



# DOLLAR ACADEMY

## EnrichEd

“Expanding Knowledge, Unlocking Potential”

2025/2026

This booklet gives details of the EnrichEd courses and studios which are available. These options will only run if there is sufficient demand, and if suitable resources are available.

## EnrichEd: Go Beyond the Classroom, Beyond Expectations!

Are you in FV or FVI and looking for exciting learning opportunities beyond the traditional curriculum? Whether it's learning a new skill, preparing for university, or diving into a passion project, **EnrichEd** has something for you.

EnrichEd offers a range of engaging, enriching courses and studios designed to develop new skills, explore new interests, and enhance your future prospects.

✓ Certified & non-certified courses    ✓ Hands-on learning experiences    ✓ University & career preparation    ✓ A chance to collaborate with peers on real-world projects

Expand your knowledge. Unlock your potential.



All qualifications in Scottish education are given credits as part of the SCQF Framework. The framework has 12 levels, and the different levels indicate the level of difficulty of a particular qualification, with 12 being the most challenging (Doctoral Degree). In school, we mostly deal with Level 5 qualifications (National 5), Level 6 qualifications (Higher) and Level 7 qualifications (Advanced Higher).

### Qualifications available

For pupils in Form V, the following courses can add to your complement of Highers. Pupils in Form VI may also opt for these courses to broaden their skills and interests.

In timetable terms, the qualifications below are one year courses and will require the same time allowance as a Higher or Advanced Higher ie 5 periods.

#### National 5

In broad terms, National 5 qualifications are equivalent to GCSE. They focus on developing critical thinking, problem-solving, and practical skills, preparing pupils for diverse challenges. In a deliberate attempt to broaden the curriculum offering for Form V pupils who may not be ready for the traditional 5 Higher route, we are running a number of new subjects at this level. These courses may also be of interest to pupils in Form VI in order to further diversify their experience.

#### National Progression Awards (NPAs)

National Progression Awards (NPAs) are qualifications aimed at assessing a defined set of skills and knowledge in a specialist vocational area. They develop skills much sought after by employers and can provide an alternative or even a bridge to Highers. Through practical experiences and continuous assessment (with no final exam), pupils are encouraged to think differently and aim higher. Our NPA selection offers experiences at Level 5 (National 5 equivalent) and Level 6 (Higher equivalent).

#### Sports Leadership and Coaching

This in-house course offers a range of experiences and qualifications to Form V pupils, from the Sports Leadership qualification which can contribute to UCAS points, to Swimming Pool Lifeguarding and sports coaching qualifications. It is ideal for those not only looking at a career in Sports and PE teaching, but anyone who has a keen interest in sport or is looking at short term (Summer/holiday) employment or to improve their interpersonal and communication skills.

### New courses for 2025:

Title	Level	Suitable for..	Page
Costume Design	National Progression Award (Level 5)	FV/VI	7
Practical Cookery	National 5	FV/VI	8
Practical Woodwork	National 5	FV/VI	9
Cybersecurity	National Progression Award (Level 6)	FV/VI	5
Travel & Tourism	National Progression Award (Level 6)	FV/VI	17
Sports Leadership	See PE department	FV	3

In addition to the courses listed above, we also offer a selection of modules (some certificated, some not, ranging from 1-5 hours per week) to **Form VI pupils** that we hope will encourage them to further develop their interests and experiences before heading off to university, a gap year, an apprenticeship or the world of work. Options on offer vary each year and are confirmed once the school timetable has been set.

Modules on offer to Form VI:

