



Launceston  
Grammar

EST. 1846



# Grade 9 and 10 Handbook



# Grades 9 and 10 Subject Handbook 2021

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# Academic Programme

The six years of secondary education available at Launceston Church Grammar School can be shown as three modules, each two years in duration.

## **THE INTRODUCTORY MODULE GRADES 7 AND 8**

The first two years at secondary school aim to provide students with a broad experience of education. A wide range of subjects offers experience in language, speech and communication, creativity and the arts, society, science and technology, with a view to making the most informed choices for future study.

## **THE CONSOLIDATING MODULE GRADES 9 AND 10**

The middle two years of the secondary school in which students may specialise in subjects according to individual needs, strengths and interests. The course consists of a common core plus up to eight half-year elective subjects and introduces students to approaches to work and forms of assessment which will be critical in the final module.

## **THE TCE MODULE GRADES 11 AND 12**

The final two years of secondary education which leads to the award of the Qualification Certificate and the Tasmanian Certificate of Education prepares students for further study, work, and their future. Students at this level can follow general or quite specialised courses. Provision is made for both academic and vocational pathways.

# Core Curriculum

The core of the Grades 9 and 10 academic programme is composed of the key subjects studied in the introductory module maintaining such themes as literacy, numeracy, understanding and awareness of one's place in a changing world, and practical abilities developed throughout Grades 7 and 8.

## **Subjects in the core:**

- Christian Studies
- English
- Mathematics
- Science
- History and Citizenship
- Health and Physical Education

The structure of the core reflects the role of traditional subject disciplines, but through Grades 9 and 10 there are numerous opportunities to pursue further questions using skills and understanding from a wide range of disciplines.

Some students will undertake English as a Second Language or Literacy support in addition to English.

The Australian Curriculum was introduced in 2013 with students in Grades 9 and 10 studying English, Mathematics, Science and History. Other subjects have been progressively introduced, after they have been approved by the Australian Curriculum Assessment and Reporting Authority (ACARA).



# The Australian Curriculum

The Australian Curriculum sets out the core knowledge, understanding, skills and general capabilities important for all Australian students.

The Australian Curriculum:

- describes the learning entitlement of students as a foundation for their future learning, growth and active participation in the Australian community;
- makes clear what all young Australians should learn as they progress through schooling;
- is the foundation for high quality teaching to meet the needs of all Australian students;
- acknowledges that the needs and interests of students will vary, and that schools and teachers will plan from the curriculum in ways that respond to those needs and interests;
- acknowledges the changing ways in which young people will learn and the challenges that will continue to shape their learning in the future.

The Australian Curriculum will eventually be developed for all learning areas and subjects set out in the Melbourne Declaration: initially for English, mathematics, science and history; followed by geography, languages, the arts, health and physical education, economics and business, civics and citizenship, and digital technology and design and technology.

The Australian Curriculum includes a focus on seven general capabilities (literacy, numeracy, information and communication technology competence, critical and creative thinking, ethical behaviour, personal and social competence and intercultural understanding) and three cross-curriculum priorities (Aboriginal and Torres Strait Islander histories and cultures, Asia and Australia's engagement with Asia and Sustainability). Continua of learning have been developed for each, to describe the relevant knowledge, understanding and skills at particular points of schooling.

**Contact Teacher**      Mrs Michelle Stocks



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# Christian Studies

## Subject Description

Building on their understanding of the Christian tradition gained in Grade 7 and 8, students look at wider issues in our society related to religion and ethics, and also consider more deeply their own spirituality, beliefs and values.

Students look further at world religions and religions in our society with the aim of being better informed about and gaining a deeper appreciation of religions and worldviews. They gain a deeper understanding of Christianity and Anglicanism.

They examine controversies in society, looking at ethical approaches, and studying current controversies of concern. From time to time religious and values issues in the news may be examined.

Class work in Christian Studies is supplemented by activities undertaken by students in their Chapel, Outdoor Education and Retreat programs. Where possible, links to other subject areas including English, History and Science are made, in order to enrich students understanding. Students have opportunities to reflect on their own life and spirituality and to gain from experiences of reflection and stillness. They are encouraged to understand others and to express their convictions in an informed and respectful manner.

A number of topics and units are selected to offer the students a rich range of experiences, and may include the following:

- religious and philosophical questions such as god, creation, evil
- current issues and controversies
- ethical frameworks to assist with deeper understanding of controversies
- religious leaders and thinkers
- bible topics or themes such as psalms, love, hope
- wisdom literature including proverbs, ecclesiastes, song of songs
- christian denominations
- anglicanism
- saints and mystics
- sacred places and journeys
- virtues and vices
- inspirational people
- personal beliefs, spirituality, values and purposes
- charities and humanitarian organisations
- peace

**Contact Teacher**      Reverend Paul Grayston



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# English

## Subject Description

The English curriculum is based on the requirements of the Australian Curriculum which is organised into three interrelated strands. Together the three strands focus on developing students' knowledge, understanding and skills in listening, reading, viewing, speaking and writing. The three strands are:

- Language: knowing about the English language
- Literature: understanding, appreciating, responding to, analysing and creating literature
- Literacy: expanding the repertoire of English usage.

The texts have been selected to correspond with the Australian Curriculum and because they offer students a range of cultural experiences, they are relevant to our students or have an enduring artistic value. As our students are increasingly exposed to a large range of texts and media in their life, so too our chosen texts cover a range of forms such as novels, expository texts, poetry, short stories and plays, multimodal texts such as film, documentaries, music and web based texts.

The English curriculum aims for students to:

- Increase their ability to use language and its conventions to speak, listen, read, view and write according to context, purpose and audience.
- Develop a sound grasp of increasingly complex linguistic structures and features of standard Australian English and the capacity to apply these.
- Develop a broad knowledge of a range of literature, including Australian literature, classic and contemporary world literature and a capacity to relate this literature to aspects of contemporary society and personal experience.
- Engage with a variety of literary genres (fiction, non-fiction and multimedia texts) in order to explore issues, characters, plot sequences and structures through a variety of responses and to gain insight into the structure and craft of such texts.
- Compose and craft a range of texts including oral, written, creative, analytical, expository and multimedia texts in which the purpose is to engage, inform, persuade or entertain.
- Increase their understanding of the ways in which textual interpretation and understanding may vary according to cultural, social and personal contexts.
- Discuss and analyse texts and language critically and with appreciation.
- Learn to work constructively in both individual and group contexts.
- Develop the organisation and skills needed to take increasing responsibility for their own learning.

## Contact Teacher

Mrs Anne Gunn

# Mathematics

## Subject Description

### Grade 9

There are three available courses designed to cater for the differing needs of our students.

The **Extension** syllabus is offered to students with a high degree of Mathematical skill and ability. Most students will have completed the Grade 8 extension course. They will complete the work in an elective subject in addition to their regular Mathematics lessons. More details are available in the elective section of this booklet. Students at this level require a CAS (algebra) calculator to assist their learning.

The majority of students study the **Mathematics** syllabus which addresses the Australian Curriculum Mathematics syllabus at Grade 9 level. The areas addressed by this syllabus are, real number arithmetic, mathematics in finance, algebra, linear and non-linear relationships, measurement, shape properties, location and transformation, geometric reasoning, probability and statistics.

The **Essential** syllabus is run with a lower teacher/student ratio and provides students with opportunities to revisit material they may have had difficulty with in the past. Students may address the Australian Curriculum Mathematics syllabus at Grade 9 level or the Australian Curriculum Mathematics syllabus at Grade 8 level (or parts at Grade 9 and other parts at Grade 8) or an individualised program according to what best suits their needs. There will be consultation in cases where the Australian Curriculum Mathematics syllabus at Grade 9 level is not addressed.

The appropriate course for each student is determined at the beginning of the year based on the previous year's performance. This allocation is not static and may change if it is decided that a student is better suited to an alternative program.

### Grade 10

Students must have completed Extension in Grade 9 to attempt **Extension** (MTM3) in Grade 10. Students who complete Extension (MTM3) in Grade 10 will not be able to use the ATAR earned in that year if they use ATAR from Grades 11 and 12 (TASC rules). For this reason, these students will be given the option of repeating MTM3 offline in Grade 11 or Grade 12. This will entail no formal lessons but all internal and external assessments will need to be completed again in Grade 11.

The majority of students study the **Mathematics** syllabus which addresses the Australian Curriculum Mathematics syllabus at Grade 10 level. The areas addressed by this syllabus are real number arithmetic, mathematics in finance, algebra, linear and non-linear relationships, measurement, shape properties, location and transformation, geometric reasoning, probability and statistics.

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All students are required to learn, practise and apply mathematical skills and techniques, utilise knowledge within a problem-solving context and to communicate mathematical method and process in a clear and effective format.

