting, directing or design
- develop individual creativity when applying skills in problem solving, analysis and evaluation
- analyse current theatrical performance
- develop analytical skills in the interpretation of texts
- develop knowledge and understanding of 20th-century theatre practice and key practitioners
- develop knowledge and understanding of social and cultural influences on drama

Course Content:

The Advanced Higher Drama course contains **two** elements of study;

Drama Skills

This Unit will focus on learners developing their knowledge of methodologies, theatre practices and texts to progress their devising, directing and performing skills. Their knowledge and skills will be informed by the work of a key theatre practitioner. Pupils will explore the evolution of the role and craft of the actor, director, and designer. Through devised and textual activities, learners will practically explore a variety of acting, directing and design concepts. They will independently create a devised drama production, using their dramatic interpretation of complex texts. This will explore how meaning can be communicated to an audience through practical realisation of their own theatrical concepts. Pupils will also evaluate the effectiveness of their concepts.

Production Skills

In this Unit, pupils will focus on the work and ideology of a key theatre practitioner, and explore in depth the influences on and the theory and practice of their chosen practitioner. They will explore and analyse key productions that reflect their acting or directing or design methodologies through both research and practical experimentation.

Skills:

Please refer to the information listed in the Higher guidelines

Methodology:

A wide range of learning and teaching approaches are used in the department. These include whole class teaching, independent work, group discussion activities, ICT presentations and research, as well as drama workshops. As this is an Advanced Higher, the level of study required is greatly increased. The course is very much pupil centred and there must be a sense of maturity in terms of reinforcing classroom learning at home. We will employ links with local theatre companies and professionals to enhance the learning and teaching of students. The course is designed to allow many opportunities for active learning and for pupils to demonstrate their creativity.



Assessment:**Internal:**

- Pupils will engage in a process of continuous assessments throughout the year – completing both extended written responses and practical performances in order to complete the course.
- Teachers will complete Observational Checklists of practical progress and pupils will evidence learning through folios, which will include personal/group research, design plans, and other tasks to support learning and teaching.

External:

The course assessment will comprise of a **3000 word** dissertation in which the pupils will select a topic from relevant and current performance theories and practice. The project will consist of a written report and may a variety of different sources of evidence. The topic may come from the work of a current theatre director, company, playwright or designer. The total marks available for this will be **40 marks**.

Performance

Pupils will approach the performance as either an **actor** or **director** or **designer**. An written 'Preparation for Performance' essay will accompany the performance to detail the process pupils have gone through to prepare for their role, this is **worth 10 marks**

The performance itself is **worth 50 marks**, with marks allocated to each roles as follows;

- **Actors** will be required to perform two contrasting acting roles, one of which should be a monologue. Each actor should be involved in an acting contribution of approx 20 minutes.
- **Directors** will be required to have prepared a key scene of their chosen text. They must be involved with directing that scene for 30 minutes and then take part in a 10 minutes viva voce.
- **Designers** will be required to present and explain a scale set model which must allow for one significant set change. They will be required to research that background of the play in terms of social, historical and theatrical context. Some of the details of the model may have to be exemplified. For example, swatches of material or wallpaper may be used to demonstrate decor.

Homework:

Pupils will have to undertake a significant amount of independent work in their own time throughout the Advanced Higher course. There must be a high level of commitment and responsibility to the course in order for pupils to reach their full potential. The course requires a great deal of study and research that must be carried out in the student's own time.

How Can You Help?

Please refer to the information listed in the Higher guidelines.



Music - Advanced Higher

Aims of the Course

- to develop pupils' performing skills
- to create original music using a range of compositional methods
- to provide pupils with a deeper understanding of music and musical literacy

Course Content

The AH course is divided into three areas: Understanding Music, Performing and Composing. In Understanding Music, pupils will broaden their knowledge of music by listening to and analysing music from a wide range of styles and will present their findings through powerpoint presentations and short essays. They will apply this learning in Composing where they will complete a series of short projects and create an original piece of music using a variety of approaches. In Performing, pupils will learn two instruments (or one instrument and voice) to grade 5 standard and they will participate in classroom performances throughout the year.

Skills

As with the N5 and Higher courses the AH course design allows pupils to further develop a broad range of skills for learning, life and work such as personal learning skills, thinking skills and using ICT. Regular performing develops self-confidence and resilience and sustaining a practice routine on an instrument or voice requires self-discipline, perseverance, planning and the ability to identify areas for improvement. Varied learning and teaching approaches allow pupils to apply knowledge in different contexts. S6 pupils are also strongly encouraged to opt into classroom support within the Department allowing them to share their experiences with younger pupils across the school.

Methodology

A wide range of learning and teaching approaches is used in the department. These include whole class teaching, group activities, ICT presentations and individual work. The course is designed to allow many opportunities for independent, collaborative and active learning. It is expected that AH pupils will be self-motivated and have the skills and abilities to take ownership for their own learning.

Assessment

A continuous assessment approach will be used throughout the course. Pupils will take part in assessed classroom performances throughout the year and sit a formal prelin in March. Their composition and understanding music work will be continually monitored using observational checklists with their final folio submitted in March.



