SA Certificate of Education (SACE)

Stage 1 Subjects

Accounting
Active Lifestyle for Women
Adult Literacy
Art
Art and the Community
Biology
Business and Enterprise
Car Care
Chemistry
Child Studies
Claymation
Computer Aided Drafting (CAD)
Computing
Design
Drawing
Electronic Music Production
English
English as a Second Language
Environmental Studies
ESL Pathways
Food and the Community
Geography
Health Science
History
Humanities
Information Processing & Publishing
  Business
  Personal
Introduction to Animation
Legal Studies
Mathematical Applications
Mathematical Studies
Mathematics - Preparation for Maths Studies
Metal Machining
Numeracy for Work and Community Life
PC Gaming (see page 23)
Personal Learning Plan

Physics
Psychology
Recreation and Fitness
Research Project Preparation
Science Pathways
Society and Culture
Textiles
Volunteering in Australia
Welding
Women's Studies
Woodwork
Working in Australia
Workplace Practices
ACCOUNTING A & B  
Business, Enterprise and Technology  
SACE Stage 1 ................................. 10 or 20 credits

COURSE DESCRIPTION
The study of accounting gives students opportunities to learn practical skills needed to record and understand financial information.

COURSE CONTENT
Accounting A (Semester 1)  
• The nature of accounting  
• Financial reports (Profit and Loss and Balance Sheet)  
• Source documents  
• Keeping cash journals

Accounting B (Semester 2)  
• Personal financial information (Budgeting)  
• Classified final reports and analysis and interpretation of final reports  
• Journals  
• Double entry recording

ASSESSMENT
Students demonstrate evidence of their learning through the following assessment types:

Skills and Applications Tasks  .................. 70%  
Investigative Study  ................................ 30%

FURTHER INFORMATION
Accounting A must be completed successfully before commencing Accounting B. This subject will give students a solid background for Accounting in Stage 2.

ACTIVE LIFESTYLE FOR WOMEN A & B  
Health and Personal Development  
SACE Stage 1 .................................. 10 or 20 credits

COURSE DESCRIPTION
This course includes practical activities and theory relating to fitness and sports activities, as well as health and dietary issues. It is especially suited to students wanting to develop their personal fitness, and those intending to proceed to Stage 2 Physical Education.

COURSE CONTENT
Practical Topics  
• Cardio and weight training program  
• Basketball, volleyball, badminton sports  
• Other recreational activities of interest to the class group

Folio Topics  
• Principles/methods to develop fitness  
• Role of diet for health and fitness  
• Investigation of a sporting issue of personal interest

ASSESSMENT
Practical activities  ............... 60%  
Folio tasks  ...................... 40%
ADULT LITERACY A & B
Humanities and Social Sciences
SACE Stage 1 10 or 20 credits

COURSE DESCRIPTION
This subject provides basic and functional language development. Knowledge of English will be developed around everyday written, visual and multimedia texts.

COURSE CONTENT
Students will build on their own experiences of daily life, work experiences and community participation to study topics related to:
- media
- social issues
- consumer awareness.

Students are supported in the creation of brochures, posters, ICT presentations and research reports.

ASSESSMENT
Students demonstrate evidence of their learning through:
- Text analysis 40%
- Text production 60%

ART A & B
Creative Arts
SACE Stage 1 10 or 20 credits

COURSE DESCRIPTION
Students complete tasks in the following areas of study:
- Visual Thinking
- Practical Resolution
- Visual Arts in Context.

COURSE CONTENT
This course aims to provide students with skills in both 2D and 3D art. Students can explore areas such as Painting, Drawing, Printmaking and Sculpture.

Students work through a creative process to produce practical work.

Students develop skills in individual research, exploring and experimenting with styles, media and techniques and interpreting and responding to visual arts in a cultural, social and/or historical context. This builds students’ knowledge and understanding of the visual arts.

ASSESSMENT
Students demonstrate evidence of their learning through the following assessment types:
- Folio 40%
- Practical works including a Practitioner’s Statement 30%
- Visual study 30%
ART & THE COMMUNITY A & B
Creative Arts
SACE Stage 1 10 or 20 credits

COURSE DESCRIPTION
Students choose from a range of art media, make decisions and develop work through the semester according to their interests, abilities and available resources.

COURSE CONTENT
In this subject students plan, make decisions and develop their art work for a group exhibition at the end of the semester. Students will also reflect on their work, learning and feedback received.

ASSESSMENT
Assessment type 1:
  Development of contract of work, folio and community activity (group art exhibition)
Assessment type 2:
  Reflection on learning

BIOLOGY A & B
Science
SACE Stage 1 10 or 20 credits

COURSE DESCRIPTION
This subject is intended for students who have an interest in Biology and may wish to continue with further studies in Biology at Stage 2.

COURSE CONTENT
Biology A
  - Classification of animals
  - Ecology
  - Adaptation
  - Use of microscopes
  - Cell functions
  - Cancer
  - Human physiology

Biology B
  - Micro-organisms
  - Human physiology
  - Plant adaptations
  - Genetics

ASSESSMENT
Assessment will include written tests, practical reports, oral presentations, issues analysis and hypothesis testing.

