



Year 10

**Curriculum
Handbook**

2009

TRINITY AVENUE, EAST PERTH, WESTERN AUSTRALIA
www.trinity.wa.edu.au

INTRODUCTION

Trinity College has its origins in Christian Brothers' College, St George's Terrace, Perth founded by Bishop Mathew Gibney and Brother Ambrose Treacy in 1894. From the beginning, both boarders and day students were enrolled, but as the business section of the city expanded, the site became increasingly unsuitable for a boarding school. In 1938, the boarders were transferred to Mount Henry, Manning, to found Aquinas College.

Christian Brothers' College continued as a day school until 1961 when the buildings and land were purchased by the Perth City Council. The College was then transferred to its present location in 1962, and renamed Trinity College.

In 1968 Trinity became a member of the Public Schools' Association of Western Australia.

Trinity College endeavours to provide a distinctly Catholic environment where the students can form a truly Christian character and where students, parents and teachers can meet in an atmosphere of mutual concern and respect.

The College aims at high standards of academic excellence. The curriculum gives attention to Religious Education, English, Languages and Communication, Mathematics, Science, Technology, Social Sciences, Art and Physical Education. Students are challenged to give of their best, to show a genuine interest in their chosen fields of study, and to develop the power of self-motivation through work in the library, the laboratories and the Art and Music Studios.

From 2009 onwards, Physical Education will no longer be a compulsory subject for Year 10 students. However, students may choose to study Physical Education Studies as an elective subject. The College will continue to provide the opportunity for students to receive the necessary level of physical activity per week through the comprehensive sporting programme that it offers to students.

Please note that all elective subjects will be studied as full year programmes in 2009.

CURRICULUM OVERVIEW

At Trinity College Year 10 students study a number of compulsory or core subjects and have an excellent range of elective subjects from which to choose. The combination of core and elective subjects provide for the interests and academic needs of all students.

The period allocation for subjects includes:

Core Subjects:

Religious Education	3 periods
English	4 periods
Mathematics	4 periods
Science	4 periods
Society & Environment	4 periods

Elective Subjects:

Each elective subject is studied for **two periods** each week for the duration of the academic year.

Accounting and Finance
Applied Computer Studies
Art
Fine Art (Drawing and Painting)
3D Art (Sculpture)
Astronomy
Communication and Performance
Design Graphics
Engineering Systems
Italian
Materials Design and Technology
Mathematics: Problem Solving & Competition
Media Studies
Music
Outdoor Education
Physical Education Studies (Stage 1)

Personal Development and Wellness

In addition the above students will participate in a personal development and wellness programme for **one period** per week that will include Christian Service, Career Education, Drug Education, Driver Education and Awareness, Study Skills and Mental Health and Resilience.

INFORMATION AND COMMUNICATION TECHNOLOGY

At Trinity College information technologies are primarily used to support and enhance all teaching programmes. Teachers integrate technology into their curriculum programmes to enhance the learning experience of their students.

English, Science, Mathematics, Society and Environment, Information Technology, Music and Design and Technology have specialised computer laboratories provided for their learning area. A Learning Technology co-ordinator assists classroom teachers with the integration of the technology into their programmes.

SENIOR ENTERPRISE PROGRAMME

This programme has been specifically designed for senior students beginning in Year 10 and carrying through to Year 12 who require an alternative educational programme to the academic programmes currently offered at Trinity College. Students participating in this programme will be required to participate in Work Experience and will work towards achieving a Certificate I or Certificate II in Business.

The course includes study in the following areas:

- *Literacy and Numeracy components are included in Certificate 1*
- *Design and Technology*
- *Movement*
- *Personal Growth*
- *Information and Communication Technology*
- *Life Saving Skills*
- *Physical and Environmental Awareness*

In addition to the above areas, the students will study Religious Education and participate in Physical Education classes as part of their Pastoral Care Group. They will choose one elective subject for each semester.

CAREER DEVELOPMENT

While there are no formal career subjects or classes, it is important to be aware that career curriculum items are incorporated in the English and Society and Environment courses. These items include: resumes and letters of application; search skills using the Trinity website, Career Voyage (an interest based career search), Wizecat (a comprehensive university and TAFEWA course search) and a certificate course in work safety.

Parents and students should become familiar with the Career Development Handbook which is now on the Trinity website. This handbook will answer many of the questions frequently asked by parents and students.

