Challenge and Enrichment Programmes @ Scotch

Years 7 - 12

Program Aims

- To provide opportunities for students to participate in competitions and events at a local, national and global level, working beyond the confines of traditional school curricula, stretching and challenging our most academically able students.
- To provide opportunities for students to work with like-minded students beyond traditional classroom settings, developing social and emotional skills.

Philosophy:

The content that students are exposed to in academic competitions is frequently much more complex and sophisticated than the lesson content covered in the classroom. This empowers students to explore and investigate areas of personal interest in depth, making links in their learning and developing new skills as a result. The development of these new skills through participation in academic competitions are of life-long value. The journey is just as important as reaching the destination!

Key Competitions and Projects:

- The **World Scholars Cup (Terms 1, 2, 3 & 4)** is a celebration of learning and requires students to work together as a team, as well as individuals in the following events: debating, collaborative writing, the Scholar's Challenge (a multiple-choice exam) and the Scholar's Bowl (an interactive, timed quiz). The competition has an overarching theme every year wherein students are required to study a syllabus based on this theme in the subject areas of Science (Enabling Technologies), History (Neglected Histories), Literature (Voice from the Margins), the Special Area (Unsolved Mysteries), Art and Music (Louder than Words) and Social Studies (On the Edge of Society).
  The competition begins at a regional level in Adelaide, progresses to Global Rounds (usually at least three different locations around the world) and finally, the year ends at the Tournament of Champions hosted at Yale University, USA.

- **Tournament of Minds (Term 3)** is a problem-solving programme for teams of students from both primary and secondary years. The Tournament's aim is to enhance the potential of our youth by developing diverse skills, enterprise, time management, and the discipline to work collaboratively within a challenging and competitive environment. Tournament of Minds is an opportunity for students with a passion for learning and problem solving to demonstrate their skills and talents in an exciting, vibrant and public way. Tournament of Minds offers real world benefits as it looks beyond academic achievement, and understands that the pursuit of excellence knows no boundaries. The Tournament process provides a platform for excellence and equips participants with twenty-first century skills and strategies.
  Teams are required to work together on a *Long Term Challenge* for six weeks without assistance from teachers, parents or peers. They are encouraged to explore possibilities and experiment with ideas as they endeavour to produce their best possible solution. They develop a creative and original way to communicate this solution to others, working within predefined parameters such as limited materials, complex challenge criteria and the deadline of Tournament Day.
  Students present the product of their ideas - their challenge solution - to a panel of judges and an audience on Tournament Day. They have ten minutes in which to present and must do so within a 3 metre by 3 metre performance area.
  The teams must also participate in an unseen *Spontaneous Challenge* on Tournament Day. This challenge requires rapid interchange of ideas, the ability to think creatively and well -developed group cooperation skills

- The **da Vinci Decathlon (Term 2)** is an academic competition designed to challenge and stimulate the minds of school students. Students compete in teams of eight across 10 disciplines: engineering, mathematics and chess, code breaking, art and poetry, science, English, ideation, creative producers, cartography and general knowledge.
  The Decathlon is designed to celebrate the academic gifts of Australian youth by providing a stimulating and challenging competition run in the spirit of an Olympic Decathlon.

- **Academy Gifted and Talented Conferences** (Terms 2 & 3) are led by Julie Arliss, who lectures at King's College, London. Julie is an outstanding Philosophy and Ethics lecturer who works with gifted students in Oxford, Cambridge and London, as well as throughout Australia and New Zealand, and her great talent is providing students with the inspiration to extend their thinking beyond the constraints of the usual curriculum. There are two conferences each year, one for Juniors and one for Seniors.
  The aim of the conferences is to help students:
    o Improve their thinking skills
    o Begin to be able to identify what is fundamental from what is trivial
    o Become intellectually creative
    o Identify assumptions and distinguish between good and poor arguments
    o Think systematically and rigorously about relevant modern-day issues

Contact and Further Information

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Please note, information is based on projects undertaken in 2019 and may vary in subsequent years

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Oratory Program @Scotch

Years 7 - 12

Meetings and coaching sessions are held throughout the year in line with competition dates.

Program Aims

- To inspire students to develop their oratory skills and build their confidence in public speaking.
- To enable students to form connections, influence decisions, and promote positive change through the power of the spoken word.
- To develop students' abilities to research, synthesise information and write compelling and persuasive arguments.

Philosophy:

The Oratory Programme is designed to provide students with opportunities to develop their oratory skills across a range of competitive events. As students prepare for competitions, they have a strong sense of purpose and focus. At the heart of all preparation is a highly personalised approach, ensuring the development and improvement of the individual, building on their previous personal performances.

Key Competitions and Projects:

- **Debating (Terms 2 & 3)** – Scotch participates in the South Australian Debating Association (SADA) competition wherein students compete in five rounds of debates prior to progression to the finals stages. Debating engages students and helps improve their analytical skills and ability to develop persuasive arguments, extending their knowledge of a range of social, political, scientific and moral issues. It instils an appreciation of different perspectives and new ideas whilst fostering teamwork, research skills and discipline.

- **Mock Trial Competition (Terms 1, 2 & 3)** – The Law Society of South Australia Mock Trial Competition comprises a series of simulated court cases contested by students from Years 10, 11 or 12. It is designed to bring young South Australians closer to the workings of our State's legal system while teaching them to present a persuasive argument. The Law Society appoints a lawyer to coach students, Lawyers are also appointed to judge each "trial".