Skills and Application Tasks 50%
Investigations 50%

FURTHER INFORMATION
Prepares students for SACE Stage 2 Biology or Psychology
BUSINESS AND ENTERPRISE
Business, Enterprise and Technology
SACE Stage 1 10 credits

COURSE DESCRIPTION
Students will gain an understanding of business operations and how internal and external factors influence the performance of businesses. Students will improve their knowledge and understanding of the contribution small businesses make to society.

COURSE CONTENT
• Business in Australia
• Nature and Structure of Business
• Business Enterprise

ASSESSMENT
Students demonstrate evidence of their learning through the following assessment types:

<table>
<thead>
<tr>
<th>Assessment Type</th>
<th>Weightage</th>
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<tbody>
<tr>
<td>Folio</td>
<td>50%</td>
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<tr>
<td>Practical</td>
<td>25%</td>
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<td>Issues Study</td>
<td>25%</td>
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</table>

CAR CARE
CONSUMER AUTOMOTIVES
Business, Enterprise and Technology
SACE Stage 1 10 credits

COURSE DESCRIPTION
Students learn how to choose, buy and affordably run and maintain a motor vehicle.

Topics include energy sources, automotive systems maintenance, elementary fault finding and repair, finance and budgeting, personal consumer rights and obligations.

COURSE CONTENT
• Vehicle types and choices
• Fuel types and choices
• System identification and function
• Finance and budgeting
• Motoring organisations
• Pre-purchase inspection and consumer checks
• Owner's checks and maintenance schedules
• Subject specific literacy and numeracy

ASSESSMENT

<table>
<thead>
<tr>
<th>Assessment Type</th>
<th>Weightage</th>
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</thead>
<tbody>
<tr>
<td>Journal</td>
<td>30%</td>
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<tr>
<td>Assignment work</td>
<td>40%</td>
</tr>
<tr>
<td>Group activity</td>
<td>20%</td>
</tr>
<tr>
<td>Oral presentation</td>
<td>10%</td>
</tr>
</tbody>
</table>

FURTHER INFORMATION
This course will provide a useful foundation for students contemplating a career or future study in the automotive industry.
CHEMISTRY A & B
Science
SACE Stage 1 10 or 20 credits

COURSE DESCRIPTION
Chemistry A provides basic chemical knowledge that can be applied to everyday situations. Chemistry B provides a more specific background for Stage 2 Chemistry.

COURSE CONTENT
Chemistry A
• Atomic nature of matter
• Periodic Table - metals and non-metals
• Elements and compounds
• Structure of materials - metallic, ionic and covalent bonding
• Petrol and organic chemistry
• Laboratory skills (including OHS)
• Writing formulae and balancing equations

Chemistry B
• Stoichiometry
• Balancing equations and writing formulae
• Acids and salts
• Intermolecular forces
• Redox reactions
• Metal reactivity and electrochemistry
• Organic compounds
• Laboratory skills

ASSESSMENT
Skills and Application Tasks 45%
Folio 55%

FURTHER INFORMATION
It is recommended that students wishing to proceed to Stage 2 Chemistry complete both Chemistry A and Chemistry B.

CHILD STUDIES A & B
Health and Personal Development
SACE Stage 1 10 or 20 credits

COURSE DESCRIPTION
Students examine the period of childhood from conception to 8 years and issues related to the growth, health and well-being of children. They examine diverse attitudes, values and beliefs about childhood and the care of children, the nature of contemporary families and the changing roles of children in a contemporary consumer society.

COURSE CONTENT
There are three areas of study.
• The nature of childhood and the socialisation and development of children
• Children in wider society
• Children, rights and safety

ASSESSMENT
Practical 50%
Group work 20%
Investigative Study 30%
CLAYMATION
Creative Arts
SACE Stage 1 10 credits

COURSE DESCRIPTION
Students complete tasks in the following areas:
• Visual thinking
• Practical resolution
• Visual arts in context

COURSE CONTENT
Students will gain skills in developing a character that will be built using special techniques and materials specifically designed for claymation productions.

The character will be animated with stop motion techniques using iStopMotionPro, Apple computers, DSLR cameras and lighting.

Students will work as individuals and in teams simulating industry practices. A DVD of a claymation product will be produced.

ASSESSMENT
Students demonstrate evidence of their learning through the following assessment types:
• Folio
• Practical works, including a Practitioner’s Statement
• Visual study.

COMPUTER AIDED DRAFTING (CAD)
INVENTOR 3D MODELLING
Business, Enterprise and Technology
SACE Stage 1 10 credits

COURSE DESCRIPTION
Student will use the 3D Auto Desk Inventor software to produce three dimensional models of real life objects. From the models they will be able to view assembly sequences and print dimensioned drawings at Australian Industry Standards. This course is extremely useful for those students wishing to plan, design and develop dimensions for projects before they start making their own.

COURSE CONTENT
• Use industry standard CAD software
• Read and interpret technical drawings
• Technical trade specific language
• Project planning and production sequences
• Accurate marking out and measuring skills
• Create virtual 3D models of real objects
• Create virtual assembly sequences for projects
• Print industry-standard technical drawings
• Produce a ‘production diary’ of project design and development

ASSESSMENT
Skills and application task 20%
Folio 20%
Product 60%

FURTHER INFORMATION
Provides preparation for designing and production planning in all Design and Technology and VET subjects.
### COMPUTING

**APPLIED COMPUTING SKILLS**  
Business, Enterprise and Technology  
SACE Stage 1 10 credits

#### COURSE DESCRIPTION
In this subject students will gain introductory skills in a range of software including a word processor, a spreadsheets package and brainstorming software. Students will work individually and in groups toward a research goal and document their learning in a journal.

