

**Year 10 Studies Guide 2021** 



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# CURRICULUM FRAMEWORK

### **Our Overarching Goal for Learning**

Empowering learners of all ages to understand, shape and enrich our changing world, by living the Gospel of Jesus Christ in the spirit of St Augustine.

### **Our Beliefs**

#### **About Learners**

- Each person is created in the image and likeness of God.
- Every person is a unique lifelong learner.

### **Foundations of Learning**

- The person of Jesus gives meaning to life and learning.
- Every person can achieve success in learning.
- Learning is an interior process.
- Learning is the active process of searching for and constructing meaning.
- Learning occurs within a community of fellow learners in a safe, connected, supportive and inclusive environment.
- Opportunities for learning encompass the richly diverse aspects of all life experience.
- Learning is directed towards knowing Truth, which is God.

#### **Our Learning Community**

- Promotes the educational mission of Villanova College as an Augustinian Catholic school.
- Gives witness to the Gospel and the integration of faith, life and culture.
- Maintains the focus on learning as the core business of Villanova College.
- Recognises that the heart of our learning community is the relationship between the teacher and the student.
- Focuses on the future and is flexibly structured.

### **Our Values**

As an Augustinian Catholic school, we value: the Catholic Christian tradition, dignity and justice for each person, the building of community, high quality learning, the principles of collaboration and subsidiarity, creativity, stewardship and mutual accountability.

In particular, our Augustinian heritage calls us to love God and one's neighbour, to solidarity with the poor and the marginalised, to value interiority and humility, to be devoted to study and the pursuit of truth, to promote freedom, to actively build and nurture community, to be devoted to the common good in a spirit of service, and to friendship and prayer.

### Our aims for each Villanova student

- To be a faithful, responsible person with integrity.
- To be a knowledgeable person with deep understanding.
- To be a complex thinker.
- To be a designer/creator.
- To be a reflective, self-directed learner.
- To be an effective communicator.
- To be a community contributor.
- To be an active investigator.
- To be a quality producer.
- To be a leader and collaborator.



# CURRICULUM STRUCTURE

The purpose of the Year 10 curriculum structure is to allow students to study a subject in greater depth than previous years to best prepare them for their Year 11 and 12 studies. Over the previous three years students have experienced a range of elective offerings in increasing degree of exposure and length.

- Year 7: Rotations of elective subjects across the year.
- Year 8: Term electives chosen by the student.
- Year 9: Semester electives chosen by the student.

This structure has enabled students to identify those subjects that they enjoy and that suit their interests, allowing students to progressively assess their personal strengths and abilities as they move through Year 7, 8 and 9.

All subjects in Year 10 are of a year in length and include a combination of core subjects that all students will study (Religious Education, English, General Mathematics OR Mathematical Methods) as well as four (4) elective subjects. Students will study a course of seven (7) subjects throughout Year 10. This guide outlines the content, assessment and skills that each subject will develop throughout the year.

### **Curriculum Structure**

Religious Education	English OR Literature	General Mathematics OR Mathematical Methods	Elective 1	Elective 2	Elective 3	Elective 4
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Students need to consider their electives carefully based on their previous experiences. They should choose subjects that match their interests and abilities.

The elective subjects act as feeder subjects for Year 11 and 12, while permitting students to change in Semester 2, Year 10 if necessary. There are no feeder subjects for Certificate based courses; students will have the opportunity to choose these at the conclusion of Year 10 to begin these Certificate courses in Year 11.

Please be aware that the timetable and elective offerings are constructed based on student demand. It may be that not all electives will run each year, depending on student demand.

Students will receive instructions on how to nominate their preferences for subjects via an online Web Preference portal. The order in which you preference your subjects is important; the timetable will allocate you your subjects based on the preference nominated for specific subjects.

Should you have any questions regarding the structure or process for nominating subjects, please contact the Curriculum Office (details are at the rear of this guide).



# RELIGIOUS EDUCATION

The key to our understanding of our self and our world, and to finding meaning in our lives is Religious Education. This is particularly important in helping students face the many demands of life today. Religious Education is part of the curriculum in every level of the College.

The Year 10 program focuses on the Christian faith of Catholics as outlined in the new Religious Education Curriculum of the Archdiocese of Brisbane. Learning experiences and activities are structured to enable students to focus on themselves as individuals and in relationship with others. They are encouraged to explore their personal call to growth in faith through the deepening of their understanding of their relationship with God and the Christian community to which they belong.

Activities in the program encourage students to be creative, original and reflective in the presentation of their work. Opportunities are provided for students to participate in Liturgical celebrations both at the class and whole College level.

Skill development in language and communication is an important element of the course. The course is also directed to the development and understanding of interpersonal skills and their application in family life and the workforce.

#### Semester 1:

- Why all the mystery? Beliefs and practices of Judaism and Christianity and the human understanding of God or the 'Other' as well as themes and key doctrines of the early Church.
- How can the Church respond to the world we live in present and future? Eucharistic call to transformation. Catholic social teaching (stewardship of creation) and the reasoned judgements of conscience. Threats to both human ecology and environmental ecology facing Australia and the modern world.

