



KINROSS WOLAROI  
— SCHOOL —

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# Curriculum Handbook

## Stage 6

**For Students Entering Year 11**  
**Year 11 - 2018**  
**Year 12 - 2019**

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## INTRODUCTION

This Curriculum Handbook is designed to assist parents and students to better understand the nature of the subjects and courses available to students entering Stage 6 (Years 11 and 12) at Kinross Wolaroi School. It will assist students in making subject choices which will best equip them for the Higher School Certificate Examination and subsequent years.

## NSW EDUCATION STANDARDS AUTHORITY (NESA) REQUIREMENTS

To be eligible for the award of the Higher School Certificate students must have satisfactorily completed a Preliminary pattern of study in Year 11 that comprises at least 12 units and, into Year 12, an HSC pattern of study comprising at least 10 units.

Both patterns must include:

- at least six units from Board Developed courses,
- at least two units of a Board Developed course in English,
- at least three courses of two unit value or greater,
- at least four subjects, and
- no more than six units of Science courses.

In addition, the Board provides us with Course Completion Criteria for Preliminary and HSC students:

“A student will be considered to have satisfactorily completed a course if there is sufficient evidence that the student has:

- (a) followed the course developed or endorsed by the Board; and
- (b) applied themselves with diligence and sustained effort to the set tasks and experiences provided in the course by the school, and
- (c) achieved some or all of the outcomes.”

Students wanting to change courses at a late stage (or are a late enrolment) must also complete the Course Completion Criteria. This is at the discretion of the Principal. As a guide, it will be too late to change a course after one third of a Preliminary course has been delivered (but no student may change a course after 30 June in accordance with section 8067 of the ACE manual).

## UNIT SELECTION FOR STAGE 6

In Year 11, students are enrolled in 12 units (some students may apply to do an additional unit, such as the Philosophy 1 unit Course through Macquarie University). Most subjects are valued at 2 units and so a common pathway to complete Year 11 is for students to study six 2-unit courses. There are, however, a small number of 1-unit courses on offer: students who are good at English and/or Mathematics are able to study an additional Extension unit in these subjects, and one unit courses in Philosophy, Studies of Religion (SOR1), and Sport, Lifestyle and Recreation (SLR) are available for students to complement their selection to total 12 units.

In Year 12 a student is able to reduce to 11 or 10 units if they wish. If you decide to do this it is strongly advised that you make an appointment with the Careers Advisor/Year 12 Coordinator and/or the Director of Studies to discuss your intentions.

Additionally, a student may pick up extra Extension units in Year 12. These courses are not ‘more of the same’; they have philosophic underpinnings and require conceptual, higher-order thinking.

At KWS the following Extension courses are offered:

- English Extension 1
- English Extension 2 (in Year 12 only with English Extension 1 as a co-requisite)
- Mathematics Extension 1
- Mathematics Extension 2 (in Year 12 only with Mathematics Extension 1 as a co-requisite)
- History Extension (in Year 12 only with Ancient or Modern History as a co-requisite)
- French Extension (in Year 12 only with French Continuers as a co-requisite)
- Latin Extension (in Year 12 only with Latin Continuers as a co-requisite)
- Music Extension (in Year 12 only with Music 2 as a co-requisite)
- Science Extension (in Year 12 only)

## Notes:

1. English is compulsory for the HSC and also must count for 2 units in the calculation of the ATAR.
2. In addition to the subjects offered at the school, Kinross Wolaroi uses external agencies to provide some courses of study for the Higher School Certificate, such as TAFE and Distance Education. These courses comprise a minority of any given student's pattern of study. A minority is defined as no more than four units for the Higher School Certificate.

Kinross Wolaroi School can only have a total of 6 students completing a Distance Education course (excludes Languages). Students interested in studying a course by distance education must apply in writing to the DOS. Preference will be given to students who miss out on their original subject selection due to a line clash (provided they are suitable candidates for distance education).

TAFE course applications are due in by the end of October. These courses cost between \$2000 and \$5500 per year.

3. Each 2 unit Preliminary and HSC subject involves 120 indicative hours of course time.

## THE HIGHER SCHOOL CERTIFICATE

For the HSC, a student does not receive a simple 'pass' or 'fail', nor do they get a single rank or mark for all courses. The HSC results are a detailed package showing the level of knowledge and skills that each student has achieved in each course.

The NESA reports students' performance by standards referencing. This means that standards are pre-set for each subject in bands (1- 6), or levels of achievement. This level of achievement will be reported on the Higher School Certificate Record of Achievement, which students receive in late December. Also on this Record of Achievement will be a student's (moderated) Assessment mark, the Examination mark achieved in the external HSC exam and an HSC mark – the average of the Assessment mark and the Examination mark.

For further information relating to the HSC and how it works, visit the NESA website, where there is a good summary at [www.boardofstudies.nsw.edu.au/hsc-results/understanding.html](http://www.boardofstudies.nsw.edu.au/hsc-results/understanding.html). The HSC results information flyer at the same address provides an overview of the 'Understanding HSC Results' section, and includes a summary of HSC and other services available for students.

## THE AUSTRALIAN TERTIARY ADMISSIONS RANK (ATAR)

The Australian Tertiary Admissions Rank (ATAR) is a separate measure from the HSC. The Universities Admissions Centre (UAC) calculates the ATAR for the Universities, and it is additional to the HSC Record of Achievement provided by the Board of Studies.

Entry from Year 12 into university courses in NSW and the ACT generally depends upon the ATAR achieved at the completion of the Higher School Certificate. The ATAR is a ranking, which compares students' performances across the state. To qualify for an ATAR, students need to have completed 10 units of study with no more than 2 of those units coming from a TAFE or Category B course (at Kinross Wolaroi we offer one Category B course – Hospitality). Should students wish to take a TAFE course and a Category B course and still qualify for an ATAR, their unit selection must equal 12 units. With the exception of Hospitality, all HSC courses offered at Kinross Wolaroi School are Category A courses.

Further detail about ATAR requirements can be found in the Universities Admissions Centre (UAC) Handbook or on the UAC website [www.uac.edu.au](http://www.uac.edu.au). A full list of Category A and B courses can be found at [www.uac.edu.au/documents/undergraduate/HSCcourses.pdf](http://www.uac.edu.au/documents/undergraduate/HSCcourses.pdf).

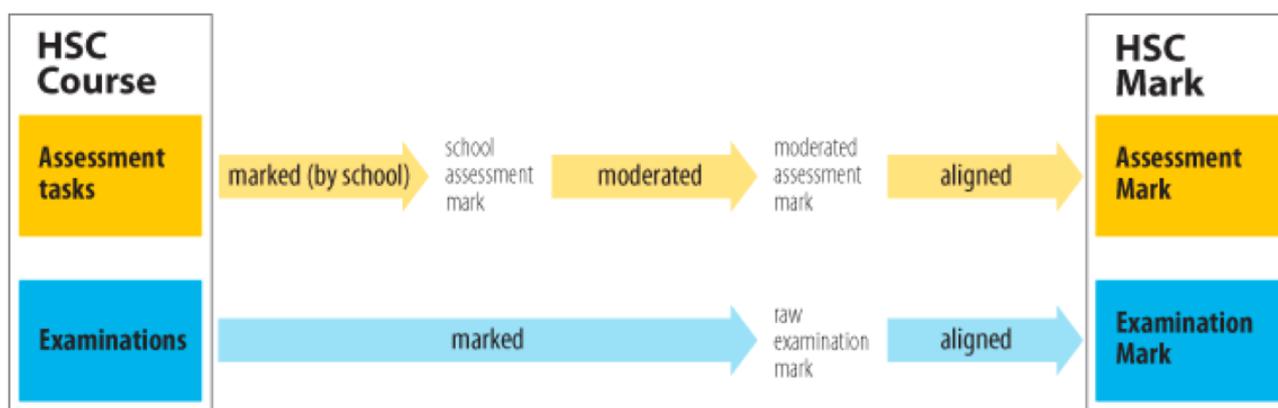
## ASSESSMENT

Assessment Information, Policies and Procedures are published at the beginning of each School Year, along with an Assessment Timetable, an Assessment Planner and a detailed Assessment Grid for each subject that outlines the dates, weighting and outcomes to be assessed. These are available on the school website at: Family and Friends → Forms Policies and Procedures → Academic.

In Year 11 these Assessment tasks are monitored, recorded and reported internally. They are also used (in line with our RoSA Grades Policy) to assign a grade for each student in each course for their Record of School Achievement (RoSA). These grades are submitted to NESA in October. The Common Grade Scale below is used to report student achievement in the Preliminary Stage 6 year in all NSW schools. It describes performance at each of five grade levels.

- A. The student demonstrates extensive knowledge of content and understanding of course concepts, and applies highly developed skills and processes in a wide variety of contexts. In addition the student demonstrates creative and critical thinking skills using perceptive analysis and evaluation. The student effectively communicates complex ideas and information.
- B. The student demonstrates thorough knowledge of content and understanding of course concepts, and applies well-developed skills and processes in a variety of contexts. In addition the student demonstrates creative and critical thinking skills using analysis and evaluation. The student clearly communicates complex ideas and information.
- C. The student demonstrates sound knowledge of content and understanding of course concepts, and applies skills and processes in a range of familiar contexts. In addition the student demonstrates skills in selecting and integrating information and communicates relevant ideas in an appropriate manner.
- D. The student demonstrates a basic knowledge of content and understanding of course concepts, and applies skills and processes in some familiar contexts. In addition the student demonstrates skills in selecting and using information and communicates ideas in a descriptive manner.
- E. The student demonstrates an elementary knowledge of content and understanding of course concepts, and applies some skills and processes with guidance. In addition the student demonstrates elementary skills in recounting information and communicating ideas.

In Year 12 the final accumulation of internal Assessment marks for HSC subjects is sent to NESA where they are moderated against student performance in the external HSC examinations. This moderated assessment accounts for 50% of the overall mark awarded in each course, and is reported on the Higher School Certificate Record of Achievement. School-based Assessment tasks are designed to measure performance in a wider range of outcomes than may be tested in an examination. The weightings for Assessment tasks are mandated in Year 12 by NESA, as are the nature of the Assessment tasks, which could include tests, written or oral assignments, practical activities, fieldwork and projects. The Assessment requirements for each course are set out in each syllabus and may be accessed from NESA website [www.boardofstudies.nsw.edu.au/syllabus\\_hsc/](http://www.boardofstudies.nsw.edu.au/syllabus_hsc/).



## THE SUBJECT SELECTION PROCESS

The initial subject selection form requires students in Year 10 to choose elective subjects in order of preference. These choices are analysed to determine how best to arrange them on 'elective lines' in order to allow as many students as possible to get as many of their first 12 units of choices as possible. If the number of students opting for a subject is very small, the School reserves the right not to offer that subject.

Once these lines are determined (usually around the middle of Term 3), Year 10 students will be given a confirmation sheet which shows their allocated subjects on the elective lines. For Stage 6 in 2018-2019, the electives will be placed on six lines, with Line Six comprising two half-lines to cater for Extension I English and Extension I Mathematics. Each line is timetabled for 10 periods per fortnight. This totals 60 periods of study per fortnight, and fits neatly into our 6 period days.

Students will be given the opportunity to alter their choices on the confirmation sheet. At this stage of process, the subjects selected may be different from your original choices; however, the elective lines are locked in at this point. Furthermore, if a particular subject is full, then preference will be given to those who chose the subject in the initial subject preference form.

Students must choose their subjects carefully, in consultation with their parents, as changes to subjects will be considered only if places are available in the required subject, and only in line with the following guidelines:

- Elective subjects are two-year courses. The Preliminary course in Year 11 must be completed satisfactorily before the HSC course is started in Term 4 of Year 11.
- Students may continue to negotiate their elective choices early in Term 1 of Year 11. This should be done through the Director of Studies. Parent approval will also be required. These changes are dependent on satisfying class size guidelines.
- After the first few weeks of Term 1 in Year 11, any changes to courses must be applied for more formally, using a 'Change of Subject' application form, available from the Director of Studies.
- It is inadvisable to change a Preliminary course after one third of the course has been delivered.

## ADVICE ON SUBJECT SELECTION

Students and parents often ask for advice about which subjects to take in Years 11 and 12 for the Higher School Certificate. The best advice that can be given is for students to take the subjects that they are most interested in. It follows that if a student enjoys a subject then they will be more prepared to work in that subject and spend time reading and doing homework and assignments in that subject. The school will provide advice on career requirements to students, primarily through the Allwell Aptitude and Career Testing program in mid Term 2 of Year 10 and the follow-up Career Exploration Program that occurs later in Term 2. There is also a P&F Careers Forum held on the evening of Thursday 22nd June. For further information on these events, contact the Careers Advisor.

Further information can also be obtained through our local NSW Education Standards Authority (NESA) Liaison Officer Julie Pyne, on 02 6334 8048.

For any courses of possible interest, please read the relevant curriculum pages in this handbook. Please contact the Heads of Department and/or the Careers Advisor for further information or clarification regarding possible elective choices. For general queries about the curriculum offered at Kinross Wolaroi School, or the process of subject selection, please contact me on 6392 0306.

Emma Bylsma  
Acting Director of Studies  
Terms 2 and 3 2017

Paul Mirrington  
Director of Studies

## HEADS OF DEPARTMENT

Below is a list of subjects offered for study in Years 11 (2018) and 12 (2019) at Kinross Wolaroi School. Please contact the relevant Heads of Department and/or the Careers Advisor for further information or clarification regarding possible elective choices.

