

LUTHERAN COLLEGE

Curriculum handbook 2024 Year 10

Table of Contents

Welcome to Year 10 and the Senior School	3
Excellence in Education, Love for Humanity	4
Understanding the essential elements of the Senior System	
Looking Ahead: Recommended Prior Learning for Year 11 and	
Religion and Ethics	11
English	
Literature	
Essential English	
Health and Physical Education	
Physical Education	16
Mathematics – General Mathematics	
Mathematics – Mathematical Methods	18
Mathematics – Essential Mathematics	
Senior Sciences Prep	21
Essential Science	22
Advanced STEAM	24
Extension Mathematics	26
Chinese	27
German	28
Japanese	29
Accounting and Legal Studies	30
Business and Economics	31
History and Geography	32
Humanities	33
Design	
Certificate I in Furnishing (MSF10122)	
Digital Solutions	
Hospitality	
Dance	
Drama	
Media Arts	
Music	
Visual Art	

Welcome to Year 10 and the Senior School

Year 10 is the beginning of the senior phase of learning. It is the transition year that connects the middle and senior phases of learning and contributes to the continuity of learning across the 13 years of schooling. In this year, students will be given support to plan their intended senior phase of learning, education and training. It is also the year students will make important decisions about study for Years 11 and 12, and which of the pathways to pursue in Years 11 and 12, such as University entrance (ATAR) or Vocational Education.

In the senior years at Trinity Lutheran College, we emphasise the importance of always setting high academic goals and students striving to achieve their personal best. Our aim is to encourage students to become mature, self-aware and reflective learners. From the start of Year 10, there is an increasing expectation that students will take greater responsibility for their learning and engage with the greater complexity of more disciplinary based or technical subjects.

Building upon the solid foundations established in the junior and middle years, the senior years curriculum focus is on the capabilities students need to work with knowledge to grow and to become lifelong learners. Year 10 is an important juncture, which makes connections with prior learning and the learning in the specialised syllabuses in Years 11 and 12. The Year 10 program has been developed to provide insight into Year 11 and 12 studies by providing the necessary support and scaffolding students need to meet the challenges of the senior phase of learning. Students are encouraged to establish clearly-defined goals for the future, including post-school destinations and to endeavour to choose subjects with these goals in mind.

Please read the accompanying information carefully. I look forward to a successful and rewarding journey with students and parents through the senior years.

We wish you and your family God's richest blessings.

God Bless

Laura Robbins Deputy Principal & Head of Campus Middle and Senior Years

Excellence in Education, Love for Humanity

Trinity Lutheran College is a school of the Lutheran Church of Australia. As such we aim to be a secure place, offering warm caring relationships and a safe environment for all. We respect individual gifts and differences. A strong partnership between students, parents and staff is emphasised. Our goal is to cultivate within students a mindset of service and stewardship, along with a deep appreciation for diverse perspectives. That is, we learn with our head, heart and hand. A true Trinity Lutheran College learner is a student who learns and enacts this to improve the lives of themselves and those in their community.

Lutheran schools seek to create a learning context in which values are recognised as having their source in God. Values have implications in all areas of life, by giving attention to the child's spiritual needs as well as their intellectual, physical, social, emotional and aesthetic needs. It is clear in our curriculum that we provide opportunities for all these values to not only be demonstrated, but also developed.

Year 10 Overview

Year 10 at Trinity Lutheran College is structured in a manner that allows students to choose subjects and pathways to match their God-given talents, goals and interests. There is a clear and direct focus on preparation for the new Senior system for the QCE and ATAR. It is important that students understand the implications of choices as it can determine their future subject pathways.

More specifically, Year 10 is structured in a manner that allows all students to begin to specialise in their studies in a manner that will best prepare them for the content and expectations of Year 11 and 12. Added to the core subjects are a suite of specialist subjects that focus on developing the knowledge and application for subjects that require a high degree of academic rigour. These subjects include:

- Mathematical Methods or Mathematics General
- Science Senior Sciences preparation.
- English focusing on higher level senior English
- Physical Education

Those students who do not wish to pursue specialisation in these chosen disciplines will have the opportunity to study core units of work and essential units. Essential units are designed for students who do not wish to take an academic pathway and may wish to study the vocational pathway. Year 10 will allow students to begin to study in a manner now that will suit this future study option.

Our subject offerings reflect this learning context and provide a strong and balanced curriculum which takes into account global trends and influences, as well as ensuring our students have the greatest possible opportunity to be successful in their chosen pathway.

Changing employment and workforce facing our students.

It is important that when considering subjects and a career pathway, that students and families are aware of current trends in employment and the need for graduating students to be fully prepared for new challenges. With the rise in automation, globalisation and more flexible work, students will need to navigate options that will open doors to employment and opportunity. A report by management and consultancy agency, McKinsey & Company (2019) "estimates that 25-46% of current work activities in Australia could be automated by 2030". This will help drive a climate of not only productivity but one of creativity and innovation.

Coupled with this information is emerging research about the to focus on soft skills, including interpersonal skills, communication skills, time management, problem-solving, leadership and empathy. These are top skills employers seek from prospective candidates as they are important for all industries.

The teaching and learning at Trinity Lutheran College offers a balanced approach to these demands. That is, we offer a range of subjects that not only create opportunity for student to be formally qualified to meet future employment trends, but also offers the underlying skills (such as a focus on critical analysis) to ensure they have the attained the competencies needed.

ELC – 12 Teaching and Learning Framework at Trinity Lutheran College

Trinity Lutheran College is committed to providing the highest standards of teaching and learning for our students. We have undertaken extensive research into contemporary best practice in pedagogy and we have aligned this with deliberate commitment to the development of an ELC to 12 Teaching and Learning Framework.

This framework has emerged from the College Strategic Plan. The framework will ensure that Trinity teachers are skilled in the delivery of innovative and engaging learning experiences that reflect best practice, as well as being skilled in the provision of programs that support a wide range of student needs.



The four key principles of this framework are: Collaboration, Communication, Diversity & Reflection, and offer our students a strong advantage in being able to meet future educational challenges.

Senior Education and Training Plans

What is the SET Plan?

A Senior Education and Training (SET) Plan is a document that each student develops in consultation with their parents/carers and the college. A SET Plan is designed to map your individual learning pathway through the Senior Phase of learning. All Year 10 students develop a SET plan. It is quite acceptable for you to change your plan. Trinity will support you by monitoring your Plan and adapting it if required.

The SET Plan should:

- work as a 'road map' to help you achieve your learning goals
- include flexible and coordinated pathway options
- assist you to examine further learning options across education, training and employment sectors,
- help you make decisions about learning pathways
- help you to communicate with the college about these learning pathways

Understanding the essential elements of the Senior System

Queensland Certificate of Education (QCE)

The QCE is Queensland's senior secondary schooling qualification. It is internationally recognised and provides evidence of senior schooling achievements. The QCE allows students to choose from a wide range of learning options to suit their interests and career goals.

To receive a QCE, students must achieve the set amount of learning, in the set standard, in a set pattern, while meeting literacy and numeracy requirements.

Australian Tertiary Admissions Rank (ATAR)

The Australian Tertiary Admission Rank (ATAR) will be used to rank eligible Year 12 graduates. ATARs will be calculated and issued by the Queensland Tertiary Admissions Centre (QTAC).

- ATAR is a number between 0.00 and 99.95 with increments of 0.05
- The ATAR is commonly used in other states and territories.

QTAC will calculate ATARs based on either:

5 General subjects O	R Combination (4 General + 1 applied/VET)
Best five QCAA General subjects	Best four QCAA General subjects + The best result in a:
	QCAA Applied (currently Authority-registered subject or Subject Area Syllabus subject) or
	Certificate III
	or
	higher

If a student is eligible for an ATAR in both categories, QTAC will use their highest ATAR.

English as a requirement for ATAR eligibility Eligibility for an ATAR will require satisfactory completion of a QCAA English subject.

Satisfactory completion will require students to attain a result that is equivalent to a Sound Level of Achievement in one of five subjects — English, Essential English, Literature, English and Literature Extension (Year 12 subject only), or English as an Additional Language.