#### Semester 2:

- **Do I have the courage to care?** Church as teacher and leader. Students develop and justify their own response to a contemporary moral question.
- How has Religion answered the human search for meaning and how have sacred texts influenced people, society and culture? Nature and significance of Religion. Sacred texts belonging to each religious tradition.



# **ENGLISH**

### **Core Curriculum Subject**

### Please note: Students should choose English OR Literature

Our world today is one of constant change – culturally, socially, economically and technologically. The study of English language provides a system of making meaning of this world. By learning to speak, listen to, read, write and shape text, students learn how to use language purposefully to represent experiences of real and imagined worlds, to interact with others and to create coherent and cohesive texts.

Year 10 English meets these wider aims of the English subject area and seeks to develop within each student an enjoyment of language whilst also helping students become purposeful, critical and creative users of the English language. The units detailed below are constructed by way of an introduction to Units 1-4 Senior English and Literature, that the students will follow in Year 11 and 12. The topics, and the use of senior assessment criteria are mirroring what is ahead.

#### Semester 1:

### Unit 1 - Understanding and Analysing Media Texts

- Task comprehension and analysis of a media text looking at the features that promote the premise and values displayed
- Assessment Written examination with a draft and plan in support with a seen pre-prepared question

#### <u>Unit 2 - Responding to a Shakespearean Text and Love Poetry</u>

- Task 1 written analytical assessment with plan and draft as support
- Task 2 spoken persuasive oral linking love poetry to themes of a Shakespearean text
- Assessment 1 written assignment
- Assessment 2 spoken, individual oral

### Semester 2:

### <u>Unit 3 - Evaluating news media texts</u>

- Task analytical comparison of reading pathways in two media texts
- Assessment spoken, analytical and persuasive

### Unit 4 - The Australian Novel

- Task 1 written, imaginative transformation
- Task 2 written, analytical response to a specific question
- Assessment 1 completed under examination conditions, seen task
- Assessment 2 completed under examination conditions, unseen question



# LITERATURE

### **Core Curriculum Subject**

The Literature course is offered as a course running over two (2) semesters. This course has been designed to enhance and develop skills in English language and literature, and to broaden the knowledge of the students who study the core English units.

Typically, the focus will be on a broad spectrum of skills – spoken and written - in English language linked to an area of English literature. For example, Romantic Poetry, Shakespearean Studies or The American Novel would represent the richness and variety of what this elective can offer students. Only one area or theme would be the focus of study per semester. Four (4) tasks would be presented in order to meet the requirements of the course - a narrative, an analytical exposition, a reflective text and a persuasive oral.

# **MATHEMATICS**

### **Core Curriculum Subject**

The Year 10 Mathematics course at Villanova College enables students to select one of two different courses. Both courses are designed to give students a solid foundation in preparing them for the course they undertake in Year 11 and 12.

General Mathematics is the core component, as outlined by the Australian National Curriculum. It should be considered the precursor for students who are likely to study General Mathematics or Essential Mathematics in Year 11 and 12. This course does contain some topics that can be difficult to understand but the pace of delivery by the teacher will be such that ALL students should grasp the basics of most of these concepts.

Mathematical Methods is the core component with additional, extension topics added in, as outlined by the Australian National Curriculum. It should be considered the precursor for students who will study Mathematical Methods and/or Specialist Mathematics in Year 11 and 12. There are often large components of problem solving, and it should be noted that the course will be fast paced. In both courses, there is a high expectation of students to complete homework and additional study in order to achieve highly.

A summary of both courses is provided below:

Year 10 General Mathematics	Year 10 Mathematical Methods				
Semester 1					
Number and Algebra – indices, linear algebra, coordinate geometry, simultaneous equations and inequations	Number and Algebra – indices, linear algebra, coordinate geometry, simultaneous equations and inequations, functions				
Measurement and Geometry – deductive geometry, trigonometry	Measurement and Geometry – deductive geometry, circle geometry, trigonometry, applied trigonometry				
Statistics and Probability – univariate data, bivariate data, statistics in the media	Statistics and Probability - univariate data, bivariate data, statistics in the media				
Semester 2					
Number and Algebra – quadratic expressions, quadratic equations	Number and Algebra – advanced quadratic expressions, advanced quadratic equations, real numbers (including surds, index laws and logarithms), polynomials, functions and relations				
Measurement and Geometry - surface area and volume	Measurement and Geometry - surface area and volume (with introductory components of Optimisation)				
Statistics and Probability – concepts of probability	Statistics and Probability - concepts of probability, conditional probability, subjective probability				

Prerequisite: B- or above in Year 9 Mathematics for entry into Year 10 Mathematical Methods.



# YEAR 10 ELECTIVES

Throughout Year 10, students will study four (4) elective subjects in addition to the core subjects of English, Religious Education and Mathematics. All subjects are one (1) year in length.