Department	Stage 6 Subjects	Head of Department	Contact #		
English	<ul style="list-style-type: none"> <li>Advanced English</li> <li>Standard English</li> <li>English as a Second Language (ESL)</li> <li>English Extension 1</li> <li>English Extension 2*</li> </ul>	Acting Head of English Mrs Lynne Fleming  (Miss Amanda Sheahan)	6392 0350  (6392 0388)		
Mathematics	<ul style="list-style-type: none"> <li>Mathematics</li> <li>General Mathematics</li> <li>Mathematics Extension 1</li> <li>Mathematics Extension 2*</li> </ul>	Mrs Michelle Hill	6392 0331		
Science	<table border="0"> <tr> <td> <ul style="list-style-type: none"> <li>Biology</li> <li>Chemistry</li> <li>Physics</li> </ul> </td> <td> <ul style="list-style-type: none"> <li>Senior Science</li> <li>Science Extension*</li> </ul> </td> </tr> </table>	<ul style="list-style-type: none"> <li>Biology</li> <li>Chemistry</li> <li>Physics</li> </ul>	<ul style="list-style-type: none"> <li>Senior Science</li> <li>Science Extension*</li> </ul>	Mr Matthew Healey	6392 0368
<ul style="list-style-type: none"> <li>Biology</li> <li>Chemistry</li> <li>Physics</li> </ul>	<ul style="list-style-type: none"> <li>Senior Science</li> <li>Science Extension*</li> </ul>				
Social Sciences	<ul style="list-style-type: none"> <li>Business Studies</li> <li>Economics</li> <li>Geography</li> </ul>	Mrs Sue-Ann Gavin	6392 0333		
History and Religious Education	<ul style="list-style-type: none"> <li>Ancient History</li> <li>Modern History</li> <li>History Extension*</li> <li>Studies of Religion 1</li> <li>Studies of Religion 2</li> </ul>	Ms Dianne Chappel	6392 0418		
Technical and Applied Science (TAS)	<ul style="list-style-type: none"> <li>Agriculture</li> <li>Industrial Technology</li> <li>Software Design and Development</li> </ul>	Mr Simon Lun	6392 0448		
Creative Arts	<ul style="list-style-type: none"> <li>Hospitality</li> <li>Textiles and Design</li> <li>Visual Arts</li> </ul>	Mrs Toni Bilton	6392 0409		
Languages	<ul style="list-style-type: none"> <li>French Continuers</li> <li>German Beginners</li> <li>Latin</li> <li>French Extension*</li> <li>Latin Extension*</li> </ul>	Mr Chris Oldham	6392 0345		
Personal Development, Health & Physical Education	<ul style="list-style-type: none"> <li>PDHPE</li> <li>Community and Family Studies</li> <li>Sport, Lifestyle &amp; Recreation**</li> </ul>	Mr Huon Barrett	6392 0344		
Performing Arts	<ul style="list-style-type: none"> <li>Music 1 and Music 2</li> <li>Music Extension*</li> <li>Drama</li> </ul>	Ms Heidi Anthony	6392 0341		
External Providers	<ul style="list-style-type: none"> <li>TAFE and Distance Education</li> <li>Philosophy: Macquarie University**</li> </ul>	T2 & 3 Mrs Emma Bylsma (Mr Paul Mirrington) Mr Yooie Choi	6392 0306  6392 0436		

\* Subjects which are only available in Year 12

\*\*These courses terminate at the end of Year 11

## OTHER CONTACTS

<b>Position</b>	<b>Name</b>	<b>Contact #</b>
Careers Advisor / Year 12 Coordinator	T2 & 3 Mrs Kimberley Jones (Mrs Emma Bylsma)	6392 0346
Director of Studies	T2 & 3 Mrs Emma Bylsma (Mr Paul Mirrington)	6392 0306
Head of Student Academic Services	Mr Yooie Choi	6392 0436
Head of Senior School	Mrs Bev West	6392 0302

# AGRICULTURE

## AIMS

Agriculture Stage 6 is designed to develop students' knowledge and understanding about the production and marketing of both animal and plant products. Students should also develop the associated skills and responsible attitudes that are necessary to manage and market these products in a productive and sustainable manner.

## OBJECTIVES

Students will develop:

- Knowledge and understanding of the physical, chemical, biological, social, historical and economic factors that interact in agricultural production systems
- Knowledge, understanding and skills required to manage agricultural production systems in a socially and environmentally responsible manner
- Knowledge of, and skills in, decision-making and evaluation of technology and management techniques used in sustainable agricultural production & marketing
- Skills in effective research, experimentation and communication
- Knowledge and understanding of the impact of innovation, ethics and current issues on Australian agricultural systems.

## PRELIMINARY COURSE CONTENT

### OVERVIEW (15%)

- Agricultural Systems
- Agricultural History
- Social aspects surrounding Agriculture

### THE FARM CASE STUDY (25%)

- The farm as a unit of production
- Farm management
- Marketing
- Farm technology
- The agricultural workplace

### PLANT PRODUCTION (30%)

- Plants and their commercial production
- Animals, climate & resource interactions
- Microbes, invertebrates and pests
- Technology
- Experimental design and research

### ANIMAL PRODUCTION (30%)

- Animals and their commercial production
- Plants, climate and resource interaction
- Microbes, invertebrates and pests
- Technology
- Experimental design and research

## **HSC COURSE CONTENT**

The Higher School Certificate course builds upon the Preliminary course. It examines the complexity and scientific principles of the components of agricultural production and places a greater emphasis on farm management to maximize productivity and environmental sustainability. The farm, as a fundamental production unit provides a basis for analysing and addressing social, environmental and economic issues as they relate to sustainability, from both National and International perspectives. This is achieved through the farm product study. Australian agriculture faces many challenges, significant and continuous change is needed to address these challenges. New computer, satellite, robotic and biological technologies are being integrated into management systems. As farmers need to respond to changing economic, social and climatic conditions, the electives focus on innovations, issues and challenges facing Australian agriculture.

### **CORE (80%)**

#### **PLANT/ANIMAL PRODUCTION (50%)**

- Soil, nutrients and water
- Factors contributing to the degradation of soil and water
- Sustainable resource management
- Plant production systems
- Constraints on plant production
- Managing plant production
- Animal nutrition
- Animal growth and development
- Animal reproduction and genetics
- Animal pests and diseases
- Animal ethics and welfare
- Experimental analysis and research in plant/animal systems

#### **FARM PRODUCT STUDY (30%)**

- The farm as a business
- Decision-making processes and management strategies
- Agricultural technology
- Marketing of a specific farm product

#### **ELECTIVE (20%)**

Choose ONE of the following electives to study.

- Agri-food, Fibre and Fuel Technologies
- Climate Challenge
- Farming for the 21st Century

# ANCIENT HISTORY

## AIM

Ancient History stimulates students' curiosity and imagination and enriches their imagination of humanity by introducing them to a range of cultures and beliefs. As well as to the origins and influences of ideas, values and behaviours that are still relevant to the modern world.

## OBJECTIVES

Students will develop knowledge and understanding about:

- A range of features, people, places, events and developments of the ancient world in their historical context
- Continuity and change over time

Students will develop skills to:

- Undertake the process of historical inquiry
- Use historical concepts and skills to examine the ancient past
- Communicate an understanding of history, sources and evidence, and historical interpretations.

Students will develop values and attitudes about:

- The influence of the past on the present and the future
- The contribution of the study of Ancient History to lifelong learning, and active and informed citizenship.

## COURSE REQUIREMENTS AND EXPECTATIONS

In order to succeed in this course, students should have:

- Curiosity and imagination
- Desire to enrich their understanding of humanity
- A desire to be a lifelong learner

## COURSE CONTENT

### Year 11 Course

The Year 11 course is structured to provide students with opportunities to develop and apply their understanding of methods and issues involved in the investigation of the ancient past. Through their use of archaeological and written sources, students investigate various aspects of the ancient world, including historical sites, people, societies, events and developments.

The course comprises three sections: Investigating Ancient History (The Nature of Ancient History and Case studies), Features of Ancient Societies and Historical Investigation.

Students undertake at least ONE option from 'The Nature of Ancient History' AND at least TWO case studies.

ONE case study must be from Egypt, Greece, Rome or Celtic Europe and ONE case study must be from the Near East, Asia, the Americas or Australia.

Students study at least TWO ancient societies through an investigation of: a different key feature for each society OR one key feature across the societies selected. These studies provide students with opportunities to develop an understanding of: the social history of a people through an investigation of the remains of their material culture; key developments and forces that may have shaped the selected feature(s) and the nature of the available sources. The historical investigation is designed to provide opportunities for all students to further develop relevant investigative, research and presentation skills that are the core of the historical inquiry process.

## **Assessment requirements for Year 11**

The Year 11 formal school-based assessment program is to reflect the following requirements:

- three assessment tasks
- the minimum weighting for an individual task is 20%
- the maximum weighting for an individual task is 40%
- one task may be a formal written examination
- one task must be an Historical Investigation with a weighting of 20–30%.

## **Year 12 Course**

The Year 12 course is structured to provide students with opportunities to apply their understanding of archaeological and written sources and relevant historiographical issues in the investigation of the ancient past.

The course comprises a study of:

- 1 Core Study: Cities of Vesuvius – Pompeii and Herculaneum
- 2 ONE 'Ancient Societies' topic
- 3 ONE 'Personalities in their Times' topic
- 4 ONE 'Historical Periods' topic

The course requires a study from at least TWO of the following areas:

- Egypt
- Near East
- China
- Greece
- Rome

## **Assessment requirements for Year 12 Ancient History are as follows**

- A maximum of four assessment tasks
- the minimum weighting for an individual task is 10%
- the maximum weighting for an individual task is 40%
- one task may be a formal written examination with a maximum weighting of 30%
- one task must be an Historical Analysis with a weighting of 20–30%.

# BIOLOGY

## AIM

The study of Biology in Stage 6 enables students to develop an appreciation and understanding of biological concepts that are used to explore the diversity of life, from a molecular to a biological systems level, and the interactions between living things and the environments in which they live. Through applying Working Scientifically skills processes and the use of biological technologies, the course aims to examine how biological practices are developed and used.

## OBJECTIVES

### Skills

Students:

- develop skills in applying the processes of Working Scientifically.

### Knowledge and Understanding

**Year 11 students:**

- develop knowledge and understanding of the structure and function of organisms
- develop knowledge and understanding of the Earth's biodiversity and the effect of evolution.

**Year 12 students:**

- develop knowledge and understanding of heredity and genetic technologies
- develop knowledge and understanding of the effects of disease and disorders.

### Values and Attitudes

Students:

- develop positive, informed values and attitudes towards biology
- recognise the importance and relevance of biology in their lives
- recognise the influence of economic, political and societal impacts on the development of scientific knowledge
- develop an appreciation of the influence of imagination and creativity in scientific research

## Course Structure and Requirements

**Year 11**

- 60 hours covering Cells as the Basis of Life and Organisation of Living Things.
- 60 hours covering Biological Diversity and Ecosystem Dynamics.
- 15 hours (within the 120 hours) must be allocated to depth studies.

**Year 12**

- 60 hours covering Heredity and Genetic Change.
- 60 hours covering Infectious Disease and Non-infectious Disease and Disorders.
- 15 hours (within the 120 hours) must be allocated to depth studies.

A depth study is any type of investigation/activity that a student completes individually or collaboratively that allows the further development of one or more concepts found within or inspired by the syllabus. It may be one investigation/activity or a series of investigations/activities.

Scientific investigations include both practical investigations and secondary-sourced investigations. Practical investigations are an essential part of the Year 11 and the Year 12 course and must occupy a minimum of 35 hours of course time, including time allocated to practical investigations in depth studies.

Practical investigations include:

- undertaking laboratory experiments, including the use of appropriate digital technologies
- fieldwork.

Secondary-sourced investigations include:

- locating and accessing a wide range of secondary data and/or information
- using and reorganising secondary data and/or information.

One fieldwork exercise must be included in Year 11.

## **ASSESSMENT**

It is mandatory for 60% of formal school-based assessments to be allocated to skills in working scientifically and 40% to knowledge and understanding of course content.

The Year 11 formal school-based assessment program is to reflect the following requirements:

- three assessment tasks
- the minimum weighting for an individual task is 20%
- the maximum weighting for an individual task is 40%
- one task may be a formal written examination
- one task must focus on a depth study or an aspect of a depth study with a weighting of 20–40%

The Year 12 formal school-based assessment program is to reflect the following requirements:

- a maximum of four assessment tasks
- the minimum weighting for an individual task is 10%
- the maximum weighting for an individual task is 40%
- one task may be a formal written examination with a maximum weighting of 30%
- one task must focus on a depth study or an aspect of a depth study with a weighting of 20–40%

## **STUDENT ATTRIBUTES**

Students who elect to study Biology will need the following attributes:

- a genuine interest in living things, their structure and relationships
- a capacity for clear and concise written expression
- a capacity for active learning and collaboration
- a positive work ethic in order to master terminology, challenging concepts and large amounts of content
- an ability to think deeply and critically about the world around them.

# **BUSINESS STUDIES**

## **AIMS**

Business Studies empowers students to become informed and responsible citizens by developing knowledge, understanding, skills and values relevant to their interactions with business and participation in a dynamic business environment.

## **OBJECTIVES**

Through Business Studies, students will develop knowledge and understanding about:

- The nature, role and structure of business
- The functions, processes and operations of business
- The nature, role, responsibilities and effectiveness of management
- The impact of internal and external factors on business

## **COURSE REQUIREMENTS AND EXPECTATIONS**

In order to succeed in this course students should have:

- An interest in business
- A good ability in written expression
- A sound mathematical background
- The ability to do independent research
- An interest and willingness to learn how to interpret and use financial reports
- The ability to read widely

Students need to be aware that, in the Preliminary Course, a major requirement is the completion of The Business Research Task.

## **COURSE CONTENT**

### **PRELIMINARY COURSE**

#### **TOPIC 1: NATURE OF BUSINESS**

- Role of Business
- Types of Businesses
- Influences in the Business Environment
- Business Growth and Decline

#### **TOPIC 2: BUSINESS MANAGEMENT**

- Nature of Management
- Management Approaches
- Management Process
- Management and Change

#### **TOPIC 3: BUSINESS PLANNING**

- Small to Medium Enterprises
- Influences in establishing a Small Medium Enterprise
- The Business Planning Process
- Critical Issues in Business Success and Failure

## **HSC COURSE**

### **TOPIC 1: OPERATIONS**

- Role of Operations Management
- Influences
- Operations Processes
- Operation Strategies

### **TOPIC 2: MARKETING**

- Role of Marketing
- Influences on Marketing
- Marketing Process
- Marketing Strategies

### **TOPIC 3: FINANCE**

- Role of Financial management
- Influences on Financial management
- Processes of Financial management
- Financial Management Strategies

### **TOPIC 4: HUMAN RESOURCES**

- Role of Human Resource management
- Key Influences
- Processes of Human Resource Management
- Strategies in Human Resource Management
- Effectiveness of Human Resource Management

## **ASSESSMENT**

The major internal assessment task in Year 11 involves students writing their own Business Plan for an imaginary business over the first two terms. Other assessment tasks over the two years include research and analysis of case studies, stimulus-based skills, oral presentations, tests and internal exams. The external HSC Examination will be a three hour written examination including multiple choices, short answer, a business report and an extended response.

# CHEMISTRY

## AIM

The study of Chemistry in Stage 6 enables students to develop an appreciation and understanding of materials and their properties, structures, interactions and related applications. Through applying Working Scientifically skills processes, the course aims to examine how chemical theories, models and practices are used and developed.

## OBJECTIVES

### Skills

#### Students:

- develop skills in applying the processes of working scientifically.

### Knowledge and Understanding

#### Year 11 students:

- develop knowledge and understanding of the fundamentals of chemistry
- develop knowledge and understanding of the trends and driving forces in chemical interactions.

#### Year 12 students:

- develop knowledge and understanding of equilibrium and acid reactions
- develop knowledge and understanding of the applications of chemistry.

### Values and Attitudes

#### Students:

- develop positive, informed values and attitudes towards chemistry
- recognise the importance and relevance of chemistry in their lives
- recognise the influence of economic, political and societal impacts on the development of scientific knowledge
- develop an appreciation of the influence of imagination and creativity in scientific research.