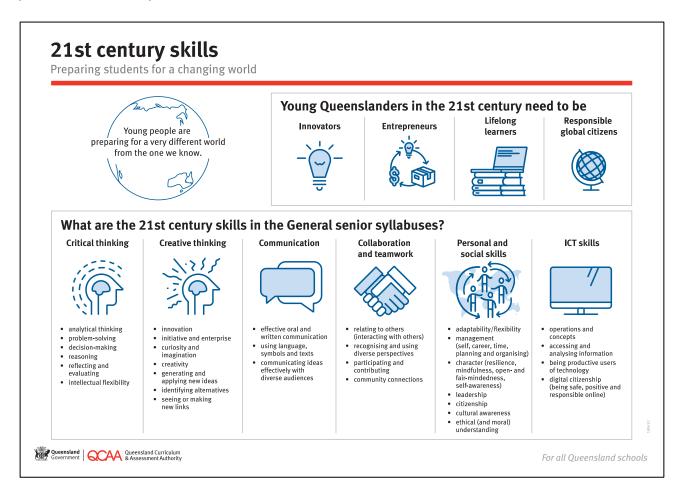
While students must meet this standard to be eligible to receive an ATAR, it won't be mandatory for a student's English result to be included in the calculation of their ATAR.

VET and other pathways

At Trinity Lutheran College, our senior students are encouraged to select the right pathway for them. Students in Year 11 and 12 may choose not to receive an ATAR. This pathway may be more suitable to students wanting to gain a trade or work pathway. Alternatively, some students may select to complete a Diploma subject during Year 11 and 12, which provides an alternative pathway to university entry.

21st century skills

To prepare students for future opportunities, teaching, learning and assessment must respond to economic and social conditions. The new syllabuses incorporate the skills identified in research as essential for living, learning and working in the 21st century and build on skills explored in the P-10 Australian Curriculum. In General subjects, students will have many opportunities to learn and practice 21st century skills, and to demonstrate achievement in them.



Looking Ahead: Recommended Prior Learning for Year 11 and 12

The information below may assist you with selecting subjects for Year 10 by identifying the subjects offered in Year 11 and 12, along with any recommended prior learning.

The table below outlines the recommended grades that must be reached in order for students to enroll in particular subjects in Years 11 and 12. You may find it helpful to know this information ahead of selecting subjects for Years 11 and 12 in 2025.

If you do not meet the recommended grades, please contact the Head of Learning in the respective subjects.

General Subjects	
Year 11 and 12 Subject	Recommended prior learning for Senior Subjects
Accounting	C in Year 10 any Mathematics
Ancient History	C in Year 10 Humanities and English
Biology	C in Year 10 Science
Business	C+ in Year 10 English and Humanities
Chemistry	B in Year 10 Science and B in Year 10 General Mathematics
Dance	C in Year 9 or 10 Dance or equivalent
Design	Nil
Digital Solutions	Nil
Drama	C in Year 9 or 10 Drama or C in Year 10 English
Economics	C in Year 10 Humanities and Mathematics
English	C in Year 10 English
English & Literature Extension (Year 12)	B+ in Unit 1 & 2 English
German	C in Year 10 German
Geography	C in Humanities or English
Health	C in English
Japanese	C in Year 10 Japanese
Legal Studies	C in Year 10 English and Humanities
Literature	C in Year 10 English or Year 10 Literature
Mathematics - General	C in Year 10 Mathematics
Mathematical Methods	B- in Year 10 Mathematics
Mathematics - Specialist	B in Year 10 Mathematics
Modern History	C in Year 10 Humanities and English
Music	C in Year 9 or 10 Music or equivalent
Music Extension (Year 12)	B in Unit 1 & 2 Music
Physical Education	C in English, HPE and Science. Ability to swim is essential.
Physics	B in Year 10 Science and Mathematical Methods. Mathematics Methods must be studied concurrently.
Psychology	B in Year 10 Science and B in Year 10 General Mathematics
Study of Religion	C in English
Visual Art	C in Year 9 or 10 Visual Art

Applied Subjects

Year 11 and 12 Subject	Recommended prior learning for Senior Subjects
Religion and Ethics (known as Christian Studies)	Nil
Essential English	Below C in Year 10 English
Essential Mathematics	Below C in Year 10 Mathematics
Social and Community Studies	Nil
Drama in Practice	Nil
Sport and Recreation	Nil
Tourism	Nil

VET Subjects

Year 11 and 12 Subject	Recommended prior learning for Senior Subjects
Diploma of Business	Good quality written and spoken communication skills.
Certificate III in Sport & Recreation	Nil
Certificate III in Business	Good quality written and spoken communication skills.
Certificate III in Hospitality	Nil
Certificate III in Health Services Assistance	Nil
Certificate II in Health Support Services	Nil
Certificate II in Community Services	Nil
Certificate II in Cookery	Nil
Certificate II in Business	Nil
Certificate II in Engineering Pathways	Nil
Certificate II in Applied Digital Technologies	Nil

CORE SUBJECTS

All students in Year 10 will study Christian Studies, English, Mathematics, Science and HPE/PE.

Religion and Ethics

Subject Type: This is a core subject studied by all students.

Required Prior Learning: This course builds on Year 9 Christian Studies.

Overview

At Trinity Lutheran College, our senior program follows the syllabus and outcomes of the QCAA Applied subject 'Religion and Ethics'. It is therefore a subject that could contribute to an ATAR calculation should the student choose to follow that pathway in Years 11 and 12.

To meet the teaching hours required by this syllabus, the program runs over the three years of senior school. Year 10 and the first semester of Year 11 is the formative program and units, and the second semester of Year 11 and Year 12 make the summative program and units.

Religion and Ethics places a focus on Service Learning and the project will allow students to develop their social conscience and reflect on delivery of practical assistance to someone in need. Whilst a variety of world views are discussed and reflected upon, the whole program has a Christ-centred focus based in the national *Christian Studies Curriculum Framework (CSCF)*, developed by Lutheran Education Australia, overlaying the QCAA Religion and Ethics syllabus.

The 4 strands of the CSCF are integrated into each unit of study. These strands are: Christian Beliefs, Christian Church, Christian Living and Christianity in the World.

The units explored in year 10 are:

Sacred Stories (35 hours – terms 1, 2 and 3)

Students are introduced to how Sacred Stories have been used across time to teach religious, spiritual and ethical messages that challenge and inspire individuals and communities. Sacred stories are shared over time and have religious, spiritual, ethical and cultural or community resonance. Examples include biblical parables and First Nations stories.

Meaning, Purpose and Expression (20 hours in year 10 – terms 3 and 4)

Humanity's search for meaning and purpose in life through religious, spiritual and ethical expression is common across cultures, countries and communities. By engaging with a variety of contexts, students explore how religious, spiritual and ethical belief systems have influenced expression and help people to create and maintain a meaningful and purposeful existence in the 21st century.

What you will know and be able to do

- Experience the benefits of networking within the community.
- Be involved with religious communities, charities, welfare and service groups and organisations.
- Interact with the ideas and perspectives which may express beliefs and values different from their own.
- Develop effective decision-making skills
- Learn how to plan, implement and evaluate inquiry processes and outcomes.
- Examine religion and ethics related to community contexts.
- Become active and engaged citizens dealing with religious, spiritual and ethical issues.

What is the workload/assessment?

Students will participate in 3 summative assessment tasks, 2 projects and one investigation.

English

Subject Type:

English is a core subject. In Year 10 at Trinity Lutheran College, students must select one of three subject offerings in the English Learning Area: English, Literature or Essential English. Students cannot study the courses concurrently. These subjects align with the Australian Curriculum and are built around the three interrelated strands of Language, Literature, and Literacy. All three subjects share common features that include the continuing development of students' knowledge, understanding and skills in listening, speaking, reading, viewing, designing and writing. Differences between the subjects lie in the emphasis on how language and skills are developed and the contexts in which they are applied.

Required Prior Learning: This course builds on Years 6-9 English.

Overview:

In Year 10 English, students develop skills associated with informative, persuasive, and imaginative genres. Students have opportunities to engage with a range of texts, including novels, film and media that offer diverse perspectives on our world, and explore themes of human experience and cultural significance, interpersonal relationships, and ethical and global dilemmas within real-world and fictional settings. In doing this, students develop their ability to respond to these texts in various ways, producing literary and media analyses, narratives and persuasive responses.

A course of study in English promotes open-mindedness, imagination, critical awareness and intellectual flexibility — skills that prepare students for local and global citizenship and for lifelong learning across a wide range of contexts.

What pathways does English lead to in Years 11 and 12?

English is a preparatory course for the QCE General English subject. However, after completing English in Year 10, students can still choose to study Literature or Essential English in Years 11 and 12.

Assessment:

Students will complete a total of four summative assessments, including Extended Responses (e.g. assignments) and Supervised Responses (e.g. exams). Students will respond in four genres: analytical, persuasive, media, and imaginative. Responses will be either written or spoken, depending on the type of assessment.