### Contact Teacher

Dr David Coulson



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# Science

## Why we study Science

Science involves a lot of talking and listening to others; it develops patience, too – a lot of the time in science things don't happen overnight. Science also provides a way to foster creativity, problem-solving and a love of learning. It also develops skills for life such as perseverance and researching.

From an early age children ask the question – why? All units covered throughout the science curriculum, allow us to assist students with the understanding of the question, why? However, as the students grow older their questions also start to focus on wanting to know how?



Science is central to many of the issues facing Australia citizens and the wider global community. In recent years concerns such as climate change, genetic modification, pandemics, vaccinations, sustainability and bio-security have been discussed extensively in the media and the community. The public discussion of such issues is vastly improved when we have a good understanding of the relevant scientific concepts.

Science education is important because it teaches our students to draw their own conclusions, based on evidence and logical thinking, rather than taking the ideas of others for granted. It encourages children to take risks, to understand and appreciate the world around them, and to, above all, be curious. At this point the stem of their questions will be....what if? Imagine if .... or how might ....?



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# Grade 9 and 10 Science

## Subject Description

The aim of Science in Grades 9 and 10 is to further develop knowledge and skills attained in Grades 7 and 8, and also to adequately prepare students for any science courses they may undertake in Grade 11 and 12.

## Grade 9 Science

The course is divided into: Physics, Chemistry, Biology and Earth and Space Science.

## Concept Knowledge

### Physics

- waves
- electricity
- light and colour
- electromagnetic spectrum
- heat and insulation
- sound

### Chemistry

- periodic table, atomic structure, metals and non-metals
- atoms and ions
- introduction to ionic bonding
- chemical formula and simple equations
- introduction to reaction types:
  - acids/base chemistry
  - endothermic/exothermic reactions
  - combustion
- radiation

### Biology

- sense and control
- disease
- ecosystems

### Earth and Space Sciences

- tectonic theory
- volcanism
- earthquakes

## Contact Teacher

Mr Mark Cox



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## **Science Grade 10**

The course is divided into: Physics, Chemistry, Biology and Earth and Space Science.

### **Concept Knowledge**

#### **Physics**

- linear motion
- graphing of motion
- newton's laws of motion
- kinetic (KE) and potential energy (PE)

#### **Chemistry**

- periodic table
- bonding models
- writing chemical formulae
- naming compounds
- balancing chemical equations
- metal displacement
- solubility and precipitation

#### **Biology**

- mendelian genetics
- monohybrid cross
- genetic technology
- natural selection
- evolution

#### **Earth and Space Sciences**

- climate change
- global systems
- cosmology

**Contact Teacher**

Mr Mark Cox



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# History

## Subject Description

The four year History curriculum (Grades 7-10) has been mapped in accordance with the Australian Curriculum. It promotes the understanding of societies, events, movements and developments that have shaped humanity. It helps students appreciate how the world and its people have changed, as well as the significant continuities that exist to the present day.

The study of history is based on evidence derived from remains of the past. It is interpretative by nature, promotes debate and encourages thinking about human values, including present and future challenges. The process of historical inquiry develops transferable skills, such as the ability to ask relevant questions; critically analyse and interpret sources; consider context; respect and explain different perspectives; develop and substantiate interpretations, and communicate effectively.

Australian Curriculum Citizenship modules are included in Grade 9 and Grade 10 course content.

## Grade 9: The Making of the Modern World

The Grade 9 curriculum provides a study of the history of the making of the modern world from 1750 to 1918. The curriculum explores the key inquiry questions:

- what were the changing features of the movements of people from 1750 to 1918?
- how did new ideas and technological developments contribute to change in this period?
- what was the origin, development, significance and long-term impact of imperialism in this period?
- what was the significance of World War I?

## Grade 10: The Modern World and Australia

The Grade 10 curriculum provides a study of the history of the modern world and Australia from 1918 to the present, with an emphasis on Australia in its global context. The curriculum explores the key inquiry questions:

- how did the nature of global conflict change during the twentieth century?
- what were the consequences of World War II? How did these consequences shape the modern world?
- how was Australian society affected by other significant global events and changes in this period?

**Contact Teacher**

Mrs Gail Harris

# Health and Physical Education

## Subject Description

*Health and Physical Education* enables students to promote their own and other's health, wellbeing and physical activity participation across the lifespan. The subject offers experiential learning, with a curriculum that is relevant, engaging, contemporary, physically active, enjoyable and developmentally appropriate.

The subject is broken into two areas:

- 1 Personal, social and community health
- 2 Movement and physical activity

Each grade offers students balanced learning opportunities in both of these health-related and movement-related areas.

From Grade 7 through to Grade 10, students develop the knowledge, understanding and skills to support them to be resilient, to strengthen their sense of self, to build and maintain satisfying relationships, and to make decisions to enhance their health and physical activity participation. As students mature, they learn in age appropriate ways about key issues affecting their health and wellbeing and that of the communities to which they belong. They also learn how to apply problem-solving techniques to these issues, which is critical to maintaining and promoting health and active lives.

The HPE Programme is broken down into the following focus areas and are taught in single sex classes in Grade 9 and co-educational classes in Grade 10:

<b>Grade 9: Health</b>	Risk Taking Behaviours and Decision Making, Sexuality and Human Development, Community Health and Illicit Drugs
<b>Physical Activity</b>	Volleyball, Touch Football, Tennis and Fitness for life
<b>Grade 10: Health</b>	Sexuality and STIs, Safe Driving activity for life and Safe Partyng
<b>Physical Activity</b>	Golf, Badminton, a Student-led Sport Competition and Non-traditional Sports

**Contact Teacher**      Mr Adrian Finch

# Subject Selection Procedure

## **Tuesday 11 August**

Briefing and distribution of information to Grade 9 (2021) by Director of Teaching and Learning.

## **Wednesday 12 August**

Briefing and distribution of information to Grade 10 (2021) by Director of Teaching and Learning.

## **Thursday 13 August**

### **Grades 9 and 10 (2021) Subject Selection Night by Zoom**

7.00 – 7.30 pm

Grades 9 and 10 Academic Programme

Mrs Michelle Stocks

Elective subjects offered for 2021

Subject teachers available to explain the content and assessment of the elective subjects to students at school and their parents via email, from 14 August onwards.

## **August**

Students discuss subject choices with parents and tutors.

## **Friday 21 August**

Final date for the on-line submission of subjects for 2021 using Edval WebChoice (after this date WebChoice will not be available)

## **Tuesday 25 August**

**Final day for submission of signed subject Edval WebChoice print-out to the Teaching and Learning Office.**

## **September/October**

Review of student choices for balance, together with consideration of class sizes. Heads of House and tutors will be involved in discussions with students concerning subject choices. Contact will be made with parents if changes are desirable or necessary.

## **November**

Finalised elective subjects emailed to students.

## Elective Subjects

The eight core subjects ensure that students have a strong basis for continuing education and life; the electives offer the individual opportunity to branch out into particular fields of interest.

There are many things to think about in deciding which elective subjects you will study.

- do I think I will enjoy/be excited by the subject?
- do I need the subject for a pre-tertiary course?
- do I need the subject for a career?
- do I need the subject for the life skills it develops?
- have I been successful in this subject in the past?
- will work in this subject enrich my personality?

In addition to the core subjects, students have the opportunity to study **up to four** electives each Semester. Each of the electives listed below will be offered in both semesters. Students are encouraged to study elective subjects from a broad range of areas.

Agricultural Science	Food Studies	Music Technology
Applied Engineering	French	Philosophy
Aviation Theory	Geography	Physical Science Foundation (G10)
Building and Construction	German	Robotics and Coding
Broadcasting	History Extended	Science Extended (G9)
Commerce	ICT Studies	Sport Science
Computer-aided Design	Intro to Social Science	Structured Study Line
Craft and Design	Investigations in Science	Technology
Creative Writing	Japanese	Textiles and Design
Dance	Mathematics Extended (G9)	Visual Arts
Drama	Mathematics Methods Foundation (G10)	Work Studies
Extension	Media Arts	
F1 in Schools	Music	

Students will be asked to choose **12** subjects in order of preference; of these, they will be allocated **eight** to study next year. The elective subjects will be arranged in four timetabled lines.

Some of the elective subjects are **sequential** in nature including Dance, Languages, Media Arts, Mathematics Extension, Mathematics Methods Foundation, Music, Music Technology, Physical Science Foundation, Science Extended. If these subjects are to be chosen for Semester 2 they must have been studied in Semester 1. Likewise, some of these subjects must have been studied in Grade 9 for them to be undertaken in Grade 10. For more information please check each subject's prerequisites.

The majority of students will be enrolled in the subjects of their first choice. Where a student's initial choices cannot be accommodated due to clashes on lines or class numbers not reaching the minimum quota, the reserve preferences will be used; where it is necessary to go outside the initial choices the student will be contacted by the Director of Teaching and Learning.