#### COURSE CONTENT
- Establishing research goals
- Create Mind Maps
- Survey design principles
- Produce and interpret graphs
- Collect and analyze data
- Develop presentation skills
- Report findings
- Reflect on learning

#### ASSESSMENT
- Practical  
  Letter  15%
  Graphing data and analysis  35%
- Group Activity  25%
- Folio and Discussion  25%

#### FURTHER INFORMATION
This subject involves working in groups towards achieving a goal, using computing skills learned along the way.

### DESIGN A & B

**Creative Arts**  
SACE Stage 1 10 or 20 credits

#### COURSE DESCRIPTION
This course will develop skills in designing for graphic, environmental or product design. The study of the influences of time, culture and society will support students’ understanding of the impact designs have on audiences and markets.

A design brief will be developed and the design process followed. Analysis of contemporary and previous designers’ work will give sound understanding of the process of creating effective designs. Industry standard software will be used to produce design products.

#### COURSE CONTENT
**Design A**
Develop fundamental design skills in the field of Graphic Design.

**Design B**
Choice of Graphic, Product or Environmental Design.

#### ASSESSMENT
Students demonstrate evidence of their learning through the following assessment types:
- Folio  40%
- Practical  30%
- Visual Study  30%
DRAWING
Creative Arts
SACE Stage 1 .......................... 10 credits

COURSE DESCRIPTION
In this course, students develop one major drawing and a folio of explorations in drawing technique using different styles and media. The focus can be drawn from a range of creative arts products from the architectural, botanic, expression, portrait or still-life fields.

COURSE CONTENT
• Drawing skills
• Drawing techniques and background of various artists
• Independent study of a creative artist of choice
• Written and oral reflection and evaluation of own work and others in relation to process, media, technique, skills and background concepts
• Participation in community art exhibition

ASSESSMENT
Product .......................... 50%
Folio ................................ 50%

ELECTRONIC MUSIC PRODUCTION
Business, Enterprise and Technology
SACE Stage 1 .......................... 10 credits

COURSE DESCRIPTION
In this course students will use Garageband and Logic Pro computer programs to design and produce music. Students will be able to create electronic music for use in other multimedia applications and for personal use.

COURSE CONTENT
• Song structure and design
• Midi programming and editing
• Importing, editing and sampling audio
• Using effects to change sound
• Recording techniques

ASSESSMENT
Skills and Applications Task .......................... 30%
Folio ................................ 30%
Product ................................ 40%

FURTHER INFORMATION
It is desirable that students undertaking this course be familiar with the basic operation of a computer and have a keen interest in creating music.
ENGLISH A & B

English
SACE Stage 1 ........................................ 10 or 20 credits

COURSE DESCRIPTION
This course is designed to provide skills in reading and responding to a range of texts as well as in the crafting and the production of various text-types.

COURSE CONTENT
• Reading and responding to novels, short stories, poems, plays or films.
• Appreciation of how authors communicate their ideas through the deliberate selection of techniques and language strategies.
• Analysis of the concepts, values, ideas and beliefs being expressed.
• Identification of the ways authors use language strategies to influence the audience.
• Creation of own communications, both written and oral, by developing and experimenting with different skills and text-types.
• An Extended Study into either Connected Texts, Language or as negotiated.

ASSESSMENT
This subject is moderated to ensure students do attain the required Literacy levels to satisfy the literacy requirements of SACE.

Text Production 40%
Text Response 40%
Extended Study 20%

FURTHER INFORMATION
This course is designed for students from English-speaking backgrounds.

ENGLISH AS A SECOND LANGUAGE A & B

English as a Second Language
SACE Stage 1 ........................................ 10 or 20 credits

COURSE DESCRIPTION
The course is designed for students for whom English is an additional language or dialect.

COURSE CONTENT
Each semester course will include the text study and one other of the following:
• Text Study – students explore a range of written, oral and visual texts constructed for different purposes and in a range of genres.
• Language Application (Communication Study) – students study written and oral texts as they are used in contexts beyond the classroom, and in particular, the use of texts to persuade, influence and instruct others.
• Language Application (Investigative Study) – students investigate a topic of personal interest by moving beyond the classroom to interview one or more people.

ASSESSMENT
One oral and one written task from each of the sections above.

Oral tasks 50%
Written tasks 50%

FURTHER INFORMATION
If students have had more than 5 years of education in English in Australia or overseas, they must have an ESL Scale of 11 or below in at least two texts to be eligible for Stage 1 ESL. Minimum ESL Scale 7 is required.
ENVIRONMENTAL SCIENCE
Science
SACE Stage 1 10 credits

COURSE DESCRIPTION
The course is designed to introduce students to the use of the scientific method for assessing the environment and providing possible solutions for its management and care.

COURSE CONTENT
Basic biological and geological knowledge will underpin the analysis and understanding of local and global issues.

Topics may include:
• Food security
• Energy - peak oil and renewables
• The future of water – local and global
• Climate change
• Biodiversity
• Waste management

ASSESSMENT
Written and oral assignments, topic tests and practical work.