Literature

Subject Type:

Literature is a core subject. In Year 10 at Trinity Lutheran College, students must select one of three subject offerings in the English Learning Area: English, Literature or Essential English. Students cannot study the courses concurrently. These subjects align with the Australian Curriculum and are built around the three interrelated strands of Language, Literature, and Literacy. All three subjects share common features that include the continuing development of students' knowledge, understanding and skills in listening, speaking, reading, viewing, designing and writing. Differences between the subjects lie in the emphasis on how language and skills are developed and the contexts in which they are applied.

Required Prior Learning: This course builds on Years 6-9 English.

Overview:

In Year 10 Literature, students focus on studying literary texts, developing their abilities as independent, innovative and creative learners and thinkers who appreciate the aesthetic use of language, analyse perspectives and evidence, and challenge ideas and interpretations through the analysis and creation of varied literary texts.

What pathways does Literature lead to in Years 11 and 12?

Literature is a preparatory course for the QCE General Literature subject. However, after completing Literature in Year 10, students can still choose to study English or Essential English in Years 11 and 12.

Assessment:

Students will complete a total of four summative assessments, including Extended Responses (e.g. assignments) and Supervised Responses (e.g. exams). Students will respond in analytical and imaginative genres. Responses will be either written or spoken, depending on the type of assessment.

Essential English

Subject Type:

Essential English is a core subject. In Year 10 at Trinity Lutheran College, students must select one of three subject offerings in the English Learning Area: English, Literature or Essential English. Students cannot study the courses concurrently. These subjects align with the Australian Curriculum and are built around the three interrelated strands of Language, Literature, and Literacy. All three subjects share common features that include the continuing development of students' knowledge, understanding and skills in listening, speaking, reading, viewing, designing and writing. Differences between the subjects lie in the emphasis on how language and skills are developed and the contexts in which they are applied.

Required Prior Learning: This course builds on Years 6-9 English.

Overview:

In Year 10 Essential English, students develop and refine their understanding of language, literature and literacy to enable them to interact confidently and effectively with others in everyday, community and social contexts. The subject encourages students to recognise language and texts as relevant in their lives now and in the future and enables them to understand, accept or challenge the values and attitudes in these texts.

As part of the studies, students in Year 10 Essential English at Trinity Lutheran College complete the QCAA Literacy Short Course. The Literacy Short Course is aimed at students who may be at risk of not otherwise attaining the minimum requirements for literacy necessary for awarding the Queensland Certificate of Education at the completion of Year 12.

In the Literacy Short Course, there are two focus topics:

- Personal identity and education, where students develop reading, writing, oral communication and learning skills through expressing personal identity, achieving personal goals, and understanding and interacting with the wider community
- The work environment, where students develop reading, writing, oral communication and learning skills through activities that relate to preparing for and seeking employment, operating in an existing workplace, and/or entering a new work environment.

What pathways does Essential English lead to in Years 11 and 12?

Essential English is closely aligned with the QCE Applied Essential English subject. After completing Essential English in Year 10, students are advised to continue studying Essential English in Years 11 and 12, rather than changing to English or Literature.

Assessment:

Students will complete a total of four summative assessments, including Extended Responses (e.g. assignments) and Supervised Responses (e.g. exams). Students will respond in different genres, including informative, persuasive, multimodal and imaginative. Responses will be either written or spoken, depending on the type of assessment. Students will also complete a journal as part of the requirements of the Literacy Short Course.

Health and Physical Education

Subject Type:

In Year 10, students must select one of two subject offerings to complete in Year 10, the core subject Health and Physical Education (HPE) or the elective subject Physical Education (PE).

Students cannot study the courses concurrently.

HPE is a core subject, based on the Australian Curriculum. It is intended to prepare students for the Year 11 and 12 subjects Sport and Recreation (Applied), Certificate III Sport and Recreation and Certificate III Health Services Assistance.

Overview:

Health and Physical Education provides a foundation for developing active and informed members of society in the pursuit of good health. It is a subject that provides students with opportunities to learn in, through and about sport and active recreation activities. Students understand the health benefits of a physically active lifestyle and explore strategies to enhance this.

What you will know and be able to do?

- Understand the contribution that sport and active recreation makes to health and wellbeing.
- Understand how physical skills can enhance participation and performance in sport and active recreation activities.
- Investigate strategies and practices that enhance your own, others' and community health, safety and wellbeing.
- Develop specialised skills for movement in a variety of sports and physical activities.
- Develop strategies for individual and team games, sports and other physical activities, in particular, offensive and defensive strategies, use of space, co-operation and teamwork.
- Understand the relationship between health, physical activity and fitness.

Frequently asked questions:

What pathways can this subject lead to in Years 11 and 12?

There are several pathways for Years 11 and 12 within the HPE department. This subject prepares students for the applied subject, Sport and Recreation, Certificate III Sport and Recreation and Certificate III Health Services Assistance in Year 11 and 12. It also provides students with the skills and knowledge to lead healthy and active lifestyles beyond school.

Assessment:

Students will be assessed in both the practical and theoretical components of the course.

Physical Education

Subject Type:

In Year 10, students must select one of two subject offerings to complete in Year 10, the core subject Health and Physical Education (HPE) or the elective subject Physical Education (PE).

Students cannot study the courses concurrently.

PE is an elective subject based on the Australian Curriculum. This subject is intended to prepare students for the Year 11 and 12 general subject, Physical Education (ATAR).

Required Prior Learning: This course builds on Year 9 HPE.

Overview:

Physical Education provides a foundation for developing active and informed members of society, capable of managing the interactions between themselves and their social, cultural and physical environments. This subject is designed to be a preparatory course for those considering selecting the Year 11 and 12 general subject, Physical Education (ATAR).

Physical Education (ATAR) in Year 11 and 12 is an academic subject that establishes a basis for further tertiary education and employment in the fields of exercise science, biomechanics, the allied health professions, psychology, teaching, sport journalism, sport marketing and management, sport promotion, sport development and coaching. In Year 10 students are introduced to content and assessment styles covered in senior Physical Education.

Content focuses on ascertaining relationships between biophysical, sociocultural and psychological concepts and principles, and various physical activity contexts. Students will use their knowledge to devise strategies to optimise engagement and performance in physical activity contexts.

What you will know and be able to do?

- Students are introduced to fundamental concepts and principles underpinning their learning of movement sequences and how they can enhance movement from a biomechanical perspective.
- Students broaden their perspective by determining the psychological factors, barriers and enablers that influence their performance and engagement in physical activity.
- Students develop specialised movement strategies and develop tactical awareness of their own and others' performance in physical activity.
- Students explore energy, fitness and training concepts and principles to optimise personal health, fitness and performance.

Frequently asked questions:

What pathways can this subject lead to in Years 11 & 12?

There are several pathways for Years 11 & 12 within the HPE department. While this subject specifically prepares students for the general subject, Physical Education (ATAR) students can still select the applied subject, Sport and Recreation, Certificate III Sport and Recreation or Certificate III Health Services Assistance in Year 11 and 12.

Assessment:

Students will be assessed in both the practical and theoretical components of the course.

Mathematics – General Mathematics

Subject Type:

In Year 10, students must study one Mathematics subject, choosing from General Mathematics, Mathematical Methods or Essential Mathematics.

Students cannot study these courses concurrently. Extension Mathematics is offered as an elective subject which can be studied concurrently with a core Mathematics subject.

General Mathematics is a core subject. It is based on the Australian Curriculum for Mathematics.

Required Prior Learning: Year 9 Mathematics Recommended Level of Achievement: C

Senior School Pathways:

Year 10 General Mathematics leads to Years 11 and 12 General Mathematics or Years 11 and 12 Essential Mathematics.

Overview:

Learning mathematics creates opportunities and enriches the lives of all Australians. The Australian Curriculum: Mathematics provides students with essential mathematical skills and knowledge in Number and Algebra, Measurement and Geometry, and Statistics and Probability. It develops the numeracy capabilities that all students need in their personal, work and civic life, and provides the fundamentals on which mathematical specialties and professional applications of mathematics are built.

Year 10 General Mathematics

The curriculum focuses on developing increasingly sophisticated and refined mathematical understanding, fluency, logical reasoning, analytical thought and problem-solving skills. These capabilities enable students to respond to familiar and unfamiliar situations by employing mathematical strategies to make informed decisions and solve problems efficiently.