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# Agricultural Science

**Subject Code** AGS

## Subject Description

Agricultural Science is a two year course that aims to develop a wide range of farming skills that can be applied to many of the agricultural industries in Tasmania. It is based on a sound understanding of the physical, soil, plant, animal, social and economic environments and develops this knowledge through a holistic approach to different farming situations. Much of the course is based upon practical hands on activities, Grade 9 students are involved in hatching, raising and caring for chickens and then rearing dairy calves. Grade 10 students undertake plant trials and engineering challenge.

**Topics studied include:** intensive farming skills including:-

- horticulture
- soil science
- climatology
- irrigation
- orcharding
- intensive animal management
- farm machinery
- grain crops
- pasture production
- agricultural chemistry
- extensive animal management

This course is ideal preparation for students wishing to study pre-tertiary Environmental Science and Society 3 Agricultural Systems 3, Agriculture Enterprise 2 and Biology 3 in either Grade 11 or 12, but it is not a pre-requisite for these courses.

**Contact Teacher** Mr George Darby

**Pre-requisite** There are no pre-requisites for this subject.

# Applied Engineering

## Subject Code

APE

## Subject Description

*Applied Engineering* introduces learners to engineering principles and systems through an integrated Science, Technologies, Engineering and Mathematics (STEM) inquiry. STEM education integrates concepts that are usually delivered as separate subjects in different classes and emphasise the application of knowledge to real-life situations. STEM learning is typically based around finding a solution to a 'real-world' problem and tends to emphasise project based learning.

*Applied Engineering* affords an opportunity for learners to gain an understanding of our influence as users and consumers, and can equip students with the skills and knowledge to make positive contributions to the future of the societies and environments in which they live. In this regard, an engineer must be socially responsible and conscious of global community issues that may impact on the environment and sustainable management of resources.

Society's heavy reliance on the creativity and problem solving abilities of Engineers reinforces that *Applied Engineering* students need to learn how to formulate ideas and strategies to solve problems through applying lateral thinking and engineering design principles.

Through the *Applied Engineering* course, learners will have the opportunity to research and appraise existing ideas, products, processes and solutions to problems. Learners will learn to generate imaginative and creative solutions of their own. They will communicate their ideas within the parameters and requirements of engineering-based tasks whilst gaining and applying knowledge of industry standards of design, manufacture and safety. Through practical, experiences, learners will learn to use technology to design, test and appraise products and solutions.

Each Semester, students investigate a different engineering field, giving them a broad range of learning experiences relevant to each specialisation. Units covered include the following areas –

- Grade 9 Semester 1 – Structural Engineering
- Grade 9 Semester 2 – Mechanical engineering
- Grade 10 Semester 1 – Marine Engineering
- Grade 10 Semester 2 – Aeronautical Engineering

Each unit of study covers a related theoretical component, after which students are required to apply the engineering concepts learnt to a range of tasks and challenges

## Contact Teacher

Mr Nick Hansson

## Pre-requisite

There are no pre-requisites for this subject.



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# Aviation Theory – Grade 9

**Subject Code** AVT

## **Subject Description**

Aviation Theory as a whole year course which is available to students in Grades 9 and 10. It is designed for students who enjoy technical matters and want the chance to apply in the “real world”, what you have learned in science and mathematics.

Aviation theory is detailed, technical and includes a wide range of scientific and mathematical concepts. You will be expected to use trigonometry to resolve forces and calculate the “g”-loading of a wing and will learn the difference between the rate and the angle of a descent.

### **Grade 9 Introduction to Aviation Theory**

In Grade 9, students will cover the introductory content required for the Recreational Pilot Licence (RPL) exam, as administered by the Civil Aviation Safety Authority (CASA). Pilot theory exams provide a great context in which to explore and expand concepts from science, technology engineering and mathematics. Students will also participate in the construction of the school’s RV12, a light sports kit aircraft. Through this process they will learn about aeronautical engineering and aircraft maintenance.

Course content:

The RPL theory includes units on:

- radio operating procedures
- aerodynamics
- engine design, fuel and fuel systems
- aircraft instrument design and function
- aircraft assembly and maintenance

**Contact Teacher** Dr Cameron Rogers

**Pre-requisite** There are no pre-requisites for this subject.

# Aviation Theory – Grade 10

**Subject Code** AVT

## Subject Description

Aviation Theory as a whole year course which is available to students in Grades 9 and 10. It is designed for students who enjoy technical matters and want the chance to apply in the “real world”, what you have learned in science and mathematics.

Aviation theory is detailed, technical and includes a wide range of scientific and mathematical concepts. You will be expected to use trigonometry to resolve forces and calculate the “g”-loading of a wing and will learn the difference between the rate and the angle of a descent.

### Grade 10 Aviation Theory

In Grade 10, students continue developing their aviation expertise. This course follows from Grade 9, and covers the remaining theory necessary for the Recreational Pilot Licence (RPL), as administered by the Civil Aviation Safety Authority (CASA). Pilot theory exams provide a great context in which to explore and expand your knowledge of science, technology engineering and mathematics. Students will also learn about risk analysis and the human factors which can compromise pilot performance. Additionally, students will continue work on the school’s RV12 build project.

### Course content:

The RPL theory includes units on	
Radio operating procedures	Human factors effecting performance
Aerodynamics	Air Law
Engine design, fuel and fuel systems	Navigation
Aircraft instrument design and function	Meteorology
Factors impacting aircraft performance	

### Assessment:

Formative assessments and tests will be given throughout the course to help students prepare for the external CASA examinations. These will include aural tests (interpreting and participating in radio traffic), written tasks, as well as practical assessments on the school’s simulator and aircraft build project.

**Contact Teacher** Dr Cameron Rogers

### Pre-requisite

The Grade 10 subject follows on from Grade 9 Introduction to Aviation Theory, and it is best if students have successfully completed the Grade 9 course to enrol in Aviation Theory in Grade 10. Students wishing to join the class in Grade 10 who have not done it in Grade 9 should contact Dr Rogers.



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# **Building and Construction – Grade 10**

## **Subject Code**

## **Subject Description**

The Building and Construction course develops students' knowledge and practical appreciation of building technologies. The course provides students with a context in which to practise and integrate their knowledge and apply it to meet community and environmental responsibilities. It develops their knowledge of environmental issues. It allows them to apply and extend mathematical knowledge and strategies for problem solving. It develops their skills in planning and management and in technical communication. In achieving the course outcomes, students learn and practise building processes and technologies, principles of design, planning and management.

It develops interaction and communication skills and fosters an understanding of teamwork. It prepares students to appreciate the continually changing conditions and expectations within building professions and encourages innovation and creativity. The course trains students in safe work practices and the principles of occupational safety and health (OSH).

The course is an introduction to further studies in trades, engineering and architecture. The course leads to employment options, further vocational education and industry training.

## **Contact Teacher**

Mr Nick Hansson

## **Pre-requisite**

There are no pre-requisites for this subject.



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# Broadcasting

**Subject Code** GTV

## **Subject Description**

Students are introduced to production processes and procedures to create a broadcast television segment, called *Grammar TV*. Students will collaborate in a production team to produce a short 'live to record' segment on a regular basis. *Grammar TV* will be published on YouTube with the view to progress to live to air broadcast in the future. The course will have significant links to a journalism career pathway, parallel to the broadcasting/video production pathway.

## **Learning Outcomes**

### **Pre-production skills**

- forming and contributing to an effective production team
- story construction and planning
- storyboarding
- script writing
- preparing auto cue documents
- preparing production breakdowns

### **Production techniques**

- interview techniques
- anchoring
- reporting
- editing
- camera operation (studio and location)
- sound capture (studio and location)
- lighting (studio and location)
- sound mixing – live
- technical direction
- playback operation
- graphics and titling

### **Post production skills**

- web publishing
- encoding
- self-assessment and appraisal
- peer assessment and appraisal

**Contact Teacher** Mr Mark Webster

**Pre-requisite** There are no pre-requisites for this subject



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# Commerce

**Subject Code** CMC

## Subject Description

Commerce teaches students skills in financial literacy, seen by so many as essential life skills. Students will learn to manage money and make wise financial decisions, and to learn what it takes to be enterprising by nature and in business.

## Grade 9

Commerce is taught in two stand-alone semester units.

1. **Smart Consumer** - Students will study essential aspects of finance and commerce to prepare and develop their decision making skills in relation to money, saving, budgeting and banking, as well as issues such as overview of credit, legal and economic issues. Commerce is taught in a relevant hands-on manner to suit most learning styles.
2. **Being Enterprising** - Students will conduct their own enterprise to learn the principles of running a small business Students will then relate their experiences to small business and undertake a small business investigation.