<b>SUBJECT</b>	<b>CERTIFICATION</b>	<b>Page</b>
<b>Coding</b>		5
<b>Costume Design</b>	NPA Level 5	7
<b>Creative Thinking</b>	Daydream Believers Lv 6/Higher	6
<b>Cybersecurity</b>	NPA Level 6	5
<b>Home Economics (Practical Cooking Skills)</b>		8
<b>Music : Performing, Technology, Theory &amp; Aural</b>		10
<b>Musical Theatre</b>		10
<b>Practical Cookery</b>	National 5	8
<b>Practical Woodworking</b>	National 5	9
<b>FIDA International Sustainability Diploma</b>	Lv 6/ Higher	11
<b>Italian</b>	Potential SQA Certification	12
<b>A Language Survival Guide</b>		12
<b>Language Ambassadors</b>		12
<b>Mandarin</b>	Potential HSK Certification	12
<b>Spanish</b>	Potential SQA Certification	12
<b>Languages for Life &amp; Work Award</b>	Potential SQA Certification	12
<b>Philosophy</b>		13
<b>Sports Leadership</b>	Certificated	13
<b>Volunteering to teach Primary Science</b>		13
<b>Applied Research in Chemistry</b>		14
<b>Astronomy</b>		14
<b>Biology for Medical Science</b>		14
<b>Data Science</b>		15
<b>Mathematics Admissions Tests University Preparation</b>	STEP	15
<b>Medical Physics</b>		15
<b>Practical Biotechnology</b>		16
<b>Psychology</b>		16
<b>Thinking Skills</b>		16
<b>Travel &amp; Tourism</b>	NPA Level 6	17
<b>SCOT BACC:</b>		
<b>Scottish Baccalaureate (Expressive)</b>		18
<b>Scottish Baccalaureate (Languages)</b>		18
<b>Scottish Baccalaureate (Science)</b>		18
<b>Scottish Baccalaureate (Soc Sci)</b>		18

Coding is now a valuable skill to have in various jobs and a requirement for some university degree courses. This is a practical module and the coding languages taught will be pupil led. For example, if you have a desire to become a web developer, you will focus on HTML, CSS, JavaScript and SQL. If you plan to do a Physics degree, then learning to code in Python would be advisable. A budding mechanical engineer would benefit from learning the fundamentals of the C programming language.

1 period per week

## **CYBER SECURITY – National Progression Award Level 6**

### **Entry Requirement**

Pupils do not require any prior knowledge of cyber security to undertake this qualification. However, it is recommended that they have achieved at least a B grade pass at National 5 English.

In today's increasingly digital world, we rely on online technologies for work, leisure, and communication. Private and public sector organisations depend on these technologies and it is therefore critical that those working in organisations have an understanding of how to protect data and prevent cybercrime. With the growing threat of cybercrime, there is an increasing demand for skilled professionals in this area. Developing skills in cyber security not only opens up possibilities for exciting career pathways in the technologies industries but also provides our young people with the transferable knowledge and skills applicable to many existing and emerging roles.

The National Progression Award (NPA) provides learners with fundamental knowledge and skills in key areas such as data security, digital forensics, and ethical hacking.

The course consists of three areas of study:

### **Unit 1: Data Security**

This unit explores current practices in corporate data security and development of a business security strategy. It equips learners with the knowledge and skills required to create a data security policy for a professional organisation, having to justify policy decisions based on best practices.

### **Unit 2: Digital Forensics**

The Digital Forensics unit introduces learners to the principles and integrity of the digital forensics process, providing a comprehensive understanding of data acquisition, data analysis, and reporting of forensic examinations. Learners will also develop vital practical skills in identifying and preserving evidential content across various digital devices and media.

### **Unit 3 - Ethical Hacking**

This unit aims to develop a detailed understanding of the tools and techniques used by ethical and malicious hackers. It provides learners with an understanding of potential threats, factors, and tools used by malicious hackers to target individuals and organisations. Learners will demonstrate how ethical hacking can help identify and mitigate these threats and evaluate the legislation and ethics of hacking.

### **Assessment**

To successfully pass this qualification, pupils are required to undertake and pass a combination of both practical and theoretical assessments for all three units. These assessments will be conducted under a mix of closed-book and open-book conditions to comprehensively gauge each candidate's understanding and skills.

### **Progression**

Successful completion of this qualification will open up a range of exciting opportunities for further education and career advancement. Pupils can progress into related undergraduate degree programmes or pursue related National Certificate (NC) and Higher National Certificate (HNC) courses to further broaden their knowledge and skills in this dynamic and ever-evolving field. In terms of potential future career pathways, individuals with qualifications in Cyber Security can progress into a variety of different roles including becoming Cybersecurity Analysts, Penetration Testers (Ethical Hacker), Forensic Analysts, and Security Architects.

## **CREATIVE THINKING (SCQF level 6 – graded, Higher/UCAS tariff rated)**

**Entry requirement - At the discretion of the Head of Department. Prior study of Art and Design, Graphic Communication, or Design and Manufacture at certificate level is desirable but not essential.**

The Creative Thinking Qualification is a Level 6 course, equivalent to a Scottish Higher, designed to help pupils develop their creativity, problem-solving skills, and ability to thrive in a fast-changing world. This innovative qualification places an emphasis on interactive, project-based learning, giving pupils the opportunity to build critical thinking, resilience, and collaboration skills. Over the course of an academic year, pupils will engage in hands-on projects inspired by real-world challenges, spending five timetabled hours per week exploring and developing their creativity. Recognised by universities, the qualification carries 24 SCQF credits at Level 6 and UCAS tariff points, making it a respected and valued choice for further education and future careers and equivalent to a Higher (C grade).