The Advanced Higher Music Course requires an SQA examiner to visit the school in May to assess a live performance given by each pupil on both of their instruments (or one instrument and voice). This performance will be worth 50% of their final grade. Pupils will be required to sit a question paper to test their knowledge of music concepts, notation and styles. This question paper will be set and marked by the SQA and will be worth 35% of the final grade. Pupils final composition, along with a composing review, will also be sent to SQA for marking and is worth 15% of the overall mark. The Advanced Higher course is graded from A – D.

Homework

Pupils will be required to practise their instruments (or instrument and singing) outwith class time on a regular basis and this will constitute a large time commitment from pupils. Pupils will also be set a number of short analysis tasks and will be required to prepare a number of presentations over the course of the year; working either independently or with their peers.

How Can You Help?

The following will help your child to become more skilled in Music:

- Encourage your child to practise regularly (we recommend **at least** 1 hour a day across both instruments for 5 days out of 7).
- Encourage your child to perform for you as often as possible.
- Encourage your child to listen to lots of different styles of music by going to concerts or listening to broadcasts on the radio, television or Internet.
- Encourage your child to get involved in leadership opportunities within the Department including; classroom support, helping out with ensembles that involve younger children and taking sectional rehearsals of the ensemble they perform in.



English – Advanced Higher

Entry Requirements

Pupils should achieve an A or B at Higher to be able to attempt the Advanced Higher English course.

Course Content

Advanced Higher English provides learners with the opportunity to develop complex language skills which are essential for learning, life and work; and to develop their ability to interpret complex literary forms and to produce sophisticated language.

Advanced Higher English fosters an in-depth appreciation of complex and sophisticated language and of a wide range of literature and texts in different genres. This enables learners to access their own cultural heritage and history, as well as the culture and history of others.

Learners have the opportunity to personalise their study; choices enable learners to encounter a wide range of texts in different genres and to produce sophisticated writing in chosen literary forms. Building on the four capacities, Advanced Higher English enables learners to communicate, be critical thinkers, develop cultural awareness and be creative.

Learners will be required to read a considerable amount during this course. Teaching will be in small groups and the emphasis will be on independent study, supported self-study and interaction in tutorials. Learners will be expected to have their own ideas and opinions and be ready to express them.

Assessment

The Course assessment will take the form of:

- a question paper, in which learners will write a critical response on drama or prose, and undertake a textual analysis of an unseen poem or extract from a poem, demonstrating an in-depth knowledge and understanding of complex and sophisticated literary text(s)
- a portfolio, which will contain two pieces of writing, and the dissertation

Homework

The vast majority of work at Advanced Higher level will be completed at home. This will include:

- reading literary texts, including those for the dissertation
- undertaking a programme of background reading
- creating and editing written work



How Can You Help?

Doing the following will help learners to become more skilled in English:

- Read your child's portfolio submissions and discuss ways in which they could be improved.
- Discuss the literature that your child is studying with him/her on a regular basis, including his/her choice of dissertation texts.
- Encourage your child to meet reading deadlines, of which there will be many.
- Ensure that your child is organised with homework deadlines and has created a study programme before the prelim and the national exam.



Spanish – Advanced Higher

Entry Requirements

Pupils should achieve an A or B at Higher to be able to attempt the Advanced Higher Spanish course.

Course Content

The Advanced Higher Spanish course comprises three Units:

- Understanding Language
- Using Language
- Specialist Study

Advanced Higher Spanish provides learners with the opportunity to further develop and extend their listening and talking, reading and writing skills in order to understand and use Spanish. Advanced Higher Spanish fosters an in-depth appreciation and understanding of complex and sophisticated language in the contexts of society, culture, employability and learning. The course provides the opportunity to develop and extend planning, research and analytical skills in order to undertake an independent specialist study based on literature or media or language in work. This enables learners to access the culture and history of others and appreciate the Spanish language and Hispanic culture.

Learners have the opportunity to personalise their study; choices enable learners to encounter a wide range of texts in different genres and to produce sophisticated writing in chosen literary forms. Building on the four capacities, Advanced Higher Spanish enables learners to communicate, be critical thinkers, develop cultural awareness and be creative.

Learners will be required to read a considerable amount during this course. Teaching will be in small groups and the emphasis will be on independent study, supported self-study and interaction in tutorials. Learners will be expected to have their own ideas and opinions and be ready to express them.

Assessment

The Course assessment will take the form of:

- two question papers, through which learners will demonstrate their reading, translation, listening and discursive writing skills in the modern language
- a performance, through which learners will demonstrate their talking skills in the modern language
- a portfolio, written in English, through which learners will demonstrate their analytical skills in relation to literature or media or language in work within the context of the modern language



Homework

The vast majority of work at Advanced Higher level will be completed at home. This will include:

- reading literary texts, including those for the portfolio
- practising reading and listening skills
- preparing for talking and writing pieces
- revising key grammar points

How Can You Help?

Doing the following will help learners to become more skilled in Spanish:

- Read your child's portfolio submissions and discuss ways in which they could be improved.
- Encourage your child to meet deadlines, of which there will be many.
- Encourage your child to submerge themselves in as much Spanish as is possible.
- Ensure that your child is organised with homework deadlines and has created a study programme before the prelim and the national exam.