## Grade 10

Commerce is taught in two stand-alone semester units:

1. **Market Awareness** looks at how markets operate in the economy with a view for students to become more financially literate to make wiser financial decisions. Students apply their economic knowledge in order to become a smarter investor by looking at various strategies for investments.
2. **Small Business** deals with basic business principles, starting and managing a business and evaluating business performance. Students are expected to conduct a Business Enterprise with the \$20 Boss program and complete a business plan

The Grade 10 course provides an excellent background and pathway to Grade 11-12 study of Accounting, Economics, Legal Studies or Business Studies.

**Contact Teacher** Mr Bernd Meyer

**Pre-requisite** There are no pre-requisites for this subject.



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# Computer-aided Design and Graphics

## Grade 9 and Grade 10

**Subject Code**                      CAD

### **Subject Description**

The Computer-aided Design course will provide an excellent basis for those students selecting Computer Graphics and Design, Technical Graphics, and/or Housing and Design in Grade 11 or 12, which are both pre-tertiary subjects.

Graphics exists as a means of communication. As a life skill, the ability to rapidly visualise one's ideas would, to many, be highly treasured. Students undertake a core of work encompassing the following areas:

- freehand sketching
- two or three dimensional computer modelling and printing
- perspective, isometric and oblique projection
- principles of design - harmony, contrast, balance and function
- techniques of visual communication - line, form, tone, colour, composition
- orthographic projection including the use of standards and symbols
- 3D drawing methods - perspective and isometric
- engineering drawing
- architectural drawing
- animation

### **Semester 1**

#### **Engineering**

This course develops students' knowledge, skills and capabilities to respond to design problems of an industrial/engineering nature. Emphasis is placed on developing Engineering design skills through a range of design briefs requiring students to virtual model their ideas using different software programs and then producing prototype of their designs using 3D printers or a laser cutter for 2D briefs. Analysis and testing will then occur. Students will consider environmental, aesthetic, functional, social, technological and ergonomic influences and impacts within a range of industrial engineering briefs.

### **Semester 2**

#### **Architecture**

This Course develops students' knowledge, skills and capabilities to respond to design problems relating to indoor and outdoor living spaces. Emphasis is placed on developing the architectural design skills of imagining, representing and testing design ideas, and application of research strategies to support this progress. Students will consider environmental, aesthetic, functional, social, technological and ergonomic influences and impacts within a range of housing and design projects.

**Contact Teacher**                      Mr Nick Hansson

**Pre-requisite**                              There are no pre-requisites for this subject.



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# Craft and Design

**Subject Code** CRD

## **Subject Description**

The Craft and Design course offers students the opportunity to experience a number of different crafts which are not available in the general Technology course. Students will learn a range of skills and processes related to that particular area, and, as their level of expertise increases, will also be required to design their own projects. The range of craft areas covered would be based on student interests but could include study within the following areas:

- stain glass
- lead lighting
- leather craft
- jewellery making

Students may undergo units in each of these crafts, learning relevant skills and processes while producing individual projects designed by them.

Once the introductory units have been completed, students would then have the opportunity to revisit the craft of their choice to undergo further study and undertake more demanding projects.

**Contact Teacher** Mr Nick Hansson

**Pre-requisite** There are no pre-requisites for this subject.

# Creative Writing

**Subject Code** CRW

## Subject Description

This course is designed to extend students with an interest in creative writing beyond that studied in the core English class. Through this subject they will explore a number of ideas through writing.

During this course students will:

- investigate and discuss imaginative texts as a model for their own writing
- learn about audience and purpose in conceptualising their own writing
- discover ways to use their own experience as a basis for their writing
- examine effective aspects of character and setting
- develop skills in crafting their own work
- reflect on their own writing in order to improve the final product
- investigate various genres and forms of writing
- share ideas for writing with a writing community
- workshop their writing with their peers
- examine professional writers and their interests in writing
- engage in their own reading and viewing, reflecting on this as a source of their own ideas
- discuss how writing has changed over time

Students will also have the opportunity to participate in competitions such as:

Write a Book in a Day Competition  
Dorothea McKellar Poetry Awards  
ABC Heywire

**Contact Teacher** Mrs Fiona Lockwood

**Pre-requisite** There are no pre-requisites for this subject.



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# Dance – Grade 9

**Subject Code**           DNC

## **Subject Description**

This **Grade 9** course may be undertaken for one semester or for the entire year. In this course, you will learn how to create and choreograph your own dance pieces and then perform them. The course caters for both experienced dancers and those wishing to begin dancing. It allows you to explore, develop and appreciate elements of movement, choreography and dance performance. During each semester, you will present polished performances to an audience.



### **In a typical lesson, you might be involved in the following:**

- warm up and stretch
- review of theory work, eg, laban effort actions
- apply theory work to a practical task
- continue work on a practical task
- work with a partner
- work with a group
- present a work to the class
- write a reflection in your journal
- view a dance performance
- write a critical appraisal of a dance performance
- research other dance styles

**Contact Teacher**       Mrs Fiona Hickman

**Pre-requisite**           It is recommended, but not mandatory, that you have previous experience in Grade 8 Dance or prior dance training.



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# Dance – Grade 10

**Subject Code**            DNC

## **Subject Description**

This **Grade 10** course is a **year-long subject**. In this course, you will revise the foundation elements for creating and choreographing dance and refine these skills to create and perform your own dance pieces. The course caters for experienced dancers and for those with limited dance experience. The course allows you to develop a deeper understanding and analysis of the elements of movement, choreography and dance performance. Solo performance is an expectation in Semester 2.



### **In a typical lesson, you might be involved in the following:**

- warm up and stretch
- review of theory work, eg, manipulating a motif
- apply theory work to a practical task
- work by yourself
- contribute to a collaborative task
- present a work to the class
- write a reflection in your journal
- view a dance performance
- write a critical analysis of a dance performance
- use production elements to enhance a dance piece
- research contemporary dance

**Contact Teacher**        Mrs Fiona Hickman

### **Pre-requisite**

Due to the sequential nature of this course, students enrolling in Grade 10 Dance are recommended to have completed 1 semester of Dance in Grade 9.



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# Drama – Grade 9

**Subject Code** DRM

## **Subject Description**

This Grade 9 course can be undertaken for a semester or for the entire year. At this level students begin to really hone drama and performance skills. As well as group work, polished solo performances are an expectation. Through involvement in different genres of drama and attendance at live theatre productions a deeper understanding of theatre will be explored. There will be a more in-depth focus on voice work and physicalisation, character development and stagecraft in order to develop self-esteem, confidence and communication skills. During each semester students will present polished performances for audiences.



### **In typical lessons, students might be involved in the following:**

- participate in improvisation and role-play
- share individual and ensemble work and provide constructive feedback for other students
- use of props, lighting, set, music and sound, costume and simple staging
- participation in workshops such as Homunculus Theatre Company
- creation of solo and group performances
- attend theatre performances and write reviews
- learn about theatre etiquette and safe performance practices
- reflect on their own work
- learn about Elizabethan Theatre
- perform in public including Competitions, 9-12 Soiree and 9/10 Drama/Dance Evening
- develop vocal skills including use of accent, vocal dynamics and the importance of breath
- develop characterisation skills through interpretation of text and physicalisation techniques

**Contact Teacher** Mrs Louise Peters

**Pre-requisite** It is recommended although not mandatory that students have previous experience in Grade 8 Drama.



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# Drama – Grade 10

**Subject Code**                    DRP

## **Subject Description**

This Grade 10 course can either be undertaken for a semester or for the entire year. At this level students are provided with the opportunity to develop their artistic ideas and skills in through exploring a wide variety of genres and styles. During each semester students will present polished performances for audiences.



### **In typical lessons, students might be involved in the following:**

- extend their use of voice and movement to build a wider variety of roles
- share individual and ensemble work and provide constructive feedback for other students
- use devices such as contrast, dramatic tension, creation of mood, Laban's Effort Actions
- learn about the genre of Naturalism
- use elements such as lighting and staging to suit different audiences and genres
- workshops as available - Homunculus Theatre Company and Bell Shakespeare
- devise solo and group performances
- engage with more diverse performances to evaluate acting and use of production elements
- further develop theatre etiquette and maintain safe performance practices
- reflect on their own work
- learn about Commedia dell'arte and its impact on modern theatre and performers
- explore the drama and influences of Aboriginal and Torres Strait Islander Peoples
- compulsory performances in Competitions, 9-12 Soiree and 9/10 Drama/Dance Evening
- develop vocal skills including use of accent, vocal dynamics and the importance of breath

### **This subject could lead to:**

Grade 11 and 12 study in Drama Foundations 2, Technical Theatre Production 2, Musical Theatre 2, Drama 3 or Theatre Performance 3. These courses all contribute 15 points towards the Tasmanian Certificate of Education

**Contact Teacher**                    Mrs Louise Peters

**Pre-requisite**                            It is recommended although not mandatory that students have previous experience in Grade 9 Drama



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# Extension

**Subject Code** EXT

## Subject Description

The Grade 9 and 10 Extension course is designed to challenge students with self-directed, project-based learning. Students are given the opportunity to explore areas of interest and passion by undertaking projects that can either be inquiry-based or creative. Depending on the student and the project, the duration of these projects range from one to four terms. Typically, students work independently, though there is scope for collaborations. Projects are refined through a process of negotiation between the student, the teacher, the mentor (optional), and the parents. A rigorous planning process helps to ensure that students are well prepared for their projects. Each student is challenged to investigate different sources and determine their authenticity and usefulness to the project. There is an expectation that students will report their findings informally and participate in discussions concerning other students' research.