### **Why Choose This Qualification?**

The Creative Thinking Qualification provides pupils with a unique chance to discover their potential while preparing for success in creative careers, higher education, or other pathways. Through Creative Playlists, developed in partnership with industry leaders like the Ellen MacArthur Foundation, Studio LR, and Acrylicize, pupils engage with practical, inspiring learning resources that encourage bold thinking and innovative solutions.

This qualification offers pupils the opportunity to:

- Engage in Interactive Learning: Dive into dynamic, real-world projects that challenge and inspire.
- Earn Recognition and Value: Achieve a qualification equivalent to a Scottish Higher, complete with academic credibility and UCAS tariff points.
- Experience Creative Freedom: Think boldly, embrace experimentation, and develop resilience through engaging, hands-on experiences.

### **How Pupils Are Assessed**

A standout feature of the Creative Thinking Qualification is that there is no written exam. Instead, pupils are assessed in ways that reflect how creativity is applied in the real world. The assessment process focuses on their journey, progress, and creative development rather than simply the final product.

- Ongoing Feedback: Throughout the course, pupils receive meaningful feedback on their ability to think critically, solve problems, and collaborate effectively.

- **Portfolio of Work:** Pupils create a portfolio that showcases their research, ideas, and final projects, providing tangible evidence of their skills and creative journey. This portfolio is an invaluable resource for university applications and career opportunities.
- **Summative Assessment:** At the end of the course, the skills pupils have developed over the year are reviewed and assessed, highlighting their ability to innovate and adapt.

### **What Projects Will Pupils Work On?**

The qualification centres on Creative Playlists, a series of themed resources that guide pupils through real-world challenges. Each playlist combines creativity, innovation, and problem-solving in a meaningful way. Here are some examples of the projects pupils could undertake:

- **SeaStory:** Pupils explore ocean conservation by creating short films that raise awareness of environmental issues and inspire action.
- **Marseum:** In this futuristic challenge, pupils design exhibits for a museum on Mars in 2050, showcasing Earth's culture, history, and achievements.
- **Living in a Digital World:** Pupils learn about cybersecurity and develop practical strategies for staying safe in an interconnected, digital society.
- **Rethink Failure:** This playlist helps pupils see failure as an opportunity for growth. By reflecting on setbacks, they build resilience and use their experiences to fuel creative solutions.

These projects allow pupils to tackle real-world issues, develop innovative solutions, and gain confidence in presenting and communicating their ideas.

### **Transforming Learning, Shaping Futures**

This qualification is designed to prepare pupils for their next steps in education and life. It develops skills that are highly valued by universities and employers, including creativity, critical thinking, collaboration, and adaptability. Pupils who complete this course demonstrate that they can think independently, solve problems creatively, and approach challenges with confidence.

In addition, the portfolio pupils create provides clear evidence of their creative abilities, making them stand out in applications for university or careers. By completing this course, pupils not only gain academic recognition but also the tools to excel in creative industries, innovation, and beyond.

This qualification is about more than earning credits—it's about empowering pupils to discover their potential and make a meaningful impact. Whether shaping a sustainable future, exploring new technologies, or thinking boldly about the challenges ahead, pupils are equipped to turn "what if" into reality.

## **COSTUME DESIGN– National Progression Award Level 5**

This programme is for anyone with a passion for costume design and a strong interest in the performing arts. As a pupil of Performance Costume, you'll be immersed in an exciting programme of discovery. You'll explore the role of Art and Design in a modern society and, in particular, the role of costume design in the performing arts. The course includes an introduction to Cutting, Sewing and textile design.

The Performance Costume NPA offers training in both Costume Design and Making for stage and screen. You'll learn how to respond to text, music and performance concepts and to develop designs for costume that are simultaneously innovative and supportive of the performer's role. You'll develop a repertoire of core skills, ranging from research, design for character, textiles, and illustration as well as pattern cutting and costume construction.

This course is portfolio based and offers the same UCAS points as A National 5.