## Course Structure and Requirements

### Year 11

- 60 hours covering Properties and Structure of Matter, and Introduction to Quantitative Chemistry.
- 60 hours covering Reactive Chemistry and Drivers of Reactions.
- 15 hours (within the 120 hours) must be allocated to depth studies.

### Year 12

- 60 hours covering Equilibrium and Acid Reactions and Acid/base Reactions.
- 60 hours covering Organic Chemistry and Applying Chemical Ideas.
- 15 hours (within the 120 hours) must be allocated to depth studies.

A depth study is any type of investigation/activity that a student completes individually or collaboratively that allows the further development of one or more concepts found within or inspired by the syllabus. It may be one investigation/activity or a series of investigations/activities.

Scientific investigations include both practical investigations and secondary-sourced investigations. Practical investigations are an essential part of the Year 11 and the Year 12 course and must occupy a minimum of 35 hours of course time, including time allocated to practical investigations in depth studies.

Practical investigations include:

- undertaking laboratory experiments, including the use of appropriate digital technologies
- fieldwork.

Secondary-sourced investigations include:

- locating and accessing a wide range of secondary data and/or information
- using and reorganising secondary data and/or information.

## **ASSESSMENT**

It is mandatory for 60% of formal school-based assessments to be allocated to skills in working scientifically and 40% to knowledge and understanding of course content.

The Year 11 formal school-based assessment program is to reflect the following requirements:

- three assessment tasks
- the minimum weighting for an individual task is 20%
- the maximum weighting for an individual task is 40%
- one task may be a formal written examination
- one task must focus on a depth study or an aspect of a depth study with a weighting of 20–40%

The Year 12 formal school-based assessment program is to reflect the following requirements:

- a maximum of four assessment tasks
- the minimum weighting for an individual task is 10%
- the maximum weighting for an individual task is 40%
- one task may be a formal written examination with a maximum weighting of 30%
- one task must focus on a depth study or an aspect of a depth study with a weighting of 20–40%

## **Student Attributes**

Students who elect to study Chemistry will need the following attributes:

- have a natural interest in Chemistry, both in terms of the theory and the practical applications.
- mathematical fluency, especially with regard to algebraic functions (students studying this course should also study 2 Unit Mathematics as a minimum standard)
- a consistent work ethic
- clear and concise written expression
- a capacity for active learning and collaboration
- enjoy problem-solving tasks

# COMMUNITY AND FAMILY STUDIES

Community and Family Studies is an interdisciplinary course drawing upon selected components of family studies, sociology, developmental psychology and students' general life experiences. This course focuses on skills in resource management that enable people to function effectively in their everyday lives, in families and communities. Community and Family Studies develops students' knowledge, skills and attitudes relevant to effective decision-making leading to confidence and competence in solving practical problems in the management of everyday living. It encourages opportunities for students to become proactive members of society as they examine both their potential to adopt a range of roles and the responsibilities they have in contributing to society.

## AIM

Community and Family Studies Stage 6 aims to develop in each student an ability to manage resources and take action to support the needs of individuals, groups, families and communities in Australian society.

## OBJECTIVES

Students will develop:

- knowledge and understanding about resource management and its role in ensuring individual, group, family and community wellbeing
- knowledge and understanding about the contribution positive relationships make to individual, group, family and community wellbeing
- knowledge and understanding about the influence of a range of societal factors on individuals and the nature of groups, families and communities
- knowledge and understanding about research methodology and skills in researching, analysing and communicating
- skills in the application of management processes to meet the needs of individuals, groups, families and communities
- skills in critical thinking and the ability to take responsible action to promote wellbeing
- an appreciation of the diversity and interdependence of individuals, groups, families and communities.

## COURSE STRUCTURE

The *Community and Family Studies Stage 6 Syllabus* includes two 120-hour courses. The Preliminary course consists of three mandatory modules. The HSC course consists of three core modules representing 75 percent of course time. An options component representing 25 percent of course time includes three modules of which students are to study only one.

### Preliminary course modules (100% total)

#### Resource Management

- Basic concepts of resource management. Indicative course time: 20%

#### Individuals and Groups

- The individual's roles, relationships and tasks within and between groups. Indicative course time: 40%

#### Families and Communities

- Family structures and functions, and the interaction between family and community. Indicative course time: 40%

## **HSC course core modules (75% total)**

### **Research Methodology**

- Research methodology and skills culminating in the production of an Independent Research Project. Indicative course time: 25%

### **Groups in Context**

- The characteristics and needs of specific community groups. Indicative course time: 25%

### **Parenting and Caring**

- Issues facing individuals and groups who adopt roles of parenting and caring in contemporary society. Indicative course time: 25%

## **HSC course option modules (25% total). Select one of the following options:**

### **1 Family and Societal Interactions**

- Government and community structures that support and protect family members throughout the life span. Indicative course time: 25%

### **2 Social Impact of Technology**

- The impact of evolving technologies on individuals and lifestyle. Indicative course time: 25%

### **3 Individuals and Work**

- Contemporary issues confronting individuals as they manage roles within both family and work environments. Indicative course time: 25%

## **ASSESSMENT**

Assessment tasks will be used to satisfy the components and weightings for Community and Family Studies. Syllabus outcomes may be assessed using the following strategies:

- case studies
- interviews and surveys
- oral presentations
- exercises using graphs, diagrams, statistics, and mathematical calculations
- briefing notes
- examinations

# DRAMA

## AIM

The aim of this course is for students to experience, understand, enjoy and value Drama as a social, collaborative and creative art form and as an expression of culture through making, performing and critically studying drama and theatre.

## PURPOSE/ RATIONALE

Drama is an art form that explores the world through enactment. It is a collaborative art form that involves the creative interaction of individuals using a range of artistic skills. Drama is an important means of understanding, constructing, appreciating and communicating social and cultural values; interpreting, valuing and transmitting the past and traditions; exploring, celebrating and challenging the present and imagining the future.

In Drama, students can investigate, shape, and symbolically represent ideas, feelings, attitudes, beliefs and their consequences. Drama can be employed as a technique for exploring personal and community issues and developing social skills. It caters for a broad range of students from varying social and cultural backgrounds. It allows for the exploration of attitudes and values of many groups in Australian society as students make, perform and critically study aspects of drama and theatre in Australian and other societies and cultures. The study of Drama will develop the talents and capacities of all students – physical, emotional, intellectual, social, spiritual, creative and expressive – as well as developing self-confidence and self-esteem. Drama is an excellent complement to English as it develops literacy skills and public speaking skills.

With our ever-changing work environment and the development of technology it has become imperative that young people develop and foster their creative thought processes. Moreover, the workplace is fast becoming a group-based environment where working in a team is more common than working as an individual. Stage 6 Drama is unique in that it develops precisely these skills, from improvisation to the development of the Group Devised Project. Studying Drama is a life skill that will stay with you throughout your professional career.

## OBJECTIVES

Students will develop knowledge and understanding about, and skills in:

### MAKING

- Drama through participation in a variety of dramatic and theatrical forms
- Drama and Theatre using a variety of dramatic elements, theatrical techniques and conventions
- the collaborative nature of Drama and Theatre

### PERFORMING

- using the elements of Drama and Theatre in performance
- in improvised and play-built theatre, and scripted drama
- the diversity of the art of dramatic and theatrical performance

### CRITICALLY STUDYING

- the place and function of drama and theatre in communities and societies, past and present
- a variety of forms and styles used in Drama and Theatre
- Drama and the Theatre as a community activity, a profession and an industry

## COURSE CONTENT

### PRELIMINARY COURSE

Components:

- Improvisation, Play Building and Acting
- Elements of Production in Performance
- Theatrical Traditions and Performance Styles

Preliminary Course content comprises an interaction between the components of improvisation, play building and acting, elements of production in performance and theatrical traditions and performance styles. Learning is experiential in these areas.

The Preliminary Course informs learning in the HSC course. In the study of theoretical components, students engage in practical workshop activities and performances to assist their understanding, analysis and synthesis of material covered in areas of study.

### HSC COURSE:

Components:

- Australian Drama and Theatre (Core Content)
- Studies in Drama and Theatre
- Group Performance (Core Content)
- Individual Project

Australian Drama and Theatre and Studies in Drama and Theatre involve the theoretical study through practical exploration of themes, issues, styles and movements of traditions of theatre exploring relevant acting techniques, performance styles and spaces.

The **group performance** of between 3 and 6 students, involves creating a piece of original theatre (8 to 12 minutes duration). It provides opportunity for each student to demonstrate his or her performance skills.

For the **Individual project** students demonstrate their expertise in a particular area, they choose one project from a critical analysis or design or performance or script writing or video drama.

**Please note:** There will be a trip to the theatre as part of the course. Students should also expect a public performance of their work once a year as part of a drama showcase.

# EARTH AND ENVIRONMENTAL SCIENCE

## AIM

The study of Earth and Environmental Science in Stage 6 enables students to develop an appreciation and understanding of geological and environmental concepts that help explain the changing face of the Earth over time. Through applying Working Scientifically skills processes, the course aims to examine how earth and environmental science models and practices are used and developed.

## OBJECTIVES

### SKILLS

#### Students:

- develop skills in applying the processes of Working Scientifically.

## KNOWLEDGE AND UNDERSTANDING

#### Year 11 students:

- develop knowledge and understanding of the Earth's systems
- develop knowledge and understanding of the Earth's processes and human impacts.

#### Year 12 students:

- develop knowledge and understanding of the evolving Earth
- develop knowledge and understanding of the impacts of living on the Earth.

## VALUES AND ATTITUDES

#### Students:

- develop positive, informed values and attitudes towards earth and environmental science
- recognise the importance and relevance of earth and environmental science in their lives
- recognise the influence of economic, political and societal impacts on the development of scientific knowledge
- develop an appreciation of the influence of imagination and creativity in scientific research

## COURSE STRUCTURE AND REQUIREMENTS

#### Year 11

- 60 hours covering Earth's Resources and Plate Tectonics.
- 60 hours covering Energy Transformations and Human Impacts.
- 15 hours (within the 120 hours) must be allocated to depth studies.

#### Year 12

- 60 hours covering Earth's Processes and Hazards.
- 60 hours covering Climate Science and Resource Management.
- 15 hours (within the 120 hours) must be allocated to depth studies.

A depth study is any type of investigation/activity that a student completes individually or collaboratively that allows the further development of one or more concepts found within or inspired by the syllabus. It may be one investigation/activity or a series of investigations/activities.

Scientific investigations include both practical investigations and secondary-sourced investigations. Practical investigations are an essential part of the Year 11 and the Year 12 course and must occupy a minimum of 35 hours of course time, including time allocated to practical investigations in depth studies.

Practical investigations include:

- undertaking laboratory experiments, including the use of appropriate digital technologies
- fieldwork.

Secondary-sourced investigations include:

- locating and accessing a wide range of secondary data and/or information
- using and reorganising secondary data and/or information.

One fieldwork exercise must be included in Year 11. One fieldwork exercise must be included in Year 12.

## **ASSESSMENT**

It is mandatory for 60% of formal school-based assessments to be allocated to skills in working scientifically and 40% to knowledge and understanding of course content.

The Year 11 formal school-based assessment program is to reflect the following requirements:

- three assessment tasks
- the minimum weighting for an individual task is 20%
- the maximum weighting for an individual task is 40%
- one task may be a formal written examination
- one task must focus on a depth study or an aspect of a depth study with a weighting of 20–40%

The Year 12 formal school-based assessment program is to reflect the following requirements:

- a maximum of four assessment tasks
- the minimum weighting for an individual task is 10%
- the maximum weighting for an individual task is 40%
- one task may be a formal written examination with a maximum weighting of 30%
- one task must focus on a depth study or an aspect of a depth study with a weighting of 20–40%

## **STUDENT ATTRIBUTES**

Students who elect to study Earth and Environmental Science will need the following attributes:

- a genuine interest in environmental and geological issues impacting on our world
- an ability to read articles, view documentaries and assimilate information pertaining to environmental issues, taken from a wide range of sources
- clear and concise written expression
- a capacity for active learning and collaboration
- interest in Physical Geography or Biology or Agriculture

# ECONOMICS

## AIMS

The aim of Economics is to develop students' knowledge, understanding, skills, values and attitudes for effective economic thinking that contributes to socially responsible, competent economic decision-making in a changing economy.

## OBJECTIVES

Through the study of Economics, students will develop knowledge and understanding about:

- The economic behaviour of individuals, firms, institutions and governments
- The function and operation of markets
- The operation and management of economics
- Contemporary economic problems and issues facing individuals, firms and governments

## COURSE REQUIREMENTS AND EXPECTATIONS

In order to succeed in this course students should have:

- A good ability in written expression
- A sound mathematical background
- The ability to reason, draw logical conclusions and engage in problem-solving activities
- An interest in economic issues
- The ability to research effectively and read widely

## COURSE CONTENT

### PRELIMINARY COURSE

#### TOPIC 1: INTRODUCTION TO ECONOMICS

- The nature of economics
- The operation of an economy
- Economies: their similarities and differences

#### TOPIC 2: CONSUMERS AND BUSINESS

- The role of consumers in the economy
- The role of business in the economy

#### TOPIC 3: MARKETS

- The role of the market
- Demand and supply
- Variations in competition

#### TOPIC 4: LABOUR MARKETS

- Demand for and supply of labour
- Labour market outcomes
- Labour market institutions

## **TOPIC 5: FINANCIAL MARKETS**

- Financial markets in Australia
- The share market

## **TOPIC 6: GOVERNMENT AND THE ECONOMY**

- Government intervention in the economy
- The role of government

## **HSC COURSE**

### **TOPIC 1: THE GLOBAL ECONOMY**

- Features of the global economy
- Impact of globalisation on the standard of living in the global economy
  - Case study on the impact of globalisation on an economy other than Australia

### **TOPIC 2: AUSTRALIA'S PLACE IN THE GLOBAL ECONOMY**

- Australia's trade and financial flows
- Exchange rates
- Free trade and protection

### **TOPIC 3: ECONOMIC ISSUES**

- Economic issues in the Australian economy
  - economic growth
  - unemployment
  - inflation
  - external stability
  - distribution of income and wealth
  - environmental management

### **TOPIC 4: ECONOMIC POLICIES AND MANAGEMENT**

- Economic objectives in relation to:
  - economic growth
  - full employment
  - price stability
  - external stability
  - environment
  - distribution of income
- The main policies available for economic management
- Limitations on policy implementation
- Policy responses and their effects in dealing with economic issues

## **ASSESSMENT**

The internal assessment tasks include research and analysis of case studies, oral presentations, stimulus-based skills, essays, tests and internal exams. The external HSC Examination will be a three hour written examination including multiple choice, short answers, stimulus-based response and extended response.

# ENGLISH STANDARD

The English Standard course is designed for students to increase their expertise in English to enhance their personal, educational, social and vocational lives. The English Standard course provides students, who have a diverse range of literacy skills, with the opportunity to analyse, study and enjoy a breadth and variety of English texts to become confident and effective communicators. English Standard offers a rich language experience that is reflected through the integrated modes of reading, writing, speaking, listening, viewing and representing.