Skills and Application Tasks 40%
Folio 60%

ESL PATHWAYS A & B
English as a Second Language
SACE Stage 1 10 or 20 credits

COURSE DESCRIPTION
This course is designed for students who may have completed NAP or CEP courses and wish to continue developing their English language skills and possibly access further SACE studies. It develops students’ abilities to understand, respond to and compose oral and written texts in a range of genres and situations.

COURSE CONTENT
Each semester, four assessment tasks from:
• Text Analysis – students analyse different structural and language features of one or more texts to understand the ways in which texts are constructed for specific purposes and audiences e.g. letters, brochures, arguments, narratives, reports.
• Text Production – students study topics related to work and community life and produce oral and written texts.

ASSESSMENT
Text Analysis 1 25%
Text Production 1 25%
Text Production 2 25%
Text Production 3 25%

FURTHER INFORMATION
This subject is appropriate for students with an ESL scale of 5-6.

It is recommended that students also enrol in CEP Grammar and Writing and/or CEP Pronunciation and Oral Presentation.
FOOD & THE COMMUNITY
A & B
Community Studies
SACE Stage 1 ........................................ 10 or 20 credits

COURSE DESCRIPTION
Students can choose their own area of interest in the field of food and work individually, or in a team, to develop their capabilities for personal development, learning and work by working in the community. The community can be the school or the wider community.

COURSE CONTENT
Students can decide on their own community activity either individually or in a group and topics that may be chosen include:

- nutrition
- food preparation and presentation
- catering
- the dietary needs of particular groups
- food hygiene
- or any other food related topic that interests the student or group of students.

An individual or group contract of work is written or recorded and then the community activity is carried out. At the end of the community activity, feedback from the community is given and the students then write or record information which reflects on their learning.

ASSESSMENT
Assessment Type 1  Contract of work
Assessment Type 2  Reflection
GEOGRAPHY
Humanities and Social Sciences
SACE Stage 1 10 credits

COURSE DESCRIPTION
The study of Geography deals with diverse environmental phenomena and human activities including natural hazards, landforms, tourism, economic development, agriculture and urban planning.

COURSE CONTENT
There are four key themes:

Location and Distribution
The development of geographical abilities in relation to local, national, and global patterns and interconnections. Use of spatial technology is a critical component.

Natural Environments at Risk
Involves an understanding of the four spheres of the natural environment (atmosphere, biosphere, hydrosphere and lithosphere) and how each of these is at risk from human activities.

People, Resources, and Development
The interplay of culture, economics, politics and other social considerations is critical to this theme.

Issues for Geographers
Involves an exploration of the geographical nature of some of the issues facing societies.

ASSESSMENT
Skills and Applications Tasks 30%
Inquiry 25%
Fieldwork 20%
Investigation 25%

HEALTH SCIENCE
Science
SACE Stage 1 10 credits

COURSE DESCRIPTION
The course is designed for students who want to improve their general scientific knowledge, skills and writing techniques.

COURSE CONTENT
- Health, safety and hygiene
- Health care professions
- Body systems
- Fitness
- Stress
- Injuries, allergies and first aid
- Nutrition
- Disease and medication
- The immune system

ASSESSMENT
Written and oral assignments, topic tests and practical work.
Skills and Application Tasks 50%
Folio 50%
HISTORY
Humanities and Social Sciences
SACE Stage 1 ................................................. 10 credits

COURSE DESCRIPTION
History involves the investigation of human experience over time. By studying past events, actions and phenomena, students gain an insight into human nature and the ways in which individuals and societies function. History builds understanding through the investigation of historical concepts and ideas such as change and continuity; historical empathy; power and its distribution; the causes and resolution of conflicts; rules and rulers.

COURSE CONTENT
The course involves developing the skills of historical inquiry and two historical studies.

The historical studies chosen will be selected, in negotiation with the students, from the following:
- Rise and fall of Nazi Germany
- Second World War
- Industrial Revolution
- 20th Century Australia
- Vietnam War
- Society in Victorian England
- Chinese Revolution
- Movements of the 20th Century (Women’s, Environmental, Union etc)
- Negotiated studies

ASSESSMENT
Folio .......................................................... 40%
Sources Analysis ........................................ 20%
Investigation .............................................. 40%

HUMANITIES A & B
Humanities and Social Sciences
SACE Stage 1 ................................................. 10 or 20 credits

COURSE DESCRIPTION
This course will explore the following topics: democracy and citizenship; human rights and the impact of colonialism.

COURSE CONTENT
Humanities A

Democracy and citizenship
- the Australian political system
- Members of Parliament
- Citizenship

Human Rights
- Human rights issues
- Human rights defenders

Colonialism
- The nature of colonialism
- Colonialism in one country

Humanities B
- Australian migration
- Unions
- Sustainability and you

ASSESSMENT
Text production ........................................... 75%
Text analysis .............................................. 25%
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INFORMATION PROCESSING AND PUBLISHING - BUSINESS
Business, Enterprise and Technology
SACE Stage 1 ............................................. 10 credits

COURSE DESCRIPTION
Information Processing and Publishing focuses on the application of practical skills to provide creative solutions to business text-based communication tasks. Business Publishing combines the use of software and hardware with the elements and principles of design and an understanding of the processes and procedures involved in using information to produce business publications.