The class is designed to facilitate flexibility and open-ended learning. Outside the formal planning and reflective components of the course, students are encouraged to take control of their learning. Help is always available for students, but they decide when and how to access it. With independence comes responsibility, which makes this a great opportunity for students to experience the kind of motivation and time management challenges they will experience after Grade 10.

In recent years students have chosen projects in areas such as:

- developing a small business
- lengthy written and artistic projects and portfolios
- research projects into areas such as religion, sport, criminology, music, history, biography, art, science, etc.
- support for competitive entries to My State Film Festival and Tasmanian Science Talent Search

## Athlete Support

This year we are offering a programme to students who are competing at a state or national level in their chosen sport as a part of the Extension Option. Students will have the opportunity for additional time and support in maintaining their academic standards. Each individual will need to submit their training programme as a part of their involvement in this option. Each student's course will be tailored to meet his/her individual needs.

**Contact Teacher** Mrs Fiona Lockwood

## Pre-requisite

There are no pre-requisites for this subject, though evidence of the student's ability to work independently and with initiative is expected.



# F1 in Schools – Grade 9

**Subject Code** F1S

## **Subject Description**

The **F1 in Schools** STEM Challenge assists with the transition to the world or work and bridges the gap between high schools, TAFE and universities. Collaboration is a fundamental aspect of the program. It is multi-faceted and multi-disciplined. It is about much more than car design, and mimics the world of a F1 Team.

Some of the areas of study are:-

- laws of Motion
- aerodynamics and streamlining
- 3D-modelling and 3D-printing
- problem solving and product prototyping
- marketing and team promotion
- innovation and entrepreneurialism

Students choosing this course will work on the programme within the 9ICT elective class.

**Contact Teacher** Miss Michelle Bradley

**Pre-requisite** There are no pre-requisites for this subject.



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# Food Studies

**Subject Code** FST

## Subject Description

The syllabus for Grades 9 and 10 caters for students planning to participate in the course for one or two semesters and is available in both Grades 9 and 10.

Food Studies in Grades 9 and 10 provide students with a broad knowledge and understanding of food properties, processing, preparation and their interrelationships, nutritional considerations and consumption patterns.

- It addresses the importance of hygiene and safe working practises and legislation in the production of food
- It provides students with a context through which to explore the richness, pleasure and variety that food adds to life
- Students develop practical skills in preparing and presenting food that will enable them to select and use appropriate ingredients, methods and equipment.
- Integral to this syllabus is the ability to design, produce and evaluate solutions to situations involving food.

During the two years students will study 8 units that are developed on the principles of nutrition, food preparation communication skills, management of resources, and the decision making process.

One major assignment will be given each semester and will form the main assessment tool for the communication criteria. Students will be expected to plan and design two recipes of their own choice in each unit of work.

**Student can select from the following semesters.**

## Grade 9

### Semester 1:

**Unit 1 – Superfoods for you** – Plan, design and prepare nutritious breakfast, lunch and snack foods

**Unit 2 – Nutritious and Delicious Foods** – Plan, design and prepare hearty winter meals, soups, snacks and desserts.

### Semester 2:

**Unit 3 – Party planning** – Plan and prepare party foods for children, morning tea, high tea and design a novelty cake.

**Unit 4 – Food for Special Occasions-** Prepare cocktail foods, confectionery, desserts and make a decorated Gingerbread House

## Grade 10

### Semester 1:

**Unit 1 – Seasonal and Sensational** - design everyday foods for the home – eg preserves, salads, barbeques and sensational desserts in a glass.

**Unit 2 – Fast and Fabulous** – Design and make spring rolls, pies, wraps, burgers and convenience meals. Design a food van product.

### Semester 2:

**Unit 3 – Foods from other Cultures-** Investigate a cuisine of your choice and prepare some cultural dishes.

**Unit 4 – Food for Festive Occasions** – Make food for gifts, Christmas foods and decorate a Christmas cake

**Contact Teacher** Ms Ena Rigney

**Pre-requisite** There are no pre-requisites for this subject.

# French

**Subject Code** FRN

## **Subject Description**

French remains a key international language; indeed, it is the only language apart from English which has truly international status, being spoken as a native tongue in 42 nations and on all five continents.

France constitutes one of the central powers of the European Union and the study of French, apart from its inherent cultural interest, is a key to other Romance languages. It is truly a 'world language' and the one most often recommended for the career of journalism.

This course is a continuation of the Grade 7 and Grade 8 course. Entry into Grade 9 without Grade 7 and Grade 8 must be negotiated with both the Director of Studies and the relevant subject teacher.

If there are sufficient numbers, students are offered a study tour to New Caledonia or France.

Students can complete University entry level French in Grade 11 or 12.

**Contact Teacher** Mrs Allison Sheehan

**Pre-requisite** Due to the sequential nature of this course, students enrolling in Semester 2 must have completed Semester 1 French.



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# Geography

**Subject Description**            GGY

All students in Grades 9 and 10 have the opportunity to study Geography as a whole year course as outlined below.

The content is organised into two themes: physical geography and human geography. These themes are interrelated and are taught in an integrated manner, using topics from a local to a global scale.

## Grade 9

**Physical theme: *Biomes and food security*** focuses on investigating the role of the natural environment and its role in food and fibre production. This unit examines the biomes of the world, their alteration and significance as a source of resources, and the environmental challenges and constraints on expanding food production in the future.

**Human theme: *Geographies of interconnections*** examines the interconnections between people and places through the products and resources that people consume and the environmental, social, and economic impacts of their production on the places that make them.

## Grade 10

**Physical theme: *Environmental change and management*** begins with an overview of the environmental functions that support all life, the major challenges to their sustainability, and the environmental worldviews that influence how people perceive and respond to these challenges. Students apply human-environment systems thinking to understand the causes and consequences of the change and geographical concepts and methods to evaluate and select strategies to manage the change.

**Geographies of human wellbeing** focuses on investigating global, national and local differences in human wellbeing between places. This unit examines the different concepts and measures of human wellbeing, and the causes of global differences in these measures between countries. Students explore programs designed to reduce the gap between differences in wellbeing.

**Contact Teacher**            Mr John McLaine

**Pre-requisite**                There are no pre-requisites for this subject.



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# German

**Subject Code** GRM

## **Subject Description**

Germany is a significant trading partner for Australia. Given the remarkable changes in eastern and central Europe and the formation of a single European market, Germany's position is strategically very important, and it is no accident that the waiting lists for the Goethe Institute's German language courses all over the world run into tens of thousands and that Tasmania has a tourist office in Frankfurt.

Students are able to complete their study of German to University entrance level (TCE 3) by the end of Grade 11.

Students in Grade 10 can participate in exchange schemes and should contact the Languages Co-ordinator for further information.

**Contact Teacher** Mrs Allison Sheehan

**Pre-requisite** Due to the sequential nature of this course, students enrolling in Semester 2 must have completed Semester 1 German.



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# History Extended

**Subject Code** HXT

## Subject Description

### Grades 9 and 10

History extended allows students with a passion for history to go beyond the constraints of the Australian Curriculum. The subject branches into intriguing episodes of history, each a fascinating confluence of human, economic, environmental and geographic factors that produced extreme situations from which much can be learned. Moreover, it allows students to dig deeper into historical episodes by employing more of the historiographic toolkit. For instance, students will subject sources to more fine-grained analysis, and of the storytelling techniques employed by historians. Topics may include:

- *Ancient Sparta*: this topic provides an opportunity to scrutinise fraught documents and archaeological evidence, as well as to disentangle the mythology surrounding this bizarre, warlike society.
- *The Trans-Atlantic Slave Trade*: this topic plunges students into the dark world of slavery and steers them to look objectively at a deeply emotive topic. The big question here is how people could perpetrate such cruelty while also thinking of themselves as morally upstanding.
- *The Russian Revolution*: at the turn of the C20th Russia commands a vast empire but is industrially backward. The reign of the last Romanov Tsar Nicholas II is challenged by civil unrest, peasant hunger, his own incompetence and the palace intrigues of Rasputin, eventuating in his overthrow by the Bolsheviks and ushering in decades of Communist rule.
- *The American Civil War*: the most explosive example of where new-world trends in freedom and human rights collided with old-world commitments to slavery and racism. The rich textual and photographic record from this war makes it one of the most studied events in all of history.
- *Heroes and Villains*: in this topic we investigate a number of historical personalities including Ned Kelly, Catherine the Great and Che Guevara considering their contribution and legacy, how were they perceived at the time and how popular culture has revived or reconstructed their legend today.