## **COOKING (1hr per week)**

Learning how to cook healthily on a budget are vital life skills and ideal preparation for student life. This one hour per week course allows pupils to gain confidence and develop practical cookery skills through the completion of a different recipe each week. Learning a variety of cookery terms, processes and skills allows pupils the opportunity to achieve the REHIS (Royal Environmental Health Institute of Scotland) Elementary Cooking Skills and Food Hygiene Awards, both of which are widely recognised within the hospitality industry.

## **PRACTICAL COOKERY – National 5**

The National 5 Practical Cookery course is ideal for pupils who enjoys hands-on learning and are interested in careers in food related industries. It also provides essential life skills for independent living and healthy eating.

The course, which is practical and experiential in nature, develops a range of cookery skills and food preparation techniques, as well as planning, organisational and time management skills, in hospitality-related contexts.

- Pupils will enhance their cookery skills, food preparation techniques and ability to follow cookery processes in the context of producing dishes.
- Knowledge and understanding of ingredients, and their characteristics, will be developed.
- Pupils develop planning, organisational and time management skills by following recipes; and by planning, producing and costing dishes and meals.
- Throughout the course, pupils develop their understanding of safety and hygiene when working with ingredients as well as the importance of always following safe and hygienic practices in a practical context.

### **Course assessment structure**

- Question paper - 25% of total course award.

The purpose of this question paper is to assess the pupils' ability to integrate and apply breadth, knowledge, understanding and skills from across the course. The question paper will ask pupils to state, name, give, identify, describe, explain, calculate and evaluate.

- Assignment and Practical activity - 75% of total course award.

In the assignment and practical activity, pupils demonstrate and apply the skills and knowledge acquired in the course. Pupils work independently to plan, produce and serve a three-course meal from the given recipes, safely and hygienically.

In the assignment, pupils plan for carrying out the practical activity by completing a planning booklet which includes a time plan, equipment requisition and service details for producing and serving the given dishes for a three-course meal. They then carry out the practical activity by implementing their plan to prepare, cook and serve the three-course meal within the allocated time.

## **PRACTICAL WOODWORKING – National 5**



The National 5 Practical Woodworking course offers pupils a hands-on, engaging introduction to woodworking techniques, tools, and materials. As a subject rooted in practical application, it is ideal for those with an interest in craft, creativity, and problem-solving. This course focuses on transferable skills, flexibility, and personalisation to support learning for life, work, and future studies.

### **What Will You Learn?**

The course is workshop-based and emphasizes the development of practical woodworking skills through safe, effective, and creative use of tools and materials. Pupils will learn to work safely in a workshop environment, measuring, marking out, cutting, shaping, and finishing timber and sheet materials with precision. They will also develop the ability to read and interpret technical drawings and diagrams, collaborate effectively in a shared workspace, and build key transferable skills like planning, organising, problem-solving, and communicating.

By participating in this course, pupils will enhance their manual dexterity, creativity, confidence, and reliability. These skills are invaluable for anyone considering a career where manual dexterity and precision are important, such as engineering, design, or manufacturing.

### **Assessment Focus**

One of the defining features of this course is that all assessment is based solely on practical assignments completed in the workshop. Pupils will demonstrate their skills and understanding through the hands-on construction of woodworking projects. There is no written exam, ensuring that assessment reflects their practical abilities, creativity, and problem-solving skills.

### **Course Structure**

The course consists of three key units, each developing a specific set of skills:

#### ***Flat-Frame Construction***

Pupils will learn to use woodworking tools and create joints and assemblies commonly used in flat-frame joinery. This unit helps develop the ability to interpret and follow technical drawings and diagrams while completing projects that involve complex features, enhancing both precision and skill.

#### ***Carcase Construction***

This unit focuses on creating woodworking joints and assemblies used in carcass construction, including working with manufactured boards and frames. Pupils will use working drawings to complete tasks and apply problem-solving skills to unfamiliar contexts, further deepening their understanding of construction techniques and materials.

#### ***Machining and Finishing***

Pupils will gain experience using machine and power tools safely and effectively. They will also explore surface preparation techniques and a variety of finishing methods, ensuring professional-quality results in their projects.