CORE SUBJECTS

RELIGIOUS EDUCATION

The Religious Education programme develops students' knowledge and understanding of the life of Jesus and its impact on generations, and the essential components of celebrating and living the Catholic tradition.

Vocation – called to be and become

This unit presents the following key learning points:

- What is a 'vocation'?
- Challenges to discovering personal vocation
- The Christian vocation
- Christians are called to share in the mission of Jesus
- Marriage is a vocation
- Ministerial priesthood is a vocation
- Religious life is a vocation

Restoring God's justice in the World

- God created in people
- Human injustice in the world
- Jesus came to restore God's justice
- Jesus restores justice in people's hearts
- Christ calls Christians to promote social justice
- The Church promotes social justice

Recognising God's call through conscience

- Alone with God
- Making judgments of conscience
- The four principles of conscience
- Challenges to recognizing the voice of conscience
- Jesus promised the Holy Spirit to guide conscience
- The growth of the Church
- The renewal of the Church through the Holy Spirit

The search for freedom

- The human desire for freedom
- How can people know if their choices are morally good?
- Responsible choices can be challenging
- God begins to restore human freedom
- God revealed the Old Law
- Jesus gave the New Law for salvation
- The New Law of true freedom
- The Sacraments

ENGLISH

Within the English course there are three English subjects offered in Year 10.

English 1

The English 1 subject is designed to provide a challenging and stimulating environment for the most capable students of English. Students will be selected and invited to enrol in this course by the Head of English Learning Area. It introduces a number of important literary theories in conjunction with the study of more challenging texts, including Shakespeare's "Macbeth" and Orwell's "Animal Farm." The subject will give students a tremendous opportunity to develop their reading and writing skills. It is designed to enhance the enjoyment of literature, as well as giving students – whether they go on to study 2A/B English or Literature in Year 11 – a great introduction to tertiary-minded post-compulsory courses.

English 2

The English 2 subject has been designed to extend all students regardless of their level of ability. The subject was designed to address the four learning outcomes of Speaking & Listening, Viewing, Reading and Writing. The subject was also designed in accordance with the over-arching outcome statements.

Throughout the year, students will study a range of texts, including; novels, films and plays. They will write argumentative and critical essays and other comprehension responses. They will also complete a number of oral tutorials and tasks.

The subject is a diverse and challenging one that gives all boys an opportunity to develop their English skills and knowledge in a supportive and stimulating environment.

English 3

The English 3 subject is a specially designed course for boys identified as needing extra assistance in English. It will closely mirror the style and structure of the English 2 subject, but will run a pace more in keeping with the abilities of the boys it contains. It will provide its students with the skills necessary to progress into a senior school course appropriate to the abilities and ambitions of the student.

The subject aims to provide a supportive and stimulating learning environment for reluctant English students as well as those who simply need extra help in reaching their potential.

MATHEMATICS

Within the Mathematics course, there are three subjects offered in Year 10.

Mathematics 1a/1b

This subject is designed to prepare students for any upper school TEE mathematics course – particularly for Mathematics 3A/3B and Mathematics Specialist 3A/3B. The course content includes;

- solving equations and in-equations involving fundamental functions (linear, quadratic, trigonometric and other) and their respective graphs in **Algebra**;
- finding perimeter and area of composite shapes (including arc lengths, sector areas and latitude and longitude problems), volume and surface areas of prisms, pyramids and spheres;
- 2D and 3D trigonometry problems in **Measurement**;
- percentage problems including compound interest and depreciation, direct and inverse proportion problems in **Number**;
- bearings, networks, transformations and circle geometry and proofs of basic properties in **Space**;
- collection and interpretation of survey data and the use of summary statistics, display and analysis of data using scatter plots and cumulative frequency graphs etc, as well as calculating probabilities using tree diagrams and Venn diagrams including compound and conditional probability problems in **Chance and Data**;
- applying investigative and problem solving strategies; explaining and justifying conclusions in **Working Mathematically**.

The use of interactive computer software programmes and CAS calculators will be an integral part of this course.

Mathematics 2

This subject is designed to prepare students to study Mathematics 2A/2B or 2C/2D in Year 11. The subject content includes;

- manipulating algebraic expressions and solving equations involving fundamental functions (linear, quadratic, and other) plus their respective graphs in **Algebra**;
- finding perimeter and area of composite shapes, volume and surface areas of prisms, pyramids and spheres;
- 2D and 3D trigonometry problems in **Measurement**;
- percentage problems including compound interest and depreciation, direct and inverse proportion problems in **Number**;
- bearings, networks, transformations and similarity, congruence and circle properties in **Space**;
- collection and interpretation of survey data and the use of summary statistics, display and analysis of data using scatter plots and cumulative frequency graphs etc as well as calculating probabilities using tree diagrams and Venn diagrams including compound and conditional probability problems in **Chance and Data**;
- applying investigative and problem solving strategies; explaining and justifying conclusions in **Working Mathematically**.