**Contact Teacher** Mrs Naomi Woodall / Dr Nicholas Clements

**Pre-requisite** There are no pre-requisites for this subject.



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# ICT Studies – Grade 9

**Subject Code**                    ICT

## **Subject Description**

This course aims at the development of practical computer skills through the use of a variety of applications. Students are encouraged to continually build their knowledge based on their existing skills, understanding and interests. While basic subject areas are taught, students are encouraged (in conjunction with their teacher) to create an individual learning programme. This allows a wide interpretation of each topic.

Students who have already completed Grade 8 ICT will be encouraged to deepen their knowledge and understanding of the area of study.

Some of the areas of study are:-

- animation
- coding
- game making
- graphic and image manipulation and enhancement
- negotiated project
- programming
- social issues
- video editing
- web authoring

**Contact Teacher**                    Miss Michelle Bradley

**Pre-requisite**                        There are no pre-requisites for this subject.



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# ICT Studies – Grade 10

**Subject Code**                    ICT

## **Subject Description**

This course aims at the development of practical computer skills through the use of a variety of applications. Students are encouraged to continually build their knowledge based on their existing skills, understanding and interests. While basic subject areas are taught, students are encouraged (in conjunction with their teacher) to create an individual learning programme. This allows a wide interpretation of each topic.

Some of the areas of study are:-

- animation
- coding
- game making
- graphic and image manipulation and enhancement
- negotiated project
- social issues
- video editing
- web authoring

Students who have already completed Grade 9 ICT will be encouraged to deepen and broaden their understanding of topics covered.

**Contact Teacher**                    Miss Michelle Bradley

**Pre-requisite**                         There are no pre-requisites for this subject.

# Introduction to Social Sciences – Grade 10

**Subject Code**                    SSC

## **Subject Description**

Why do people behave the way that they do? How can the same society produce good, productive citizens but also criminals, deviants and psychopaths? Are people born bad or does society create them? What economic and social factors impact their choices and behaviour?

This year-long subject is about human behaviour. We approach this topic from a sociological and psychological perspective, while also examining economic and legal aspects that relate to social issues

This elective serves as an ideal introduction to TCE Humanities courses including Sociology, Psychology, Legal Studies and Economics.

Some of the topics discussed in class include:

- what do some famous Psychological and Sociological experiments tell us about human behaviour?
- what is a psychopath?
- what is the Nature vs Nurture debate in human behaviour?
- how and why does society change? Why can't it change quicker?
- is it possible to have a society where everyone is equal? How difficult is it to eliminate inequality?
- why do people commit crime? Why do people abide by the law?
- what kinds of crime are committed by different types of people in Tasmanian society? Why?
- how are young offenders treated differently?
- what can be done to lower crime rates in Tasmania?

**Contact Teacher**                    Mr Simon Shaw / Dr Nicholas Clements / Mr Bernd Meyer

**Pre-requisite**                        There are no pre-requisites for this subject.



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# Japanese

**Subject Code**                    JPN

## **Subject Description**

Japan is a vitally important trading partner for Australia and the importance of Japan in our tourism sector is, of course, self-evident.

Students in Grades 9 and 10 will study all three Japanese scripts.

Topics centre on daily activities in both Japan and Australia and provide a valuable insight into an Asian culture.

Students have the opportunity to travel to Japan to visit our partner school in Osaka.

Students can complete University entry level Japanese in Grade 11 or 12.

**Contact Teacher**                Mrs Allison Sheehan

**Pre-requisite**                      Due to the sequential nature of this course, students enrolling in Semester 2 must have completed Semester 1 Japanese.

# Mathematics Extended – Grade 9

**Subject Code** MXT

## Subject Description

In the normal course of events, students who wish to study Tasmanian Certificate of Education Mathematics Methods 4 course (a pre-requisite to most tertiary mathematics, science courses and some business courses) do so in Grade 12 after studying Mathematics Methods Foundation 3 in Grade 11.

Some very able students prefer to undertake Mathematics Methods 4 in Grade 11 and this enables them to:

- complete Mathematics Methods 4 in only one year of TCE study
- study Mathematics Specialised 4 (advantageous for university engineering courses) in Grade 12
- develop their potential in mathematics more fully
- enjoy the challenges posed by a most demanding subject

To undertake Mathematics Methods 4, Grade 11 students need to have successfully completed Mathematics Extended in Grades 9 and 10.

Only students with outstanding mathematical potential and above average results will be accepted for Grade 9 Mathematics Extended. Most, if not all students, who are accepted into Grade 9 Mathematics Extended will have completed Grade 8 Mathematics Extended.

Due to the sequential nature of this course, students enrolling in Semester 2 must have completed Semester 1 Mathematics Extended

During Grade 9, Grade 9 Mathematics Extended students complete the Grade 9 and Grade 10 Australian Curriculum Mathematics syllabuses to enable them to undertake the TASC Mathematics Methods – Foundation 3 course in Grade 10 Mathematics Extended. Mathematics Extended is undertaken in both core and elective time.

The availability of this two-year option for individual students is carefully considered by the Head of Mathematics Department and/or the teacher of the Grade 8 Mathematics Extended class.

Note that students who complete Mathematical Methods Foundation 3 in Grade 10, will not be able to use the ATAR earned in that year if they use ATAR from Grades 11 and 12 (TASC rules). For this reason, these students will be given the option of repeating Mathematical Methods Foundation 3 offline in Grade 11 or Grade 12. This will entail no formal lessons but all internal and external assessments will need to be completed again in Grade 11.

**Contact Teacher** Dr David Coulson

**Pre-requisite** Due to the sequential nature of this course, students enrolling in Semester 2 must have completed Semester 1 Mathematics Extended



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# Mathematics Methods Foundation – Grade 10

**Subject Code**                    MTM3

## Subject Description

Grade 10 Mathematics Extended teaches the *TASC Mathematics Methods – Foundation 3 course* utilizing an elective line and the line devoted to core mathematics giving 14 periods a fortnight (the same organisation as Grade 9 Mathematics Extended).

Due to the sequential nature of this course, students enrolling in Semester 2 must have completed Semester 1 Grade 10 Mathematics Extended.

In the normal course of events, students who wish to study Tasmanian Certificate of Education Mathematics Methods 4 course (a pre-requisite to most tertiary mathematics, science courses and some business courses) do so in Grade 12 after studying Mathematics Methods Foundation 3 in Grade 11.

Some very able students prefer to undertake Mathematics Methods 4 in Grade 11 and this enables them to:

- complete Mathematics Methods 4 in only one year of TCE study
- study Mathematics Specialised 4 (advantageous for university engineering courses) in Grade 12
- develop their potential in mathematics more fully
- enjoy the challenges posed by a most demanding subject

To undertake Mathematics Methods 4, Grade 11 students need to have successfully completed (a CA or better is recommended) the Mathematics Methods – Foundation 3 course in Grade 10 taught in Grade 10 Mathematics Extended. Only students with solid Grade 9 Mathematics Extended results will be accepted for this course.

Note that students who complete Mathematical Methods Foundation 3 in Grade 10 will need to sit the 3 hour TASC external examination in the subject.

Note also, that students who complete Mathematical Methods Foundation 3 in Grade 10, will not be able to use the ATAR earned in that year if they use ATAR from Grades 11 and 12 (TASC rules). For this reason, these students will be given the option of repeating Mathematical Methods Foundation 3 offline in Grade 11 or Grade 12. This will entail no formal lessons but all internal and external assessments will need to be completed again in Grade 11.

**Contact Teacher**                Dr David Coulson

**Pre-requisite**                        Due to the sequential nature of this course, students enrolling in Semester 2 must have completed Semester 1 Mathematics Methods Foundation

# Media Art (photography) – Grade 9

**Subject Code** MRT

## Subject Description

The **Grade 9 Media Art** course is designed to enable students to develop, through a variety of practical and theoretical activities, an appropriate standard of knowledge and skills relating to the creation of digital artwork, with a focus on digital image manipulation and photography. This course is designed to ensure students continuing with visual art studies in Grades 11 or 12 have the skills required to excel, but teaches skills relevant to all students regardless of future studies or career choices. All of the units of study are of a practical nature but include a research and reflection component. Students learn about visual art through their involvement in creating, documenting and reflecting on work they have created, whilst gaining an insight into artists, working in related fields, through research tasks.