By the end of 10 General Mathematics, students will:

- use mathematical modelling to solve problems involving growth and decay in financial and other applied situations
- apply linear functions and solve related equations numerically and graphically
- solve problems involving simultaneous linear equations with 2 variables algebraically and graphically
- interpret and use logarithmic scales representing small or large quantities or change in applied contexts
- solve surface area and volume problems relating to composite solids
- apply Pythagoras' theorem and trigonometry to solve practical problems
- identify the impact of measurement errors on the accuracy of results
- use mathematical modelling to solve practical problems invovling proportion and scaling, evaluating and modifying models, and reporting assumptions, methods and findings
- Interpret networks used to represent practical situations and describe connectedness
- plan and conduct statistical investigations involving bivariate data
- represent the distribution of data using tables and scatter plots, and interpreting possible causation
- compare the distribution of continuous numerical data using various displays, and discuss distributions in terms of centre, spread, shape and outliers
- apply conditional probability to solve problems involving compound events
- construct a matrix and perform arithmetic involving matrices.

Mathematics – Mathematical Methods

Subject Type:

In Year 10, students must study one Mathematics subject, choosing from General Mathematics, Mathematical Methods or Essential Mathematics.

Students cannot study these courses concurrently. Extension Mathematics is offered as an elective subject which can be studied concurrently with a core Mathematics subject.

Mathematical Methods is a core subject. It is based on the Australian Curriculum for Mathematics.

Required Prior Learning: Year 9 Mathematics Recommended Level of Achievement: B

Senior School Pathways:

10 Mathematical Methods leads to Years 11 and 12 Mathematical Methods and Years 11 and 12 Specialist Mathematics.

Overview:

Learning mathematics creates opportunities and enriches the lives of all Australians. The Australian Curriculum: Mathematics provides students with essential mathematical skills and knowledge in Number and Algebra, Measurement and Geometry, and Statistics and Probability. It develops the numeracy capabilities that all students need in their personal, work and civic life, and provides the fundamentals on which mathematical specialties and professional applications of mathematics are built.

Year 10 Mathematical Methods

The curriculum focuses on developing increasingly sophisticated and refined mathematical understanding, fluency, logical reasoning, analytical thought and problem-solving skills. These capabilities enable students to respond to familiar and unfamiliar situations by employing mathematical strategies to make informed decisions and solve problems efficiently.

By the end of 10 Mathematical Methods, students will:

- define rational and irrational numbers and perform operations with surds and fractional indices, including simplifying algebraic fractions
- factorise quadratic equations using a variety of techniques
- use the definition of a logarithm to establish and apply the laws of logarithms
- Investigate the concept of a polynomial and apply the factor and remainder theorems to solve problems
- solve simple exponential equations
- describe, interpret and sketch parabolas, hyperbolas, circles and exponential functions and their transformations
- solve problems involving surface area and volume of right pyramids, right cones, spheres and related composite solids
- establish the sine, cosine and area rules for any triangle and solve related problems
- use the unit circle to define trigonometric functions, and graph them with and without the use of digital technologies
- solve simple trigonometric equations
- apply Pythagoras' theorem and trigonometry to solving three-dimensional problems in rightangled triangles
- calculate and interpret the mean and standard deviation of data and use these to compare data sets
- use information technologies to investigate bivariate numerical data sets. Where appropriate use a linear relationship to describe the relationship allowing for variation.
- use mathematical modelling to solve problems involving growth and decay in financial and other applied situations
- apply linear functions and solve related equations numerically and graphically

- solve problems involving simultaneous linear equations with 2 variables algebraically and graphically
- interpret and use logarithmic scales representing small or large quantities or change in applied contexts
- identify the impact of measurement errors on the accuracy of results
- interpret networks used to represent practical situations and describe connectedness
- represent the distribution of data using tables and scatter plots, and interpreting possible causation
- apply conditional probability to solve problems involving compound events

Mathematics – Essential Mathematics

Subject Type:

In Year 10, students must study one Mathematics subject, choosing from General Mathematics, Mathematical Methods or Essential Mathematics. Students cannot study these courses concurrently.

Essential Mathematics is a core subject. It is based on the Australian Curriculum for Mathematics.

Required Prior Learning: Year 9 Mathematics

Senior School Pathways:

Year 10 Essential Mathematics leads to Years 11 and 12 Essential Mathematics.

Overview:

Learning mathematics creates opportunities and enriches the lives of all Australians. The Australian Curriculum: Mathematics provides students with essential mathematical skills and knowledge in *Number and Algebra*, *Measurement and Geometry*, and *Statistics and Probability*. It develops the numeracy capabilities that all students need in their personal, work and civic life, and provides the fundamentals on which mathematical specialties and professional applications of mathematics are built.

Year 10 Essential Mathematics

In addition to learning the Australian Curriculum with high support, students in Year 10 Essential Mathematics at Trinity Lutheran College also complete the QCAA Numeracy Short Course. The Numeracy Short Course is aimed at students who may be at risk of not otherwise attainin ghte minimum requirements for numeracy necessary for awarding the Queensland Certificate of Education at the completion of Year 12.

In the Numeracy Short Course, there are two focus topics:

- Personal identity and education where students develop numeracy and learning skills in the contexts of expressing personal identity, achieving personal goas, and understanding and interacting with the wider community
- The work environment where studetns develop numeracy and learning skills through activities that relate to preparing for and seeking employment, operating in an existing workplace, and/or entering a new work environment.

Senior Sciences Prep

Subject type:

In Year 10, students must study one Science subject, choosing from Senior Sciences Prep or Essential Science. Students cannot study these courses concurrently.

Senior Sciences Prep is a core subject. It is based on the Australian Curriculum for Science.

Senior School Pathways:

Year 10 Senior Sciences Prep leads to Year 11 and 12 Biology, Chemistry, Physics, and Psychology.

Overview:

This subject will be taught by specialist Year 10 Science teachers as part of a course of study designed to prepare students for senior Science subjects and provide them with a course which concentrates on the skills to independently design and undertake investigations which take into account the need for accuracy, safety, fairness, ethical actions and collaboration. All students need to communicate using scientific language and representations appropriate for the content. Science is organised into three content strands. The Science Understanding strand describes the knowledge and understanding, or the "what" of Science. The Science Inquiry Skills strand describes the skills, or the "how" of Science. The Science as a Human Endeavour strand is incorporated in the Science Understanding strand and provides contexts for linking concepts and learning experiences that are meaningful to students.

In the Science Understanding strand, students explore:

- the processes that underpin heredity and genetic diversity and describe the evidence supporting the theory of evolution by natural selection
- key events in the origin and evolution of the universe and describe the supporting evidence for the big bang theory
- trends in patterns of global climate change and identify causal factors
- Newton's laws describe motion and apply them to predict motion of objects in a system
- patterns and trends in the periodic table and predict the products of reactions and the effect of changing reactant and reaction conditions

Within the Science Inquiry Skills areas, students develop skills in:

- 1. Questioning and predicting
- 2. Planning and conducting
- 3. Processing and analysing data and information
- 4. Evaluating
- 5. Communicating

Essential Science

Subject type:

In Year 10, students must study one Science subject, choosing from Senior Sciences Prep or Essential Science. Students cannot study these courses concurrently.

Essential Science is a core subject. It is based on the Australian Curriculum for Science.

Senior School Pathways:

Year 10 Essential Science is a subject that is suitable for learners who are not planning on taking a senior Science course in Year 11 and 12.

Overview:

This subject will be taught by a specialist Year 10 Science teacher. It will include a substantial amount of practical work as a way of consolidating the understanding of key science concepts. This course concentrates on developing the skills to undertake investigations, which take into account the need for accuracy, safety fairness, ethical actions and collaboration. Science is organized into three content strands. The Science Understanding strand describes the knowledge and understanding, or the "what" of Science. The Science Inquiry Skills strand describes the skills, or the "how" of Science. The Science as a Human Endeavour strand is incorporated in the Science Understanding strand and provides contexts for linking concepts and learning experiences that are meaningful to students.

In the Science Understanding strand, students explore:

- Biology heredity and genetic diversity and describe the evidence supporting the theory of evolution by natural selection
- Earth and Space global climate change and the origin and evolution of the universe and the big bang theory
- Physics Newton's laws
- Chemistry patterns and trends in the periodic table and chemical reactions

Within the Science Inquiry Skills areas, students develop skills in:

- 6. Questioning and predicting
- 7. Planning and conducting
- 8. Processing and analysing data and information
- 9. Evaluating
- 10. Communicating

ELECTIVE SUBJECTS

Students will study three electives for three lessons each week. Please note the recommended prior learning preferences for Year 11 and choose subjects accordingly.

Advanced STEAM

Subject Type:

This elective subject is based on the Australian Curriculum for Science, Technology, Visual Art and Mathematics.