- **Bond Mooting (Term 2)** – The Faculty of Law at Bond University has been running its National High School Mooting Competition for more than 20 years. The Competition is designed to share Bond Law's expertise in advocacy with high school students who have an interest in a career in law. Teams of students from participating high schools compete in the preparation and delivery of arguments in support of their fictitious clients and present their arguments before judges including Bond Law professors, practising barristers, and experienced members of the judiciary.

  High school students who participate in the competition are provided with the opportunity to significantly improve their competencies in research, writing, oral communication, critical thinking, problem solving and the development, articulation and defence of arguments. Participation also provides students with an opportunity to "experience" our legal system in operation and assists with their deliberations about their university studies and career choices.

- **Public Speaking**
  - **Plain English Speaking Association (Term 2)**
    The Plain English Speaking Award (PESA) is a National Competition conducted through Australian Secondary Schools and Colleges. It aims to contribute to the personal development of 15-17 year old students through the enhancement of their oral communication skills and the best use of clear and effective spoken English.
    Each competitor must present a prepared 8 minute speech on a topic of their choosing and an impromptu speech (3 minutes, with 4 minutes preparation time on a set topic).

  - **Rostrum Voice of Youth (Term 2)**
    Rostrum Voice of Youth is a public speaking competition for school students in Years 7 -12. It offers students an opportunity to hone their public speaking skills in a high-quality competitive environment. The competition is divided into Junior and Senior Divisions. Seniors speak for eight minutes and Juniors for six minutes. Participants prepare and present a speech on one of the set topics.

  - **UN Youth Voice (Term 4)**
    Voice is a public speaking competition for students between Years 7 and 10. Voice asks contestants to construct realistic and creative solutions to issues that affect their community, nation and planet. Whether it be climate change or global poverty, Voice provides a platform for school students to construct, propose and defend their big ideas to the world's most pressing issues. In addition to building a broader understanding of important world issues and developing critical thinking and research skills, Voice allows students to mingle and network with like-minded peers from across the state, promoting the sharing of ideas and the creation of friendships.

  - **UN Youth Evatt (Term 3)**
    Evatt places young Australians in the shoes of UN Security Council representatives, Evatt provides students with a deeper understanding of worldwide issues and the skills they need for global citizenship. Taking on the role of international diplomats, students jump straight into the hard-and-fast world of global diplomacy as they battle to form complex solutions to international security conflicts, from the Syrian crisis to the use of torture by governments worldwide. But things aren't as they seem – all the while, they'll be secretly pursuing the hidden agenda of your chosen country. It's fast and furious, delegates quickly develop their leadership, negotiation, public-speaking and critical thinking skills, and gain a practical understanding of international politics.

  - **You Should Hear This (Term 1, 2, 3 & 4)**
    This forum is based directly within the Scotch community at lunchtimes. Students prepare a speech based on a topical event or issue that is important to them. The speeches are delivered in an open community space, to capture passing audiences. After the speech, questions and comments are taken from the audience to encourage as many people as possible to engage with the topic being discussed.

Contact and Further Information

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STEM Enrichment @Scotch

Years 7 - 10

Workshops run Wednesdays after school from 3:45pm-5:00 pm in Terms 2, 3 and 4.
In addition to these workshops, trial days, excursions to business and university sites, and competition days are also coordinated.

Program Aims
- To engage students with Science, Technology, Engineering and Mathematics (STEM) projects.
- To ignite an interest in STEM subjects and provide a platform to extend and enrich student learning and skills.
- To enable students to explore STEM subjects in innovative and inventive ways outside the curriculum.

Philosophy:
The STEM enrichment program is student led and driven, with mentoring and partnerships from industry professionals such as community groups, businesses and universities.
Student teams are involved in the design, problem solving, construction, engineering and reporting of various projects. Projects are designed and constructed from basic materials which students engineer from concept to creation.

Key Competitions and Projects:
- **Junior vehicle challenge** – Year 7 and 8 students design and assemble a Scalextric car. The design and finish of the car is a key assessment area, with a team theme across all Scotch team vehicles. A competition is held in Term 4 against other schools wherein Scotch team member assembles their body to their chassis, completes 10 laps, and disassembles the car.
- **Wetland Environmental Management challenge** – Year 9 and 10 students design, build and test a water-based craft to collect 500ml water samples from suburban wetlands. Students use CAD/CAM to design components & 3D printer to produce them. A challenge day is held against other schools where students have 15 minutes to collect and test as many samples as possible. Samples are tested for pH, temperature, and salinity with bonus points awarded for direct transmission of the data to Control Station.
- **Drone flying challenge** – Year 9 and 10 students learn to fly nominated drone & use drone to identify faulty insulators in over-head powerlines. Student use CAD/CAM to design components & 3D printer to produce them, then select & install a camera and GPS unit on the drone. A challenge day is held against other schools where students have 15 minutes to identify and record as many damaged insulators as possible. Bonus points are awarded for direct transmission of recorded data to control station.
- **Zero-robotics** - Year 9 and 10 students learn to program robots (SPHERES - Synchronized Position Hold Engage and Reorient Experimental Satellites) inside the International Space Station (ISS). Student teams program the SPHERES to solve an annual challenge in an online competition against other schools. After several phases of virtual competition in a simulation environment that mimics the real SPHERES, finalists are selected to compete in a live championship aboard the ISS where an astronaut will conduct the championship competition in microgravity with a live broadcast.

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