The use of interactive computer software programmes and CAS calculators will be an integral part of this subject.

Mathematics 3

This subject provides opportunity for the continued development of all concepts specified in the more general Mathematics stated above. However, the subject content and strategies will provide students with a better opportunity to prepare for the study of Mathematics in Year 11. Class size is kept small to allow for individualised and small group instruction, so as to maximise student progress in each mathematics cluster area. Students will engage in practical and enriching activities to help stimulate concept development. Additional support materials will be made available to students to aid this process.

SCIENCE

There are three Science subjects offered in Year 10. At the end of Term 1 opportunities exist for movement between the subjects.

Science 1

This subject is designed for capable and highly motivated students who are able to cope with extension of science outcomes. It is particularly suited to students going on to study Physics and Chemistry.

Students start the year with Life and Living that explores genetics concepts, with an emphasis on heredity and diseases, and the impact of contemporary trends in this area of scientific research. This outcome is followed by Energy and Change which delves into the physics of movement. Second semester focuses on Natural and Processed Materials, particularly chemical bonding. Throughout all the above outcomes Investigating Scientifically is run with a major investigation at the end of Semester One.

Science 2

The subject structure is the same as Science 1 but progresses at a reduced rate focusing more on the core areas of science and with less extension material. This is suitable for all science courses in Year 11 but tends to suit those students going on to study Biology and Human Biology

Science 3

This subject provides a more hands-on approach to science for students who are unlikely to progress to TEE science in Year 11. Students explore the same concepts in the Life and Living outcome as Science 1 and 2. At the end of the topic more able students have the opportunity to join Science 2. This is followed by Forensic Science which provides insight into the job of a forensic detective and emphasises the scientific method of investigation. In Semester Two the Energy and Change outcome explores the science of vehicles in the Automotive Science topic. The year concludes with an Earth and Beyond outcome, looking at aspects of the environment.

SOCIETY & ENVIRONMENT

The Society and Environment learning area develops students' understanding of how individual and groups live together and interact with their environment. Students develop a respect for cultural heritage and a commitment to social justice, the democratic process and ecological sustainability.

Particular emphasis is placed on the development of literacy, thinking skills and the application of Information and Communication Technology.

Year 10 provides students with the opportunity to study concepts and issues relating to Year 11 and 12 Economics, History - Ancient and Modern, Politics and Law and Geography. Students will have a different specialist teacher for each semester for each of these subjects ensuring that they are receiving the highest quality teaching programme in each eight week module. By the end of the year, students will have developed the necessary background to enable them to study any of the Society and Environment subjects offered in Year 11. A range of assessment instruments are used including assignments, information technology items, oral presentations, tests, essays and examinations.

The Economics course will focus on the issues of markets, income flows and will touch on the basics of the important macroeconomic topics of unemployment and inflation as well as looking at the effects and possible solutions for these problems.

The Politics and Law course will focus on the establishment of the Commonwealth Parliament as well as explore the role of political parties, pressure groups and the High Court.

The Modern History course picks up with the causes of the Second World War. Students will understand that there was a war in Europe and a war in the Pacific. Special focus will be on the impacts of war on the Australian homefront. This unit will finish with a study of the Cold War which emerged after the Second World War.

The Geography course is a varied and dynamic course under the theme of 'Earth at Risk'. Areas of study include world biomes, population issues, global warming and natural hazards.

ELECTIVE SUBJECTS

ACCOUNTING AND FINANCE

The Year 10 Accounting and Finance elective consists of Units 1A and 1B of the WACE Accounting and Finance Course. As such, students considering completing Accounting and Finance 2A and 2B in Year 11 will be advantaged by completing this Year 10 course.

The focus for the 1A unit is **personal finance**. Students are introduced to the concepts, principles and terminology used in financial decision-making and management on a personal basis. They learn about the main institutions that operate in financial markets and how governments and other community bodies can affect the way individuals and groups make financial decisions. Students learn about the main financial documents and reports used in personal financial transactions and decision-making and the systems that facilitate individuals to carry out their financial transactions.