Languages Baccalaureate

The Scottish Baccalaureate in Languages: Interdisciplinary Project

The Scottish Baccalaureate in Languages has been designed to provide a challenging and rewarding experience for candidates in sixth year of secondary school.

The Languages Interdisciplinary Project Unit (often referred to as the IP) offers a challenging yet rewarding opportunity to develop knowledge of language at Advanced Higher level and, at the same time, to develop the learning skills needed for future studies, employment and life. The IP encourages learners to develop independence through taking ownership of, and responsibility for, their Project. It will help to broaden experience outside school life and help to enhance the transition from school or college into higher or further education and employment.



What makes the Interdisciplinary Project different is that the learner chooses:

- the theme
- how best to carry out the Project
- the contacts and the links to make
- the presentation method
- the audience for the presentation

It is important to realise from the outset that the IP is designed to encourage a high level of independence. Other skills to be developed include research skills, interpersonal skills, planning time and information management, independent learning, problem solving and critical thinking.

Entry Requirements

To be eligible to study the Scottish Baccalaureate in Languages the learner must have opted to study two languages at Higher level.

Criteria for award of Pass

The Languages Interdisciplinary Unit will be graded A, B or C. In order to pass the Unit, the learner must achieve at least a grade C



Mathematics Advanced Higher

Entry Requirement

Entry to Advanced Higher is an A or B pass at Higher level. The Advanced Higher is for those students who may go on to university to study some element of Mathematics in their chosen course.

Aims of the Course

Mathematics can be used to model real-life situations and can equip us with the skills we need to interpret and analyse information, simplify and solve problems, assess risk, and make informed decisions.

The aims of the Course are to enable learners to:

- select and apply complex mathematical techniques in a variety of mathematical situations, both practical and abstract
- extend and apply skills in problem solving and logical thinking
- extend skills in interpreting, analysing, communicating and managing information in mathematical form, while exploring more advanced techniques
- clarify their thinking through the process of rigorous proof

Course Content

The Advanced Higher Mathematics Course has three Units of work:

Mathematics: Methods in Algebra and Calculus

This unit involves developing advanced knowledge and skills in algebra and calculus that can be used in practical and abstract situations to manage information in mathematical form. The Outcomes cover partial fractions, standard procedures for both differential calculus and integral calculus, as well as methods for solving both first order and second order differential equations. The importance of logical thinking and proof is emphasised throughout.

Mathematics: Application of Algebra and Calculus

This unit allows pupils to apply their knowledge of algebra and calculus to real life and mathematical situations, including applications to geometry. Learners will acquire skills in interpreting and analysing problem situations where these skills can be used. The Outcomes cover the binomial theorem, the algebra of complex numbers, properties of functions, and rates of change. Aspects of sequences and series are introduced, including summations, proved by induction.



Mathematics: Geometry, Proofs and Systems of Equations

This unit explores geometry, number and algebra, and allows pupils to examine the close relationship between them. Learners will develop skills in logical thinking. The Outcomes cover matrices, vectors, solving systems of equations, the geometry of complex numbers, as well as processes of rigorous proof.

Skills

This Course will develop, deepen and extend the mathematical skills necessary at this level and beyond. Learners will acquire and apply operational skills necessary for exploring mathematical ideas through symbolic representation and diagrams. In addition, learners will develop mathematical reasoning skills and will gain experience in making informed decisions. The abstract content of the Course will greatly benefit students who wish to pursue a career in pure mathematics, and the more practical aspects of the Course will benefit those intending to study an element of mathematics in their chosen course.

Methodology

A wide range of learning and teaching approaches is used in the department. These include whole class teaching, group discussion activities and individual work. ICT is also used when relevant.

Assessment

Pupils will be formally assessed on completion of each unit of work. To achieve an Advanced Higher award, pupils should pass the schools internal assessments for each unit and an external exam at the end of the course.

Homework

Students following the Advanced Higher course need much reinforcement of their classwork. Homework and self-study are essential features of this course, and students must be prepared to make a substantial commitment of time.

How Can You Help?

Doing the following will help your child with their Mathematics:

- Encourage your child to read over their notes
- Ensure that your child has a Scientific calculator
- Ensure that your child has a study plan in place early in the year and that they are following it.



Biology – Advanced Higher

Aims of the Course:

The aims of the Course are to enable learners to deepen their knowledge of biological issues but in addition become more able to work in a way which prepares them for university or work by improving their skills in following areas:-

- take more responsibility for their learning and work more autonomously
- independently read and evaluate scientific papers in order to help communicate complex ideas and issues.
- improve analytical thinking skills and problem solving
- carry out a wide range of experimental activities and carry out an independent practical investigation

Course Content: The course consists of three full units.