COURSE CONTENT
Business Publishing
- Business letters
- Business reports
- Agendas
- Minutes of meetings
- Menus
- Advertisements
- Itineraries
- Business forms

ASSESSMENT
Students demonstrate evidence in the following assessment types:

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<thead>
<tr>
<th>Practical Skills</th>
<th>50%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product and Documentation</td>
<td>30%</td>
</tr>
<tr>
<td>Issues Analysis</td>
<td>20%</td>
</tr>
</tbody>
</table>

INFORMATION PROCESSING AND PUBLISHING – PERSONAL
Business, Enterprise and Technology
SACE Stage 1 ............................................. 10 credits

COURSE DESCRIPTION
Information Processing and Publishing focuses on the application of practical skills to provide creative solutions to personal text-based communication tasks. Students create both hard copy and electronic text-based publications and evaluate the development process.

COURSE CONTENT
Personal Publishing
- Data Input
- Keyboarding
- Personal Letters
- Margin Headings
- Displays
- Tables
- Menu displays
- Final display task (Product and Documentation)
- Issues Analysis task

ASSESSMENT
Students demonstrate evidence of their learning through the following assessment types:

<table>
<thead>
<tr>
<th>Practical Skills</th>
<th>50%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Documentation</td>
<td>30%</td>
</tr>
<tr>
<td>Issues Analysis</td>
<td>20%</td>
</tr>
</tbody>
</table>
INTRODUCTION TO ANIMATION
Business, Enterprise and Technology
SACE Stage 1 10 credits

COURSE DESCRIPTION
This course is an introductory course in which students will design, create and evaluate animation movies. The Adobe Flash computer program will be used to produce animations, add sounds and make interactive animations.

COURSE CONTENT
• Frame by frame animation
• Motion tweening
• Working in scenes
• Applying motion paths
• Animating pictures
• Creating movie clip symbols
• Creating action buttons
• Adding sound
• Creating shockwave movies
• Make Interactive animations

ASSESSMENT
Skills and Application Tasks 30%
Folio 30%
Project 40%

FURTHER INFORMATION
It is desirable that students undertaking this course be familiar with the basic operation of a computer and have a keen interest in drawing and creating animated movies.

LEGAL STUDIES
Humanities and Social Sciences
SACE Stage 1 10 credits

COURSE DESCRIPTION
The study of Legal Studies provides insight into law-making and the processes of dispute resolution and administration of justice. Students evaluate the merits of the adversary system of trial and other forms of dispute resolution systems and processes. In addition, students investigate legal perspectives on contemporary issues in society.

Students examine the Australian legal system. They read and write about, discuss, analyse and debate issues. They use a variety of methods to investigate legal issues, including observing the law in action in courts and through various media.

COURSE CONTENT
• Law and Society
• People, Structures and Processes
• Law Making
• Justice and Society
• Victims and the Law
• Motorists and the Law

ASSESSMENT
Folio 60%
Issues Study 20%
Presentation 20%
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MATHEMATICAL APPLICATIONS A & B
Mathematics
SACE Stage 1 ................................. 10 or 20 credits

COURSE DESCRIPTION
This course is intended as a first unit for students who wish to proceed to other Mathematical courses. Students who achieve a ‘C’ grade or higher will gain the required SACE Numeracy.

COURSE CONTENT
Mathematical Applications A
• Earning and Employment
• Earning wages, salaries and taxation
• Balancing books, fees and charges
• Spending and percentage calculations, discounts and GST
• Measurement
• Scale, ratio and time
• Perimeter, area, volume and capacity

Mathematical Applications B
• Saving, Borrowing
• Financial institutions
• Balancing books, fees and charges
• Investing
• Statistics
• Mean, median and reliability
• Spread of a distribution
• Conjectures from interval and categorical data
• Excel spreadsheets for graphing purposes
• Sampling of populations
• Data based investigation

ASSESSMENT
Skills and application tasks 65%
Folio tasks 35%

MATHEMATICAL APPLICATIONS C
Mathematics
SACE Stage 1 ................................. 10 credits

COURSE DESCRIPTION
This course contains topics on Simulating Random Processes and Functions and Graphs.

COURSE CONTENT
Functions and Graphs
• Graphs of points and lines
• Linear equations
• Interpreting slope
• Models of growth
• Graphs of exponentials
• Applications to finance

Simulating Random Processes
• Electronic simulations
• Problem solving using simulations
• Probability calculations
• Queuing

ASSESSMENT
Skills and application tasks 65%
Folio tasks 35%
**MATHEMATICAL STUDIES A**
Mathematics
SACE Stage 1 10 credits

**COURSE DESCRIPTION**
Mathematical Studies A may be taken concurrently with, or following, Mathematical Studies B. Graphs and graphic calculators will be used throughout this subject to solve problems.

**COURSE CONTENT**

**Statistics**
- centre of a distribution
- spread of a distribution
- sampling
- normal distribution

**Geometry and Mensuration**
- right angled triangle geometry
- solving non-right angled triangles

**2-D Coordinate Geometry**
- distance formula, ratio, equations of straight lines
- equations of circles
- inverse functions

**ASSESSMENT**
Skills and application tasks 70%
Folio tasks 30%

**FURTHER INFORMATION**
Students who wish to do Mathematical Studies at Stage 2 should do both Mathematical Studies A and B at Stage 1. Students wishing to do Specialist Mathematics at Stage 2 should also do the Mathematical Studies C (Specialist Preparation) unit.