Required Prior Learning: B in Year 9 Science and Mathematics, and a B in Year 8 or Year 9 Visual Art and/or Design Technology.

Overview

STEAM is an educational approach to learning that uses Science, Technology, Engineering, the Arts and Mathematics as access points for guiding student inquiry, dialogue and critical thinking. This requires students to take thoughtful risks, engage in experiential learning, persist in problem-solving, embrace collaboration, and work through the creative process.

The unique format of the STEAM course removes the usual limitations of subject divisions, replacing them with curiosity, critique, inquiry, and innovation. STEAM education isn't just one thing—it's a range of strategies that help students apply concepts, skills and knowledge they have learned or are in the process of learning from different disciplines to solve meaningful problems, providing opportunities for students to make cross-curricular links in a more authentic way. STEAM develops ingenuity, a set of thinking, reasoning, teamwork, investigative, and creative skills that students can use in all areas of their lives.

This course will appeal to students who value a self-directed style learning environment and provides a wide scope for choice and practical high-level problem solving.

You will engage in:

- Entrepreneurship and practical problem solving
- Innovation and creativity
- Communication
- Collaboration and productive teamwork
- Hypothesising, researching and reflecting
- Trialing, testing and experimenting
- Time management and organisational skills
- Independent work capabilities
- Introduction to aspects of relevant industry
- A focus on real-world issues and problems
- Tasks guided by the design process
- Hands-on inquiry and open-ended exploration
- Application of rigorous math and science content learnt
- Appreciation for multiple right answers and reframe failure as a necessary part of learning

Frequently Asked Questions

How is this course assessed?

• Assessment is based on Australian Curriculum standards in all four subjects; Mathematics, Science, Technology and Visual Art.

What types of assessment are included?

- Exhibition; formal and informal display
- Presentations; physical, oral, digital, virtual
- Design process journal documentation
- Research tasks

Year 10 Curriculum Handbook 2024

What is the workload?

Three lessons per week:

- one teacher directed lessons covering relevant theoretical knowledge and skills
- two self-directed lessons, for independent student selected project-based tasks
- class work needs to be mirrored in individual time, as per the College homework policy.

Where does this course pick up from Year 9 STEAM?

- Extends further the students' appreciation of the design process
- Develops further high order problem-solving skills
- Broadens students' knowledge of community and global issues
- Introduces relevant technologies and theoretical knowledge applicable to community and global issues
- Develops effective numeracy, literacy, visual literacy and logical reasoning skills
- Enhances communication skills
- Helps students acquire essential real-life skills such as collaboration used in all vocations

What could this course lead to in Years 11 and 12?

This course can lead directly into several Year 11 and 12 General subjects: Mathematical Methods, Specialist Mathematics, Physics, Chemistry, Biology, Psychology, and Visual Art. It familiarises students with many aspects of the senior courses and the knowledge and understanding and skills gained in Year 10 Advanced STEAM will be valuable as a foundation for Senior studies, and for numerous career opportunities beyond schooling.

Extension Mathematics

Subject Type:

Extension Mathematics is an elective subject studied by students who have a keen interest in Mathematics and are willing to extend their content knowledge, reasoning ability, analytical processes and problem solving skills. Some of the topics covered are part of the 10A section of the Australian Mathematics Curriculum and some go beyond this level.

Required Prior Learning: Year 9 Mathematics Recommended Level of Achievement: B Concurrent learning: Year 10 Mathematical Methods

Senior School Pathways: Years 11 and 12 Mathematical Methods and Years 11 and 12 Specialist Mathematics.

Overview:

Learning mathematics creates opportunities and enriches the lives of all Australians. The Australian Curriculum: Mathematics provides students with essential mathematical skills and knowledge in *Number and Algebra*, *Measurement and Geometry*, and *Statistics and* Probability. It develops the numeracy capabilities that all students need in their personal, work and civic life, and provides the fundamentals on which mathematical specialties and professional applications of mathematics are built.

Year 10 Extension Mathematics: The Extension Mathematics curriculum focuses on developing increasingly sophisticated and refined mathematical understanding, fluency, logical reasoning, analytical thought and problem-solving skills. Specifically, topics from senior years are introduced to give students a foundation of knowledge for students intending to complete Mathematical Methods, Specialist Mathematics and General Mathematics (offline).

By the end of 10 Extension Mathematics, students will:

- comprehend that matrices can be used for storing and displaying information, identify different types of matrices, apply addition, subtraction and multiplication to matrices, solve matrix equations, determine the power of a matrix, make decisions and problem solve using matrices.
- understand the meanings of the terms graph, edge, vertex, loop, degree of a vertex, subgraph, simple graph, complete graph, bipartite graph, directed graph (digraph), arc, weighted graph and network
- identify practical situations that can be represented by a network and construct such networks, e.g. trails connecting camp sites in a national park, a social network, a transport network with one-way streets, a food web.
- prove and apply angle, chord and tangent properties of circles
- define the three basic trigonometric functions using the Unit Circle, use symmetry properties to determine the sine, cos and tan of any angle, graph sinusoidal and tangent functions, make decisions and problem solve using trigonometry
- define the concept of a polynomial function and apply the factor and remainder theorems to solve problems, graph polynomial functions
- use and apply Combinatorics to solve problems
- use and apply Set Theory and Number Theory to solve problems
- be introduced to the complex number system and arithmetic with complex numbers.
- communicate vectors graphically and algebraically, completing vector addition in both graphically and algebraically.

During the year, students will participate in the Intermediate Section of the Mathematics Challenge and the Australian Mathematics Competition run by the Australian Mathematics Trust.

Chinese

Subject Type:

This is an elective subject which students may choose to study. It is based on the Australian Curriculum for Chinese.

Required Prior Learning:

C in Year 9 Chinese. Students considering Chinese in Year 11 MUST choose Chinese in Year 10.

Overview

The study of Chinese:

- consolidates and builds upon those skills already acquired from previous study.
- continues the emphasis on the four macro-skills.
- engages students in real language for life-like purposes, making the language relevant.

In Year 10 Chinese, the language and grammar become more complex, and students develop the ability to make decisions about the language needed to effectively communicate. The course will continue to develop the four macro-skills involved in learning a foreign language: Speaking, Listening, Reading and Writing, but the skills become more interrelated. These macro-skills will be developed through the use of videos, role-plays, blogs and classroom activities. In addition, students will have the opportunity to participate in the Gold Coast Speech Competition.

Why do this subject?

The ability to speak and understand a second language is a very valuable skill to have in our globally connected society of today. In many countries, bilingualism is the norm. By studying Chinese, you will not only learn about another language and culture, but you become more knowledgeable about your first language whilst studying. Even if you do not continue your language learning beyond Year 10, your time learning another language helps you develop an understanding and respect for diversity and differences in our multi-cultural world.

What you will know and be able to do:

By the end of Year 10, students should be able to communicate their opinions and ideas on a simple level, enquiring into the experiences of others and sustaining and initiating interactions in both familiar and unfamiliar contexts. The most frequently used functions will be those involved in daily communication and in general conversation. The students will have an understanding of the use of Chinese in the world and an appreciation for the Chinese language. The students will, by the end of the year, know basic language patterns and conventions to enhance and facilitate the greater complexity of language development in Years 11 and 12.

Workload / assessment:

Students are assessed using the four skills of Writing, Listening, Reading and Speaking each semester, with all skills being weighted equally. The assessment is designed to reflect and aid the transition onto ATAR Chinese in Years 11 and 12. To do well in a language, continual revision and practice of vocabulary and new structures is essential. Your commitment to doing this is a very important factor in your success.

German

Subject Type:

This is an elective subject which students may choose to study. It is based on the Australian Curriculum for German.

Required Prior Learning:

C in Year 9 German. Students considering German in Year 11 MUST choose German in Year 10.

Overview

Year 10 German consolidates and builds upon those skills already acquired from previous study. The language and grammar become more complex, and students develop the ability to make decisions about the language needed to effectively communicate. The course aims to link the past with the present culture and teaches everyday German in a realistic context. Students learn about the recent history of Berlin and discuss current events in Germany. Interactive online texts and programs which accompany the course, illustrate how language is used in a range of situations using speakers with different accents. Students learn what young people may need to say, understand and write in German, in order to cope with social and public situations. In addition, they will have the opportunity to participate in the Gold Coast Speech Competition.

Why do this subject?

The ability to speak and understand a second language is a very valuable skill to have in our globally connected society of today. In many countries, bilingualism is the norm. By studying German, you will not only learn about another language and culture, but you become more knowledgeable about your first language whilst studying. Even if you do not continue your language learning beyond Year 10, your time learning another language helps you develop an understanding and respect for diversity and differences in our multi-cultural world.

