

2017 EDITION



APPLECROSS

SENIOR HIGH SCHOOL
INDEPENDENT PUBLIC SCHOOL

Academic Extension Program

YEARS | 7 - 10

Achieve

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Note:

The Academic Extension Program offered by Applecross Senior High School is NOT a GATE (Department of Education Gifted and Talented Program), therefore any 'out of area' academic extension applications received will be processed for testing, however results of testing **WILL NOT** result in an application acceptance to Applecross Senior High School.

Students will be required to gain access to Applecross Senior High School via the **usual enrolment application process**. Out of Area applications are based on distance from the school to the student's residential address. The school will decide if any 'out of area' applications will be accepted towards the end of Term 3 of the preceding year of entry

AIMS OF THE PROGRAM

This document outlines the structure of the Academic Extension Program at Applecross SHS. Our mission is to deliver one of the best Academic Extension programs in the State. Drawing on the experience of our highly dedicated staff, we aim to offer:

- acceleration of the standard Australian Curriculum
- differentiation
- an In Depth focus on developing Creativity, Problem Solving
- introduction of high level Science, Technology and Engineering concepts

CHARACTERISTICS OF THE GIFTED AND TALENTED LEARNER

A Gifted and Talented student may exhibit some or all of the following to varying degrees:

- learns rapidly and quickly grasps new concepts
- has an excellent memory
- is creative or imaginative, e.g. produces many ideas or is highly original
- is independent - may prefer to work alone
- may have a keen sense of humour
- may be highly motivated, particularly in self-selected tasks
- has unusual or advanced interests
- demonstrates exceptional critical thinking skills or problem-solving ability
- may have superior leadership and interpersonal skills
- frequently asks in-depth, probing questions
- may demonstrate a high degree of social responsibility or moral reasoning
- possesses a large, advanced vocabulary
- has superior insight and the ability to draw inferences or is intuitive
- is an advanced reader either in English or in the home language
- engages in academic debates in class

SELECTION OF STUDENTS

Parents who would like to have their child considered for the Academic Extension program need to provide the following information:

- Completed Application Form
- Most recent school report
- Year 5 NAPLAN Results
- Other
 - Primary Teacher/Principal Recommendation
 - PEAC Reports, other academic extension program reports

Based on the information provided, students may gain pre approval to enter the Academic Extension program. If pre approval is not granted, students will be required to sit an ACER Academic and Talented Program test. The tests will be sat at Applecross SHS on a date to be advised in the preceding year of entry.

The school's decision on suitable candidates will be final.

Any 'out of area' academic extension applications received will be processed for testing, however results of testing **WILL NOT** result in an application acceptance to Applecross Senior High School. Students will be required to gain access to Applecross Senior High School via the **usual enrolment application process**. Out of Area applications are based on distance from the school to the student's residential address. The school will decide if any 'out of area' applications will be accepted towards the end of Term 3 of the preceding year of entry.

EVALUATION

Maintaining a place in the Applecross Academic Extension program is based on the ongoing assessment conducted throughout the course. Student performance is reviewed at the end of each semester. Each candidate is then informed of their suitability for continuation in the program.

STRUCTURE OF THE PROGRAM

Students can be enrolled in one or both of the following course choices:

- AE Mathematics/Science
- AE HASS/English

Students are enrolled in the program from Years 7 to 10 with enrolments constantly reviewed during this time based on student performance.

Students may be withdrawn from normal classes 4 times per term for a double period.

Students enrolling throughout the year are able to apply for a placement in the Academic Extension Program.

The mainstream program in each learning area is accelerated and differentiated to challenge all students in each of the four MESH areas.

The program adopts a themed project based model in each learning area.

MATHEMATICS

Year 7

Problem solving strategies will be introduced and explained in class by the teacher. The strategies will be developed conceptually throughout Year 7 to 10. All AE Mathematics students should be prepared to participate in competitions. Sometimes preparation is done out of classroom time and the competitions can occur outside of school hours. The activities include:

- Creative problem solving
- Fun spots, Investigations and challenges based on coursework (CSI 2nd Edition)
- Australian Mathematics Competitions
- Mathematics Talent Quest
- Have Sum Fun Online
- Have Sum Fun Competition for Yr 7 & 8

Year 8

- Art of problem solving Strategies are formalised.
- Australian Mathematics Competitions
- Mathematics Talent Quest
- Australasian Problem Solving Mathematical Olympiads
- WA Junior Mathematics Olympiads
- Have Sum Fun Online
- Have Sum Fun Competition for Yr 7 & 8