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**MATHEMATICAL STUDIES B**
Mathematics
SACE Stage 1 10 credits

**COURSE DESCRIPTION**
Mathematical Studies B may be taken concurrently with, or following, Mathematical Studies A. Graphs and graphic calculators will be used throughout this subject to solve problems.

**COURSE CONTENT**

**Quadratics and other Polynomials**
- The quadratic function
- Quadratic algebra
- Cubics and Quartics

**Models of Growth**
- Linear functions
- Exponential functions

**Logarithms**
- Rules, solving exponential equations
- Using Binomial Theorem

**Functions and Graphs**
- Linking algebraic and graphical representations of a relationship
- Sketching of linear, quadratic and other functions
- Graphs of cubic polynomials

**ASSESSMENT**
Skills and application tasks 70%
Folio tasks 30%

**FURTHER INFORMATION**
See Mathematical Studies A
MATHEMATICAL STUDIES C
SPECIALIST PREPARATION
Mathematics
SACE Stage 1 ........................................................................ 10 credits

COURSE DESCRIPTION
This course is intended to provide prerequisite knowledge for students who wish to proceed to Specialist Mathematics at Stage 2.

COURSE CONTENT
Planar Geometry
• Similar Triangles and Congruence
• Circle Properties
• Cyclic Quadrilaterals

Vectors
• Operations
• Component Form
• Unit Vectors
• Vector Projection

Periodic Phenomena
• Observing Periodic Behaviour
• Sine Function
• Cosine Function
• Trigonometric relationships

ASSESSMENT
Skills and application tasks 70%
Folio tasks 30%

FURTHER INFORMATION
The Study of Stage 1 Mathematical Studies A and B is assumed for all students wishing to study Stage 2 Mathematical Studies and Mathematical Studies C is required for Stage 2 Specialist Mathematics.

MATHEMATICS
PREPARATION FOR MATH STUDIES
Mathematics
SACE Stage 1 ........................................................................ 10 credits

COURSE DESCRIPTION
This course is intended to provide students with additional mathematical skills needed for Stage 1 Mathematical Studies A,B and C

COURSE CONTENT
Numbers
• Rational, irrational, surds and their applications

Algebra
• Index laws, quadratics, factorization, binomial expansion

Linear functions
• Graphs, their equations and what they mean

Geometry
• Properties shapes and deductive geometry

ASSESSMENT
Skills and Application Tasks 60%
Folio (Assignment work) 40%
METAL MACHINING
Business, Enterprise and Technology
SACE Stage 1 10 credits

COURSE DESCRIPTION
Students identify, create, initiate and develop products using metal fabrication and welding tools and technologies. Students analyze the impacts of technology on people, society and the environment. Students use hand and power tools and machines to make and evaluate products.

COURSE CONTENT
There will be a strong emphasis on industrial and workshop safety. Students will use drilling machines, milling machines and metal turning lathes to manufacture a range of small components. The practical aspects of the course will be underpinned with theoretical knowledge about all processes used. Materials will include various steel, brass and aluminium sections, such as round, flat and hexagonal bar stock.

There is a focus on employability skills and employment opportunities in the metal fabrication industry. The nature of apprenticeships will be discussed.

ASSESSMENT
Skills and application tasks 20%
Folio 20%
Product 60%

FURTHER INFORMATION
Most safety clothing will be provided, but students will need to wear sturdy shoes at all times in the workshop. It is advisable for students to wear overalls or similar work clothes whilst using machines.

NUMERACY FOR WORK AND COMMUNITY LIFE
Mathematics
SACE Stage 1 10 credits

COURSE DESCRIPTION
This course is intended as a first unit for students who wish to proceed to other mathematics courses. Students who achieve a ‘C’ grade or higher will gain the required SACE Numeracy credits.

COURSE CONTENT
The following topics will be covered:
- Using electronic calculators (scientific and graphic)
- Spreadsheets (Excel)
- Fractions, decimals, percentages
- Calculation of discounts, GST and simple interest
- Group work investigations
- Units of measurements and applying the units in everyday situations
- Measuring shape and space
- Investigating wages and salaries.

ASSESSMENT
Skills and application tasks 70%
Folio tasks 30%
PERSONAL LEARNING PLAN
Cross Disciplinary Studies
SACE Stage 1 .............................. 10 credits

COURSE DESCRIPTION
Students have an opportunity to explore the five Capabilities of Learning, Communication, Personal Development, Work and Citizenship.

COURSE CONTENT
Capabilities
• Write a short autobiography
• Development of capabilities

Goal Setting
• Use the SMART template to set goals
• Develop short term and long term goals

Planning Future Pathways
• Complete an on-line career quiz
• Collect career and job information, eg Career Expo
• Research further study and training pathways
• Complete subject selections for the next semester

Presenting Your Plan
• Deliver a short presentation, supported by media such as PowerPoint and the resources collected. Outline plans for further study and training.

ASSESSMENT
Folio .................................. 75%
Reflection .......................... 25%

FURTHER INFORMATION
The PLP is a compulsory component of the SACE and it must be passed at C grade or better to count as 10 credits.