Students engage with texts that include widely acknowledged quality literature from the past and contemporary texts from Australia and other cultures. They explore language forms, features and structures of texts in a range of academic, personal, social, historical, cultural and workplace contexts. Students study, analyse, respond to and compose texts to extend experience, access information and assess its reliability. They synthesise the knowledge gained from a range of sources to fulfil a variety of purposes. Responding to and composing texts provide students with the opportunity to appreciate the imaginative and the affective domains and to recognise the ways texts convey, interpret, question and reflect opinions and perspectives.

In their study of English students continue to develop their creative and critical faculties and broaden their capacity for cultural understanding. The course provides diverse approaches to texts so that students may become flexible and critical thinkers, capable of appreciating the variety of cultural heritages and differences that make up Australian society. They further develop skills in literacy, and independent, collaborative and reflective learning. Such skills form the basis of sound practices of investigation and analysis required for adult life, including the world of work as well as post-school training and education. The course encourages students to analyse, reconsider and refine meaning and reflect on their own processes of writing, responding, composing and learning.

## ENGLISH ADVANCED

In the English Advanced course, students continue to explore opportunities that are offered by challenging texts to investigate complex and evocative ideas, to evaluate, emulate and employ powerful, creative and sophisticated ways to use language to make meaning, and to find enjoyment in literature.

The English Advanced course is designed for students who have a particular interest and ability in the subject and who desire to engage with challenging learning experiences that will enrich their personal, intellectual, academic, social and vocational lives. Students appreciate, analyse and respond imaginatively and critically to literary texts drawn from a range of personal, social, historical and cultural contexts, including literature from the past and present and from Australian and other cultures. They study challenging written, spoken, visual, multimodal and digital texts that represent and reflect a changing global world.

Through their study of English students can become critical thinkers, and articulate and creative communicators. They extend and deepen their ability to use language in subtle, nuanced, inventive and complex ways to express experiences, ideas and emotions. They refine their understanding of the dynamic relationship between language, texts and meaning. They do this through critical study and through the skilful and creative use of language forms and features, and of structures of texts composed for different purposes in a range of contexts. They extend their experiences in researching, accessing, evaluating and synthesising information and perspectives from a range of sources to fulfil a variety of purposes.

Through exploring and experimenting with processes of composition and response, students further develop understanding of how language is employed to create artistic expression in texts. They analyse the different ways in which texts may reflect and/or challenge and extend the conventions of other texts. They evaluate the meanings conveyed in these texts, and how this is achieved. Students further develop skills in independent, collaborative and reflective learning. Such skills form the basis of sound practices of investigation and analysis required for adult life, including the world of work as well as post-school training and education. The modules encourage students to question, reconsider and refine meaning through language, and to reflect on their own processes of responding, composing and learning.

## **ENGLISH EXTENSION**

The English Extension 1 course provides students who undertake Advanced English and are accomplished in their use of English with the opportunity to extend their use of language and self-expression in creative and critical ways. Through engaging with increasingly complex concepts through a broad range of literature, from a range of contexts, they refine their understanding and appreciation of the cultural roles and the significance of texts.

Students have the opportunity to pursue areas of interest with increased independence and to theorise about the processes of responding to and composing texts. Students learn about research methodology to enable them to undertake extensive investigation used to develop extended compositions. Throughout the course students explore and evaluate multiple meanings and relative values of texts. They explore a range of conceptual frameworks for the reading and composition of texts and examine a range of reading practices to develop awareness of the assumptions that guide interpretation and evaluation. They engage with complex texts that intellectually challenge them to think creatively and critically about the way that literature shapes and reflects the global world.

The course is designed for students with an interest in literature and a desire to pursue specialised study of English.

## **ENGLISH EXTENSION 2**

**(Available only in Year 12)**

The English Extension 2 course enables students who are accomplished in their use of English with the opportunity to craft language and refine their personal voice in critical and creative ways. They can master skills in the composition process to create a substantial and original Major Work that extends their knowledge, understanding and skills developed throughout Stage 6 English courses. Through the creative process they pursue areas of interest independently, develop deep knowledge and manipulate language in their own extended compositions.

Through the experimentation with and exploration of form, style and media students express complex concepts and values in innovative, insightful and powerful ways. The creative process involves the exploration and expression of complex human experiences, connects individuals to wider visions and perspectives, and enhances a student's enjoyment of literature and the aesthetics of language.

This course provides students with the opportunity to apply and extend research skills developed in the English Extension Year 11 course to their own extensive investigation and develop autonomy and skills as a learner and composer. English Extension 2 develops independent and collaborative learning skills and higher-order critical thinking that are essential at tertiary levels of study and in the workplace.

The course is designed for students who are independent learners with an interest in literature and a desire to pursue specialised study of English.

## ENGLISH EAL/D

English EAL/D addresses the needs of a specific group of students and shares the overall aim and rationale of English. When presented at the HSC, the English EAL/D course will satisfy NESA requirements for the study of English. The English EAL/D course is designed for students to become proficient in English to enhance their personal, educational, social and vocational lives. The course provides students with the opportunity to analyse, study and enjoy a breadth and variety of English texts to become confident and effective communicators. The course offers rich language experiences that are reflected through the integrated modes of reading, writing, speaking, listening, viewing and representing.

Students engage with texts that include widely acknowledged quality literature from the past and contemporary texts from Australia and other cultures. They explore language forms, features and structures of texts in a range of academic, personal, social, historical, cultural and workplace contexts. They can become imaginative, critical and confident users of a range of digital technologies and understand and reflect on the ongoing impact of these technologies on society.

The English EAL/D course focuses on the close study of language and meaning and English language learning. Students are provided with opportunities to develop and refine skills in spoken and written English. The English EAL/D course assists students to develop the collaborative and critical thinking skills needed to navigate their way through the 21st-century world. Explicit and targeted English language instruction throughout the English EAL/D course is delivered in context and at students' point of need in order to assist them in achieving Years 11 and 12 outcomes across the curriculum.

EAL/D learners come from diverse backgrounds and bring a variety of linguistic and cultural experiences to the classroom. The English EAL/D course is designed to embrace and incorporate students' backgrounds and experiences within flexible teaching and learning programs that address this diversity, while also providing opportunities to enhance students' knowledge, understanding and appreciation of Australian society, culture, history and literature, including the nation's rich Aboriginal and Torres Strait Islander histories and cultures.

The English EAL/D course assists students to participate more effectively in Australian education and society by providing them with the opportunity to learn Standard Australian English in varied, relevant, authentic and challenging contexts. This development of creative and critical English language skills, knowledge and understanding, and their engagement with literature and other textual forms, will contribute to an increased understanding of the diversity and values of Australian and other cultures.

# FRENCH CONTINUERS

## AIMS

The French Continuers course aims to develop high order competency in the French language, relating particularly to the areas of communication, cross-cultural understanding and grammar. Students will develop linguistic abilities which provide distinct advantages when seeking employment in fields such as the arts, banking, finance, politics, law, international relations, hospitality, tourism, translation and wine-making and distribution.

## COURSE CONTENT

### THE INDIVIDUAL

- personal identity
- relationships
- school life
- leisure and interests

### THE FRENCH-SPEAKING COMMUNITIES

- daily life/lifestyles
- arts and entertainment

### THE CHANGING WORLD

- travel and tourism
- the world of work
- current issues
- the young person's world

## EXPECTATIONS

Students must have successfully completed French to Year 10. The course demands a keen interest in cultures elsewhere. It also involves ongoing dedication to learning, which takes the shape of numerous short oral and written exercises facilitating the building and practicing of vocabulary and language structures. It involves constant commitment to learning, practising and revising vocabulary and structures, both orally and in writing.

## ASSESSMENT

Speaking	20%	Conversations, discussions, role-plays, presentations
Listening and Responding	25%	Comprehensions, videos, discussions, interviews
Reading and Responding	40%	Reading comprehensions, questionnaires
Writing in French	15%	Diary entries, notes, e-mails, written observations, letters

The course is both rewarding and interesting. It opens doors to travel and meaningful intercultural experiences. However, it does require hard work and commitment and a desire to understand how languages operate. A substantial English vocabulary is an enormous asset for this course.

# FRENCH EXTENSION

(Available only in Year 12)

## AIMS

The aim of Extension French is to enhance students' knowledge and understanding of a range of issues in contemporary French society and texts, extending their ability to use and appreciate French as a medium for communication, creative thought and expression.

## OBJECTIVES

Students will achieve the following objectives:

Objective 1 Present and discuss opinions, ideas and points of view in French

Objective 2 Evaluate, analyse and respond to texts that are in French and that reflect the culture of French-speaking communities.

Meeting these objectives will involve using the skills of listening, speaking, reading and writing, either individually or in combination, and being able to move between French and English.

## PRESCRIPTIONS FOR FRENCH EXTENSION

### PRESCRIBED ISSUES

The impact of social class	Issues of tolerance	Relationships
For example: <ul style="list-style-type: none"><li>• social inequality</li><li>• importance of social standing for individuals and groups</li><li>• acceptance/rejection of others</li></ul>	For example: <ul style="list-style-type: none"><li>• racism and prejudice</li><li>• immigration</li><li>• stereotypes</li></ul>	For example: <ul style="list-style-type: none"><li>• family</li><li>• community</li><li>• school</li></ul>

### PRESCRIBED TEXT – FILM

*The film “Neuilly sa mère”*

## EXPECTATIONS

Students must be doing French Continuers in Year 12. They must also be achieving high marks in that course. It is expected that students will be keen to participate in debate and discussion in French. This course also requires skills in textual analysis and the ability to think critically.

## ASSESSMENT

NESA prescribes assessment in the following areas:

Component		Weighting
Analysis of written text that is in French	Objective 2	15
Response to written text	Objective 2	10
Writing skills	Objective 1	15
Speaking skills	Objective 1	10
		50

# GEOGRAPHY

## AIMS

The aim of Geography is to enable students to study the spatial and ecological dimensions of biophysical and human phenomena in a changing world.

## OBJECTIVES

Through the study of Geography, students will develop knowledge and understanding of:

- The characteristics and spatial distribution of environments
- The processes that form and transform the features and patterns of the environment
- The global and local forces which impact on people, ecosystems, urban places and economic activity
- The contribution of a geographical perspective

## COURSE REQUIREMENTS AND EXPECTATIONS

For the Preliminary course, students must complete 12 hours of fieldwork and the Senior Geography Project. For the HSC course, students must complete 12 hours of fieldwork.

In order to succeed in Geography students should have:

- An interest in contemporary issues
- An interest in the environment and how people live within the environment
- An awareness of basic global geography – people and places
- An ability to effectively express themselves in both essay and report form
- An ability to research issues using a range of tools
- An interest and willingness to learn how to interpret and use geographical data, maps, photos and statistics

## COURSE CONTENT

### PRELIMINARY COURSE

#### Topic 1: Biophysical Interactions

- The biophysical environment
- Biophysical processes and issues
  - a case study investigating ONE issue in ONE of the biophysical components

#### Topic 2: Global Challenges

- Population Geography
- Students also choose TWO of the following FOUR options:

Option 1 – Cultural Integration	Option 3 – Development Geography
Option 2 – Political Geography	Option 4 – Natural Resource Use

#### Topic 3: Senior Geography Project

The focus of this study is the nature of geographical inquiry and its application to a practical research project

- Geographical inquiry
  - the nature and purpose of geographical inquiry
  - the use of primary data
  - the use of secondary data
  - the ethical responsibilities of conducting geographical inquiry

## **HSC COURSE**

### **Topic 1: Ecosystems at Risk**

- Ecosystems and their management
  - biophysical interactions which lead to diverse ecosystems and their functioning
  - vulnerability and resilience of ecosystems
  - the importance of ecosystem management and protection
  - evaluation of traditional and contemporary management strategies
- Case studies of ecosystems
  - TWO case studies of different ecosystems at risk to illustrate their unique characteristics
  - eg. coastal dunes, freshwater wetlands, inter-tidal wetlands, coral reefs, arid areas, alpine areas, rainforests, temperate forests

### **Topic 2: Urban Places**

- World cities
  - the nature, character and spatial distribution
  - the role of world cities as powerful centres of economic and cultural authority
  - the operation of global networks
  - the relationships of dominance and dependence between world cities and other urban centres
- Mega cities
  - the nature, character and spatial distribution of mega cities in the developing world
  - the challenges of living in mega cities
  - the responses to these challenges
- Urban dynamics
  - the urban dynamics of change
  - a case study of the results of the urban dynamics in a large city selected from the developed world
  - a case study showing one of the urban dynamics operating in a country town or suburb

### **Topic 3: People and Economic Activity**

- Global economic activity
  - a description of the nature, spatial patterns and future directions of ONE economic activity in a global context
  - factors explaining the nature, spatial patterns and future directions of the selected economic activity
  - the environmental, social and economic impacts of the economic activity such as pollution, resource depletion, labour exploitation, cultural integration, provision of infrastructure, job creation, transfer pricing
- Local case study
  - a geographical study of an economic enterprise operating at a local scale

## **ASSESSMENT**

The major internal assessment task in Year 11 is a Senior Geography Project. This is researched and written up over the first two terms. Other assessment items over the two years include research and analysis of case studies, fieldwork studies, oral presentations, stimulus-based skills, essays, tests and internal examinations. The external HSC Examination will be a three hour written examination including multiple choice, short answers and extended response.

# GERMAN BEGINNERS

## AIMS

This course is designed for students who wish to begin their study of German at senior secondary level. It is intended to cater for students with no prior knowledge or experience of the German language.

German-speaking countries have emerged as strong international leaders in trade, commerce, culture, environmental protection and politics. Germany is one of Australia's largest single trading partners. As well as being a significant world language in its own right, a knowledge of German allows a profound understanding of English – English being, at its core, a Germanic language.

The aim of the course is to enable students to reach a solid competency in basic, everyday German by the end of Year 12.

## COURSE CONTENT

- The Personal World
  - Family life, home and neighbourhood
  - Education and work
  - Friends, recreation and pastimes
  - Holidays, travel and tourism
  - Future plans and aspirations
  
- The German-speaking Communities and Their Culture
  - Daily life and lifestyles
  - Arts and entertainment

## EXPECTATIONS

Students must have obtained above average results in both French and Latin in Years 7 and 8. Ideally, they should also be currently studying a foreign language, although this is not a pre-requisite.

Learning a foreign language is hard work but, because of this, the rewards are great. Consistent and high-level diligence will be required.

## ASSESSMENT

- |                           |     |
|---------------------------|-----|
| • Listening Comprehension | 30% |
| • Reading Comprehension   | 30% |
| • Writing                 | 20% |
| • Speaking                | 20% |

# HISTORY EXTENSION

(Available only in Year 12)

## AIMS

The History Extension course is about the nature of history, and how and why historical interpretations are developed from different perspectives and approaches over time. It offers a higher level of challenge than the Ancient History and Modern History courses with its greater emphasis on historiography.