What you will know and be able to do:

By the end of Year 10, students should be able to communicate their opinions and ideas on a simple level, enquiring into the experiences of others and sustaining and initiating interactions in both familiar and unfamiliar contexts. The most frequently used functions will be those involved in daily greetings and in general conversation. The students will have an understanding of the use of German in the world and an appreciation for German language and German speaking countries. The students will, by the end of the year, know basic language patterns and conventions to enhance and facilitate the greater complexity of language development in Years 11 and 12.

Workload / assessment:

Students are assessed using the four skills of Writing, Listening, Reading and Speaking each semester, with all skills being weighted equally. The assessment is designed to reflect and aid the transition onto ATAR German in Years 11 and 12. To do well in a language, continual revision and practice of vocabulary and new structures is essential. Your commitment to doing this is a very important factor in your success.

Frequently Asked Questions:

Can I go to Germany?

In the past, the College has conducted a German trip. The next proposal for this trip is November / December 2024. In 2024, it is also hoped we will re-commence the term long exchange opportunity for Year 10 students to our sister school in Hamburg.

Japanese

Subject Type:

This is an elective subject which students may choose to study. It is based on the Australian Curriculum for Japanese.

Required Prior Learning:

C in Year 9 Japanese. Students considering Japanese in Year 11 MUST choose Japanese in Year 10. Overview

The ability to speak and understand a second language is a very valuable skill to have in our globally connected society today. In many countries, bilingualism is the norm. In Japanese, you will not only learn about another language and culture, but you will become more knowledgeable of your first language whilst studying. Even if you do not continue your language learning beyond Year 10, your time learning another language helps you develop an understanding and respect for diversity and differences in our multi-cultural world.

The study of Japanese:

- consolidates and builds upon those skills already acquired from previous study.
- continues the emphasis on the four macro-skills.
- engages students in real language for life-like purposes, making the language relevant.

The Year 10 course will develop the four macro-skills involved in learning a foreign language: Speaking, Listening, Reading and Writing. These macro-skills will be developed through the use of the Obento textbook series, as well as online programs and students will also continue to study the character scripts Hiragana and Katakana, as well as Kanji.

What you will know and be able to do:

By the end of Year 10, students should be able to interact on a simple level with peers, and other Japanese speakers to exchange information and opinions about personal interests and experiences. With support they share information about broader topics of interest. The most frequently used functions will be those involved in daily routines and in general conversation. The students will also have mastered the phonetic written scripts of Hiragana, Katakana and basic Kanji whilst continuing to develop their appreciation, knowledge and understanding of the varied nature of Japanese culture. The students will, by the end of the year, know all the basic Japanese language patterns and conventions to enhance and facilitate the greater complexity of the language development in Years 11 and 12.

Workload / assessment:

Students are assessed using the four skills of Writing, Listening, Reading and Speaking each semester, with all skills being weighted equally. The assessment is designed to reflect and aid the transition onto ATAR Chinese in Years 11 and 12. To do well in a language, continual revision and practice of vocabulary and new structures is essential. Your commitment to doing this is a very important factor in your success.

Frequently Asked Questions:

What could this course lead to in Years 11 and 12?

Years 9 and 10 Japanese form the basis for studying Japanese in Years 11 and 12. Students learn a variety of the most commonly used vocabulary and the grammatical foundations for the language in Years 9 and 10 and these are further developed in Years 11 and 12, affording the students much greater communicative abilities in later schooling.

Can I go to Japan?

Every 2 years the College organises a Japan trip which is usually in the June/July holidays for about 2 weeks at a cost of approximately \$3500. The next trip will be in 2025. In 2024, it is also hoped we will re-commence the term long exchange opportunity for Year 10 students to our sister school, Reitaku High School, near Tokyo.

Accounting and Legal Studies

Subject Type:

This is an elective subject and it is based on the Australian Curriculum for Economics and Business, and Civics and Citizenship.

Overview

In this elective, students consider real-world applications of accounting to develop an understanding of the role, purpose and uses of accounting. Students explore the purpose of financial statements and entering transactions in MYOB. Accounting principles are applied conceptually (handwritten and/or spreadsheet) to create a Statement of Profit and Loss and Balance Sheet. Further, students will record and process transactions for a trading or service business in a computerised accounting program (MYOB). Year 10 Legal Studies investigates Australian citizens' legal rights and responsibilities, our system of criminal and civil law, and the resolution of disputes. It also delves into the Constitution and how laws are made and altered to deal with the changes in our society.

Students will complete four units over the year to provide them with experience in the disciplines of Accounting and Legal Studies. Each unit is based on a set theme. Possible themes for each discipline are:

- An introduction to legal practices
- Personal Finance
- Financial management skills
- Criminal & Civil law

What you will know and be able to do:

- describe accounting concepts and principles relating to entities and role of accounting.
- explain accounting concepts, principles and processes relating to entities and role of accounting.
- apply accounting principles and processes relating to financial statements for a trading or service business.
- The role of the hierarchy of courts, including the interpreting of legislation.
- Young people and the law: what laws apply specifically to young people under the age of 18?
- How laws are made.
- Choose legal cases of interest from the media and write about them in their own legal blog.
- Looking at the law as it is reported in the media.
- Criminal law process and infamous cases.
- Examine ways individuals can have an impact on our legal system.

What is the workload / assessment?

- Practical written test
- Practical Report
- Multi modal presentation
- Research essay

Business and Economics

Subject Type:

This is an elective subject and it is based on the Australian Curriculum for Economics and Business.

Overview

The Year 10 curriculum gives students the opportunity to further develop their understanding of economics and business concepts by considering Australia's economic performance and standard of living. The ways governments manage economic performance to improve living standards is explored, along with the reasons why economic performance and living standards differ within and between economies. Students explore the nature of externalities and why the government intervenes to ensure that prices reflect the depletion of resources or costs to society. Students examine the consequences of decisions and the responses of business to changing economic conditions, including the way they manage their workforce.

Possible topics to be investigated include:

- How to start a Social Entrepreneurship, a business that also makes a difference
- How to brand a product or service like your favourite brand, so people love and trust it
- Practical business venture where students establish, prepare, participate and then evaluate a real-life business enterprise of their choice

What you will know and be able to do:

- Understand how a business prepares market research in terms of developing a product/service
- Prepare Bank Reconciliation Statements for different business ownerships
- Explore multiple contexts of recording financial information
- Understand how to establish a business enterprise
- Develop skills in executing a practical business venture where products are manufactured and sold for profit
- Indicators of economic performance and how Australia's economy is performing
- The links between economic performance and living standards
- Factors that influence major consumer and financial decisions
- Develop questions and hypotheses about an economic or business issue or event, and plan and conduct an investigation

Assessment

- Exams
- Practical written test
- Practical Business Venture Report
- Multi modal presentation

History and Geography

Subject Type:

This elective subject is based on the National Curriculum for History and Geography within the Humanities and Social Sciences learning area.

Overview

The Year 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 transformation of the modern world during a time of political turmoil, global conflict and international cooperation provides a necessary context for understanding Australia's development, its place within the Asia-Pacific region and its global standing.

There are two units of study in the Year 10 curriculum for Geography: 'Environmental change and management' and 'Geographies of human wellbeing'. 'Environmental change and management' focuses on investigating environmental geography through an in-depth study of a specific environment. This includes an overview of the environmental functions that support all life, the challenges to their sustainability, and the environmental world views – including those of Aboriginal and Torres Strait Islander Peoples – that influence how people perceive and respond to these challenges. Students investigate a specific type of environment and environmental change in Australia and one other country. '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. These distinctive aspects of human wellbeing are investigated using studies drawn from Australia, India and across the world as appropriate.

Students will complete four units over the year to provide them with experience in the disciplines of Geography and History. Each unit is based on a set theme. Possible themes for each discipline are:

- Involvement in World War II
- Human Rights and Freedoms
- The Globalising World Popular Culture/Migration/Environmental awareness
- Human-induced environmental changes that challenge sustainability
- The Aboriginal and Torres Strait Islander Peoples' approaches to custodial responsibility and environmental management
- Issues affecting development of places and their impact on human wellbeing, drawing on a study from a developing country or region in Africa, South America or the Pacific Islands

What you will know and be able to do:

- Use historical and geographical terms and concepts
- Identify and select different kinds of questions to inform historical and geographical inquiry
- Identify the origin, purpose and context of primary and secondary sources
- Identify and analyse the perspectives of people from the past
- Select and use a range of communication forms (oral, graphic, written) and digital technologies

What is the workload / assessment?