Unit 1 - Cells and Proteins

This Unit focuses on the key role that proteins play in the structure and functioning of cells and organisms. The unit consists of:

- Lab skills
- Protein Structure
- Membrane Proteins
- Detecting and amplifying an environmental stimulus
- Communication within multicellular organisms
- Protein control and cell division

Unit 2 - Organisms and Evolution

This Unit explores the importance of parasites in evolution. It builds on some key concepts from the Human Higher Biology Course. The unit consists of:

- Field Techniques
- Evolution
- Variation and Reproduction within different organisms
- Organism Behaviour
- Parasitism

Unit 3 - Investigative Biology

This Unit will give learners a solid grounding in both the **principles and practice of investigative Biology**. This unit contains a wide range of skills fundamental to biological investigations and is split into three main areas:

Scientific principles and process

This involves the construction of a testable hypothesis, details of experimental design, recording and evaluation of data, conclusions and the formation of new hypotheses where necessary in a manner, which can be published and peer reviewed



Experimentation

This involves an ability to carry out an independent experimental investigation which takes into account the development of valid experimental design, control of variables, use of valid controls, randomised sampling techniques

Critical evaluation of biological research

This involves candidates completing a report in their investigation which includes:-

- evaluation of all background research, techniques used
- data analysis of results including use of graphs and relevant statistical techniques
- using analysed results to produce valid conclusions

Entry Requirements

- Entry to the Advanced Higher course requires an 'A' or 'B' pass in Higher Human Biology.
- Higher Chemistry is also very desirable

Assessment

Assessment in Advanced Higher Courses will generally reflect the investigative nature of Courses at this level, together with high-level problem-solving and critical thinking skills and skills of analysis and synthesis.

Internal assessment - Formative assessment, practice essay questions and Past Paper questions will be used throughout each topic.

External assessment - In this Course, added value will be assessed by a **question paper** and a **project**.

- **The question paper** is used to assess whether pupils can retain and consolidate the knowledge and skills gained in individual Units. It requires learners to demonstrate aspects of challenge and application. Pupils will apply breadth and depth of skills, and the various applications of knowledge — such as reasoning, analysing, evaluating and solving problems from across the Course to answer questions in Biology.
- **The project** is used to assess a wide range of high-order cognitive and practical skills and to bring them together, such as skills relating to planning, analysis, synthesis and evaluation. It requires learners to apply skills of scientific inquiry, using related knowledge, to carry out a meaningful and appropriately challenging task in biology and communicate findings. **Pupils will carry out a significant part of the work for the project independently with minimal supervision.**

Homework

Formal homework will come in the form of questions and research based tasks. This will require pupils to have a clear understanding of completion dates and an ability to organise and self-motivate. Pupils will have access to SCHOLAR resources and are expected to work through these resources independently in order to develop their Knowledge and Understanding of the course content.



How Can You Help?

Try to ensure that you son/daughter becomes a more independent learner by regularly reviewing class work, making weekly progress on project work and meeting submission dates.



Chemistry – Advanced Higher

Aims of the Course –

The aims of the Course are to enable learners to deepen their knowledge of chemical issues but in addition become more able to work in a way which prepares them for university or work by improving their skills in following areas:-

- take more responsibility for their learning and work more autonomously
- independently read and evaluate scientific papers in order to help communicate complex ideas and issues.
- improve analytical thinking skills and problem solving
- carry out a wide range of experimental activities and carry out an independent practical investigation

Course Content: The course consists of three full units.

Unit 1 – Researching Chemistry

This unit contains a wide range of skills fundamental to chemical investigations and is split into three main areas:

Scientific principles and process

This involves the construction of a testable hypothesis, details of experimental design, recording and evaluation of data, conclusions and the formation of new hypotheses where necessary in a manner which can be published and peer reviewed

Experimentation

This involves an ability to carry out an independent experimental investigation which takes into account the development of valid experimental design, control of variables, use of valid controls, randomised sampling techniques

Critical evaluation of biological research

This involves candidates completing a report in their investigation which includes:-

- evaluation of all background research, techniques used
- data analysis of results including use of graphs and relevant statistical techniques
- using analysed results to produce valid conclusions

Unit 2 – Inorganic and Physical Chemistry

The general aim of this Unit is to develop skills of scientific inquiry, investigation, analytical thinking, along with knowledge and understanding of inorganic and physical chemistry. Learners will use these skills when considering how the applications of inorganic and physical chemistry impact on our lives, as well as on the environment/society. This application and development of skills can be achieved using a variety of approaches, including investigation and problem solving.

The Unit covers the key areas of:

- electromagnetic radiation and atomic spectra
- atomic orbitals and electronic configurations
- the Periodic table and transition metals
- chemical equilibrium, reaction feasibility and kinetics.



Unit 3 – Organic Chemistry and Instrumental Analysis

The general aim of this Unit is to develop skills of scientific inquiry, investigation, analytical thinking along with knowledge and understanding of organic chemistry and instrumental analysis. Learners will use these skills when considering how the applications of organic chemistry and instrumental analysis can impact on our lives, as well as on the environment/society.

The Unit covers the key areas of:

- molecular orbitals and molecular structure
- stereo chemistry and synthesis
- experimental determination of structure and pharmaceutical chemistry

Entry Requirements

- Entry to the Advanced Higher course requires an 'A' or 'B' pass in Higher Chemistry & Maths.

Assessment

Assessment in Advanced Higher Courses will generally reflect the investigative nature of Courses at this level, together with high-level problem-solving and critical thinking skills and skills of analysis and synthesis.

Internal assessment - Formative assessment and Past Paper questions will be used throughout each topic.

External assessment - In this Course, added value will be assessed by a **question paper** and a **project**.