#### **Business**

- Accounting
- Business
- Economics
- Hospitality Practices

#### **Creative Arts**

- Drama
- Film, Television and New Media
- Music
- Visual Art

### **Health and Physical Education**

• Physical Education

### **Languages Other Than English**

- Chinese
- Italian

#### **Mathematics**

• Specialist Mathematics

#### **Sciences**

- Biology
- Chemistry
- Earth and Environmental Science
- Physics

#### **Social Sciences**

- Geography
- Legal Studies
- Modern History

### **Technologies**

- Design
- Digital Solutions
- Engineering
- Workshop Fundamentals

# SPECIALIST MATHEMATICS

The Specialist Mathematics course is designed to explore advanced mathematical techniques and concepts beyond the Mathematical Methods course. It should be selected by students intending on studying Specialist Mathematics in Year 11 and 12. Specialist Mathematics is an elective that must be chosen only if Mathematical Methods is also selected. The benefit of choosing two mathematics subjects is significant as students move through the Senior School because the skills and methods of thinking overlap.

The course covers advanced mathematical topics including:

- Matrices
- Complex numbers
- Vectors
- Combinatorics
- Trigonometry
- Mathematical induction
- Statistical analysis

Please note that this course is designed to be challenging and students are encouraged to choose this elective if they are passionate about Mathematics and have already demonstrated an aptitude for the study of Mathematics in Year 9.

The topics covered in Specialist Mathematics will be a direct feeder for the topics that students cover in Specialist Mathematics in Year 11 and 12. Due to the amount of content studied in Units 1-4 in Specialist Mathematics in Year 11 and 12, efficiency of topic coverage is enhanced by beginning the topics in Year 10.

Students will complete one (1) assignment and three (3) examinations throughout the Specialist Mathematics course in Year 10, which reflects the same assessment they will have throughout their continuation of the subject in Year 11 and 12, if they choose to do so.

### DRAMA

Creativity plays a vital role in the well-being and advancement of all societies. Drama is a practical and engaging opportunity for you to unlock and extend your creative potential. Through practical learning experiences you will develop real life skills such as; creative thinking, critical evaluation, literacy, negotiation, organising, planning, presentation, research and team work.

Throughout the year students will explore various forms of theatre styles and their conventions.

#### **SEMESTER 1 - CREATE**

True crime stories underpinned by social issues are explored through the eclectic style of documentary drama. With documents such as court reports, poetry, diaries, news articles, documentaries, the creation of episodic theatre evolves. Students view professional live theatre performances and write written analytical responses evaluating how dramatic action and languages are manipulated for meaning. Students engage with the conventions of the non- realistic style of documentary drama, devising performance from directorial visions. Complimentary styles of physical theatre and verbatim will be workshopped along with non-linear storyboarding and culminate in a Documentary performance.

#### **Semester 2- PERFORM**

Students explore the nuts and bolts of the Drama experience, focusing on the dramatic languages, especially the elements of drama, applying stagecraft directorial vision through workshopping conventions and play extracts. Students love participating in the Queensland Theatre Scene Project. This involves the provision of a script, an industry director and a workshopping and presentation day with other schools. This authentic performance opportunity is invaluable and one of the highlights of the boys' Drama experience. Practical workshops assist in the exploration of character development, and productions elements. Modern texts in the style of realism offer the students an opportunity to direct their peers.

Prerequisite: Year 10 Drama is a prerequisite for studying Drama in Year 11 and 12.

# FILM, TELEVISION & NEW MEDIA

The study of Media involves creating representations of the world and telling stories through technologies such as television, film, video, newspapers, radio, video games, the internet and social media. Media connects audiences and ideas, exploring concepts and viewpoints through the creative use of texts and technologies. Like all art forms, Media has the capacity to engage, inspire and enrich all students, exciting the imagination and encouraging students to reach their creative and expressive potential. Students learn through **critical thinking** and creative processes in Media practice. They learn to collaborate in creative teams and analytically respond to and interact with context and audience. Media electives will also orientate students to the five key components of media education which in unison direct the learning and assessment for this subject. These fundamentals include media technologies, representations, institutions, audiences, and languages.

#### **Semester 1 - DIGITAL JOURNALISM**

With the rapid infusion of new communication technologies, the news media has the potential to disseminate its messages to audiences in revolutionary new ways, e.g. internet, mobile phones and podcasting. As participants in this global mediascape, students require skills that allow them to actively participate in this new world of meaning. As such, this unit will introduce students to the way in which different news texts are constructed to target audiences and markets (i.e. commercial and non-commercial). They will also gain an appreciation of how journalists and editors manipulate media languages to present their own representations of the news.

#### Semester 2 - HOMAGE TO HOLLYWOOD

Students will explore a medium which has continually transformed and reinvented itself over the past century - the institution of filmmaking. Students will trace the early developments of film history before focusing on the evolution of an industry which emerged as the dominant force in filmmaking - Hollywood Cinema. Underpinning their study of this institution will be an examination of the star/studio system, the development of film styles and genres and the film languages of classical narrative form. This unit provides further foundation for students looking to study Film, Television and New Media in Years 11 and 12.

It is **recommended** that students intending to study the ATAR Film, Television and New Media course in the Senior School should complete at least ONE of the Media units in Year 10.

Prerequisite: Year 10 Film, Television and New Media is a prerequisite for studying Film, Television and New Media in Year 11 and 12.

# **MUSIC**

Take an auditory journey through the wide, cosmic realm of sonic events that we call Music! This year long course develops important fundamental building blocks in preparation for great success in Senior Music in the dimensions of Responding, Composing and Performing.

#### Music of our Virtual World

Do you like playing computer games and enjoy the exciting musical scores which accompany them? In this unit, students explore the genre of video game music, learning about the variety of compositional devices used in popular computer game soundtracks, and have the opportunity to perform them on an instrument of their choice.