History Extension appeals to students who appreciate the intellectual challenge of grappling with an area of debate, and constructing and defending a position through a reasoned and cohesive argument.

## OBJECTIVES

### Students:

- Develop knowledge and understanding about significant historiographical ideas and methodologies

## SKILLS

### Students:

- Design, undertake and evaluate historical inquiry
- Communicate their understanding of historiography, changing interpretations and the results of historical inquiry

## VALUES AND ATTITUDES

### Students will value and appreciate

- The study of history for critical interpretation of the past and present
- The contribution of the study of history towards lifelong learning and informed, responsible and active citizenship.

## COURSE REQUIREMENTS AND EXPECTATIONS

- Year 11 Ancient History or Modern History is a prerequisite for History Extension
- Year 12 Ancient or Modern History is a co-requisite for Year 12 History Extension

## COURSE CONTENT

**1 Constructing History** – Key Questions and Case Studies. Students investigate 4 key questions in regards to the construction of History: Who are historians? What are the purposes of history? How has history been constructed, recorded and presented over time? Why have approaches to history changed over time? These questions are answered through a study of changes and development in historiography and through a case study.

### **2 History Project.**

Students will undertake an individual investigative project, focusing on an area of changing historical interpretation.

## HISTORY EXTENSION ASSESSMENT REQUIREMENTS

- three assessment tasks
- one task may be a formal written examination with a weighting of 30%
- one task must be the History Project – Historical Process (proposal, process log, annotated sources) with a weighting of 30%
- one task must be the History Project – Essay with a weighting of 40%.

# HOSPITALITY

## AIMS

The aim of this VET (Vocational Education & Training) course is to provide students with a range of skills and knowledge to enable them to be competent and suitable for employment in a variety of hospitality settings. This course also provides pathways for university and other tertiary study.

## COURSE STRUCTURE

This course is a dual accredited course.

The two forms of accreditation possible are:

- 1 **HSC** – Students will sit the HSC exam in this subject and are eligible to receive an HSC in Hospitality (240hr course). The marks received can be used towards an ATAR.
- 2 **AQF Credential** – Depending on the achievement of units of competency, the possible qualification outcomes is a Statement of Attainment towards:

**Certificate II Kitchen Operations (Code: SIT20416)**

## COURSE CONTENT

### MANDATORY UNITS

- Use hygienic practices for food safety
- Participate in safe work practices
- Work effectively with others
- Source and use information on the hospitality industry

### KITCHEN OPERATIONS AND COOKERY STREAM

- Use food preparation equipment
- Produce dishes using basic methods of cookery
- Clean kitchen premises and equipment
- Participate in safe food handling practices

### ELECTIVE UNITS – COMMERCIAL COOKERY AND CATERING

- Prepare simple dishes
- Prepare sandwiches
- Produce appetisers and salads
- Produce vegetable, fruit, egg and farinaceous dishes
- Use cookery skills effectively
- Methods of cookery

## **COURSE REQUIREMENTS AND EXPECTATIONS**

Students will be required to purchase a full chef's uniform and a basic toolkit. A strong work ethic, high standards of personal hygiene and personal presentation are required in order to successfully complete this course.

## **WORKPLACEMENT**

As an integral part of the course, all students **MUST** spend a minimum of 70 HOURS undertaking closely supervised, structured industry training in an actual workplace setting. In Year 11, 35 hours (1 week) are completed with the remaining 35 hours completed during the early stages of the HSC course.

## **ASSESSMENT**

VET courses are competency based courses. This means that assessment is based on individual students being able to complete both practical and written activities to an acceptable industry standard as determined by the AQF (The Australian Qualifications Framework Advisory Board).

In order to achieve the required competencies in this course and thus be eligible for a Certificate II, students need to:

- Meet attendance and uniform requirements
- Complete the mandatory work placement hours
- Complete all written competency tasks to an acceptable standard
- Complete all practical competency tasks to an acceptable standard
- Meet all of the assessment requirements of each unit of competency

Students will visit a hotel management training school and tour a hotel during the course.

In order to prepare students for the HSC examination, regular class testing will be undertaken as well as formal theory examinations.

# INDUSTRIAL TECHNOLOGY

Only one Industry (Metal or Timber) may be selected

## AIMS

Industrial Technology is designed to develop in students a knowledge and understanding of the Metal or Timber industry and its related technologies with an emphasis on design, management and production through practical applications.

## OBJECTIVES

Students will develop:

- Knowledge and understanding of the selected industry and of manufacturing processes and techniques used by industry
- Knowledge and understanding of safe and cooperative work practices and of the need for a safe and cooperative work environment
- Competence in designing, managing and communicating within a relevant industry context
- Knowledge and skills in producing quality products
- Knowledge and skills in communication and information processing related to the industry focus area
- An appreciation of quality products and the principles of quality control
- An appreciation of the relationships between technology, the individual, society and the environment.

## COURSE REQUIREMENTS AND EXPECTATIONS

The Preliminary course consists of practical work through a series of minor projects. This includes an introduction to processes, skills and practices relevant to the design, management, communication and construction of practical projects. An industry study of a local business is undertaken to provide a broad range of skills and knowledge related to the Metal or Timber industry studied.

The HSC course consists of the development, management and communication of a major practical project and folio that contributes to the development of knowledge, skills and understanding related to the Metal or Timber area of study.

Students who are able to plan, exhibit self-discipline, relate skills previously learned to other tasks, manage their time effectively and have previous experience with Stage 5 Technics/Industrial Technology will have an advantage when undertaking this course. Note: Students will need to be organised, be aware of Work Health and Safety issues and work within these guidelines while being considerate to fellow students. Good housekeeping will have to be practised when in workshops to create a safe and tidy environment.

## COURSE CONTENT

### PRELIMINARY COURSE

#### Industry Study 15%

Study of the organisation and management of an individual business within the focus area, including:

- structural
- technical
- environmental
- sociological
- personnel
- WHS issues

## **Design 10%**

Design and plan projects through the completion of associated folios

- elements and principles of design
- types of design
- quality
- influences affecting design

## **Management and Communication 20%**

Manage work through the completion of a management folio linked to each project produced

- development of a number of practical projects
- development of management folios
- development of skills related to research, analysis and evaluation
- skills in managing projects
- documentation skills in the preparation, planning and presentation of a management folio
- skills in literacy through written reports, folio work
- skills in computer-based technologies
- numeracy skills related to sizing, costing, estimating, ordering and efficient resource usage
- graphical skills related to the project work
- knowledge and understanding of workplace safety and communication:
  - signage
  - WHS principles and requirements
  - personal protective equipment (PPE)
  - safe working practices
  - risk assessment

## **Production 40%**

- developing knowledge and skills through the construction of a number of projects
- acquisition of relevant practical skills

## **Industry Related Manufacturing Technology 15%**

- developing knowledge and understanding of a range of materials, processes, tools, equipment and machinery through the construction of a number of projects

## **HSC COURSE**

### **Industry Study 15%**

Study of the organisation and management of the industry related to the focus area, including:

- structural
- technical
- environmental
- sociological
- personnel
- sectors within the industry
- legislation
- WHS issues
- career opportunities
- historical aspects
- sales and marketing

## **Major Project 60%**

### **Design, Management and Communication**

- application of design principles in the production of the Major Project:
  - design development
  - sketching and idea generation
  - prototyping, modelling and testing
  - production and working drawings
  - quality and ongoing evaluation
  - selection of appropriate materials, processes and other resources
- application of management and communication skills to produce a related folio justifying:
  - research
  - design
  - analysis
  - evaluation including selection of appropriate materials, components, processes and technologies
  - ICT
  - WHS
  - Presentation

### **Production**

- applying knowledge and skills through the construction of a Major Project which reflects:
  - quality
  - evidence of a range of skills
  - degree of difficulty
  - links between planning and production
  - use of appropriate materials, components, processes and technologies
  - evidence of practical problem solving
  - WHS and safe work practices

### **Industry Related Manufacturing Technology 25%**

- demonstrates knowledge and understanding of a range of materials, processes, tools, equipment, machinery and technologies related to the focus area industry through practical experiences, including the development of the Major Project
- new/emerging technologies associated with the industry

# INVESTIGATING SCIENCE

## AIM

The study of Investigating Science in Stage 6 enables students to develop an appreciation and understanding of science as a body of knowledge and a set of valuable processes that provide humans with an ability to understand themselves and the world in which they live. Through applying Working Scientifically skills processes, the course aims to enhance students' analytical and problem-solving skills, in order to make evidence-based decisions and engage with and positively participate in an ever-changing, interconnected technological world.

## OBJECTIVES

### SKILLS

#### Students:

- develop skills in applying the processes of Working Scientifically.

### KNOWLEDGE AND UNDERSTANDING

#### Year 11 students:

- develop knowledge and understanding of cause and effect
- develop knowledge and understanding of models, theories and laws.

#### Year 12 students:

- develop knowledge and understanding of science and technology
- develop knowledge and understanding of contemporary issues involving science.

## VALUES AND ATTITUDES

#### Students:

- develop positive, informed values and attitudes towards science
- recognise the importance and relevance of science in their lives
- recognise the influence of economic, political and societal impacts on the development of scientific knowledge
- develop an appreciation of the influence of imagination and creativity in scientific research

## COURSE STRUCTURE AND REQUIREMENTS

### Year 11

- 60 hours covering Cause and Effect – Observing, Inferences and Generalisations.
- 60 hours covering Scientific Models and Theories & Laws.
- 30 hours (within the 120 hours) must be allocated to depth studies.
- 

### Year 12

- 60 hours covering Scientific Investigations and Technologies.
- 60 hours covering Fact or Fallacy and Science in Society.
- 30 hours (within the 120 hours) must be allocated to depth studies.

A depth study is any type of investigation/activity that a student completes individually or collaboratively that allows the further development of one or more concepts found within or inspired by the syllabus. It may be one investigation/activity or a series of investigations/activities.

Scientific investigations include both practical investigations and secondary-sourced investigations. Practical investigations are an essential part of the Year 11 and the Year 12 course and must occupy a minimum of 35 hours of course time, including time allocated to practical investigations in depth studies.

Practical investigations include:

- undertaking laboratory experiments, including the use of appropriate digital technologies
- fieldwork.

Secondary-sourced investigations include:

- locating and accessing a wide range of secondary data and/or information
- using and reorganising secondary data and/or information.

One fieldwork exercise must be included in Year 11. One fieldwork exercise must be included in Year 12.

## **ASSESSMENT**

It is mandatory for 60% of formal school-based assessments to be allocated to skills in working scientifically and 40% to knowledge and understanding of course content.

The Year 11 formal school-based assessment program is to reflect the following requirements:

- three assessment tasks
- the minimum weighting for an individual task is 20%
- the maximum weighting for an individual task is 40%
- one task may be a formal written examination
- one task must focus on a depth study or an aspect of a depth study with a weighting of 30–40%

The Year 12 formal school-based assessment program is to reflect the following requirements:

- a maximum of four assessment tasks
- the minimum weighting for an individual task is 10%
- the maximum weighting for an individual task is 40%
- one task may be a formal written examination with a maximum weighting of 30%
- one task must focus on a depth study or an aspect of a depth study with a weighting of 30–40%

## **STUDENT ATTRIBUTES**

Students who elect to study Investigating Science will need the following attributes:

- a genuine interest in the investigation of scientific research impacting on our world
- an ability to read articles, view documentaries and assimilate information pertaining to science, taken from a wide range of sources
- clear and concise written expression
- a capacity for active learning and collaboration
- interest in the inter-disciplinary nature of science and its applications

# LATIN

## AIMS

The Latin Continuers Course builds on the detailed knowledge of the Latin language previously acquired, and provides students with access not only to the culture, thought and literature of Ancient Rome, but also to the continuing influence of Latin in European languages and culture. The study of Latin at this level helps students, inter alia, to develop techniques of literary analysis within the appropriate literary, social and historical contexts, and assists them to form habits of precision in thought and expression which will equip them to analyse problems and communicate ideas succinctly in their chosen field of employment.

## COURSE CONTENT

### PRELIMINARY COURSE

The course content is based on original Latin texts, chosen to allow students to sample the significant literary genres in the canon of Classical writers, such as Caesar, Cicero, Catullus, Tacitus, Martial, Ovid, Pliny and Virgil.

### HSC COURSE

The prescribed texts for the HSC course are Virgil's Aeneid, selected speeches of Cicero, and Livy's History of Rome. Approximately 400 lines of each text will be selected for study, with the remainder of the books being read in English.

## EXPECTATIONS

Students are expected to have completed Latin to Year 10. The course involves constant commitment to learning, practising and revising vocabulary and grammatical structures, and studying texts in detail.

## ASSESSMENT - HSC COURSE

Translation of extracts from the set texts	25%	Written versions and/or oral explanation of translations.
Identification, explanation and analysis of grammar in extracts from set texts	15%	Identification, explanation and analysis: clause analysis, short answers, multiple choice quizzes.
Commentary on Latin prescriptions, including scansion of verse	25%	Discussion, oral presentation, quizzes, report writing, debate, research.
Commentary on prescribed English translation and unseen translation	35%	Discussion, oral presentation, report writing, debate, research.

# MATHEMATICS AND MATHEMATICS EXTENSION I

Prerequisites: For students who intend to study the Mathematics course, it is recommended that they study the topics Real Numbers, Algebraic Techniques and Coordinate Geometry as well as at least some of Trigonometry and Deductive Geometry from the Stage 5.3 Mathematics Years 7–10 syllabus, if not all of the content. It is recommended that at Kinross Wolaroi School students have come from one of the Year 10 5.3 classes and completed the course successfully. However, it is possible to study this course with exceptional results in the Year 10 5.2 course.

Students intending to study the Mathematics Extension I course, should study the Stage 5.3 optional topics Curve Sketching and Polynomials, and Functions and Logarithms, as well as the topic Circle Geometry in the Mathematics Years 7–10 syllabus. At Kinross Wolaroi School it is recommended that the study of the Year 10 5.3 course is completed to a high level in order to attempt this course.

## AIMS

Kinross Wolaroi School offers the 2 unit and Extension I courses to give students an understanding of, and competence in, Mathematics that furthers their knowledge gained in stage 5. These courses will also enable the student to see Mathematics used in real world situations.

NESA recommends the Mathematics ('2 Unit') course as the most appropriate basis for further studies in mathematics in tertiary courses such as in the life sciences, business, finance, technology and education. For students who require substantial mathematics at a tertiary level, NESA recommends that they undertake one or both of the Stage 6 Mathematics Extension courses.

The Mathematics Extension I course provides students with the opportunity to develop thorough understanding and competence in aspects of mathematics for further studies in mathematics itself, and in such areas as physics, chemistry, engineering, statistics, and computer science.

Students of outstanding mathematical ability should consider undertaking the Mathematics Extension 2 course. This course provides a strong basis for a wide range of useful applications of mathematics, as well as a strong foundation for the further specialised study of the subject.