Year 9

- Additional problem solving strategies
- Australian Mathematics Competitions
- Mathematics Talent Quest
- Australasian Problem Solving Mathematical Olympiads
- WA Junior Mathematics Olympiads
- Have Sum Fun Online
- Have Sum Fun Competition for Yr 9 & 10

Year 10

- Advanced problem solving strategies
- Australian Mathematics Competitions
- Mathematics Talent Quest
- Have Sum Fun Online
- Have Sum Fun Competition for Yr 9 & 10
- Preparatory topics for Year 11
- Australian Maritime College Talks

SCIENCE

Year 7

Humans as Organisms - In this unit the students will study aspects of the human body, taking measurements and making observations of various aspects of the human structure. They will make use of this information to classify modern humans using a classification key. This will then be extended to look at features of ancient human skeletons and how they have evolved over time.

Prosthetic Limb Technology - In this extension unit students study the technology behind the advanced development of Prosthetic limbs. Students study the materials the concepts of manual and automated control mechanisms and the role of ICT. Students will travel to the Murdoch University. Students will present their prototype of a prosthetic limb.

Year 8

Cells, tissues and organs - In this unit the students will have an opportunity to study cell structure and function in detail by observing pre prepared slides as well as mounting and staining their own slides. They will study the history and development of the microscope with a field trip to look at the most modern microscopes in action. They will also have the opportunity to complete dissections of some organs.

Year 9

Body Systems - In this unit the students will study how organs and tissues are integrated into organ systems. They will study feedback mechanisms and complete experiments to observe the effects. They will research the modern understanding body systems in regard to their structure and function has developed since the time of Galen.

Year 10

Genetics and Inheritance - In this unit the students will study the history of the study genetics from Mendel and his punnet squares to the current day an epigenetics. The ethics of genetics research methods and copywriting of genetically modified organisms will be discussed as well as the impact of genetic modification on modern farming practices. Inheritable characteristics will be explored in terms of dominant and recessive genes and that will lead to an exploration of genetic disorders and their characteristics.

ENGLISH

The Academic Extension Program for English focuses on engaging, challenging and inspiring students who display both talent and passion for the subject.

In order to achieve this, the course provides students with challenging texts and enriched assessment tasks in order to promote higher-order thinking. Students are encouraged to look for nuanced meanings in texts, drawing on an emerging understanding of literary theory to form more sophisticated conclusions. The program also fosters a holistic approach to learning, integrating concepts and skills from other subjects to promote 'bigger picture' thinking.

While classes are highly competitive, students are required to work collaboratively to consider new perspectives and develop their interpersonal skills. There is a strong culture of verbal communication, cultivated by rigorous class discussion and debate.

Although the course focuses on analytical work, there are ample opportunities for students to develop their creative writing skills across a range of forms, including poetry, prose and drama. For example, this year, students will be participating in an inaugural series of workshops facilitated by a local spoken word poetry group. Moreover, students are urged to showcase their work in writing competitions and seek feedback to develop their craft.

Through these unique learning opportunities, the course aims to give students a more empowered role in their own education. By recognising individual talents and allowing for greater independence in the learning process, students are inspired to extend their skills and cultivate a genuine passion for English.

Year 7

Academic extension students will explore more complex concepts of narrative style such as foreshadowing and conflict types. They will also investigate different text choice and developing paragraphing techniques by melding various techniques. They will be encouraged to participate in debating and writing competitions. In Semester One, they will produce an anthology of creative classwork to present at a reading event.

In Semester Two their focus will be contextual information and how it impacts of reading a text. These topics include: Slavery, Segregation in America and World War II in the Pacific. They will also investigate multimodal methods of presentation and understanding the techniques of visual texts.

Year 8

Academic extension students will use their journals to engage with a wide range of short stories exploring figurative language. They will apply this to creating poetry and short stories using a number of techniques including flashbacks, denouements, symbolism and point of view. They will begin learning skills to analyse film and employ multi-modal skills to present themes and create their own multi-modal texts.

In Semester Two they will focus on contextual concepts and work with Bloom's Taxonomy and how to embed evidence in written response to a number of text types. They will develop the skills required for constructing persuasive essays. The text types studied will include detailed study of a Shakespearian play focusing on voice, set design, costume, lighting and symbolic interpretation. These students will be encouraged to participate in debating and writing competitions.