#### Jazz Tracks

This is another popular unit focusing on one of the predominant twentieth century styles from America, ranging from Dixieland to Acid Jazz. Students will have the opportunity to create their very own piece of Jazz from the many different styles studied in class and experience live Jazz in a professional setting.

### **Sonic Expressions**

Hurtling through interstellar space on board the spacecraft "Voyager" is our planet's message to potential extra- terrestrials and believe it or not, in it is the universal language of Music. This highly popular unit explores a variety of musical genres from far reaching parts of the globe and throughout history that are contained on the Voyager's "Golden Record".

Prerequisite: Year 10 Music is a prerequisite for studying Music in Year 11 and 12.

# VISUAL ART

Visual Art allows students to develop the skills to engage in a multimodal, media-saturated world that is reliant on visual communication.

Visual Art will provide students with a broad range of opportunities to extend their skills and unlock their creativity in a dynamic working environment. In response to the explosion of new artistic professions, this course combines traditional art-making skills with the use of industry-level software to produce artworks that respect the past and embrace the future. During this course, students will think creatively and critically, solve problems, communicate verbally and visually, conceptualise and make decisions to resolve and respond to artworks.

Across the year of study, students will:

- develop and extend their knowledge and understanding of drawing, painting, print making, ceramics and digital media (including Photoshop, Illustrator and Animation).
- apply their developing knowledge of art history, concepts, and terminology to deconstruct and critically discuss two-dimensional and three- dimensional art, and graphic design/typography.
- complete a range of folio based 'Making' tasks, maintain a Visual Diary of research, ideas, and progress, and develop formal written responses to artworks in context.
- Become visually intelligent and prepared to enter Year 11 and 12 Visual Art as critical thinkers who are able to seek creative solutions to complete design problems.

Prerequisite: Prior experience in Visual Art will provide students with an understanding of making and responding as learning and assessment in the Senior Visual Art course. Therefore, Year 10 Art is a prerequisite for studying Visual Art in Year 11 and 12.



# ACCOUNTING

A key element to the success of any business is the understanding of financial information. It is from this understanding that effective business decisions are made. Accounting introduces the basic skills such as organising, critically analysing and communicating financial data and information for decision-making. In addition to developing Excel skills through the preparation of this information, financial records will be also prepared using an accounting package.

The course consists of the following units:

### **Accounting foundations**

- The role of accounting
- Elements of accounting
- Ownership structure
- · Principles and concepts

### Financial Reporting for trading and service businesses

### **Double entry**

- Accounting equation
- Accounting assumptions
- Debit and credit
- Transaction analysis
- Accounting process

#### **Ratios**

- Net profit ratio
- Return of owner's equity
- Current ratios
- Turnover of Accounts Receivable

### **Internal Controls**

- Inventories
- Cash
- Credit

### Source documents, general journal, ledger and trial balance

Accounting package (i.e. MYOB)

Assessment for this subject will consist of examinations and a project. This course is designed to lead into the General subject of Accounting.

## **BUSINESS**

The study of business is relevant to all individuals. The knowledge and skills developed in Business allows students to contribute meaningfully to society, the workplace and the market place, and prepare them as potential employees, employers, leaders, managers and entrepreneurs of the future. Business will approach the content through both the theoretical and practical approach while equipping students with analysis tools fundamental to strategic planning.

The course will address:

#### Fundamentals of business

- Business environments
- Business life cycle
- Leadership and management
- Entrepreneurship
- Impact of innovation
- Creating a viable business venture

The assessment for this subject will consist of an examination, case study and report. This course is designed to lead into the General subject of Business or the Certificate III in Business.

### **ECONOMICS**

The Economic course has been designed to explore various aspects of economic studies. Economics is the study of the interaction between households, businesses, and the government. It helps individuals to understand the decisions and actions of all of these entities in shaping the distribution of income and wealth in the home, country and the world. Any decision made is in a sense an economic decision, atrade-off between costs and benefits.

The course will address the contemporary issues relating to:

- Supply and demand
- Opportunity cost
- Circular flow of income
- Market operations Sharemarket
- Environment economics
- Economic indicators
- Modern economic systems The Shared Economy

Assessment will take the form of examinations and a research task.

This course is designed to lead into the General subject of Economics.

# HOSPITALITY PRACTICES

Hospitality Practices provides the opportunity for students to develop an understanding of the hospitality industry. As part of this course, students will undertake practical cookery session each week. This will be complemented with theoretical examination of food topics including:

- Meat and meat products
- Poultry
- Fish and seafood
- Fruit and vegetables
- Milk and milk products
- Cereals

Students will also develop an understanding of Coffee Shop operations. They will have the opportunity to produce market and sell their products in a student- run coffee shop. To achieve this, students will be involved in:

- Preparing and serving coffee
- Food service
- Financial management
- Methods of cookery
- Coffee operation
- Marketing and advertising

Students will develop awareness of industry workplace culture and practices, and develop the skills, processes and attitudes desirable for future employment in the sector.

Assessment will consist of a project, investigation and examinations.

# **DESIGN**

Design provides students with the skills and knowledge to undertake the new Design subject in Years 11 and 12.