### **Key Skills and Knowledge Gained**

Through this course, pupils will develop proficiency in using a range of woodworking tools and equipment for tasks with complex features. They will learn to interpret technical drawings in both familiar and unfamiliar contexts and apply practical creativity to woodworking tasks. Additionally, pupils will gain a solid understanding

## **MUSIC PERFORMING ( 2 – 3 hours per week )**

For those pupils who already play an instrument and/or sing but who are unable to complete a full Music course, the department offer opportunities to complete a performing unit. This consists of rehearsing a number of pieces of music and recording them, completing a short programme note about one of them and keeping a log or diary to show progress and practice over the year. There are 3 levels of unit, Grade 3, Grade 4 or Grade 5. These units can be completed during 1 or 2 non-contact periods per week or as part of instrumental lessons.

### **MUSIC TECHNOLOGY ( 2 – 3 hours per week )**

There are a number of Music Technology options available for Form VI pupils who have not had the opportunity to follow this subject as a course but who have an interest in popular music and music recording and editing. Units vary from live recording, mixing and editing to an assessed course through Rockschool Music Production qualifications. Units start at beginner level and progress through to HNC depending on pupils' previous experience and class uptake. Units can be taught over 2 or 3 periods per week, To discuss further, pupils should speak with Mr Brown in G12 or see Mrs Timney.



### **MUSIC THEORY and AURAL ( 2 hours per week )**

This is an option for any pupil sitting ABRSM Music exams who need Grade 5 theory to progress to higher grades. There is flexibility to include aural training elements too from the ABRSM and TRINITY Exam syllabus as well as those pupils hoping to study Music after school. In addition, any pupils who are considering a higher education music course could select this option if they would like to work on audition material or any other additional practice or preparation.

### **MUSIC THEATRE ( 2 – 3 hours per week )**

We hope to run a timetable of music theatre activities during Form VI for those interested in taking part in a mini show during the 2<sup>nd</sup> term. This would be dependent on the number who sign up, at which point a show will be chosen to work on and a schedule of rehearsals created to fit in around existing music activities. These sessions would also include some acting, vocal coaching and dance tuition. There are awards/ certifications available in this genre through Rock School and other external bodies. Discussion can take place when people sign up.

**International Sustainability Diploma (SCQF level 6 – equivalent to Higher/UCAS tariff rated)**

[Passing the diploma is equivalent in UCAS points to a C grade at Higher; a distinction is equivalent to a grade A at Higher.]

Do you want to develop the knowledge and skills to make the world a better place? To tackle inequalities, injustice or climate change? This course is an opportunity to do just that – while gaining a UCAS tariff rated qualification at Level 6, equivalent to Higher.

#### UNIT 1: UNDERSTANDING SUSTAINABILITY AND DESIGN THINKING (20%)

Explore the concept of sustainability through the framework of the UN Sustainable Development Goals (SDGs) and learn the principles of Design Thinking – a powerful tool for creative problem-solving. You will apply these in practice to create a compelling social media campaign around an SDG of your choice.

#### UNIT 2: DESIGNING SUSTAINABLE SOLUTIONS (60%)

Choose two Global Challenge Projects from a range of options, each rooted in the SDGs. For instance, you might design a video game to combat climate anxiety; a new wave-powered method for water desalination; a monument to represent unheard voices in your community; or an accessible playground for older people to keep fit, healthy and connected. In each case, you will conduct research to build understanding of the issues; generate ideas; develop your concept through a process of feedback and testing; and present your solution.

#### UNIT 3: ENTREPRENEURSHIP – IDEAS INTO ACTION (20%)

With support from the University of Stirling Enterprise Team, you will choose one of your Global Challenge Project solutions from Unit 2 to develop further and pitch as a business or social enterprise – and have the opportunity to receive feedback from entrepreneurs.

#### ASSESSMENT

Assessment is based on a Portfolio of work which you will build throughout the year, and there are no examinations.

#### OUTCOMES

You will build understanding and experience of how you can apply your knowledge and abilities to tackle the challenges that face humanity in the coming decades. You will develop key skills such as independent research, problem-solving, critical thinking, collaboration, communication and entrepreneurship, which are increasingly sought by universities, colleges and employers.

## **ITALIAN – BEGINNERS**

The intention of this (up to) three-hour module is to teach the language to complete beginners. The emphasis will be communication – understanding and being understood in the beautiful language of a beautiful country. That said, dedicated learners will have the option of taking an SQA qualification at the end of the year.

## **SPANISH – BEGINNERS**

The intention of this (up to) three-hour module is to teach the language to complete beginners. The emphasis will be communication – understanding and being understood in this widely spoken and useful language. That said, dedicated learners will have the option of taking an SQA qualification at the end of the year.