- **The question paper** is used to assess whether pupils can retain and consolidate the knowledge and skills gained in individual Units. It requires learners to demonstrate aspects of challenge and application. Pupils will apply breadth and depth of skills, and the various applications of knowledge — such as reasoning, analysing, evaluating and solving problems from across the Course to answer questions in chemistry.
- **The project** is used to assess a wide range of high-order cognitive and practical skills and to bring them together, such as skills relating to planning, analysis, synthesis and evaluation. The project requires learners to apply skills of scientific inquiry, using related knowledge, to carry out a meaningful and appropriately challenging task in chemistry and communicate findings. **Pupils will carry out a significant part of the work for the project independently with minimal supervision**

Homework and how you can help

Although the teacher the change in emphasis will require pupils to plan will coordinate homework tasks, carry out and submit tasks independently. Please try to ensure that you son/daughter becomes a more independent learner by regularly reviewing class work, making weekly progress on project work and meeting submission dates.



Physics – Advanced Higher

Aims of the Course:

The aims of the Course are to enable learners to deepen their knowledge of chemical issues but in addition become more able to work in a way which prepares them for university or work by improving their skills in following areas:-

- take more responsibility for their learning and work more autonomously
- independently read and evaluate scientific papers in order to help communicate complex ideas and issues.
- improve analytical thinking skills and problem solving
- carry out a wide range of experimental activities and carry out an independent practical investigation

Course Content

The course consists of three full units.

Rotational Motion and Astrophysics

- kinematic relationships
- angular motion
- rotational dynamics
- gravitation
- general relativity
- stellar physics

Quanta and Waves

- introduction to quantum theory
- particles from space
- simple harmonic motion
- waves
- interference
- polarisation

Electromagnetism

- Fields
- Circuits
- Electromagnetic radiation

Investigating Physics



In this Unit, learners will develop key investigative skills. The Unit offers opportunities for independent learning set within the context of experimental physics. Learners will identify, research, plan and carry out a physics investigation of their choice.

Entry Requirements

Entry to the Advanced Higher course requires an 'A' or 'B' pass in Higher Physics & Maths

Assessment

Assessment in Advanced Higher Courses will generally reflect the investigative nature of Courses at this level, together with high-level problem-solving and critical thinking skills and skills of analysis and synthesis.

Internal assessment

Formative assessment and Past Paper questions will be used throughout each topic.

External assessment - In this Course, added value will be assessed by a **question paper** and an investigation.

- **The question paper** is used to assess whether pupils can retain and consolidate the knowledge and skills gained in individual Units. It requires learners to demonstrate aspects of challenge and application. Pupils will apply breadth and depth of skills, and the various applications of knowledge — such as reasoning, analysing, evaluating and solving problems from across the Course to answer questions in biology.
- **The project** is used to assess a wide range of high-order cognitive and practical skills and to bring them together, such as skills relating to planning, analysis, synthesis and evaluation. The investigation requires learners to apply skills of scientific inquiry, using related knowledge, to carry out a meaningful and appropriately challenging task in physics and communicate findings. **Pupils will carry out a significant part of the work for the project independently with minimal supervision.** Some of the practical work will be carried out with the support Of Strathclyde and Glasgow Universities.

Homework and how you can help

Although the teacher the change in emphasis will require pupils to plan will coordinate homework tasks, carry out and submit tasks independently. Please try to ensure that your son/daughter becomes a more independent learner by regularly reviewing class work, making weekly progress on project work and meeting submission dates.



Science Baccaureate

Aims of the Course

The Scottish Baccaureate in Science has been designed to provide a challenging and rewarding experience for candidates in sixth year of secondary school.

It is based on a coherent group of subjects at Higher and Advanced Higher level with the addition of the **Interdisciplinary Project**, which offers added breadth and value and helps to equip the candidate with the generic skills, attitudes and confidence necessary to make the transition into Higher Education and/or employment.



Entry Requirements

To be eligible to study the Scottish Baccaureate in Science each pupil must have opted to study two Advanced Highers from Science and/or Mathematics. The pupil must also have passed Higher Mathematics in S5.

Criteria for award of Pass

Candidates who achieve at least Grade C in all mandatory components will be awarded a Pass in the Scottish Science Baccaureate.

Criteria for award of Distinction

The Scottish Science Baccaureate with Distinction will be awarded to candidates who achieve:

- Grade A in one Advanced Higher eligible Course
- Grade A in one other component
- Grade B or above in all other components



Accounting – Advanced Higher

Aims of the Course

The Accounting Course is designed to enable learners to:

- develop skills in preparing complex accounting information with a high degree of accuracy and precision
- analyse and evaluate complex accounting information to aid planning, control and decision making in business and making informed judgements to support management teams
- develop an in-depth understanding of the principles which underpin costing
- gain an understanding of the regulatory framework that underpins the production of accounting information of public limited companies for external use
- apply the use of information technology in complex accounting tasks
- gain an understanding of the importance of the effective management of finance and how this contributes to successful organisations and a thriving economy

Entry Requirements

Learners are expected to have the pre-requisite qualifications:

- A or a B in Higher Accounting

Course Content

The Course has two mandatory Units.

Financial Accounting

In this Unit, learners will develop and enhance skills, knowledge and understanding relating to the preparation of complex financial accounting information for public limited companies. They will carry out learning activities that allow them to investigate, analyse and report on the organisation's current financial position and performance. Learners will gain an in-depth understanding of the regulatory framework governing published financial statements.