The focus for the 1B unit is accounting for **small cash entities**. Students extend their knowledge of the fundamental principles and conventions of accounting and finance to learn how these apply to the establishment and operations of small cash entities including small incorporated bodies. They learn about the main financial institutions that small cash entities deal with and understand how governments and other community bodies can influence their decision-making processes. Students learn about financial record-keeping on a cash basis for small entities, as well as the main financial documents and reports used in the financial transactions of small incorporated entities. They learn the main issues involved in business decision-making and carry out simple analyses of given information to determine the financial performance and position of a business.

APPLIED COMPUTER STUDIES

This is a skills based, practical course that will establish a foundation for the skills component of the Year 11 Applied Information Technology course. Skills taught include: Animation; Graphics Editing; Digital Video construction and Web Site creation.

ART

Through exploration of drawing, painting, printmaking and ceramics studio disciplines, students will develop an understanding and appreciation of visual artworks in society. The general aim of this course is to allow students the opportunity to explore creative activities that encourage personal fulfilment through designing, making and evaluating 2D and 3D art works. Through Arts practice and an understanding of visual literacy students gain the ability to form appropriate arts responses and evaluate artworks. This is a hands-on course which promotes creativity, innovation and the development of technical skills in a fun working environment. This course may assist students in building their knowledge and skills in preparation for courses in Year 11.

FINE ART (DRAWING AND PAINTING)

This is an enjoyable hands-on course which allows students to specialize in the studio areas of drawing and painting. Students will explore creative drawing and painting activities that encourage personal fulfilment through designing, making and evaluating 2 dimensional artworks. Students will use a variety of mediums, techniques and technologies to produce artworks and develop an understanding of the elements and principles of art. This course may assist students in building their knowledge and skills in preparation for courses of study in Year 11.

3D ART (SCULPTURE)

This is an enjoyable hands-on course which allows students to specialize in the studio area of sculpture. Students will explore creative sculptural activities that encourage personal fulfilment through designing, making and evaluating three dimensional artworks. Students will use a variety of sculptural mediums, techniques and technologies to produce artworks and develop an understanding of three dimensional form and construction. This course may assist students in building their knowledge and skills in preparation for courses of study in Year 11.

ASTRONOMY

This is a hands-on, student-centered, self-paced online course. Modules of study on offer include; The Life & Death of Stars, Cosmology (study of the Universe), Astrobiology (Life beyond Earth), Satellite Remote Sensing and Manned Space Missions. Students will use the College's robotic telescope to acquire astronomical images and perhaps undertake a research project of their choice. The Space Science component includes construction and launching of student designed model rockets using data loggers to understand the parameters of controlled rocket flight. Students need to have reasonable computing skills.

COMMUNICATION & PERFORMANCE

This course is designed to give students a broad range of oral communication experiences. The Year 10 course will follow on from the Year 9 course, but can be studied by students who did not undertake it in the previous year. Some of the activities include: dramatic performance, debating, and public speaking. The course has been designed to develop confidence and communication skills through the inclusion of tasks that are creative and improvisational, to tasks that replicate the rigours of formal debates and professional interviews. The course is designed to appeal to students at all levels of ability, as it is capable of extending more capable students and giving less able students a chance to consolidate their skills through the completion of challenging and enjoyable oral tasks.

DESIGN GRAPHICS

This course is designed to provide students with the opportunity to further develop their understanding of design and graphics. It includes computer assisted graphics, modelling and drafting methods together with illustration sketching, animation and rendering techniques.

The focus will be on computer assisted drafting using Ironcad software to accurately design, illustrate and present a variety of drawings and designed presentations. Students develop solutions to design problems which will prepare them for the Design (Technical Graphics) in Years 11 and 12 and to pursue careers such as architecture, engineering, surveying, interior design, product design, graphics design and marketing.

NB It is recommended that students wishing to study Design (Technical Graphics) in Years 11 and 12 complete the Design Graphics course in Year 10.

ENGINEERING SYSTEMS

This course aims to encourage the acquisition of problem-solving skills through a range of activities including design, assembly of systems, communication in technological situations and solutions to practical problems of a technological nature. Students will be encouraged to apply initiative and creative thought along with knowledge gained within the course.

The areas of study will include:

Electronics - working models will be assembled using suitable construction kits to solve problems.