PHYSICS A & B
Science
SACE Stage 1 .............................. 10 or 20 credits

COURSE DESCRIPTION
The course is designed as an introduction to Physics. It enables students to understand and appreciate the world around them. The focus is on concepts and experimental methods used to understand what happens in the physical world.

COURSE CONTENT
Physics A
• Waves and their properties
• Light and sound
• Static and current electricity
• Electricity in the home

Physics B
• Kinematics – the study of motion of objects
• Dynamics – the study of the interaction of objects
• Newton’s laws of motion
• Conservation Laws
• Relativity

ASSESSMENT
Written assignments, topic tests and practical work including the testing of hypotheses.

Skills and Application Tasks .......................... 60%
Folio .................................. 40%

FURTHER INFORMATION
It is strongly advised that students wishing to study Stage 2 Physics complete both Physics A and Physics B.
PSYCHOLOGY A & B
Science
SACE Stage 1 .................................................. 10 or 20 credits

COURSE DESCRIPTION
This course is an introduction to the study of Psychology showing how it relates to our social world. Psychology builds on the scientific method by involving students in the collection and analysis of qualitative and quantitative data. It enables students to understand their own behaviours and the behaviours of others.

COURSE CONTENT
Psychology A
• Introduction to Psychology - a required background in the principles of research, the profession and ethics.
• Social Influence - a study of films and experiments, persuasion and aggression.
• Emotions - a study of the way people express their emotions and what causes the behaviour.

Psychology B
• Introduction to Psychology - a required background in the principles of research, some basic statistics, the profession and ethics.
• Biological Basis of Behaviour - functions of the human brain and how the brain is studied.
• Human Personal Development.

ASSESSMENT
Skills and applications tasks 50%
Folio 40%
Group work 10%

RECREATION AND FITNESS A & B
Health and Personal Development
SACE Stage 1 .................................................. 10 or 20 credits

COURSE DESCRIPTION
This course includes practical activities relating to fitness and sports activities, as well as a study of topical issues relating to fitness, health and sport. It is especially suited to students wanting to develop their personal fitness and particular sports abilities and those intending to proceed to Stage 2 Physical Education.

COURSE CONTENT
Practical Topics
• Cardio and weight training program
• Basketball, volleyball, badminton, soccer, tennis and cricket
• Other recreational activities of interest to the class group

Folio Topics
• Principles of and methods to develop fitness
• Components of a healthy lifestyle
• How we learn sports skills
• Investigation of a sporting issue of personal interest

ASSESSMENT
Practical activities 60%
Folio tasks 40%
RESEARCH PROJECT PREPARATION
Cross Disciplinary Studies
SACE Stage 1 ........................................................................ 10 credits

COURSE DESCRIPTION
This course is designed to provide an introduction to the skills and understandings needed to complete the compulsory Research Project at Stage 2.

COURSE CONTENT
• Choosing a topic
• Developing a proposal
• Planning research
• The research process
• Keeping records
• Research product
• Reflection

ASSESSMENT
Practical ........................................................................ 40%
Group Activity .............................................................. 20%
Folio and Discussion ......................................................... 40%

SCIENCE PATHWAYS
Science
SACE Stage 1 ........................................................................ 10 credits

COURSE DESCRIPTION
A SACE course to provide students with the skills for SACE Stage 1 Physics, Chemistry and Biology.

COURSE CONTENT
Each semester will focus on different aspects of science in which the following will be covered:
• Explaining scientific phenomena
• Reading and understanding scientific text
• Planning and investigation
• Conducting research
• Collating, representing and analyzing data
• Evaluating scientific investigations
• Presenting findings.

ASSESSMENT
Assessment will include a variety of tasks that cover students’ understanding and the skills acquired. Individual and collaborative tasks will be assessed.

Folio ........................................................................ 50%
Skills and Application Tasks ............................................. 50%
SOCIETY AND CULTURE  
Humanities and Social Science  
SACE Stage 1  10 credits

COURSE DESCRIPTION
Students study the interactions of people, societies, cultures and environments. They learn about the ways in which societies constantly change and are affected by social, political, historical, environmental, economic and cultural factors. Students develop the ability to influence their own future by acquiring skills, values and understanding that enable them to participate effectively in contemporary society.

COURSE CONTENT
Students study two of the following topics. Selection of topics negotiated with the class:

- Cultural diversity
- Social issues
- Popular culture
- Sub-cultures
- Lifestyle diversity
- Social change
- Land and culture

ASSESSMENT
Students demonstrate evidence of their learning through the following assessment types:

<table>
<thead>
<tr>
<th>Assessment Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sources Analysis</td>
<td>50%</td>
</tr>
<tr>
<td>Group Activity</td>
<td>25%</td>
</tr>
<tr>
<td>Investigation</td>
<td>25%</td>
</tr>
</tbody>
</table>

TEXTILES A & B  
Cross-Disciplinary Studies  
SACE Stage 1  10 or 20 credits

COURSE DESCRIPTION
The course looks at textiles and how they are used in the community. The class will develop community activities as a group as well as each student having to undertake their own community activity. Students will be able to further develop their skills in sewing, computer embroidery design and machining and the sewing and using of textiles in a variety of garments and articles.

COURSE CONTENT
Students select their own community activity and they could include:

- Garment construction – clothing for adults, children or babies
- Accessories for fashion - eg scarves, bags
- Household items – quilts, cushions, throw rugs
- Using woven or stretch textiles in a variety of ways
- Creative use of textiles including knitting and crochet.