## OBJECTIVES

### SPECIFIC OBJECTIVES OF THE COURSE ARE:

- To give an understanding of important mathematical ideas such as variable, function, limit, etc and to introduce students to mathematical techniques which are relevant to the real world;
- To understand the need to prove results, to appreciate the role of deductive reasoning in establishing such proofs, and to develop the ability to construct these proofs;
- To enhance those mathematical skills required for further studies in Mathematics, the physical sciences and the technological sciences.

### FOR ACHIEVEMENT OF THESE OBJECTIVES, THE FOLLOWING POINTS ARE IMPORTANT:

- Understanding of the basic ideas and precise use of language will be emphasised;
- A clear distinction will be made between results which are proved, and results which are merely stated or made plausible;
- Where proofs are given, they will be carefully developed, with emphasis on the deductive processes used;
- Attaining competence in mathematical skills and techniques requires many examples, given as teaching illustrations and as exercises to be undertaken independently by the students;

- Students will be given the opportunity to apply Mathematics to problems drawn from real life situations. Realistic problems will follow the attainment of skills, and techniques of problem solving will be continually developed.

## COURSE REQUIREMENTS AND EXPECTATIONS

Both these courses are 'Algebra based'. Unless students have enjoyed and succeeded in the Algebra components of Mathematics Stage 5.2 or Mathematics Stage 5.3, they will not find these courses easy to manage.

Furthermore, the Mathematics Extension I course is very challenging. Students will need to get advice from their teachers before nominating to study this course.

## COURSE CONTENT

### Mathematics

#### Preliminary Course

- Basic Arithmetic and Algebra
- Real Functions
- Trigonometric Ratios
- Linear Functions
- The Quadratic Polynomial and the Parabola
- Plane Geometry
- Tangent to a curve and the Derivative Function

#### HSC Course

- Coordinate methods in Geometry
- Applications of Geometrical Properties
- Geometrical Applications of Differentiation
- Integration
- Trigonometric Functions
- Logarithmic and Exponential Functions
- Applications of Calculus to the Physical World
- Probability
- Series and Series Applications

### Mathematics Extension I

#### Preliminary Course

- Other Inequalities
- Circle Geometry
- Further Trigonometry
- Angles between two lines
- Internal and External Division of a line
- Parametric Representation
- Permutations and Combinations
- Polynomials
- Harder Applications of the Preliminary 2 unit course

#### HSC Course

- Methods of Integration
- Primitive of  $\sin^2x$  and  $\cos^2x$
- Exponential growth and decay  $\frac{dN}{dt} = k(N - P)$
- Velocity and Acceleration as a function of  $x$
- Projectile Motion
- Simple Harmonic Motion
- Inverse Functions
- Induction
- Binomial Theorem
- Further Probability
- Iterative methods for finding roots
- Harder applications of HSC 2 unit

## ASSESSMENT

The Program gives a variety of assessment options for teachers to use.

# MATHEMATICS EXTENSION 2

(Available only in Year 12)

Prerequisites: Completion of both the Mathematics (2 Unit) and Mathematics Extension 1 Preliminary (Year 11) Courses.

## AIMS

The aim of Kinross Wolaroi School is to present the Extension 2 Mathematics Course as a living art which is intellectually exciting, aesthetically satisfying, and relevant to a great variety of practical situations.

This course provides a strong basis for a wide range of useful applications of mathematics, as well as a strong foundation for the further specialised study of the subject.

## SPECIFIC AIMS OF THE COURSE ARE:

- To offer a program that will be of interest and value to students with the highest levels of mathematical ability in Year 12 of the Higher School Certificate and which will present some challenge to such students.
- To study useful and important mathematical ideas and techniques appropriate to these levels of ability.
- To develop both an understanding of these ideas and techniques and an ability to apply them to the study and solution of a wide variety of problems.
- To provide the mathematical background necessary for further studies in Mathematics, and useful for concurrent study of subjects such as science and economics-based subjects.

## OBJECTIVES

The objectives of this syllabus are addressed through eight topics:

- Graphs
- Complex Numbers
- Conics
- Integration
- Volumes
- Mechanics
- Polynomials
- Harder 3 Unit topics.

Students will be introduced to the following in the teaching of the above 8 topics:

- Practical applications of the theory
- Proofs
- Problem solving
- Use of calculators and specialised computer applications
- Practical experiments.

## ASSESSMENT

The Program gives a variety of assessment options for teachers to use.

# MATHEMATICS GENERAL

Prerequisites: The Preliminary Mathematics General 2 course has been constructed on the assumption that students have studied the content and achieved the outcomes of the Mathematics Years 7–10 syllabus up to and including the content and outcomes of Stage 5.1. It is also recommended that they study at least some of the Stage 5.2 content of the Mathematics Years 7–10 syllabus, particularly the topics Statistics, Algebra and Trigonometry, if not all of the content.

## AIMS

General Mathematics is designed to promote the development of skills, knowledge and understanding in areas of Mathematics that have direct application to the broad range of human activity. Students will learn to use a wide range of techniques and tools to develop solutions to a wide variety of problems related to their present and future needs and aspirations.

The Preliminary Mathematics General course and the HSC Mathematics General 2 and General 1 courses provide students with the opportunity to develop appropriate understanding and competence in aspects of mathematics for a range of vocational pathways, in careers or in further training.

Study of the HSC Mathematics General 2 course can provide students with a strong foundation for university courses in the humanities, nursing and paramedical sciences. At Kinross Wolaroi School we currently only offer General Mathematics 2 at HSC level.

## OBJECTIVES

Students will develop:

- Appreciation of the relevance of Mathematics
- The ability to apply mathematical skills and techniques to interpret practical situations
- The ability to communicate Mathematics in written and/or verbal form
- Skills, knowledge and understanding in
  - Financial Mathematics
  - Data analysis
  - Measurement
  - Probability
  - Algebraic Modelling
  - Networks

## COURSE REQUIREMENTS AND EXPECTATIONS

Any formulae that have been required in the Mathematics Stage 4 (Years 7 and 8) Syllabus and the Stage 5 (Years 9 and 10) Standard course are considered to be assumed knowledge. These include formulae for: Pythagoras' Theorem; perimeter; circumference of a circle; the area of a rectangle, triangle, circle, parallelogram, trapezium and rhombus; volume of a right prism. Students are not required to learn other formulae that are introduced or referred to in this syllabus. A list of formulae will be provided in the HSC Examination.

The key competencies of **collecting, analysing and organising information** and **communicating ideas and information**, reflect core processes of statistical inquiry are developed through the methodologies of the syllabus and through classroom pedagogy. Students work as individuals and as members of groups to engage with applications and modelling tasks, and through this, the key competencies **planning and organising activities** and **working with others and in teams** are developed. At all levels of this course, students are developing the key competency **using mathematical ideas and techniques**. Through the advice provided on the selection and use of appropriate technology, students can develop the key competency of **using technology**. Finally, students' continual involvement with seeking solutions to problems, both large and small, contributes toward their development of the key competency **solving problems**.

## ASSESSMENT

The program gives a variety of assessment options for teachers to use.

# MODERN HISTORY

## AIMS

Modern History stimulates students' curiosity and imagination, and enriches their appreciation of humanity by introducing them to a range of historical developments and experiences that have defined the modern world. It requires students to understand and use historical concepts and apply skills in their investigation of people, ideas, movements, events and developments of the modern world within personal, local, national, regional and global contexts.

## OBJECTIVES

Students will develop knowledge and understanding about:

- A range of features, people, ideas, movements, events and developments of the modern world in their historical context
- Continuity and change over time

Students will develop skills to:

- Undertake the process of historical inquiry
- Use historical concepts and skills to examine the modern past
- Communicate their understanding of history, sources and evidence, and historical interpretations.

Students will develop responsible values and attitudes about

- The influence of the past on the present and the future
- Contribution of the study of Modern History to lifelong learning, and active and informed citizenship.

## COURSE REQUIREMENTS AND EXPECTATIONS

To succeed in this course, students should have:

- Curiosity and imagination
- Desire to enrich their understanding of humanity
- A desire to be a lifelong learner

### Year 11 course

The Year 11 course is structured to provide students with opportunities to develop and apply their understanding of methods and issues involved in the investigation of Modern History.

#### 1 Investigating Modern History

- a. The Nature of Modern History
- b. Case Studies  
ONE case study must be from Europe, North America or Australia  
ONE case study must be from Asia, the Pacific, Africa, the Middle East or Central/South America

#### 2 Historical Investigation

The Historical investigation is designed to provide opportunities for students to further develop relevant investigative, research and presentation skills that are the core of the historical inquiry process.

#### 3 The Shaping of the Modern World

Students investigate forces and ideas that shaped the modern world through a study of key events and developments and meaning of modernity.

### Year 11 Assessment requirements

- three assessment tasks
- the minimum weighting for an individual task is 20%
- the maximum weighting for an individual task is 40%
- one task may be a formal written examination • one task must be an Historical Investigation with a weighting of 20–30%.

## **Year 12 course**

The Year 12 course is structured to provide students with opportunities to apply their understanding of sources and relevant historiographical issues in the investigation of the modern world.

### **The course comprises a study of:**

1. Core Study: Power and Authority in the Modern World 1919-1946
2. ONE 'National Studies' topic
3. ONE 'Peace and Conflict' topic
4. ONE 'Change in the Modern World' topic

Students are required to study at least ONE non-European/Western topic.

### **Year 12 Assessment requirements**

- A maximum of four assessment tasks
- the minimum weighting for an individual task is 10%
- the maximum weighting for an individual task is 40%
- one task may be a formal written examination with a maximum weighting of 30%
- one task must be an Historical Analysis with a weighting of 20–30%.

# MUSIC COURSE I

Co-requisite: This course requires the student to undertake individual lessons on their primary instrument.

## AIM

The aim of Music I is to provide students with the opportunity to acquire knowledge, skills and experiences and to emerge as musically sensitive and capable individuals with the capacity and desire for music to play a significant and continually developing role in their lives.

Music notation skills are not a necessity, but students are expected to perform on their primary instrument or sing as a soloist and/or in an ensemble. This course is heavily focused on performance and listening skills.

## OBJECTIVES

- To develop knowledge and skills about the concepts of music and of music as an art form through performance, composition, musicology and aural activities in a variety of cultural and historical contexts
- To develop the skills to evaluate music critically
- To develop an understanding of the impact of technology on music
- To develop personal values about music

## COURSE STRUCTURE

Students study the concepts of music through the learning experiences of performance, composition, musicology and aural within the context of a range of styles, periods and genres.

## LEARNING EXPERIENCES

The learning experiences through which students understand music are performance, composition, musicology and aural.

Students develop musically through the integration of these learning experiences. These may include:

- playing
- organising
- observing
- singing
- listening
- analysing
- moving
- creating
- discriminating
- improvising
- recording
- evaluating
- discussing
- experimenting
- manipulating
- innovating
- responding

## CONTEXTS

The following topics are available for study. Topics are chosen to cater for student needs and interest. Students must perform pieces that represent the topics studied in class and must present at least 1 piece by an Australian composer. Topics available for study:

- Australian Music
- Jazz
- Popular Music
- Medieval Music
- Baroque Music
- Rock Music
- Theatre Music
- Music and Religion
- Music and the Related Arts
- Music for Large Ensembles
- Music for Small Ensembles
- Music in Education
- Music of a Culture
- Music of 18<sup>th</sup> Century
- Music of 19<sup>th</sup> Century
- Music of 20<sup>th</sup> and 21<sup>st</sup> Centuries
- Renaissance Music
- Technology and its Influence on Music
- An Instrument and its Repertoire
- Methods of Notating Music
- Music for Radio, Television and Multimedia

## **PERFORMANCE** *(Performance refers to participation in any form of practical music making.)*

The development of performance skills is fostered by providing extensive performance opportunities in a variety of media, styles and genres according to individual needs, interests and abilities. These are explored through the contexts.

Students will have experiences in performing:

- solo and as part of an ensemble
- music of various genres, periods and styles
- music representative of the contexts studied
- compositions, arrangements and improvisations
- with different types of technology.

## **COMPOSITION** *(Composition refers to the organisation of sounds.)*

The development of knowledge and skills in composing results from continued involvement in a wide range of experiences in class activities. This includes such activities as providing melodic and non-melodic ostinato patterns to songs, adding a bass line to a song, improvising, creating variations on existing melodies or rhythms. Students are able to utilise the dedicated Music Computer Lab where they compose music using a variety of music software programs.

Students have experiences in:

- experimenting
- improvising
- arranging
- structuring
- notating
- using different types of technology.

## **MUSICOLOGY** *(Musicology refers to the study of musical styles and genres from a number of perspectives. These include the historical, the sociological, the notational and the analytical.)*

Students will have experiences in:

- identifying and commenting on the musical concepts
- analysing
- collecting information
- using different types of technology
- investigating some of the cultural contexts of music.

## **AURAL** *(Aural refers to the ability to discriminate between sounds and to make judgements about their use in a wide range of musical styles, periods and genres.)*

Aural is an integral part of all activities associated with Performance, Composition and Musicology. Students are exposed to a wide range of styles, periods and genres in their listening experiences.

## **ASSESSMENT**

Summary of external HSC assessment

<b>External examination</b>	<b>Mark</b>
Core Performance	10%
Core Aural Written Examination	30%
Electives: Any combination* of: <ul style="list-style-type: none"><li>• Performance</li><li>• Composition</li><li>• Musicology</li></ul> *Most students choose 3 performance electives	60%

## MUSIC COURSE 2

Prerequisite: This course requires the student to undertake lessons on their primary instrument and to be at a minimum level of approximately 5<sup>th</sup> to 6<sup>th</sup> grade performance. Students are required to be able to read and write traditional music notation. Please note that students who have not completed the Stage 5 Music Elective Course, will find the Musicology, Composition and Aural components challenging.

### AIM

The aim of Music 2 is to provide students with the opportunity to build on their musical knowledge and skills, and to emerge as musically sensitive and critical individuals with the capacity and desire for music to play a significant and continually developing role in their lives.

### OBJECTIVES

Students will gain understanding of the musical concepts through the integration of experiences in performance, composition, musicology and aural. The objectives of Music 2 are:

- to continue to develop musical knowledge and skills, an understanding of music in social, cultural and historical contexts, and music as an art form through performance, composition, musicology and aural activities
- to develop the ability to synthesise ideas and evaluate music critically
- to develop an awareness and understanding of the impact of technology on music
- to develop personal values about music.

### CONTEXTS

The contexts of music (styles, periods and genres) will be studied through specific topics. Contexts are chosen according to student needs and interest.

**Preliminary Course**, students study “Music from 1600 to 1900” (mandatory topic) and ONE additional topic from the list below:

- Australian Music
- Music of a Culture
- Medieval Music
- Renaissance Music
- Music 1900–1945
- Music 1945 to Music 25 years ago.