Design as a subject can facilitate skills that involve creativity, risk taking, invention and analytical thinking. It engages students in learning experiences that are transferrable to family and home, leisure activities, community contributions and the world of work. In Design, students will have the opportunity to experience creating designed solutions for a product, service or environment to solve human-centred design problems and presenting these.

Students will use design knowledge and understanding, processes skills and design thinking to produce design solutions that identify needs or opportunities of relevance to individuals and regional and global communities. Students work independently & collaboratively, and use problem solving skills and a specified design process that can be applied to the complexities of contemporary life.

In this course students will follow a design process using a range of technologies, including sketching and graphical representation in 2 and 3 dimensions, and rapid design processes to communicate designs. They produce prototypes using various materials, 3D printing, modelling and laser cutting, render illustrated views for marketing, and use graphical visualisation to produce dynamic views of design concepts.

Students' work is assessed in folios and examinations. Final folio submissions require a design development folio, prototype model, and a design pitch using communication boards.

# DIGITAL SOLUTIONS

Digital Solutions provides students with the skills and knowledge to undertake the General subject of Digital Solutions in Year 11 and 12. Although not essential, it also provides a background for students to undertake the Certificate III in Information, Digital Media and Technology in Year 11 and 12

The Digital Solutions problem-solving model comprises four non-linear iterative phases through which students explore the problem, develop ideas, generate components and solutions, and evaluate ideas, components, and digital solutions. In this subject, students will learn basic computer programming constructs and will use and develop the four cornerstones of computational thinking (decomposition, pattern recognition, abstraction and writing algorithms). They will develop an understanding of data types and data structures used in programming, program structures, parameters, file structures and data storage.

Students will design solutions and generate technical proposals involving desktop applications, server applications, robotics and development board devices. They will design using flowcharts, pseudocode, hierarchy charts, annotated sketches, and desk- checking, applying standard design principles. They will produce a technical proposal for a project including screen designs, layout and data storage and retrieval methods. This may be implemented using a range of computer languages including HTML, CSS, JavaScript, PHP, SQL and C++. The problem-solving process and implementation is documented in a structured project folio.

Students are assessed on their work in project folios, technical proposals and examinations.

# **ENGINEERING**

Engineering provides students with the skills and knowledge to undertake the General subject of Engineering in Year 11 and 12.

This course is taught using a problem-solving framework and practical hands-on activities. Students will use critical and creative thinking, communication, collaboration and teamwork to develop solutions that acknowledge social, ethical, economic, environmental and sustainable impacts.

Students undertaking the Engineering course will explore open-ended, real-world problems to develop solutions by applying a problem-solving process that is both analytical and technical. This process is iterative and involves a number of phases. They will analyse problems and information to determine success criteria and use knowledge of Science, Technology, Engineering and Mathematics (STEM) to develop and test a range of ideas. They will select a solution to create a prototype for testing, analysis and refinement.

The problems used in this course will allow students to apply and enhance their knowledge of Newton's Laws, trigonometry, measurement, electricity and mechanics. They will examine a variety of materials, testing them to determine their properties. Their data will be organised and analysed using spreadsheets and graphs. Students will explain their ideas by sketching, annotating and drawing, including computer aided design (CAD), developing folios to communicate all aspects of the problem-solving process. The projects may include the design, construction and testing of straw bridges, the development of control and robotics solutions, and the design, construction and demonstration of a mechanical lifting device.

Students will develop skill in using CAD, applying the Australian standards for engineering drawings. They will sketch plane and solid shapes, orthographic, oblique and isometric views, joint details and assembly. They will use trigonometric ratios to calculate distances and forces and perform basic calculations for mechanics and circuits.

Students are assessed on project folios and semester examinations.

# WORKSHOP FUNDAMENTALS

Workshop Fundamentals provides students with the knowledge and skills to move into the Certificate I in Furnishing in Year 11 and 12.

This course provides students with an opportunity to work with a range of different timbers and materials, as well as providing an understanding of their properties and uses within the furnishing industry. Practical tasks and projects will expose students to a broad range of joints, assembly and construction methods, tools and equipment used in the manufacturing and construction of furnishing items. Equipment may include hammers, squares, tape measures, circular saws, planers, cordless drills, biscuit joiners, routers, impact drivers, pneumatic nail guns, drill presses and disc sanders.

Students will identify a broad range of materials, tools and joints used in the manufacture of furnishing products. Students will learn about timber technology, manufactured board products and sustainability, and use a range of these in their projects. They will identify and produce a range of joints.

Students will identify different types of timber defects, stoppings, adhesives, tools and equipment commonly used in the manufacture of furnishing projects. Students will use a range of techniques, tools and equipment to prepare surfaces and project work ready for finishing.

Students will learn to identify different types of plans and recognise commonly used symbols, abbreviations and specifications used on plans relevant to furniture manufacturing. Students will also produce drawings, cutting lists and costings for the manufacture and construction of practical project work.

Assessment will be based on each student's practical work throughout the course and written examinations and assignments.

## **CHINESE**

Australia has always had a substantial Chinese community, and this is growing. Australia's links with Asia are becoming more and more important and many nations throughout Asia also have large Chinese communities. Australia's links with China itself are also becoming increasingly important. Chinese is, therefore, a very valuable language for Australians to learn. It has relevance to careers in commerce, diplomacy, law and tourism to name a few.