Management Accounting (Advanced Higher)

In this Unit, learners will develop and enhance skills, knowledge and understanding relating to the provision of internal accounting information, and the ability to use a range of complex accounting techniques. They will carry out a range of learning activities to identify and calculate costs. Learners will gain an in-depth understanding of the significant impact that management accounting information has on the planning, control and decision making within a business. This will give learners the opportunity to provide solutions which can assist in future business financial planning.

Methodology

A wide range of learning and teaching approaches are used in the department. These include whole class teaching, group discussion activities, paired work and individual work. The course is designed to allow many opportunities for collaboration and active learning. ICT is a vital part of the course and is used regularly to enhance pupils learning.



Skills

Skills will be developed to allow pupils to be successful in many key transferable skills:

- Applying accounting techniques to facilitate decision-making
- Recording, presenting and interpreting information to determine profits and costs
- Literacy
- Numeracy – information handling, number process and money, time and measurement
- Reliability and working with others
- Using ICT in a business context
- Employability skills and entrepreneurial spirit
- Presenting and communicating

Assessment

Learners will be assessed internally by an end of unit assessment for each topic. In addition learners will be assessed by a Final Exam (75%) and an Project (25%). This Assignment will be completed during class time.

Homework

Learners will be expected to keep up to date with class work as part of their homework. Formal written homework will be issued to prepare learners for assessments and the final exam.

How Can You Help?

Doing the following will help your child to become more skilled in Accounting:

- Encourage your child to learn accounting layouts.
- Encourage your child to successfully complete homework issued



Business Management – Advanced Higher

Aims of the Course

Advanced Higher focuses on equipping learners with an understanding of global nature of business. This includes the challenges posed by globalisation and the effect it has on Scotland's businesses and environment, business and management theories, and principles of effective management used in different organisations. Learners will develop analytical and research skills by investigating real organisations in a range of contexts.

The Business Management Course is designed to enable learners to:

- enhance the skills of independent learning, research, critical analysis and problem solving in a business context.
- apply business and management concepts and theories to draw conclusions.
- assess the social, ethical and global factors that affect local, national and multinational organisations.
- analyse and evaluate leadership, management and motivation theories.
- investigate a range of research and analysis models used to assist in managing change.
- critically assess a range of management techniques used to assist in effective planning and decision making at a strategic level

Entry Requirements

Learners are expected to have the pre-requisite qualifications:

- A or B at Higher Business Management

Course Content

The Course has three mandatory Units.

The External Business Environment (Advanced Higher)

In this Unit, learners will develop investigative and analytical skills and a detailed knowledge and in-depth understanding of the effect of external influences on organisations at a multinational and global level. The Unit provides learners with the opportunities to investigate how an organisation is affected by external factors and to gain an in-depth understanding of the responsibilities of managers in an economic, social and environmental context. Learners will analyse and evaluate the impact of such external factors and consider the implications of various courses of action.

The Internal Business Environment (Advanced Higher)

In this Unit, learners will gain a thorough grounding in the discipline that forms the basis of management practice. The Unit allows learners to carry out activities that will expand their knowledge of both traditional and contemporary management and motivational theories used by organisations to maximise their efficiency. It also allows learners to analyse and evaluate theories relating to internal factors that influence the success of individuals and teams.

Researching a Business (Advanced Higher)

In this Unit, learners will develop research, investigative and decision-making skills. This will help learners to become competent and confident in the analysis of business data and will prepare them to carry out an investigation into an organisation.



Methodology

A range of teaching techniques will be employed, however it is important to note that at Advanced Higher level learners will be expected to be independent in their learning and thinking. Reading business articles and journals will also be required in order to be prepared for class. Whole class teaching, ICT and group work will still be used to engage learners.

Skills

Skills will be developed to allow pupils to be successful in many key transferable skills:

- Critical thinking
- Analysis and evaluation
- Numeracy - Interpretation of data
- Decision making
- Research and investigation
- Analytical and evaluative skills – drawing business conclusions and decision making
- Literacy – oral and written communication skills
- Reliability and working with others
- Using ICT in a business context
- Employability skills and attitudes
- Presenting and communicating

Assessment

Learners will be assessed internally by an end of unit assessment for each topic. In addition learners will be assessed by a Final Exam worth 80 marks (67%) and an Assignment worth 40 marks (33%).

Homework

Learners will be expected to keep up to date with current business news and research. Formal written homework will be issued to prepare learners for assessments and the final exam.

How Can You Help?

Doing the following will help your child to become more skilled in Business Management:

- Encourage your child to create a regular study plan/schedule.
- Encourage your child to read business news either in print or online. At Advanced Higher level reading will be directed more to articles and journals.
- Encourage your child to successfully complete homework issued.



Geography – Advanced Higher

Aims of the Course

The main aims of Geography are to enable learners to develop:

- A range of geographical skills and techniques.
- An understanding of the ways in which people and the environment interact in response to physical and human processes.
- A geographical perspective on environmental and social issues.