Throughout the year students will be frequently involved in the following activities:

- researching contemporary practitioners
- documentation, and developing an understanding of the importance of idea development
- image manipulation through the use of Photoshop
- justification of decisions made
- visual diary maintenance
- problem solving
- critical thinking

**Semester 1** will see students focus on units of work which include:

- photographic composition and abstraction
- narrative within a single image
- contemporary collage
- camera control

**Semester 2** will see students focus on units of work which include:

- still life photography
- studio portraiture
- self-directed independent study

**Contact Teacher** Mr Mark Webster

**Pre-requisite** There are no pre-requisites for this subject

# Media Art (film making) – Grade 10

**Subject Code** MRT

## Subject Description

The **Grade 10 Media Art** course is designed to enable students to develop, through a variety of practical and theoretical activities, an appropriate standard of knowledge and skills relating to the creation of screen based media, with a focus on narrative film making. This course is designed to ensure students continuing with Media or Art Production in Grades 11 or 12 have the skills required to excel, but teaches skills relevant to all students regardless of future studies or career choices. The course is designed in two distinct semesters, either of which will give students a good grounding in film making, however it is ideal if students were to complete both semesters.

Throughout the year students will be frequently involved in the following activities:

- non-linear editing (Final Cut Pro)
- post production adjustments and effects (After Effects)
- story-boarding
- script writing
- studio and location lighting
- audio capture
- soundtrack and foley
- recognising and appraising codes and conventions in film making
- directing
- camera control

**Semester 1** will see students focus on the creation of short prescribed productions and skills based activities, with the aim of preparing them for self-directed film making in the future.

**Semester 2** will see students work in production teams and focus on producing a short film for submission to the MyState Film Festival:

**Contact Teacher** Mr Mark Webster

**Pre-requisite** There are no pre-requisites for this subject



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# Music

**Subject Code**                    MSC

## **Subject Description**

The course is designed to enable students to develop, through a variety of integrated activities, an appropriate standard of knowledge and skills in performing, creating (improvising, composing and arranging) and listening. Individual and group work will enable students to develop ideas through the manipulation of the elements of music and to gain some understanding of the historical development of music.

In both Semester 1 and Semester 2 students will be involved in the following activities:

- development of instrumental skills
- solo and ensemble performance
- creating music through improvising, composing and arranging
- critical and analytical listening
- development of aural skills
- interpreting music notation

Many of the activities are of a practical nature and students learn about music through their involvement in creating, performing and listening to music.

**Contact Teacher**                Mrs Sherryn Arneil Hepher

**Pre-requisite**                        Due to the sequential nature of this course, students enrolling in Semester 2 must have completed Semester 1 Music.



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# Music Technology

**Subject Code** MTC

## Subject Description

This course allows students to develop, through computer-based technologies, an appropriate standard of knowledge and skills in performing, creating and listening. Using a range of ICT, students will develop skills using composing as a means of self-expression, musical creation and problem-solving.

Digital electronics provide musicians with a wide range of new instruments and sounds, as well as the means to record and manipulate sounds. Synthesisers, sequencers, recording and editing systems are the everyday tools of many musicians.

The range of technologies may include:

- computer-based notation and performance software
- sound reinforcement (PA systems)
- a variety of hardware and software used to develop creative skills
- recording and editing systems that allow recording and transformation of musical performances.

In both semester one and semester two students will be involved in some of the following activities:

- Composing and arranging using software such as *Sibelius* and *Mixcraft*
- Creating accompaniments using *Mixcraft*
- Audio recording and editing using *Pro-Tools* and *Audacity*
- Recording in the Studio
- Project based musical tasks
- live sound set-up

In Semester 2 students will consolidate their skills enabling them to more proficiently select appropriate technology.

**Contact Teacher** Mrs Sherryn Arneil Hepher

**Pre-requisite** Due to the sequential nature of this course students enrolling in Semester 2 must have completed Semester 1 Music Technology.



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# Philosophy

**Subject Code** PHL

## Subject Description

Students in Grades 9 and 10 can study Philosophy for **one or both semesters**. The course is designed to introduce philosophical thinking skills through the exploration of relevant and interesting topics. In a world of quick and often dubious information, Philosophy equips students to ask probing questions and scrutinise claims, as it introduces them in a safe and structured context to some of life's most fascinating and meaningful questions. The course is designed to be accessible and engaging for young people who are curious about themselves and life's big questions. Each Semester entails a negotiated inquiry, but otherwise students' assessments are based largely on their written musings and contributions to discussions.

Grade 9 and 10 Philosophy (the class may be composite depending on numbers) explores a range of big questions, some of which are front and centre in our minds, while others rarely occur to us. All, though, are crucial to understanding ourselves and our relations with others. Semester 1 will focus on: How does logic operate in everyday life? Is there a God? And, what is love? Semester 2 will focus on: And, how should we treat artificial intelligence? What are the limits of Free Speech? How can we be sure about anything? In both semesters, there will be scope for exploring alternative philosophical questions, should the class be curious.

**Contact Teacher** Dr Nicholas Clements

**Pre-requisite** There are no pre-requisites for this subject.

# Physical Science Foundation - Grade 10

**Subject Code** PSC2

## Subject Description

The physical sciences endeavour to explain natural phenomena and properties of matter that occur in the physical world. Physics uses models and theories based on physical laws to visualise, explain and predict physical phenomena. Chemistry uses an understanding of chemical structures, interactions and energy changes to explain chemical properties and behaviours.

The Extension syllabus is offered to students with a high degree of Scientific ability and skill. Students will complete the course work in an elective subject in addition to their regular Science lessons.

Over the two-year period, students complete the Grade 9 and Grade 10 Australian Curriculum Science syllabuses, plus the Physical Science – Foundation 2 course. Science Extended is undertaken in both core and elective time.

The TCE Physical Sciences - Foundation 2 course prepares students for pre-tertiary Physical Science 3 in Grade 11. The course is designed to equip students with skills and knowledge in physical sciences to apply basic principles to explain observations of the properties and behaviour of matter and natural phenomena that occur in the real world. In studying this course, students will also develop skills in scientific thinking, and understanding of scientific terminology. Students will be exposed to a range of scientifically based approaches for inquiring into the physical, chemical and natural world. Content will have a strong practical basis and, where possible, link to with the students' experiences and lives.

**Contact Teacher** Mr Greg Titmuss / Mr Matthew Kent

**Pre-requisite** The award of EA or HA in Grade 9 Australian Science Curriculum (with a minimum of B ratings on the Physics and Chemistry criteria) and a CA in Grade 9 Science Extended is considered essential.

NB To enrol in Physical Science Foundation (Grade 10) 2021, students must have completed the Grade 9 Science Extended programme.



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# Sport Science

**Subject Code** SPT

## Subject Description

Sport Science provides students with opportunities to understand and apply scientific principles to help analyse and improve sports performance.

**The Grade 9** course offers students the chance to develop an understanding of the fundamental knowledge and skills used to analyse human performance. The systems of the human body that contribute to sporting excellence are studied, as is how exercise affects their functioning. Sport Science is an applied science and various components of fitness are tested and analysed by students in laboratories throughout the year.

**The Grade 10** course delves deeper into the main pillars of Sport Science. Students work within the areas of Exercise Physiology, Biomechanics, Sport Psychology and Skill Acquisition. Through practical and theory lessons students are exposed to the scientific aspects of sport and their application.

The Sport Science program is broken up into the following units:

- Grade 9 - Semester 1:** The skeletal system, muscular system, how they both relate to movement in sport and sports injuries.
- Grade 9 - Semester 2:** Training principles, training methods, the cardiovascular system and how it relates to movement in sport.
- Grade 10 - Semester 1:** Exercise Physiology with an emphasis on energy systems and how they are utilised during different sporting activities.
- Grade 10 - Semester 2:** Sport Psychology, Biomechanics and Skill Acquisition.

The Sport Science program is developmental and although each of the semesters are stand-alone units, it is recommended that student's progress through each of the semesters. The programme is an excellent lead –in subject for those going on to study the Sport Science 3 course in Grades 11 or 12.

**Contact Teacher** Mr Adrian Finch

**Pre-requisite** There are no pre-requisites for this subject.



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# Robotics and Coding

**Subject Code** RBT

This course for Grades 9 and 10 is aimed at developing programming and problem solving skills in students, with a focus on robotics and coding. Students completing this course will be able to begin from their current level of expertise, and build on that expertise to complete robotic and gaming challenges.

Some areas the course will cover are:-

- algorithm design
- basic robotic programming introduction
- project building
- design challenges
- major project

Students with advanced prior knowledge and understanding will be able to use Arduino to create their own custom projects.



**Contact Teacher** Ms Michelle Bradley

**Pre-requisite** There are no pre-requisites for this subject.



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# Science Extended - Grade 9

**Subject Code** SCX

## **Subject Description**

The Extension syllabus is a two year course offered to students with a high degree of Scientific ability and skill. Students will complete the coursework in an elective subject in addition to their regular Science lessons.