In this course, a continuation of the Year 9 semester unit, topics are introduced through dialogues, role play, simple texts and games. Materials are related to everyday activities such as family and community relationships, shopping, school, travel, food, health, local transport, dining and customs. Thus, language can be seen not as an academic exercise but as a medium of communication.

Amongst the goals of the course are familiarity with the basic Chinese characters, the romanisation of Chinese, and the tonal quality of the language. Included also is the development of an understanding of language as a communication process.

Student skills are developed in four major areas - listening, reading, speaking and writing. The kinds of tasks students master include: responding in English or Chinese to questions in English about a text in Chinese; retelling in English the essence of a message spoken in Chinese; role play and one-to-one interview; reading a variety of texts that differ in length, purpose and style (e.g. timetables, maps, menus, articles); directed writing; writing of narrative and descriptive paragraphs and dialogues.

Prerequisite: Learning a second language is a developmental process. For this reason, Chinese and/or Italian must be taken in Year 10, inorder to be selected for study in Year 11 and 12.

### ITALIAN

Italian is a language in which it is relatively easy to achieve a basic degree of social proficiency. Italy is a leading industrial nation and, therefore, Italian is a major language of trade and commerce. The student of Italian gains access to cultural traditions which go back thousands of years and which have had a profound effect on western society. For students with an Italian family heritage, the study of Italian may fill in gaps in literacy or give access to the standard form of the language.

Italian is one of the easiest languages for English speakers to learn, as Italian and English are related. It has many similarities to English in grammar and vocabulary and is no trouble to write as the language is phonetic.

In this course, topics are introduced through dialogues, role play, simple texts and games. Materials are presented as realistically as possible so that language can be seen not as an academic exercise but as a medium of communication.

#### **Topics include:**

Personal identification: name, address, age, parts of the body, nationalities. Relationships with others: social conversations, greetings, introductions, apologies, invitations. Entertainment: hobbies, radio and TV programs, cinema, parties, sports.

Food and Drink: common foods and drinks, eating at home, ordering from a menu. Services and Landmarks: public transport, buying tickets, finding your way, buildings, landmarks. Travel: means of transport, holidays, places and countries.

Student skills are developed in four major areas - listening, reading, speaking and writing. The kinds of tasks students master include: Responding in English or Italian to questions in English about a text in Italian; Retelling in English the essence of a message spoken in Italian; Role play, one to one interview; Reading a variety of texts that differ in length, purpose and style (e.g. recipe, menu, TV guide, newspaper); Directed writing (e.g. postcard, letter, invitation); Writing of narrative and descriptive paragraphs and dialogues. Some of these tasks will be completed at home. Students will be required to spend 15 to 20 minutes working on Italian at home for each lesson they have during the week.

# PHYSICAL EDUCATION

Physical Education is offered as an elective in Year 10 and offers students the opportunity to incorporate an interest in physical activity into a range of academic tasks. It allows students to experience a range of physical experiences that can be integrated into a variety of real-world experiences. For many students this elective offers them the potential to have a balanced approach to the suite of subjects, giving them a physical and health dimension to their education.

#### **Subject Structure**

Each term has a content focus linked to a physical task. This content mirrors the type of subject matter that is covered in the senior course and gives them an introduction to the types of assessment tasks they could encounter. Approximately seventy five percent of grades come from the written tasks, with twenty five percent coming from the physical tasks.

#### Term 1

Tactical Awareness and Badminton - A 6 to 10-minute multimodal presentation.

The planning, designing and implementing of strategies to improve the application of tactics in game play will be explored. Using a variety of approaches and models, students will assess the most effective approach for them in a number of different circumstances.

#### Term 2

Ethics, Integrity and Netball- A 1500-word Report

The ethical issues associated with physical activities will be examined, with students able to explore a topic of their choice. The establishment of personal values, fair play and ethical dilemmas form a significant portion of the unit.

#### Term 3

Motor Learning and Basketball - A 6 to 10-minute multimodal presentation

Students will examine the key aspects of how skills are developed and applied in a sporting context. Issues of effective practice, feedback, coaching and movement concepts will be covered.

#### Term 4

Energy Systems and Touch Rugby League (TRL) - A 90-minute exam

Energy for fitness and training will be explored, with a specific emphasis on the physiological requirements for TRL. A range of training methods and principles will be undertaken and used as data for the assessment task.

(The physical tasks will depend on the availability of facilities.)

In Year 10 Physical Education, time will be distributed between physical tasks and theoretical content to ensure the course material is delivered. It is envisaged that a significant number of theory-based lessons will be completed outside of the classroom in a variety of sporting settings. Consistent with the senior course, the performance of physical skills will be incorporated into the theoretical content as meaningful learning experiences.



Given that the course will be delivered using a variety of activities, students will be required to be active learners in both the practical and theoretical environments.

Involvement in this subject is encouraged for any student considering Physical Education and students will be required to be active learners in both the sporting and classroom environments.

Students with an interest in a deeper understanding of physical activity or are considering taking Physical Education or the Certificate III in Fitness in Year 11, are very strongly encouraged to select this subject.