## **A LANGUAGE SURVIVAL GUIDE**

The intention of this 1-hour per week module is to teach language to complete beginners. The focus will be language required when visiting the country or having a conversation with a native speaker. Communication is key! This can be offered in French, German, Spanish, Italian or Mandarin, dependent on forthcoming interest.

## **LANGUAGE AMBASSADORS**

This offers the opportunity to Form VI pupils to use their language skills in a variety of ways. It is designed for those pupils doing an AH in a language or those who have gained a Higher in Form V and want to continue to use their skills. Pupils can assist in language lessons with younger pupils, offer homework support, organise language events e.g. the European Day of Languages . . . the list is endless and Form VI pupils can bring their own ideas. This is an ideal way to add to your leadership skills and your CV.

## **MANDARIN**

In this option, pupils will gain basic language skills, sufficient for survival, a foundation in this fascinating language. As well as learning about China's culture, pupils can work towards elementary HSK certification. HSK is China's only standardized test of Chinese language proficiency for non-native speakers. It certifies the possession of Chinese language skills when applying to university or for a job in China. It also fulfils admission requirements when applying to a range of schools in China. It is also one of the requirements for applying for scholarship and grants for a gap year in China. The option of working towards a N5 or Higher can also be considered.

## **LANGUAGES FOR LIFE & WORK AWARD**

### **Entry Requirement - none**

Open to Form V or VI pupils who have previously done no, or minimal study of a language. This Award is widely recognised. It is open to all learners, regardless of academic experience or ability and provides a knowledge of at least one modern language desired by many universities and employers.

## **PHILOSOPHY**

*What is Knowledge? How can we prove we exist? Do we have free will? What is it to be moral? Can war ever be justified?*

Have you ever thought about these questions?

The central aim of this course is to encourage pupils to develop philosophical methods of enquiry applicable to a range of contexts, encourage critical thinking and expose pupils to several key philosophical ideas.

In the first term the class will focus on different aspects of Moral Philosophy and the different philosophical approaches to such ethical questions as Punishment, Euthanasia and War. The ideas of Immanuel Kant and J.S.Mill will be examined and their relative strengths and weaknesses estimated.

Further study will take account of the areas of Epistemology, where the problems of Induction and Scepticism will be introduced, the ideas of Rene Descartes examined. A study of Metaphysics, where the existence of God and the "Mind-Body" problem will be undertaken alongside the central question of Free Will, bringing the course to an end. Films such as "The Matrix" and "Blade Runner" will be used to illustrate particular philosophical theories and to indicate just how profound the impact of philosophical ideas has been on popular culture.

The class is discussion based but there will be opportunities for pupils to undertake several written assignments throughout the session.

## **SPORTS LEADERSHIP**

Pupils undertaking a module in Sports Leadership will learn and demonstrate important life skills such as effective communication and organisation whilst learning to lead basic physical activities to younger people, their peers, older generations and within the community.

The course involves both guided & peer-to-peer learning and supervised leadership to ensure that pupils have all the skills they need to lead basic physical activities to other people.

The sessions use sport to deliver fun and engaging physical activities with other pupils and within the community. Pupils will plan, lead and evaluate sports/physical activity sessions over a number of tutored hours and then demonstrate their leadership skills as part of their assessment.

This SLQ Sports Leadership course will give you valuable skills and experiences relating to various aspects of leadership. It will also give you a UCAS recognised qualification.

## **VOLUNTEERING to teach Primary Science**

This module is suitable for anyone with an interest in working with people (e.g. in teaching, social work, medicine etc.) or in volunteering. It could also be relevant for pupils with an interest in Science. Pupils studying this module will learn how to carry out and teach several practical science lessons to primary pupils. We will teach pupils in at least 3 local schools over the course of the session and all training will be given beforehand – no experience of Science is required. No previous knowledge or experience is required as all training will be provided.

## **APPLIED RESEARCH in CHEMISTRY**

Many Dollar pupils are destined to pursue careers in Science, Medicine or Engineering. This module equips pupils with a knowledge of practical techniques and research skills that often form part of first-year Undergraduate courses. Students will gain experience in undertaking applied research and will learn how to present their findings to different types of audience.

Research skills covered include;

- Practical laboratory skills and instrumental techniques
- Literature searching
- Experimental Design
- Science writing (for publication)
- Public outreach
- Team working

The 2-hour per week module involves extensive practical work. Previous pupils on a similar Dollar Academy module produced experimental investigation packs, devised spectacular demonstration experiments and produced teaching materials used in schools across Scotland.