- Research report
- Research essay
- Multi media presentation
- Source investigation and analysis

Humanities

Subject Type: This is an elective subject based on the Australian Curriculum Humanities and Social Sciences.

Overview

Humanities covers History, Geography, Civics and Citizenship and Economic and Business and it:

- Emphasises the key values of the democratic process, social justice, ecological and economic sustainability, peace
- Provides practice in the writing of reports, research essays, in-class analytical essays (including in-text referencing). This is a course which requires good literacy and analytical skills
- Provides practice in geographical skills such as mapping, atlas work, construction and interpretation of a variety of graphs
- Further develops the research process formulating a hypothesis, creating focus questions, making notes from a variety of sources, writing an annotated bibliography
- Provides practice in the critical use of primary and secondary sources
- Expands knowledge and understanding of a variety of topics
- Provides experience in criteria-based assessments

Students will complete four units over the year to provide them with experience in the disciplines of Civics, Economics, Geography and Modern History. Each unit is based on a set theme. Possible themes for each discipline are:

- Geography: Local and National Geographical Issues
- Modern History: World War II, Human Rights
- Economics and Business: The Economy in our Society
- Civics: Australian government and Immigration policies

What you will know and be able to do:

- Hypothesising, researching, creating, participating, communicating, reflecting
- Report writing, analytical essay-writing
- Time management and organisational skills
- Group work and independent study skills
- Interpreting primary and secondary sources
- Note-making (from lectures, videos, books, internet)

What is the workload / assessment?

- Research reports
- Research analytical essays
- Unit tests
- Multi Media presentations

Design

Subject Type: This is an elective subject which students may choose to study. It is based on the Australian Curriculum for Design Technology.

Overview:

The subject focuses on the application of design thinking to envisage creative products, services and environments in response to human needs, wants and opportunities. Designing is a complex and sophisticated form of problem-solving that uses divergent and convergent thinking strategies that can be practised and improved. Designers are separated from the constraints of production processes to allow them to appreciate and exploit innovative ideas.

What you will know and be able to do:

You will develop an appreciation of designers and their role in society. You will learn the value of creativity and build resilience as you experience iterative design processes, where the best ideas may be the result of trial and error and a willingness to take risks and experiment with alternatives. Design equips students with highly transferrable, future-focused thinking skills relevant to a global context.

Workload and Assessment:

Assessment consists of Design Folios and Tests. You will use the Design Process to explore options and develop ideas and design concepts. You will use drawing and low-fidelity prototyping skills. You will evaluate ideas and design concepts. You will communicate design proposals to suit different audiences.

Where does this course pick up from Year 9?

- Extends further the students' understanding of the Design Process
- Develops higher quality sketching and communication skills
- Broadens understanding of new and emerging technologies
- Introduces prototyping skills
- Increases problem solving and critical thinking skills

What could this course lead to in Years 11 and 12?

This subject covers significant aspects of the General Subject Design in Years 11 and 12. Students will experience similar units studied in this subject to ascertain if they wish to continue this course of study in the senior years.

What pathways can this subject lead to in the future?

Jobs in industrial design, architecture, digital media design, fashion design, graphic design, interior design and landscape architecture.

Certificate I in Furnishing (MSF10122)

Subject type: VET (under TLC registration RTO 30507).

Required Prior Learning: Nil

Overview:

This course is designed to provide you with the foundation to develop the core skills necessary to create products out of wood. During this course, students will develop the ability to plan, design and build a range of products. Students who successfully complete this course will gain a nationally recognised qualification on completion, as well as industry skills to enter TAFE or the workforce.

What will you know and be able to do;

You will be able to use power tools and fixed machines to produce products out

of wood. You learn know basic skills and techniques to join timber materials to produce a range of products.

Units of competency for Certificate I in Furnishing are:

MSNENV272	Participate in environmentally sustainable work practices
MSMWHS100	Follow WHS procedures
MSMOPS101	Make measurements
MSMSUP102	Communicate in the workplace
MSMSUP106	Work in a team
MSFFP2011	Use timber furnishing construction techniques
MSFFP2014	Use basic furnishing techniques on timber surfaces
MSFFP2015	Use basic upholstery techniques



Workload and Expectations

You will use wood lathe, laser cutter, drop saw, band saw, disc sander and a range of other tools, equipment and a wide assortment of hand and power tools. Furnishing units of competency are assessed through observation, questioning and projects.

Frequently asked questions:

Q: What will we be making?

A: Projects may include: foot stool, turned bowl, small tale, dartboard cabinet.

Q: Do I need to provide any materials?

A: No. All materials and resources will be provided for you.

Q: What can I do on completion of this course?

A: TAFE/Apprenticeship in the furnishing or building industry.

Q: What career can this lead to?

A: This subject prepares you for careers in architecture, engineering, building trades and related fields.

Q: Are there any additional costs/equipment?

A: There are no additional costs, but you are required to wear the provided aprons and safety glasses, as well as your leather school shoes.





Digital Solutions

Subject Type: This is an elective subject which students may choose to study. It is based on the Australian Curriculum for Digital Technology.

Overview:

You will complete four units over the year. Each unit is based on a set theme.

- 1. Cyber Security
- 2. Web Design and Development
- 3. Python 2
- 4. Virtual Reality and Augmented Reality

What you will know and be able to do:

- Problem solving
- Analysis and design skills
- Project Management (Design, Make, Evaluate Process)
- Work collaboratively in teams
- Critical thinking techniques and evaluation

Workload and Assessment:

You will complete preliminary tasks to build skills and knowledge in each topic area. This will be followed by a project which will assist you to develop further skills and knowledge.

Frequently asked questions

- Q: What jobs can you do with this subject?
- A: Information Technology Code Development, Robotics, Computer Science Multimedia - Web Designers, Video Editors, Game Designers, Digital Effects Artists
- Q: What software applications do you use?
- A: Google Chrome, AdobeDreamweaver, Python, VRCreate, HTML5, iBook Author, RoboLab, Adobe Photoshop and other relevant applications.

Hospitality

Subject Type: This is an elective subject which students may choose to study, designed to provide an insight into the Hospitality industry and the senior Year 11 & 12 course, where students can achieve a Certificate II in Cookery and a Certificate III in Hospitality. It is based on the Australian Curriculum Technology syllabus.

Required Prior Learning: NIL

Overview:

The course has been designed to provide students with an understanding of food preparation and cookery skills in the context of the hospitality industry. Students will not only develop skills, processes and attitudes crucial for kitchen operations, but also develop an understanding of the wider hospitality industry.

What you will know and be able to do:

- Knowledge and skills for participation in the hospitality industry
- Confidence in a range of hospitality contexts
- A responsible attitude towards the safety, health and well-being of self and others
- The ability to communicate effectively
- The skills associated with team-work
- An awareness of responsible work attitudes

Workload and Assessment:

Learning activities are centred around The Pineapple Café on the Trinity Lutheran College Campus. Through practical, hands-on tasks, students will enrich their understanding of the different aspects of hospitality within the course, which is divided into four units of study.

- Unit 1: Introduction to Hospitality
- Unit 2: Food Trends
- Unit 3: Casual Dining
- Unit 4: Food for Special Occasions

Frequently asked questions

Q: What jobs can you do with this subject?

A: Barista, range of café service roles, entertainment industries, various roles in fast food outlets

Q: What could this course lead to in Years 11 and 12?

A: This subject provides a pathway to the Certificate II in Cookery and Certificate III Hospitality VET certificates.







Dance

Subject Type:

This elective subject is based on the Australian Curriculum for Dance.

Required Prior Learning: C or better in Year 8 or Year 9 Dance.

Overview

The study of Dance develops cognitive skills in creating, performing, responding and appreciating. Year 10 Dance covers a range of different dance styles such as musical theatre, jazz, contemporary, slow modern, hip hop, tap and Latin dance. The course focuses on the performance qualities of these styles and what makes a dynamic and entertaining performance. Students will also gain an understanding of the choreographic elements of each specific style.

Students will study the stylised movement of a specific musical and complete a teacher-devised performance routine incorporating the elements of musical theatre. Students also complete an indepth study of a Musical of their choice and complete an oral presentation explaining how the elements of the style were used effectively. The study of contemporary dance exposes students to themed and abstract dance and requires them to choreograph a small group routine, based on a theme, and using dance elements specific to the style.