# **BIOLOGY**

Biology is the study of life in its many manifestations.

It encompasses studies of the origin, development, diversity, functioning and evolution of living systems, and the consequences of intervention in those systems. The study of biology provides opportunities for students to engage with living systems and develop their understanding of cells, and the concepts of heredity and the continuity of life.

Biology aims to develop students':

- sense of wonder and curiosity about life.
- respect for all living things and the environment.
- understanding of how biological systems interact and are interrelated.
- understanding of major biological concepts, theories and models related to biological systems.
- appreciation of how biological knowledge has developed over time and continues to develop, how scientists use biology in a wide range of applications and how biological knowledge influences society in local, regional and global contexts.
- ability to plan and carry out laboratory and other research investigations, including the collection and analysis of qualitative and quantitative data and the interpretation of evidence.
- ability to use sound, evidence-based arguments creatively and analytically when evaluating claims and applying biological knowledge.
- ability to communicate biological understanding, findings, arguments and conclusions using appropriate representations, modes, genres and nomenclature.

Biology demands ability in abstract thinking. The course is designed for the serious, committed student and it is difficult to succeed without daily study. At least 20 minutes study each day is necessary for continued success. Students succeed best if they are prepared to work beyond the set homework or reading, and if they accept responsibility for their own learning and their contribution to the work of the class group. As a result, there should be a firm commitment to reading, study and individual research. The student contemplating Biology should have enjoyed studying the area in Year 8 and 9 and have an appreciation of living things.

Understanding biological concepts, as well as general science knowledge and skills, is relevant to a range of careers, including those in medical, veterinary science, food and marine sciences, agriculture, biotechnology, environmental rehabilitation, biosecurity, quarantine, conservation and eco-tourism. This subject will also provide a foundation for students to critically consider contemporary biological issues and to make informed decisions about these issues in their everyday lives.

During the course of the year students studying biology will learn about:

- Cell theory and the use of microscopes
- Enzymes
- Genetics and gene technology
- · Theories of evolution

Assessment in Year 10 Biology will utilise a range of assessment types including student experiments, research investigations, data tests and supervised examinations.



# **CHEMISTRY**

Chemistry enables us to understand the links between the macroscopic properties of the world and the sub- atomic particles and forces that account for those properties. In this subject, students will begin to understand and apply chemical concepts, models, procedures and processes for the management of the planet's limited resources that could be crucial to our survival. The study of Chemistry also provides students with a means to further develop their understanding of the world around them, a way of obtaining useful knowledge and skills and a platform for further study.

### Chemistry aims to develop students:

- interest in and appreciation of the wonder of chemistry and its usefulness in helping to explain phenomena and solve problems encountered in their ever-changing world.
- understanding of the theories and models used to describe, explain and make predictions about chemical systems, structures and properties.
- understanding of the factors that affect chemical systems and how chemical systems can be controlled to produce desired products.
- appreciation of chemistry as an experimental science that has developed through independent and collaborative research and that has significant impacts on society and implications for decision making.
- expertise in conducting a range of scientific investigations, including the collection and analysis of qualitative and quantitative data and the interpretation of evidence.
- ability to critically evaluate and debate scientific arguments and claims in order to solve problems and generate informed, responsible and ethical conclusions.
- ablility to communicate chemical understanding and findings to a range of audiences, including through the use of appropriate representations, language and nomenclature.

The course is designed for the committed student and it is difficult to succeed without daily study. At least 20 minutes study each day is necessary for continued success. Students succeed best if they are prepared to work beyond the set homework or reading, and if they accept responsibility for their own learning and their contribution to the work of the class group. It is highly recommended that students studying this subject should also study Mathematical Methods.

Chemistry is a subject suited to students who are interested in pathways beyond school that lead towards tertiary studies. It can lead to further education and employment in fields such as forensic science, environmental science, engineering, medicine, pharmacy and sports science.

During the course of the year, students studying chemistry will learn about:

- Atomic structure and periodicity
- The types of chemical reactions
- The rates of chemical reactions
- The development of useful materials and processes
- Measurement, uncertainty and error

Assessment in Year 10 Chemistry will utilise a range of assessment types including student experiments, research investigations, data tests and supervised examinations.



# EARTH AND ENVIRONMENTAL SCIENCE

The subject Earth and Environmental Science is a study into the nature of the universe. Students will explore the Earth's processes, phenomena and systems, and how they are interrelated. Opportunities are given for students to engage with the dynamic interactions between the four systems, and the effect of human impact on climate change. The formation of the universe, stars and their connection to the formation of the Earth's geological structures will also be investigated. It is an interdisciplinary subject linking many aspects of Biology, Chemistry and Physics.

Earth and Environmental Science aims to develop student's:

- interest in Earth and Environmental Science and their appreciation of how this multidisciplinary knowledge can be used to understand contemporary issues.
- understanding of earth as a dynamic planet consisting of four interacting systems, the geosphere, atmosphere, hydrosphere and biosphere.
- appreciation of the complex interactions, involving processes that continually change Earth's systems over a range of timescales.
- ability to explore the nature of the universe and the formation of the stars.
- understanding that Earth and Environmental Science knowledge has developed over time, is used in a variety of contexts and influences, and is influenced by social, economic, cultural and ethical considerations
- ability to conduct a variety of field, research and laboratory investigations involving collection and analysis of qualitative and quantitative data and interpretation of evidence.
- ability to critically evaluate Earth and Environmental Science concepts, interpretation, claims and conclusions with reference to evidence.
- ability to communicate understandings, findings, arguments and conclusions related to the Earth and its environment, using appropriate representations, modes and genres.