ASSESSMENT
Practical Community Activity
Contract of Work
Folio
Reflection
VOLUNTEERING IN AUSTRALIA
Humanities and Social Science
SACE Stage 1 10 credits

COURSE DESCRIPTION
Students will gain experience and knowledge about volunteering and have the opportunity to undertake a volunteer experience.

The course will provide an overall understanding of the types of volunteering including both local and international opportunities.

COURSE CONTENT
- Knowledge of the variety of volunteering experiences available
- Preparing for volunteering
- Responsibilities of a volunteer
- Legal requirements of volunteers
- Basic first aid information
- Preparation of a personal resume and skills register

ASSESSMENT
Volunteering placement 30%
Research assignment 20%
First Aid assignment 20%
Journal and Folio presentation 30%

WELDING
Business, Enterprise and Technology
SACE Stage 1 10 credits

COURSE DESCRIPTION
This course is mainly practical work based upon the learnt skills of welding and metal fabrication. Students learn OHS guidelines in the practical use of Oxy-Acetylene, Manual Metal Arc and Spot Welding machines. The technical language, theory and skills required are learnt from the practical work in making a welded metal project.

COURSE CONTENT
- Use of machines and hand power tools
- Development of accurate hand skills
- Technical trade specific language
- Reading and interpreting technical drawings
- Project planning and production sequences
- Accurate marking out and measuring skills
- Oxygen-acetylene welding
- Manual Metal Arc Welding (Arc)
- Resistance Welding (Spot)
- Producing a ‘production diary’ and basic sketches

ASSESSMENT
Skills and Application Tasks 20%
Folio 20%
Product 60%

FURTHER INFORMATION
This subject provides preparation for Stage 1 Machining, Stage 2 Metals subjects and the VET Metal Trades course.
WOMEN’S STUDIES
Humanities and Social Sciences
SACE Stage 1 10 credits

COURSE DESCRIPTION
In Women’s Studies students look at the world from the perspectives of women. They examine the diversity of women’s experiences and their relationships to others while promoting an inclusive and just society. Students identify complex and contradictory ideas that exist about femininity and masculinity, and how being a woman or a man may influence an individual’s experiences and expectations.

COURSE CONTENT
- Gender Analysis Framework: Women, Gender and Social Identity
- Representations of Women in Cultural Texts
- Key Issues in Women’s Studies (one issue study)

ASSESSMENT
Students demonstrate evidence of their learning through the following assessment types:

Text Analysis 40%
Group Presentation 30%
Issues Analysis 20%

WOODWORK A & B
Business, Enterprise and Technology
SACE Stage 1 10 or 20 credits

COURSE DESCRIPTION
Students identify, create, initiate and develop products using woodworking tools and technologies. Students analyze the impacts of technology on people, society and the environment.

COURSE CONTENT
There will be a strong emphasis on industrial and workshop safety. Students will use hand and power tools to make framing joints including rebate joints, housing joints and dowel joints. Materials will include natural pine timber sections as well as a range of manufactured boards. Skills tasks will be based around a small ladder and design tasks will be focused on a small item of home furniture. The practical aspects of the course will be underpinned with theoretical knowledge about all processes used.

There is a focus on employability skills and employment opportunities in the cabinet making and furniture making industries. The nature of apprenticeships will be discussed.

ASSESSMENT
Skills and Application Tasks 20%
Folio 20%
Product 60%

FURTHER INFORMATION
Most safety clothing will be provided, but students will need to wear sturdy shoes at all times in the workshop. It is highly advisable for students to wear an apron or similar to cover clothing.
WORKING IN AUSTRALIA
Humanities and Social Science
SACE Stage 1 10 credits

COURSE DESCRIPTION
This program is designed to enable students to develop their English language literacy skills through the use of critical reading and viewing of the media.

The course is based on current affairs in order to maximise the chances of each student being familiar with and/or having an opinion on the topics under discussion.

COURSE CONTENT
This is a functional literacy class where explicit modelling and targeted exercises will be provided to support development of literacy skills.

Students will also have the opportunity to develop the capabilities of communication, citizenship, personal development, work and learning.

They will gain an appreciation of, and competence in, the literacy skills valued by employers. Students will recognise the ways in which literacy skills, and knowledge and understanding of the structure and style of a variety of texts, can be applied in the workplace and the wider community through analysis of media reports, advertisements and letters targeting different audiences and serving different functions.

ASSESSMENT
Text analysis 40%
Text production 60%

WORKPLACE PRACTICES
Business, Enterprise and Technology
SACE Stage 1 10 credits

COURSE DESCRIPTION
Students develop knowledge, skills and understanding of the nature, type and structure of the workplace. Students can undertake learning in the workplace and develop their capabilities, interests and aspirations.

COURSE CONTENT
Focus areas of study:
- Industry and Work Knowledge
- Vocational Learning
- Vocational Education and Training (VET).

2 topics will be selected from:
- Future Trends in the World of Work
- The Value of Unpaid Work to Society
- Workers Rights and Responsibilities
- Career Planning
- Negotiated Topics.

ASSESSMENT
Students demonstrate evidence of their learning through:
Folio 40%
Performance 30%
Reflection 30%