Grade 9 Extension (2021) includes the Grade 9 Australian Curriculum science syllabus plus the Grade 10 Earth Science coursework. In addition, students will undertake open ended student-led investigations.

Over the two-year period, students complete the Grade 9 and Grade 10 Australian Curriculum Science syllabus. Concepts are studied with greater depth of detail.

In studying this course, students will also develop skills in scientific thinking and understanding of scientific terminology. Students will be exposed to a range of scientifically based approaches for inquiry into the physical, chemical and natural world. Content will have a strong practical basis and where possible, linked to the students' experiences and lives.

**Contact Teacher** Mrs Victoria Haeusler / Miss A Noyman / Mr Mark Cox

**Pre-requisite** The award of EA or HA in Grade 8 Science (with a minimum of B ratings on the Physics and Chemistry criteria) is considered essential.

# Structured Study Line

**Subject Code**                      SSL

## **Subject Description**

Structured Study Line is of particular advantage to students requiring additional support and consolidation in core skills such as literacy and numeracy, as well as needing help with organisational and time management skills.

Students are able to receive assistance with assignment work from all subject areas, and examination review and planning. Assistance is also given to support students with career pathway planning and work placement opportunities.

The small group environment allows opportunities for one-on-one tutoring, whilst at the same time encouraging more independent learning.

**This option is only available after consultation and approval by the Co-ordinator for Educational Support.**

**Contact Teacher**                      Ms Jami Lane

**Pre-requisite**                              There are no pre-requisites for this subject.



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# Technology and Design Grades 9 and 10

**Subject Code** TCH

## **Subject Description**

Design responds to human need by producing artefacts and solutions to enhance quality of life and user experience. Innovative solutions to 'real world' problems are addressed through the use of a design process. Objects are designed in a range of fields. Social, economic and environmental benefits are derived from the innovation and the creative use of technologies that contribute to the lives of individuals and to cultures and environments. The use of a design process, when devising and producing solutions, necessitates the application of a range of cognitive processes which are transferable to contexts beyond the design realm. These include business, engineering, social entrepreneurship and innovation in other sectors.

*Technology and Design* develops design thinking, systems thinking and project implementation skills which typify contemporary design practice. Through an iterative and reflective approach, ideas are generated, tested and refined and the functional, environmental, economic, aesthetic, social and technological attributes of the design brief are considered. A range of technological skills are developed, through the use of tools and equipment to transform materials to meet a need in areas such as furniture and homewares, farm equipment and tools and devices.

This is a 'hands on' course with the emphasis on skills development through the design and construction of projects in principally, wood and metal. In Grade 10, experience in a wider range of materials is possible, depending on student interests.

Grade 9 students have the opportunity to undertake two semesters of study, one covering a Design in Wood unit in Semester 1 and a Design in Metal unit in Semester 2.

In Grade 10, students have a choice to undergo semester-based projects or to undertake a larger full-year project which would have a student-directed design brief.

It is advisable for students wishing to undertake study in this area in Grade 11 or 12 to have studied Technology and Design in Grades 9 and 10.

**Contact Teacher** Mr Nick Hansson

**Pre-requisite** There are no pre-requisites for this subject.

# Textiles and Design

**Subject Code** TXD

## Subject Description

### Grade 9 and 10 Textiles and Design

The syllabus for Grade 9 and 10 Textiles and Design caters for students planning to participate in the course for one or two semesters and is available in both Grades 9 and 10. The course is arranged to provide students with practical experience in garment construction techniques using commercial patterns and the design process, encouraging the translation of original ideas into completed textile articles.

#### Semester 1

##### Unit 1: Fashion Design and the Future.

This unit incorporates the design process, design development, fashion drawing and mood board construction. Students are encouraged to consider entering the national Wool4school competition. Students consider issues of sustainability and relationship to textile garments. Students create 1 major or 2 minor garments.

##### Unit 2: Fashion Extravaganza

Students are introduced to the design process, elements and principles of design, pattern making and using commercial patterns. Students work to complete 2 articles of individual choice from within the course guidelines. There is a focus on meeting individual needs and enabling individual creative expression using textiles. Students are encouraged to enter textile articles and garments into local and national competitions.

Work on both units occurs concurrently throughout the semester. Students create 1 major or 2 minor garments.

#### Semester 2

##### Unit 1: Fashion and Media.

Students design a class fashion magazine incorporating history of fashion and current textile issues eg. Manmade and natural fibres and eco- fashion. Students create 1 major or 2 minor garments.

##### Unit 2: Design and Create Fashion

Students construct 2 garments/ articles of choice from within the course guidelines incorporating skills according to their textile experience. Individual needs and experience levels are catered for. Students create 1 major or 2 minor garments.

Students may enter outfits into the Australian Apex Teenage Fashion Awards to showcase work.

Students interested in designing and creating with textiles should include this course of study as part of their elective program.

**Contact Teachers** Ms Ena Rigney / Mrs Janelle Scott

**Pre-requisite** There are no pre-requisites for this subject.



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# Visual Arts – Grade 9

## **Subject Code**

VRT

## **Subject Description**

### **Semester 1**

In first semester the Grade 9 Visual Arts program is designed to further extend and consolidate the skills students have acquired in Grades 7 and 8 and to continue to build student confidence through the completion of a variety of two and three-dimensional media. Students will be introduced to key art movements of the early 20<sup>th</sup> century through the journal project and from this project the first semester's activities will focus on applying the style of these movements to a variety of media including drawing, painting and printmaking. Throughout both semesters students will be exposed and will engage in Visual Art terminology and the practices and responsibilities of working in a studio environment.

### **Semester 2**

This second semester course in Visual Arts builds upon the experiences of the first, or effectively stands alone. Students will have the opportunity to work with ceramics, drawing and painting to complete exciting two and three-dimensional work that encourages the students to have fun expressing themselves while considering Elements of Design; line, shape, space, colour, texture, pattern and tone. An integral element of the learning will be to foster curiosity and confidence and to encourage students to create and complete work that makes the best use of their skills. Links are made to other cultures, Artists and Art movements to enable students to see the influences that help to shape the way that we see and produce artworks. There will also be an on-going use of ICT through the use of the student's tablets as a research tool to enable a comprehensive diary to be enhanced over the course of the school year. Students will use their artwork to communicate ideas and feelings and are motivated to achieve quality-finished pieces.

## **Contact Teacher**

Mr Paul Snell

## **Pre-requisite**

There are no pre-requisites for this subject.



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# Visual Arts – Grade 10

## **Subject Code**

VRT

## **Subject Description**

### **Semester 1**

In this first semester Visual Arts course students acquire a broad range of technical skills across the disciplines of collage, printmaking, drawing, painting and sculpture. On each occasion they employ the elements and principles of design to progressively produce works that are perceptive and expressive. The maintenance of a visual diary is also an essential component of this course, becoming a depository for everything of concern to the individual – visual, conceptual, expressive or highly personal. Some of the major units have allied theory assignments through which students are expected to demonstrate their understanding of art and culture. They are also required to make work individually as well as within a collaborative context.

### **Semester 2**

This second semester course in Visual Arts builds upon the experiences of the first, or effectively stands alone. Students acquire a broad range of technical skills across the disciplines of collage, printmaking, drawing, painting and sculpture. On each occasion they employ the elements and principles of design to progressively produce works that are perceptive and expressive. The maintenance of a visual diary is also an essential component of this course, becoming a depository for everything of concern to the individual – visual, conceptual, expressive or highly personal. Some of the major units have allied theory assignments through which students are expected to demonstrate their understanding of art and culture. They are also required to make-work individually as well as within a collaborative context.

## **Contact Teacher**

Mr Paul Snell

## **Pre-requisite**

There are no pre-requisites for this subject.

# Work Studies

**Subject Code**                    WKS

## **Subject Description**

The focus of this course is to enable young individuals to become life-long learners and to educate them to be entrepreneurial rather than just educating them to be employees.

Work Studies will be taught as an elective subject in Grades 9 and 10.

## **Grade 9**

Grade 9 students will:

- learn the importance and components of self-directed and lifelong learning.
- they will investigate the skills and personal qualities associated with a range of occupations.
- also examine entrepreneurial behaviours and their importance for work and in addressing a range of challenges.
- plan and implement strategies to improve their learning and strengthen their individual learning skills.

## **Grade 10**

Grade 10 students will:

- learn the relationship between changing circumstances and 21st century work opportunities, and identify the skills needed to manage changes.
- evaluate work-related communication tools and analyse the skills and capacities needed for 21st century work including appropriate communication skills, collaboration and teamwork.
- learn the importance of developing entrepreneurial skills and a distinct profile to access and manage 21st century work opportunities and challenges.
- research a range of information and data to identify trends in work arrangements emerging over time and evaluate agencies and organisations that support various employment situations.

**Contact Teacher**                Mrs Pushpa Kunasegaran

**Pre-requisite**                        There are no pre-requisites for this subject.