Students will also develop basic skills and techniques of tap dancing and collectively develop a performance piece in the style of the 'Stomp'. Finally, students will explore the popular style of street dance and choreograph a routine demonstrating the dynamic elements of this style.

Frequently Asked Questions

What is the workload and assessment?

As a Dance student, you will be expected to be involved in a variety of curricular and co- curricular activities. The subject area requires that you devote time to preparing and rehearsing assessment tasks, both in-class and in your own time.

Assessment is based on the Australian Curriculum for Dance in the two dimensions of Making and Responding.

What could this course lead to in Years 11 and 12?

This course leads directly into the Senior Dance course and familiarises students with many of the dance forms and styles studied in years 11 and 12. Assessment experiences gained in Year 10 Dance are invaluable in preparation for Years 11 and 12 Dance.



Drama

Subject Type:

This is an elective subject based on the Australian Curriculum for Drama.

Required Prior Learning: C or better in Year 8 Performing Arts or Year 9 Drama

Overview

In Year 10 the focus is on developing skills for performance or creation of Drama. Scripted texts are explored in detail for both comic and dramatic effect. Students have the opportunity to create, perform and respond to drama, as individuals, in small groups and as a class. Students write and perform their own work, perform and analyse the work of others, and transform and direct the work of others.

What you will know and be able to do:

- Characterisation derived from script interpretation
- Script interpretation for direction and acting
- Improvisation
- script writing and play-building
- Vocal modulation, inflection and projection
- Movement and physical comedy
- Written analysis
- Develop teamwork and empathy

Frequently asked Questions

What is the workload and assessment? Assessment is based on:

- Individual written scripts and assignments
- Individual and small group performances
- Practical/oral presentations of original ideas

Where does this course pick up from Year 9?

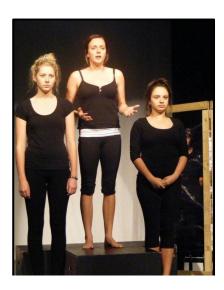
- Extends range of dramatic styles and forms experienced
- Extends students' performance skills, both vocal and physical, in individual and small group ensemble situations
- Extends students' critical evaluation of live performances and scripts
- Expands drama terminology and understandings

What could this course lead to in Years 11 and 12?

This course leads directly into either Senior Drama or Drama in Practice. Year 10 Drama familiarizes students with many of the dramatic forms and styles available to them in the senior courses. The experiences gained in Year 10 Drama are invaluable for preparing students for the dramatic concepts explored in Years 11 and 12. Drama also leads to strength in communication skills, increased confidence and empathy with others, both within our school community and the broader community.

How does the course compare to private speech and drama?

Private tuition in speech and drama is complimentary to the school course. Whilst they both deal with performance, the Drama subject extends students' ability to analyse drama and write original scripts and focuses more on ensemble or group playing. Many students study BOTH private and class Drama.



Media Arts

Subject Type:

This subject is based on the Australian Curriculum for Media Arts.

Recommended prior learning: nil.

Overview

Media Arts involves using a variety of communications technologies to design, produce and distribute media artworks. You will learn through exploring, viewing, analysing and participating in media culture and you will acquire skills and processes to create work in a range of media forms and styles, including; a range of print, cinematography, visual effects (CGI) 2D and 3D asset creation for game development and hybrid works.

You learn to clarify, intensify and interpret human experience through representations in images, sounds and text. Creating media artworks, engages your senses, imagination and intellect, and you learn to express and challenge constructs of the world. Through creative and critical use of language and technology, you develop aesthetic control that allows you to communicate with clarity and impact through the media you create and consume.

In Media Arts, technical and symbolic elements work together within established and emerging media technologies to inform, persuade, entertain and educate through story structures and ideas.

Creating media artworks involves the development of technical, physical and communication skills that help you learn to understand yourself and others through processes that promote critical perception, personal expression and collaboration

The development of aesthetic knowledge in Media Arts increases your understanding of how images, sounds and text create experiences consumers recognise and respond to physically, emotionally and intellectually.

You will know and be able to:

- Develop and refine your understanding and use of structure, intent, character, settings, points of view, genre conventions and media conventions in compositions
- extend the use of time, space, sound, movement and lighting as you use technologies
- analyse the way audiences make meaning, interact with and share media artworks
- draw on media arts from a range of cultures, times and locations as you experience and explore traditional and contemporary media forms, styles and influences, and how these may influence your own artistic intentions in making media artworks.
- consider local, global, social and cultural contexts that shape purpose and processes in the production of media artworks you make and respond to.
- evaluate the social and ethical implications of media arts including the use of images and works of others, maintaining ethical practices and considering regulatory issues when using technology.

Frequently asked questions:

What are the benefits of studying Media Arts?

- Enjoyment and confidence to participate in, experiment with and interpret the media rich culture and communications practices that surround us, both existing and evolving local and global media cultures.
- Develop creative and critical thinking, and your ability to explore perspectives in media as producers and consumers.
- Build aesthetic knowledge and a sense of curiosity and discovery as you explore imagery, text and sound to express ideas, concepts and stories for different audiences.

How will learning in this subject help me?

- Increase knowledge and understanding of your active participation in existing and evolving local and global media cultures.
- The skills you will learn can lead to careers such as VFX artists for movies and games, cinematography, installation artist, or work in new media in upcoming industries such as VR, AR as well as traditional print and journalism pathways.

Music

Subject Type:

This is an elective subject based on the Australian Curriculum for Music.

Required Prior Learning: C or better in Year 9 Music.

Overview

In Music you will explore the ways in which musicians, both performers and composers communicate to audience, identifying how musicians create character, drama, conflict, and mood across a range of styles and cultures. You will analyse the use of music elements to communicate to an audience and will apply this to performance and composition in a range of musical genres. You will participate in a range of performance and composition activities to support your development as a musician.

An evaluation of the use of the elements of music and defining characteristics of different styles, will assist in the continued development of your aural skills and understanding of music making in different cultures, times and places helping to inform and shape your own compositions for a combination of instruments/voice. Your individual choice of instrument will be guided by your experience but can be selected from a range of brass, percussion, woodwind, strings or guitar.

Frequently Asked Questions

What could this course lead to in Years 11 and 12? This course leads directly into Senior Music and in Year 12, Music Extension (a performance-based subject offered to Year 12 students).

Year 10 Music enables students to become adept at working in the three areas of musical study required at a senior level: Musicology, Composing and Performing. Students who undertake Year 10 Music are provided with an advanced base of musical skills, enabling them to enter Year 11 music studies with confidence.

Workload and Assessment

Assessment is based on the Australian Curriculum. Assessment in Year 10 Music involves composition assignments, singing and instrumental performances, in class exams and research assignments. Music homework is a regular expectation and students are expected to commit to out of class time to practise and rehearse.





Visual Art

Subject Type:

This elective subject is based on Australian Curriculum for Visual Art.

Required Prior Learning: C or better in Year 8 or Year 9 Visual Art

Overview

Students complete one theme-based unit per term including practical artmaking and related responding tasks. Students explore ideas through a range of art forms such as painting, drawing, collage, photography, sculpture, ceramics, digital imagery and printmaking. This course will appeal to students who value a self-directed style learning environment and provides a wide scope for choice and individuality. Criteria are applied to; visual diary process work, a folio of artwork, and written responding tasks.

Visual Art in Year 10

- Extends the range of media and associated skills experienced previously
- Allows for more individual responses to set themes and tasks
- Places greater emphasis on resolution and finish of artworks
- Expands art terminology and theoretical understandings

You will know and be able to:

- create artwork in a variety of art forms as listed above. Develop an increasingly confident understanding of the art elements and concepts and their relationships to conveying meaning through visual expression.
- explore a world of ideas and develop individual interpretations to communicate through your artmaking, in an increasingly individual manner progressively over the year.
- analyse, evaluate and justify in both written and visual forms.

This course can lead to:

This course can lead directly into Senior Visual Art. It familiarises students with many of the media areas available to them in the senior courses and the explorations made in Year 10 are valuable for guiding individual choice at the senior level. A sound basis of practical skills is developed and combined with an understanding of the complete process of creating an artwork, forming important foundations for Senior Art studies, for numerous career opportunities or for an individual pursuit of art beyond schooling.



A frequently asked question: I don't want to be an artist, why study Visual Art?

Skills learnt in Visual Arts are useful in many areas of life as art promotes creative problem solving and critical thinking, an understanding of visual texts, the use of traditional and contemporary media and technologies, being organized, following briefs and meeting deadlines. It promotes an understanding of other people's motivation and sensitivity to cultural and historical differences, and it also develops selfconfidence and an understanding of who you are and your place in the world.