Pupils studying the module may be eligible for a formal STEM Leader award, credit rated by the SQA at SCQF levels 4, 5 or 6.

## **ASTRONOMY (2 periods per week)**

No prior knowledge of Astronomy or Physics is necessary to take the Astronomy module. In recent years, some pupils who have chosen Astronomy have done so purely for interest but the course also caters for pupils who wish to further their knowledge in preparation for study of the physical sciences at university; the Astronomy module has very broad appeal. We use parts of the GCSE Astronomy course as a framework for learning.

Astronomy is a practical subject so there will also be activities such as night time viewing sessions, safely observing the sun, performing simple astronomical experiments to help understand the earth, moon and sun better etc. You will learn how to make astronomical observations using the naked eye (unaided observations) and also with astronomical equipment (aided observations) such as binoculars, cameras and telescopes (both manual and robotic). We have access to telescopes around the world which we can operate over the Internet to produce stunning images.

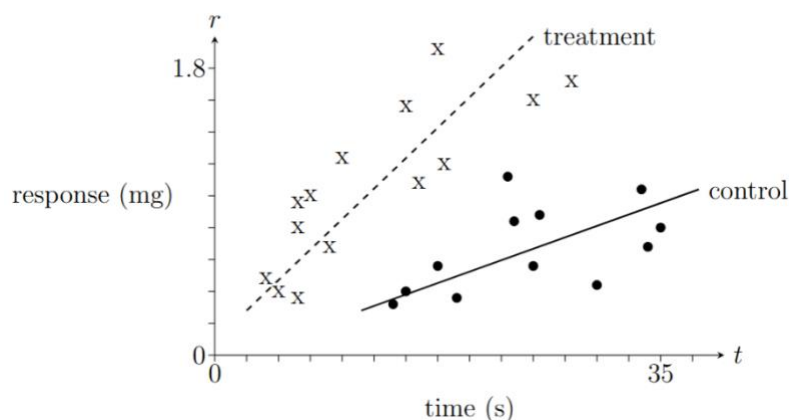
## **BIOLOGY FOR MEDICAL SCIENCE**

This two hour per week course is aimed at pupils planning to study Medicine, Dentistry or Veterinary Medicine at University.

The aim of the course is to allow pupils to explore topics relevant to medical science in more detail than the syllabus allows. There is flexibility regarding the topics studied meaning current issues and personal interests can be accommodated but typical topics studied include immunology, cancer, CVD, diabetes and drug testing. There will also be the opportunity to practice relevant interview techniques and dissection skills.

## **DATA ANALYSIS**

We live in a world which is becoming ever more reliant on data, and the need to be able to make informed decisions based on data is increasingly important. This module will allow pupils to develop skills in data analysis using computer software (particularly Excel and R) which are sought after by employers in many industries. It is open to pupils who are considering careers in all types of Sciences and Social Sciences as well as Statistics and Mathematics. No previous knowledge of using computer software is required, although a basic working knowledge of Excel would be useful.



## MATHEMATICS ADMISSIONS TESTS UNIVERSITY PREPARATION (MATHUP)

This course is designed primarily for pupils who are wishing to apply to a university for a course which will involve a Mathematics-based entrance test (all Sciences, Engineering and Maths based courses). It will cover topics and mathematical techniques which may appear on such tests, some of which are currently outside the Scottish Mathematics Curriculum. We will focus on preparation for the following three tests. Please see a list of universities below which accept and/or require these as part of the application process.

STEP: Cambridge, Warwick and Imperial

TMUA: Bath, Cambridge, Cardiff, Durham, Nottingham, Lancaster, Sheffield, LSE, Southampton & Warwick

MAT: Oxford, Imperial

## MEDICAL PHYSICS

This is a module based upon material from the A-level Physics syllabus. It would be useful for those who wish to go on to study Medicine or Physics at University, or for anyone with a general interest in the subject. As well as classroom-based activities, trips to the Medical Physics department at Ninewells Hospital in Dundee and Radiography Department at Forth Valley Hospital in Larbert will be organised. You will get a chance to learn and experience the cutting edge of applied physics which may well give you an advantage when it comes to your university interview.