**HSC Course**, students study “Music of the Last 25 Years (Australian Focus)” (mandatory topic) and ONE additional topic from the list below that must be different from the topic studied in the Preliminary Course:

- Music of a culture
- Medieval Music
- Renaissance Music
- Baroque Music
- Classical Music
- Music in the 19<sup>th</sup> Century
- Music 1900–1945
- Music 1945 to Music 25 years ago.

### ASSESSMENT

Summary of external HSC assessment

External examination	Mark
Written examination – <i>Musicology and Aural Skills</i> Four questions	35%
Practical examination Performance (15 marks) Sight-singing (5 marks)	20%
Core Composition	15%
Elective: Performance, Composition or Musicology	30%

# MUSIC EXTENSION

(Available only in Year 12)

Prerequisite: This course is for Music 2 students and requires the student to undertake lessons on their primary instrument and to be in a position to specialise in Performance, Composition or Musicology. A Composition specialist must be able to read and write traditional music notation at a high level.

## AIM

The aim of the Music Extension course is to provide challenging and rigorous opportunities for musically and academically talented students to assist them in the realisation of their potential as performers, composers or musicologists.

## OBJECTIVE

Students have the opportunity to pursue excellence in a particular area of interest and expertise in the contexts of their choosing in order to:

- refine knowledge and skills associated with performance, composition or musicology
- expand critical aural knowledge and skills in all musical experiences.

## COURSE STRUCTURE

As an extension of studies in Music 2, students will develop and expand aural awareness and understanding through their specialisation in Performance or Composition or Musicology. Each student follows an individual programme of study that is negotiated between the teacher and student.

## CONTENT

Students in Music Extension will develop a deeper understanding of the characteristics of musical styles, periods and genres through their specialisation in Performance, Composition or Musicology.

## PERFORMANCE

- high level technical and interpretive skill
- solo/group performances and presentations
- ensemble direction
- refinement of the skill of critical appraisal of own performances
- refinement of the skill of critical appraisal of the performance of others
- program development
- an increasing understanding of musical style
- concert practice and management.

## COMPOSITION

- establishing a convincing personal musical style
- sophisticated and constructive critical appraisals of own compositions and the compositions of others
- refining the skill of analysing the works of other composers through the use of musical concepts
- ensemble direction in the performance of own compositions
- discussion of ideas that have led to the development of a composition
- compiling a composition portfolio

## **MUSICOLOGY**

- refining research skills
- refining transcription and notation skills
- refining the skill of analysing works through the use of musical concepts
- refining the skill of critical appraisal of own writing and the writing of others
- an increasing understanding of style
- an increasing understanding of cultural context
- refining essay writing skills (ie stating an hypothesis, development of hypothesis supported by musical evidence, reaching a conclusion)
- refining evaluation skills compiling a musicology portfolio.

## **HSC EXAMINATION SPECIFICATIONS**

### **PERFORMANCE (50 MARKS)**

Performance students present 3 pieces for performance with a maximum time limit of 20 minutes. 20 marks are allocated to an ensemble piece and the remaining 30 marks are allocated to the other 2 contrasting solo pieces.

### **OR COMPOSITION (50 MARKS)**

Candidates compose and submit two original contrasting pieces or movements. The maximum combined length of the two pieces or movements must be 6 minutes. Students prepare a composition portfolio in which they record the progress of their compositions and their research and ideas during the composition process. The portfolio is assessed within the school assessment.

### **OR MUSICOLOGY (50 MARKS)**

Candidates will prepare and submit an essay of approximately 3000 words. Students prepare a musicology portfolio in which they record the progress of their essay and musicological explorations made along the way. The portfolio is assessed within the school assessment.

# PERSONAL DEVELOPMENT, HEALTH AND PHYSICAL EDUCATION

Personal Development, Health and Physical Education (PDHPE) is an integrated area of study that provides for the intellectual, social, emotional, physical and spiritual development of students. It involves students learning about ways of maintaining active, healthy lifestyles and improving their health status. It is also concerned with social and scientific understandings about movement, which lead to enhanced movement potential and appreciation of movement in their lives.

## AIMS

The aim of PDHPE Stage 6 is to develop in each student a capacity to think critically about key issues related to health and physical activity in order to make informed decisions that support and contribute to healthy, active lifestyles and communities.

## OBJECTIVES

Through the study of PDHPE students will develop:

- values and attitudes that promote healthy and active lifestyles and communities
- knowledge and understanding of the factors that affect health
- a capacity to exercise influence over personal and community health outcomes
- knowledge and understanding about the way the body moves
- knowledge and understanding of the principles and processes impacting on the realisation of movement potential
- an ability to take action to improve participation and performance in physical activity
- an ability to apply the skills of critical thinking, research and analysis

## COURSE REQUIREMENTS AND EXPECTATIONS

For successful study of this subject, students have to have an interest in health and physical education concepts. Students need to be committed to reading beyond the text book as there is an expectation that as well as learning medical, anatomical and physiological detail, students will engage in research and debates to develop an understanding of current social, political and environmental issues relating to the health status of Australians.

Study of PDHPE is advantaged by a consistent work ethic, a desire to engage in active learning and a capacity to work constructively with peers.

## COURSE CONTENT

The Preliminary course consists of two core modules representing 60% of course time. An options component representing 40% of course time includes four options of which students are to study two.

The HSC Course consists of two core modules representing 60% of course time. An options component representing 40% of course time includes five options of which students are to study two.

### PRELIMINARY COURSE

#### Core Strands (60% total)

- Better Health for Individuals (30%)
- The Body in Motion (30%)

#### Options (40% total)

Select two of the following options:

- First Aid (20%)
- Composition and Performance (20%)
- Fitness Choices (20%)
- Outdoor Recreation (20%)

### HSC COURSE

#### Core Strands (60% total)

- Health Priorities in Australia (30%)
- Factors Affecting Performance (30%)

#### Options (40% total)

Select two of the following options:

- The Health of Young People (20%)
- Sports Medicine (20%)
- Improving Performance (20%)
- Equity and Health (20%)
- Sport and Physical Activity in Australian Society (20%)

### ASSESSMENT

Student assessment is balanced between knowledge and understanding outcomes and course content and skills outcomes and content. Assessment tasks have specific marking criteria so that students can learn from their experiences and make progress.

Internal assessment methods may include the following:

- examinations
- class essays
- critical reviews
- debates
- diary/learning log
- oral reports
- written reports
- excursion reports
- internet research assignments
- laboratory reports
- library research projects
- oral presentations
- practical participation & performances
- research reports
- skills checklists
- excursions, field trips, surveys

The external HSC Examination will be a three hour written examination including multiple choice, short answer and extended response questions.

# PHILOSOPHY 137 CRITICAL THINKING

Philosophy 137 Critical Thinking is offered by Macquarie University. It is a NESA 1 unit Preliminary endorsed course. Students who select Critical Thinking must apply to the University and be subject to the University's selection criteria. Therefore, acceptance into the course is not automatic. Students who are interested in the course are encouraged to express their interest, attend an Information Evening (early in Term 4) and fill out an Application Form.

Upon completion of the course, students will gain Credit points towards a degree at Macquarie University, a Certificate of completion and visit Macquarie University.

Note: This course is offered by Macquarie University. They retain the right to offer or withdraw the course. A decision is usually made by the beginning of Term 4.

## AIMS

This unit aims to teach the fundamentals of critical thinking and reasoning. Students learn how to construct, analyse and critically evaluate arguments, how to detect common fallacies in reasoning, and how to think logically and creatively. We teach these skills by developing practical techniques for the evaluation of reasoning, and applying them to arguments across different subject areas. Critical thinking skills are invaluable across all disciplines, and will benefit students in academic contexts and in life beyond university.

## OBJECTIVES

- To learn how to recognise the structure of arguments, and how to represent that structure in a clear, standardised form
- To learn about different types of reasoning, such as deductive and inductive reasoning and the methods of evaluation appropriate to each
- To learn to apply your critical analysis skills to real arguments from a variety of contexts, and to recognise the generalisability of these skills, and their applicability to other disciplines
- To develop critical analysis skills
- To develop problem-solving skills
- To develop creative-thinking skills

## COURSE REQUIREMENTS AND EXPECTATIONS

### SELECTION CRITERIA:

- Students have high academic ability. Coursework is at University level which is rigorous and fast-paced
- Students will have attained good results in Year 10 and achieved high Bands in NAPLAN
- Students should be suitable candidates for an extension course in Mathematics or English or both
- Students should already have developed good time-management skills. The coursework involves a self-paced curriculum requiring good independent learning skills, online access, and online submission of assignments
- Ability to attend lessons after-school for 1 hour per week as well as attendance on Saturday at the University
- Ability to communicate effectively

This course will suit students who:

- Have an interest in Philosophy
- Seek challenge beyond current school curriculum
- Want to experience University life and coursework
- Want to develop their argument and essay writing skills
- Enjoy discussion and debate
- Have an interest in world affairs and current issues

## **COURSE CONTENT**

Note: Based on the 2017 Student Unit Guide, the following is a guide to the course content. The University retains the right to change the topics from year to year.

### Part I: What are arguments?

- Arguments vs Explanation
- Standardisation and reconstruction of arguments
- Deductive arguments
- Inductive arguments

### Part II: Critical Thinking and the Human Mind

- How our Minds work
- “Automatic” thinking and Critical Reasoning
- “Social” thinking and Critical Reasoning
- The Power of Language and Image I and II

### Part III: Fallacies

- Identifying Fallacies
- What is Pseudo-Reasoning
- Applying to everyday arguments

## **ASSESSMENT**

Note: Based on 2017 Student Unit Guide, the following is a guide to the assessment schedule. The University retains the right to change the assessment schedule from year to year.

- |                    |     |
|--------------------|-----|
| • On Line Quiz 1   | 15% |
| • On Line Quiz 2   | 15% |
| • On Line Quiz 3   | 15% |
| • Participation 1  | 10% |
| • Participation 2  | 10% |
| • Final Assessment | 35% |

Students will receive a Grade from the University typically based on the following:

- 85 above equates to a High Distinction
- 75 above and below 84 equates to a Distinction
- 65 above and below 74 equates to a Credit
- 50 above and below 64 equates to a Pass
- Below 49 equates to a Fail grade

Students will receive a Term 3 Report from the School with feedback and comments regarding class attendance, engagement and contribution to classroom learning. All results will come from the University.

# PHYSICS

## AIM

The study of Physics in Stage 6 aims to enable students to develop an appreciation and understanding of the application of the principles of physics, and of the theories, laws, models, systems and structures of physics. It also enables students to apply Working Scientifically skills processes to examine physics models and practices and their applications.

## OBJECTIVE

### SKILLS

Students:

- develop skills in applying the processes of Working Scientifically.

### KNOWLEDGE AND UNDERSTANDING

**Year 11 students:**

- develop knowledge and understanding of fundamental mechanics
- develop knowledge and understanding of energy.

**Year 12 students:**

- develop knowledge and understanding of advanced mechanics and electromagnetism
- develop knowledge and understanding of the role of evidence and prediction in the development of theories in physics.

### VALUES AND ATTITUDES

Students:

- develop positive, informed values and attitudes towards physics
- recognise the importance and relevance of physics in their lives
- recognise the influence of economic, political and societal impacts on the development of scientific knowledge
- develop an appreciation of the influence of imagination and creativity in scientific research.

## Course Structure and Requirements

**Year 11**

- 60 hours covering Kinematics and Dynamics.
- 60 hours covering Waves and Thermodynamics, Electricity and Magnetism.
- 15 hours (within the 120 hours) must be allocated to depth studies.

**Year 12**

- 60 hours covering Advanced Mechanics and Electromagnetism.
- 60 hours covering The Nature of Light and From the Universe to the Atom.
- 15 hours (within the 120 hours) must be allocated to depth studies.

A depth study is any type of investigation/activity that a student completes individually or collaboratively that allows the further development of one or more concepts found within or inspired by the syllabus. It may be one investigation/activity or a series of investigations/activities.

Scientific investigations include both practical investigations and secondary-sourced investigations. Practical investigations are an essential part of the Year 11 and the Year 12 course and must occupy a minimum of 35 hours of course time, including time allocated to practical investigations in depth studies.

**Practical investigations include:**

- undertaking laboratory experiments, including the use of appropriate digital technologies
- fieldwork.

**Secondary-sourced investigations include:**

- locating and accessing a wide range of secondary data and/or information
- using and reorganising secondary data and/or information.

## **ASSESSMENT**

It is mandatory for 60% of formal school-based assessments to be allocated to skills in working scientifically and 40% to knowledge and understanding of course content.

The Year 11 formal school-based assessment program is to reflect the following requirements:

- three assessment tasks
- the minimum weighting for an individual task is 20%
- the maximum weighting for an individual task is 40%
- one task may be a formal written examination
- one task must focus on a depth study or an aspect of a depth study with a weighting of 20–40%

The Year 12 formal school-based assessment program is to reflect the following requirements:

- a maximum of four assessment tasks
- the minimum weighting for an individual task is 10%
- the maximum weighting for an individual task is 40%
- one task may be a formal written examination with a maximum weighting of 30%
- one task must focus on a depth study or an aspect of a depth study with a weighting of 20–40%

## **STUDENT ATTRIBUTES**

Students who elect to study Physics will need the following attributes:

- mathematical fluency, especially with regard to algebraic functions (students studying this course should also study 2 Unit Mathematics as a minimum standard)
- a consistent work ethic
- clear and concise written expression
- a capacity for active learning and collaboration
- enjoy problem-solving tasks

# SCIENCE EXTENSION

I unit course  
(Available only in Year 12)

## AIM

The study of Science Extension Stage 6 aims to enable high achieving students, with a passion for science, to explore the development of the scientific process over time and to undertake authentic scientific research.

## OBJECTIVES

### KNOWLEDGE, UNDERSTANDING AND SKILLS

#### Students:

- apply the Working Scientifically processes as they are practised
- develop extensive knowledge and understanding of the progression of contemporary scientific inquiry and research
- develop extensive understanding of the nature, application and processes involved in modern scientific research
- develop comprehensive knowledge, understanding and skills, of a specific area of science informed by researching and analysing large data set(s)
- develop extensive knowledge, understanding and skills in regard to the current methods of communicating scientific ideas through scientific research

### VALUES AND ATTITUDES

#### Students:

- develop positive, values and attitudes towards science
- develop an appreciation of the significance of imagination and creativity and their application to scientific research
- develop an appreciation of the wonder of science and acknowledge the contribution science has made to contemporary society
- recognise the influence of cultural, political and societal influences on the development of scientific knowledge
- apply ethical practice in collecting and analysing data and publishing scientific research results

### COURSE STRUCTURE AND REQUIREMENTS

#### Year 12

60 hours covering:

- The Foundations of Scientific Thinking,
- The Scientific Research Proposal,
- The Data, Evidence and Decisions,
- The Scientific Research Report

Throughout the course students select and develop a scientific research question and develop evidence-based responses in the form of a scientific research report that is supported by a scientific research portfolio. The research report is a result of the student's own work and must adhere to the principles and practices of good scholarship, as identified in the HSC: All My Own Work. While students may collaborate with and draw upon the expertise, knowledge and data held by others in developing their research portfolio and report, this assistance must be referenced using accepted protocols. All scientific research must be sensitive to community expectations in relation to the question being interrogated and students must adhere to ethical practices in the collection and analysis of data and publishing results of the scientific research.