Year 9

Academic extension students study written texts focusing on symbolism in written texts and the importance of context in contributing to understanding. Students will extend their knowledge of persuasive writing through the reading, writing and presentation of a speech. They will also work with IT programmes to construct and present a non-print advertisement.

In Semester Two they will create and maintain an Autobiographical Blog creating anecdotal life stories. They will explore the use of Parody by reading and creating examples. Students will explore the importance of symbolism through film and drama texts and practise developing extended essay responses to that concept. These students will be encouraged to participate in debating and writing competitions.

Year 10

Students will engage in the study of the Literary Canon. They will read classic novels and make an in depth study of at least one Shakespearian play.

Their research will include the literary notion of “readings” and how to apply this to their texts. In Semester One they will create Picture Books and liaise with local primary schools. Students will be given the opportunity and encouraged to submit creative writing to available competitions

HUMANITIES AND SOCIAL SCIENCES

Year 7

Students will study Anthropology and Archaeology in Year 7 History. This will culminate their learned knowledge with a museum visit. Students will be encouraged to critique the exhibits they saw at the museum. They will then use this to design their own museum exhibit, with the potential for these exhibits to be submitted into the National History Challenge. Challenging activities are also undertaken in Civics and Citizenship, Economics and Geography. For example, students will also work on guided independent research on Australia's Federal system, the earth's water systems and the interaction between various components of the economy.

Year 8

Students are presented with a range of challenging activities in History, Geography, Civics and Citizenship and Geography. They are challenged to become critical and engaged thinkers. In Semester One they will participate in a Historical Inquiry process, in relation to Medieval Europe. This will prepare them for a study of the Renaissance in Second Semester looking at how individuals have the potential to change societies. In particular there will be a focus on Leonardo da Vinci. Why is he considered a 'Renaissance Man' and how can people today (including the students) embody the ideals of a 'Renaissance Man?' In Geography there is the opportunity to compete in the National Geography Competition as well as opportunities to apply theoretical skills in field trips such as the one undertaken to Scarborough Beach in 2016 and to hypothesize about the issues facing megacities. In Civics and Citizenship and Economics students research a current consumer issue and develop a proactive plan to address the issue.

Year 9

Students use the content of 'Biomes' to learn how to utilise and create infographics. Using ICT and a variety of tools they both cover the course content and learn the value of visual representations of information. There is also a camp to Dryandra Woodland in conjunction with the Academic Extension program in Science.

There will be an opportunity for a collaborative assessment with English looking at values and ethics. This will have a particular focus on Australia, and the democratic process in the Civics and Citizenship section of the course.

Students in Academic Extension participate in the National History Challenge requires students to undertake a historical inquiry and create a project on a topic of their choice. Students will be led through the process of a historical inquiry, where possible, interacting with primary sources related to their chosen topic. Finally they will create their entry, which could range from an essay to an art-piece or an audio-visual presentation. A presentation night will be held at the school and a judging panel will select the top 6 entries.

Year 10

In Term One students will organise and conduct the school's ANZAC Day Service. For the first time in 2017, Year 10 Academic Extension students will have the opportunity to visit Canberra as part of an organized tour. There will also be opportunities here for students to also prepare an entry into the Premier's ANZAC tour. In Geography, students will produce an environmental management project in conjunction with visits to the Swan River Trust and review and monitoring of the Murdoch-Quenda wetland. Students will also review how the environment links with economics. In second semester, students will also visit the Francis Burt Law Centre and review the core system. In relation to studies of Civics and Citizenship there will be opportunities to participate in the Western Australian Mock Trials competition. As part of the Mock Trial program, students will work with Murdoch University in preparing their cases and will then travel to the Western Australian Supreme Court to compete against other schools. In 2016 Applecross Senior High School had the second highest number of Mock Trial teams of all government schools.

OPPORTUNITIES BEYOND THE CLASSROOM

Many extension challenges are provided beyond the classroom. Opportunities provided to students

- Have Sum Fun Mathematics Competition
- Brain B Challenge
- Excursion to Murdoch University Biomedical Facility (All Years)
- National History Challenge
- Simpson Prize
- Premier's ANZAC Tour Competition
- POSSIBLE: Da Vinci Decathlon – 10 events in art, poetry, English, engineering, maths, science, philosophy, code breaking, cartography and general knowledge.

CONTACT

- Showcase engineering days (UWA and Curtin Universities)
- Showcase of modern mathematics for Year 9 and 10
- Australian Maritime college talks
- Have Sum Fun Mathematics Competition
- Mathematical Olympiads
- Australian Mathematics Competition