## PRACTICAL BIOTECHNOLOGY

This hands-on practical module focuses mainly on Microbiology. We will complete one Intermediate 2 unit and one Higher Biotechnology Unit on practical biotechnology.. Pupils will learn how to carry out activities such as making media, pouring plates, culturing microorganisms, biochemical tests, DNA fingerprinting and genetic engineering of bacteria. These practicals have been described by past pupils as very relevant to pupils who plan to study any Biological Science, Medicine, Dentistry or Veterinary Medicine but no previous experience of Science or future plans to study one of these courses is required.

## **PSYCHOLOGY**

### **ENTRY REQUIREMENT - None**

This course is offered to Form VI pupils with an interest in Psychology – the study of the mind. It runs for two hours per week and introduces pupils to the main domains of Psychology. In addition, pupils have the opportunity to pass a Higher Psychology Unit on “Individual Behaviour” through the study of sleep, dreams and sleep disorders.

## **THINKING SKILLS**

This module is designed for those who wish to sharpen up their problem solving and critical thinking skills. It would suit pupils who enjoy stretching themselves to their limits and doing some serious thinking with other like-minded students.

The module is based around an A-level qualification called ‘Thinking Skills’ which is administered by Cambridge International Education (CIE). The module is structured in a similar way to the CIE qualification but with our own Dollar agenda built in for pupils to practice for Olympiad papers and entrance exams for competitive universities.

The course is not geared towards a particular subject or subject group and is instead focussed on developing thinking skills, it could also be a pragmatic choice for those who are required to sit entrance exams and aptitude tests for university entrance. There is inbuilt flexibility with this module, each individual pupil is able to prioritise what suits them best but the default option would be that each pupils does a bit of everything on offer.

A pupil wishing to study Law would benefit from the critical thinking components, a pupil who wished to study Engineering would benefit from the problem-solving components, and a pupil who wished to study Medicine would benefit from both these components. Pupils who wish to practice Olympiad papers in the Sciences would be able to spend time going over past exam papers to help them gain the highest award possible in these elite competitions.

## **TRAVEL & TOURISM – National Progression Award Level 6**



The National Progression Award (NPA) in Travel and Tourism is designed to provide pupils with the knowledge and skills required for working in the travel and tourism industry, an important part of the Scottish economy. This course covers key aspects of the sector, helping students gain a foundational understanding of how travel, tourism, and hospitality services operate. It will also enhance knowledge of the geography of Scotland and the location of major tourist destinations across the globe.

Topics may include:

- Travel and tourism in the UK
- Sustainable practices in travel and tourism
- Leisure and business tourist destinations
- The Scottish tourism product
- Tour guiding (including at least one pupil led half day excursion)

Assessment will take place throughout the year, a combination of tests and practical tasks. It will all be marked internally with no requirement for a final exam.

This course is suitable for anyone considering a short term or long-term career in the travel industry, or with an interest in travel and destination tourism.

This course builds on some of the ideas introduced in the National 5 Geography course, but is open to all learners in Form V or Form VI.

## SOCIAL SCIENCES

The Scottish Baccalaureate (Scot Bacc) in Expressive Arts, Languages, Science and Social Sciences a group Award comprised of several Highers and Advanced Highers from a pupil's portfolio of qualifications. of current Higher and Advanced Higher qualifications in their respective areas. But what makes a Scottish Baccalaureate unique is the **Interdisciplinary Project (IDP)**.

### **The Interdisciplinary Project (IDP)**

Have you got an idea that you would like to explore in more depth? Would you like to see how your subject knowledge could be used in real-life? How about the opportunity to understand how all the subjects that you study can fit together to create something valuable? Undertaking the Interdisciplinary Project will enable you to do these things - and so much more besides.

The IDP is an independent research project that is carried out by a pupil or group of pupils. From the initial idea; through to the planning, execution and delivery of the final output this is pupil driven and is designed to develop skills that are valuable at University and beyond. As part of this, you will develop, and exemplify skills such as collaboration, problem-solving, communication, negotiation, independent learning, critical thinking and analysis. The IDP can provide you with a wealth of evidence to show that you have deepened your understanding of the area that you wish to study further at University as you will be pursuing a research area of your choice.

The final output of your project will be whatever you determined as being appropriate during your project planning stage. This may well be a report, but is just as likely to be a leaflet, poster, event, YouTube video or app; whatever is the best way for you to communicate your findings to the relevant audience.

In terms of UCAS points, the IDP is equivalent to half an Advanced Higher.

Further information, and examples of projects, can be found on the SQA website;  
<https://www.sqa.org.uk/sqa/34638.1567.html>