Course Content

Unit 1 – Geographical Methods and Techniques (35%)

This unit builds on the skills and techniques introduced at an earlier stage, and will concentrate on a number of pieces of fieldwork, statistical work and map production. This will be assessed in a final exam out of 50 marks.

Unit 2 – Geographical Study (45%)

This unit involves students carrying out an investigative study which will include collecting, processing and presenting information gathered from fieldwork or research studies. In the past this information has been gathered during a 3 day residential stay at the Loch Ranza Field Study Centre on the Isle of Arran and pupils **MUST** be prepared to go on this trip (which normally costs approximately £150). Students will be required to write a 3000 word study. This work is done in class and at home and will be sent away to the SQA for marking (out of 70 marks).

Unit 3 – Geographical Issues (20%)

This unit further develops key issues contained within the Higher course – students will be required to write a 1800 word critical essay over 12 pages of A4. This work is done in class and at home and will be sent away to the SQA for marking (out of 30 marks)

Skills

Learners will:

- Research and collect information from a range of sources about geographical issues.
- Use advanced mapping skills, including the use of Ordnance Survey maps.
- Use advanced research skills, including fieldwork skills.
- Use and interpret a range of numerical and graphical information.
- Demonstrate knowledge and understanding of local, national, international and global physical environments, human environments and geographical issues.

Methodology

A wide range of learning and teaching approaches is used in the department. These include whole class teaching, group activities, learning in the outdoors, paired work and individual work.



Assessment

The Geographical Study and Geographical Issues unit combine to form the **Geographical Folio**. Pupils work on this folio throughout their sixth year and the completed folio is sent to the SQA in April for assessment. This folio is worth 65% of the pupils' final award (100 marks). The final exam is only worth 35% of the final Advanced Higher award (50 marks).

Homework

Pupils will be expected to gather and process data in addition to an ongoing programme of investigatory work. Pupils should update their personal learning plan on a regular basis. The final folio will have to be prepared at home and pupils will often be expected to complete pieces of work that have been started in class.

How Can You Help?

Doing the following will help your child to become more skilled in Geography:

- Ensure that your child is regularly completing and submitting homework for marking.
- Discuss with your child their progress within this subject.
- Encourage your child to take responsibility for their own learning.
- Encourage your child to meet deadlines for submission of first drafts.

Entry Requirements

Pupils must have a pass at Higher Geography. Self-motivation, independent learning and initiative are also key skill requirements for success on this course.



History – Advanced Higher

Course Aims

- To develop pupils' understanding and foster their ability to think independently in order to reach balanced conclusions;
- To encourage pupils to apply a historical perspective in order to more fully understand modern society;
- To enable pupils to acquire breadth and depth in their knowledge and understanding of the past;
- To analyse a range of straightforward historical sources;
- To encourage pupils to draw reasoned conclusions on the basis of evidence;
- To help develop pupil confidence and transferable skills through active learning, discussion and debate;

Course Content

This Course has one mandatory Unit: Weimar & Nazi Germany

Weimar and Nazi Germany: This involves an in depth study of both the Weimar and Nazi Governments. Pupils will study the aftermath of World War One and its effect on the new democratic Weimar government. They will study the years of the Weimar government, analysing its successes and failures. They will then go on to assess why democracy in Germany failed and the Nazis were able to gain power. The second section of the course then goes on to study life under Nazi rule examining what it was like to live in Nazi Germany, Hitler's foreign policy and how they Nazis maintained their power.

Students will also undertake a dissertation on an aspect of the course they choose. They will examine this in greater detail, visiting Glasgow University to complete their research.

Skills

History lends itself to the development of numerous important skills, not only reading and writing, researching and using historical sources to reach conclusions, but also the ability to think, argue and debate. Pupils will also develop a range of transferable skills through the use of active learning such as role-plays, debates and discussions.

Methodology

A wide range of teaching strategies will be employed including whole class teaching, active learning, group work and individual study. Learning experiences including document work, historical research and debates will encourage learners to understand past societies.



Assessment

Pupils' will be assessed in a number of ways in History. Throughout the course pupils will be assessed using self and peer assessment. This will build the pupils' confidence as they will be expected to give themselves achievable targets for the next piece of work. Formative assessment will also take place whereby the teacher will be able to give the pupils meaningful feedback. Assessments will be taken on a Unit-by-Unit basis or through combined assessment. Pupils' are also required to pass an added value assessment to gain a full course award.

At Advanced Higher level pupils will complete unit assessments, which will assess their essay skills and source work. They will also complete a dissertation on a topic of their choice

Homework

Throughout the course pupils will be given regular homework to enhance their study skills and prepare for unit assessments. Homework can take a number of different formats, for example, completing course work, revision or research tasks.

How Can You Help?

Doing the following will help your child to become more skilled History:

- Encourage your child to read regularly.
- Use conversation to give your child confidence to learn. Discussing a topic at home and asking questions will help your child to understand a topic.
- Encourage your child to watch historical programmes that are relevant to what they are learning.
- Read through any written work your child has been given before they submit it. This will give you the opportunity to get an insight into what they are learning in class.



Modern Studies - Advanced Higher

The Advanced Higher course involves social, political and economic issues relevant to local, national and international affairs today.