Computer Robotics - Using real-life situations, wherever possible, problems will be solved with Lego Control Lab Kits and Intellecta Robotic Software. The Designing, Making and Evaluating process will be developed throughout the course.

Technology in Manufacture - Students will be introduced to computer control of mechanisms using an interface and appropriate software.

NB It is recommended that students wishing to study Engineering Studies in Years 11 and 12 complete the Engineering Systems course in Year 10.

ITALIAN (Stage 1)

Students undertaking Italian in Year 10 will complete Units 1A and 1B of the Italian WACE course.

Unit 1AITA

The focus for this unit is **questo mio mondo (here and now)**. It introduces students to the Italian language and culture from a personal perspective, enabling them to share information related to personal identity, aspects of everyday life, and popular culture. They begin to develop an understanding of what it is to be Italian and Italian-speaking, and compare their own lives to those of others in Italian-speaking communities.

Unit 1BITA

The focus for this unit is **cose da fare, luoghi da visitare (things to do, places to go)**. It is aimed at students who have a basic knowledge of Italian. They share information about, and develop a sense of their own space and place. While developing the skills to travel within Italy, students learn more about Italian-speaking communities and cultures and their sense of space and place.

NB: Any student wishing to enrol in this course must have completed the Year 9 programme satisfactorily. This also applies to students of Italian background as their knowledge of grammar in many cases is quite below the required standard.

MATERIALS DESIGN AND TECHNOLOGY

This area of study is concerned with developing skills and knowledge in the fields of design techniques, graphics, materials and construction with the emphasis on practical skills and safety.

Students complete two minor design and make projects and a major project which contributes to their final grade. The pace and content of this course will be challenging and will require initiative, commitment and good organisational skills.

NB It is recommended that students wishing to study Materials Design and Technology in Years 11 and 12 complete the above course in Year 10.

MATHEMATICS: PROBLEM SOLVING AND COMPETITION

This course has been designed to extend students' ability to solve problems in a computer laboratory environment. Students will be expected to select and use appropriate strategies to solve a variety of problems. Time will be spent on a wide range of mathematical topics which are of interest. Special emphasis in this course will be the use of computers in problem solving.

The course does not cover specific content of the Year 10 mainstream course but skills learnt will definitely complement the work done in Maths classes and be of help for Year 11 and 12 courses.

Students may expect a range of opportunities to enter national and state-wide competitions, use computers, play mathematical games and learn problem solving strategies.

This is an enriching and extension elective **not** a supportive elective.

MEDIA STUDIES

The Media Studies option in year ten is a chance for students to study the theory and experience some of the practicalities of film-making. Students spend considerable time researching, storyboarding and producing short films, as well as studying a range of texts to further appreciate the craft of media production. This unit will assist students contemplating studying media in Year 11 and 12.

MUSIC

Year 10 Music is based on developing skills in reading, composing, performing and aurally identifying the characteristics of various musical styles. This includes a study of music through its principal elements of rhythm, melody, harmony, form, texture and instrumentations, whilst exploring styles from the Renaissance to contemporary music. Instrumental and/or vocal performance forms a very practical part of the course. The use of Sibelius and Cubase notation and recording software is integral to the course.

Students who participate in one or more of the College performing ensembles (wind orchestra, swing band, chorale, orchestra, pipes and drums and any of the smaller ensembles) would benefit significantly from doing classroom music. Students who have not participated in the Year 9 Music course should see Dr Braham before doing Year 10 Music. Those intending to do Music in Year 11 are advised to study Music in Year 10.

OUTDOOR EDUCATION

The Year 10 Outdoor Education programme concentrates on mobility activities and preparing students for wilderness expeditions. Skills taught include roping, rock climbing, navigation and snorkelling.

Due to the practical nature of the course it is essential all participants be prepared to be actively involved in all activities in varying and sometimes challenging conditions. Furthermore, because the elective includes water based activities the ability to swim 200 metres in open water is a prerequisite.

This elective will culminate in a four day expedition for students who receive a satisfactory level of achievement.

PHYSICAL EDUCATION STUDIES (Stage 1)

The aim of the elective is to extend students interested in improving their sport performance and physical fitness. Students will be introduced to a variety of training methods, fitness activities and skills for physical activity. These include: resistance (weight) training; cross training; and, speed and agility conditioning. Although there will be a theory component, the course will be predominantly practical and complement the other activities offered within the Physical and Health Education and sporting programmes at the College. This elective provides a sound background for Stage 2 and 3 units in Physical Education Studies offered in Years 11 and 12.