## **ASSESSMENT**

The assessment guidelines are still being finalised, however the draft syllabus states the following requirements:

- three assessment tasks
- the minimum weighting for a formal task is 20%
- the maximum weighting for a formal task is 40%
- one task may be a formal written examination with a maximum weighting of 30%
- one task must be the Scientific Research Report with a weighting of 40%

NESA favours an HSC Examination for 1.5 hours with 10 minutes reading time, consisting of two sections worth a total of 50 marks.

## **STUDENT ATTRIBUTES**

Students who elect to study this course will need the following attributes:

- a self-directed learner who enjoys designing and conducting first-hand investigations
- a consistent work ethic
- a high level of curiosity
- clear and concise written expression
- a capacity for active learning and collaboration
- a good understanding all of the elements of the scientific method

# SOFTWARE DESIGN AND DEVELOPMENT

Students interested in the fields of software development and computer science will find this subject of value as will students interested in other fields of study. As more and more jobs and careers use IT, it is increasingly important for students to not necessarily be programmers, but to be able to work confidently with computer-based technologies, adapt to change and implement problem-solving skills. As such, this subject is not only for those who seek further study or careers in this field, but also for those who wish to improve their understanding of Information Technology and develop strong problem-solving and project management skills.

Students do not need prior experience in computing studies to study this course. There is a strong focus on developing practical skills through project-based learning. The course is structured 60% practical 40% theory, approximately.

## AIM

Software Design and Development provides students with a systematic approach to problem-solving and an opportunity to explore their creative interests. Software development is a challenging and unique field within the Computing discipline.

## COURSE CONTENT

### PRELIMINARY COURSE

- Concepts and Issues in the Design and Development of Software (30%)
- Introduction to Software Development (50%)
- Developing Software Solutions (20%)

### HSC COURSE

- Development and Impact of Software Solutions (15%)
- Software Development Cycle (40%)
- Developing a Software Package (25%)

### OPTION TOPICS (20%) – CHOOSE EITHER

Evolutions of Programming Languages **OR** The Software Developer's View of Hardware

## COURSE REQUIREMENTS AND EXPECTATIONS

Students should be able to effectively:

- Collect, analyse and organise information and data through thorough planning.
- Communicate ideas and information to allow the understanding of the problem to be solved and ensure that the proposed solution meets the users' needs.
- Use appropriate documentation methods to allow the tracking of the progress of all major projects undertaken.
- Work within an individual and a team environment to develop and analyse software problems and issues.
- Plan and organise activities within a specified time frame.
- Use mathematical ideas and techniques to allow the logical approach to the solving of a problem so that algorithms can be developed and appropriate decisions regarding data structures can be made.
- Select and use appropriate software and hardware technologies to allow the effective solving of problems and the production of a software solution.

Personal attributes which should ensure success in this course:

- Self-motivated
- Independent worker
- A complex and logical thinker
- An interest in computer programming and information technology

## **ASSESSMENT**

The types of assessment that will be used include:

- Unit Tests, Written Projects and Research Activities.
- Half Yearly and Yearly Examinations
- Project work: Two Major Individual Programming Projects are undertaken.
- (One in the Year 11 Preliminary Course and one in the Year 12 HSC Course)
- Practical work throughout the unit.

In the Preliminary and HSC Courses there are compulsory programming projects that will be undertaken. Both the Preliminary and HSC projects consolidate both the theory and practical aspects of the course and provide students with a final product, which they and others can use in everyday situations.

# SPORT, LIFESTYLE AND RECREATION

## I unit Content Endorsed Course (Available only in Year 11)

### AIMS

The Sport, Lifestyle and Recreation Content Endorsed Course develops in each student the knowledge, understanding and skills needed to adopt active and health-promoting lifestyles. Specifically, it focuses on those aspects of the learning area that relate most closely to participation in sport and physical activity. Participation in a range of leadership activities and the opportunity to attain a range of relevant accreditations are embedded in the course.

### OBJECTIVES

Through the study of Sport, Lifestyle and Recreation students will develop:

- Knowledge and understanding of the factors that influence health and participation in physical activity
- Knowledge and understanding of the principles and processes impacting on the realisation of movement potential
- The ability to analyse and implement strategies that promote health, physical activity and enhanced performance
- A capacity to influence the participation and performance of self and others
- A lifelong commitment to an active, healthy lifestyle and the achievement of movement potential

### COURSE REQUIREMENTS

This course is offered as a 1 unit Preliminary Course (Year 11) only. 60 indicative hours are required to complete this course, with three modules studied from a range of choices.

### COURSE EXPECTATIONS

For optimal involvement in this subject, students need to have an interest in health and physical education concepts. Students need to be prepared to participate in a wide range of practical activities and learning experiences.

### COURSE CONTENT

The modules that may be studied in Sport, Lifestyle and Recreation are:

- First Aid and Sports Injuries (RLSSA Senior First Aid Certificate)
- Sports Coaching and Training (Australian Sports Commission NCAS Level 1 Coaching Principles Certificate)
- Aquatics (RLSSA Bronze Medallion or Bronze Star)
- Sports Administration
- Resistance Training
- Games and Sports Applications

Students may study both PDHPE and SLR as the modules selected for study in SLR do not duplicate PDHPE modules. Module selection each year is based on the interest and ability of the cohort.

### ASSESSMENT

Student assessment is balanced between

- Knowledge and understanding outcomes and course content (50%) and
- Skills outcomes and content (50%).

Assessment methods may include the following:

- |                      |                                 |  |
|----------------------|---------------------------------|--|
| • Examinations       | • Written reports               | • Practical participation & performances |
| • Class essays       | • Excursion reports             | • Skills checklists                      |
| • Critical reviews   | • Internet research assignments | • Excursions, field trips, surveys       |
| • Debates            |                                 |  |
| • Diary/learning log | • Library research projects     |  |
| • Oral reports       |                                 |  |

There is no external examination of students in Stage 6 Content Endorsed Courses.

# STUDIES OF RELIGION I AND II

## AIMS

The aim of the Stage 6 Studies of Religion syllabus is to promote an understanding and critical awareness of the nature and significance of religion and the influence of belief systems and religious traditions on individuals and within society.

## OBJECTIVES

Students will develop knowledge and understanding about:

- The nature of religion and belief systems in local and global contexts
- The influence and expression of religion and belief systems in Australia
- Religious traditions and their adherents

Students will develop skills relating to:

- Effective gathering, analysing and synthesising of information about religion
- Effective evaluation and application of findings from research about religion
- Communication of complex information, ideas and issues in appropriate forms to different audiences and in different contexts.

Students will value and appreciate:

- Ethical and socially responsible behaviours which are brought about through empathy for, and acceptance, of religious diversity
- Fundamental rights of religious believers, rules and laws that promote fairness, justice and equality in society.

## COURSE REQUIREMENTS

Studies of Religion I (a 1 unit course over two years) and Studies of Religion II (a 2 unit course over two years)

## COURSE CONTENT

### Preliminary (Year 11)

#### 1 unit and 2 unit

- Nature of Religion and Beliefs
- Religious Tradition Study 1
- Religious Tradition Study 2

#### 2 unit only

- Religious Tradition Study 3
- Religions of Ancient Origins
- Religion in Australia 1945

### HSC course (Year 12)

#### 1 unit and 2 unit

- Religion and Belief Systems in Australia post-1945
- Religious Tradition Depth Study 1
- Religious Tradition Depth Study 2

#### 2 unit only

- Religious Tradition Depth Study 3
- Religion and Peace
- Religion and Non-Religion

**Note:** For this course, Religious Traditions are considered to be the five major Religions of Buddhism, Christianity, Hinduism, Islam and Judaism.

## ASSESSMENT

Tasks for Internal assessment include oral presentations, research, examinations and stimulus-based assessments. The HSC External examination will consist of objective response questions, short answer questions, essays and extended response.

# TEXTILES AND DESIGN

## AIMS

Textiles and Design Stage 6 is designed to enable students to understand and appreciate the nature and significance of textiles and to develop confidence and competence in the selection, design, manufacture and application of textile items.

## OBJECTIVES

Students will develop:

- Knowledge and understanding of the functional and aesthetic requirements of textiles for a range of applications
- Practical skills in design and manipulation of textiles through the use of appropriate technologies
- The ability to apply knowledge and understanding of the properties and performance of textiles to the development and manufacture of textile items
- Skills in experimentation, critical analysis and the discriminatory selection of textiles for specific end-uses
- Knowledge and understanding of Australian Textile, Clothing, Footwear and Allied Industries
- An appreciation of the significance of textiles in society

## COURSE CONTENT

### PRELIMINARY COURSE

#### **Area of Study: Design (40%)**

Studies in design allow students to develop knowledge and understanding of the functional aesthetics of design applied to a variety of textile materials, methods, techniques and end-uses. Practical design investigations, experiments and product manufacturing activities contribute to the development of a student's need to become discriminating individuals and consumers.

- Elements and principles of design
- Types of design
- Communication techniques
- Manufacturing methods
- Preliminary Textile Project 1. This focuses on the generation and communication of ideas, design modification, manipulative skills, evaluation of ideas and the project, and management of time and resources

#### **Area of Study: Properties and Performance of Textiles (50%)**

For students to understand and appreciate the properties and end-uses of textiles, a knowledge of fabrics, yarns and fibres is required. Experimentation with a range of fabrics will give students the opportunity to select appropriate fabrics for a textile item.

- Fabric, yarn and fibre structure
- Types, classification and identification of fabrics, yarns and fibres
- Fabric, yarns and fibre properties
- Preliminary Textile Project 2. This focuses on an analysis of fabric, yarn and fibre properties, experimental procedures, product design, fabric choice, manipulative and management skills, communication methods and the recording of information

#### **Area of Study: Australian Textile, Clothing, Footwear and Allied Industries (10%)**

Studies in this area will enable students to develop an understanding of the factors affecting the selection and quality of textile products from a local and global perspective. The changing nature of career options is investigated.

- Industry overview – past, present, future
- Quality and value of textiles

Through the Preliminary Textile Projects and the documentation that supports project development, students should be involved in initiating activities, planning procedures, experimenting, collecting data, communicating, formulating conclusions and evaluating ideas that they can substantiate with factual evidence.

In the Preliminary course, students will also undertake practical applications related to content being addressed. Examples of these may include experimental work, development of manufacturing skills, graphical, communication and sketching skills.

## **HSC COURSE**

### **Area of Study: Design (40%)**

Studies in this area will enable students to develop an understanding and appreciation of the influences of historical, cultural and contemporary aspects of design in society.

- Historical design development
- Fabric decoration
- Influence of culture on design
- Contemporary designers

### **Area of Study: Australian Textile, Clothing, Footwear and Allied Industries (10%)**

Studies in this area will enable students to make decisions about factors affecting the producer, manufacturer, retailer and consumer.

- Appropriate textile technology and environmental sustainability
- Current issues
- Marketplace

### **Area of Study: Properties and Performance of Textiles (50%)**

This area of study allows students to develop knowledge and understanding of scientific and technological developments. A critical approach towards the effects of innovations and emerging technologies is a major area of study.

- End-use applications
- Innovations and emerging textile technologies

### **Major Textiles Project**

Students will undertake a Major Textiles Project worth 50% of the HSC mark. The project focus is selected from ONE of the following areas:

- Apparel
- Furnishings
- Costume
- Textile arts
- Non-apparel

**The Major Textiles Project has TWO components:**

#### **1 Supporting documentation:**

- design inspiration
- visual design development
- project manufacture specification
- investigation, experimentation and evaluation

#### **2 Textile item(s)**

- Student's projects must be of a scale that fits into specific packaging requirements.

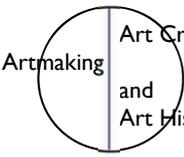
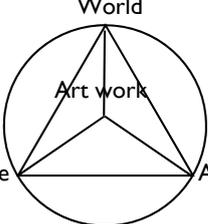
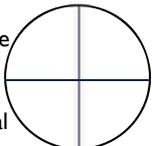
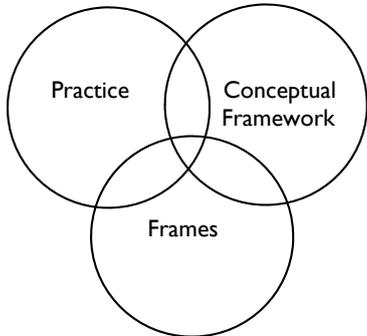
# VISUAL ARTS

## AIMS

Students will develop knowledge, skills and understanding of how they represent their interpretations of the world in artmaking as an informed point of view. Students will also investigate a broad range of artists, designers and crafts to enable their development of art criticism and art history.

The students Body of Work for the Higher School Certificate may explore drawing, painting, printmaking, photography, digital media, textiles and fibre, wearables, film, sculpture and performance works.

## COURSE CONTENT

Preliminary Course	HSC Course
<p style="text-align: center;"><b>Outcomes</b></p> <p style="text-align: center;"><b>CONTENT</b></p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>PRACTICE</p>  </div> <div style="text-align: center;"> <p>CONCEPTUAL FRAMEWORK</p>  </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="text-align: center;"> <p>Subjective</p>  </div> <div style="text-align: center;"> <p>Cultural</p> <p>Post modern</p> </div> </div> <p style="text-align: center;">FRAMES</p>	<p style="text-align: center;"><b>Outcomes</b></p> <p style="text-align: center;"><b>CONTENT</b></p> 
<p><b>Course Requirements</b></p> <p>A focus on the key components and concepts that need to be known in the visual arts through:</p> <ul style="list-style-type: none"> <li>• The content of practice, conceptual framework, frames</li> <li>• Making artworks in at least 2 forms eg sculpture, printmaking</li> <li>• Use of a process diary VAPD</li> <li>• Broad investigation of ideas in art criticism and art history</li> </ul>	<p><b>Course Requirements</b></p> <p>A focus on more interpretive investigations and relationships through:</p> <ul style="list-style-type: none"> <li>• The content of practice, conceptual framework, frames</li> <li>• The development of a Body of Work</li> <li>• Use of a process diary VAPD</li> <li>• Investigation of content through at least 5 case studies in art criticism and art history</li> </ul>
<p><b>Assessment</b></p> <p>School-based assessment:</p> <p>Art marking (50%)</p> <p>Art criticism and art history (50%)</p>	<p><b>Assessment</b></p> <p>School-based assessment:</p> <p>Development of the Body of Work (50%)</p> <p>Art criticism and art history (50%)</p> <p>External examination: submission of a Body of Work (50%) and written paper (50%)</p>

**\*Students should note:** There are strict size and weight restrictions for HSC Bodies of Work, as well as restrictions on the use of some materials such as glass and barbed wire. There are also restrictions on the use of some subject matter.