The Advanced Higher Modern Studies course allows students to build on the skills they have learned in Higher Modern Studies. It gives them the opportunity to study in depth a vital and interesting area of Modern Studies and encourages the student to openly debate, discuss and evaluate many different viewpoints.

In this course they will study Unit 2 (Law and Order). These units will incorporate research methods such as media analysis, in-depth interviewing and use of official statistics. Thirty percent of their final grade will come from their dissertation. This is an excellent chance for the student to research and study in depth a topic of their choice. The finished dissertation will be 5,000 words in length.

Methodology

The skills of knowledge, understanding and evaluation will be developed through textbooks, worksheets, video and audiotapes, discussion, display, presentation and past papers. The skill of essay writing will also be looked at in detail.

Homework

Homework will be set regularly and will include reading, questions, essays and preparation for class presentations. Students will also be expected to research issues and current affairs by reading a quality daily newspaper. At Advanced Higher level they will be expected to put their research methods into practice.

Assessment

Students will be regularly assessed through class tests, set essay questions and a prelim in term 2. Students also have to pass the three end of Unit tests. These tests must be passed in order to sit the final external exam in the summer term.



Computing Science – Advanced Higher

Aims of the Course

The Advanced Higher qualification in Computing draws on the knowledge, understanding and practical skills developed through previous study at Higher level, and extends these through investigation and analysis. Learners are equipped with skills to design and implement a solution to a significant computing problem.

Course aims:

- to further develop pupil's ability to write programs to solve complex problems
- to further enhance pupil's ability to communicate computing concepts clearly and concisely using appropriate terminology
- to further develop pupil's knowledge of the software development process, programming languages and environments and standard algorithms.
- to further develop pupil's ability to create complex databases and websites.

Entry Requirements

Learners are expected to have the pre-requisite qualifications:

- Band A or B in Higher Computing Science

Course Content

The Course has two mandatory Units.

Software Design and Development

Learners who complete this Unit will be able to:

- design, develop, test and evaluate modular programs, using appropriate programming languages in a range of contemporary contexts.
- understand the differences in a range of software development languages.

Information System Design and Development

Learners who complete this Unit will be able to:

- plan, develop and manage databases, webpages and other Information Systems.
- develop their independent learning skills by investigating and reporting on a contemporary information system, describing its purpose and features.

Skills

Pupils will handle information using a variety of different applications and show creativity with the development of new software. In addition, pupils will further enhance their problem solving skills and tailor software solutions to meet specific problems. These skills will benefit pupils in their future career paths and will be transferable across many different subject areas.



Methodology

A wide range of learning and teaching approaches are used in the department. These include whole class teaching, group discussion activities, paired work and individual work. Pupils will spend a large proportion of time using ICT.

Assessment

An end of unit assessment for each topic will assess learners internally. Additionally, learners will be assessed by a Final Exam (40%) and an Assignment (60%). This Assignment will be completed during class time.

Homework

Pupils will be expected to complete regular homework exercises which will reinforce class learning. Pupils will also be encouraged to practise the skills that they have developed in class and attend a lunchtime club to develop their software development skills.

How Can You Help?

Doing the following will help your child to become more skilled in Computing Science:

- Encourage your child to attend ICT lunchtime club to develop and improve skills.
- Download and install Visual Basic onto your home computer and encourage your child to practise the skills learned in class.
- Ensuring that all Computing Science homework is completed and submitted on time.
- Encourage you child to read over course notes and resources on departmental study Blog and Scholar website.



Graphic Communication – Advanced Higher

Aims of the course

The aims of the Course are to enable learners to develop:

- skills for enquiry, research and evaluation in the commercial contexts of graphic communication
- critical understanding of the impact of advanced graphic communication technologies and activities on our environment and society
- skills in applying graphic communication design principles and techniques in the various contexts of commercial activity
- skills in the use of software applications in producing creative, meaningful and effective graphic items and solutions to contextualised problems and challenges
- skills in creatively applying graphic presentation work and animation techniques to satisfy the needs of commercial activities and those of their audiences
- the ability to demonstrate independence in learning and thinking

Course Content

There are two main units with the Advanced Higher course;

Technical Graphics

This Unit will provide opportunities for learners to develop and creatively apply the graphic communication knowledge, skills and understanding which directly support graphic designing and communication activities in the various contexts of technical activities and in communicating technical detail.

Commercial and Visual Media Graphics

This Unit will provide opportunities for learners to develop skills and explore techniques in creating a range of effective commercial and visual media graphic communication activities and their application in the fields of publishing and promotion. This Unit will attract learners with an interest in the broad commercial and visual media use of graphics.

Methodology

The course seeks to allow the learner to explore graphic communication in specific work contexts, with a clear focus on the application of their skills and knowledge in producing effective, relevant and creative solutions and in supporting the activities of those contexts.

With significant opportunities for personalisation and choice, the course encourages creative and independent minds and provides skills and enthusiasm for lifelong learning.



Entry requirement

A good pass at Higher Graphic Communications is mandatory for entry into the Advanced Higher course.

Assessment

Component 1 — project 120 marks

Component 2 — question paper 80 marks

Total marks 200 marks

Homework

A significant amount of learning will require pupils to be self-directed and demonstrate a mature approach to learning. They will be expected to work using their own initiative and will require considerable time outside class to complete each assessment task.