The study of Earth and Environmental Science demands ability in abstract thinking. The course is designed for the committed student and it is difficult to succeed without daily study. At least 20 minutes study each day is necessary for continued success. Students succeed best if they are prepared to work beyond the set homework or reading, and if they accept responsibility for their own learning and their contribution to the work of the class group. As a result, there should be a firm commitment to reading, study and individual research. The student contemplating this subject should have enjoyed studying the area in Year 8 and 9 and have an appreciation of living things and the complex interactions of Earth systems.

Earth and Environmental Science is a subject suited to students who are interested in pathways beyond school that lead towards tertiary studies. It can lead to further education and employment in fields such as geoscience, soil science, agriculture, marine science, environmental rehabilitation, urban planning, ecology, natural resource management, wildlife, environmental chemistry, conservation and ecotourism.

During the course of the year, students studying Earth and Environmental Science will learn about:

- The Solar System and Astronomy
- Caring for the country and its environment
- Global changes associated with human activities
- Building a sustainable environment an experiment in building design.

Assessment in Year 10 Earth and Environmental Science will utilise a range of assessment types including student experiments, research investigations, data tests and supervised examinations.



## **PHYSICS**

Physics is the study the physical world around us. It looks to create models and theories which allow us to explain the things we see and which also allow us to predict and control events in the physical world. For example, knowledge of motion will allow us to understand why a car skids on a wet road when it turns a corner. It will also explain to us why braking is not the correct course of action in such circumstances. The study of Physics is also about the historical development of the theories of Physics. This allows the student to appreciate the unfolding nature of knowledge in the area of science, as well as the significance of the great human endeavour which is scientific enquiry.

Physics is the science underlying much of modern technology. Computers, skyscrapers, bridges and jet aircraft are a few examples of physics in action. Through a study of Physics students should come to understand the principles behind some of these technologies, and in addition to such practical knowledge, Physics opens the mind to consideration of some of the bigger questions: What is matter? What can we learn about the fundamental particles of the universe? What is scientific theory?

Physics aims to develop students:

- appreciation of the wonder of Physics and the significant contribution Physics has made to contemporary society.
- understanding that diverse natural phenomena may be explained, analysed and predicted using concepts, models and theories that provide a reliable basis for action.
- understanding of the ways in which matter and energy interact in physical systems .
- understanding of the ways in which models and theories are refined and new models and theories are developed in physics and how physics knowledge is used in a wide range of contexts and informs personal, local and global issues.
- investigative skills, including the design and conduct of investigations to explore phenomena and solve problems, the collection and analysis of qualitative and quantitative data and the interpretation of evidence.
- ability to use accurate and precise measurement, valid and reliable evidence and scepticism and intellectual rigour to evaluate claims.
- ability to communicate physics understanding, findings, arguments and conclusions using appropriate representations, modes and genres.

The course is designed for the committed student and it is difficult to succeed without daily study. At least 20 minutes study each day is necessary for continued success. Students succeed best if they are prepared to work beyond the set homework or reading, and if they accept responsibility for their own learning and their contribution to the work of the class group. Manipulation of formulae and ability to solve equations are essential skills. It is highly recommended that students studying this subject should also study Mathematical Methods.

Physics is a subject suited to students who are interested in pathways beyond school that lead towards tertiary studies. It can lead to further education and employment in fields such as science, engineering, medicine and technology.

During the course of the year, students studying Physics will learn about:

- Motion
- Structures and simple machines
- Heating processes
- Electrical circuits

Assessment in Year 10 Physics will utilise a range of assessment types including student experiments, research investigations, data tests and supervised examinations.

# **GEOGRAPHY**

This study of Geography will provide students with the opportunity to compare the significance, interconnectedness and specific characteristics of a variety of places, spaces and environments. It will also allow students to analyse the relationships between humans and the natural world, the consequences of our actions and ways in which we can manage these consequences.

This elective will provide students the opportunity to develop a range of core skills including:

- Observing and questioning
- Planning, collecting and evaluating
- Processing, analysing, interpreting and concluding
- Communicating
- · Reflecting and responding

### Unit 1 - Environmental Challenges

This unit gives students the opportunity to use geographical thinking, skills and technological tools to examine some environmental challenges that will affect their future lives, and to find out how geography contributes to the understanding and management of these challenges. Environmental challenges that may be included in a detailed study (fieldwork may be incorporated) include:

- Marine resources and the oceans
- Climate change
- Coastal erosion and sea level rise
- River basins
- Urban biophysical environments
- Mountains
- Land degradation

### Unit 2 - Global Well-Being

This unit focuses on the nature of well-being around the world and how it can be measured. Spatial characteristics of well-being and the factors that influence global inequalities are used to investigate programs that address issues of well-being. Sustainability principles will be applied to evaluate alternative futures.

# LEGAL STUDIES

Legal Studies focuses on the interaction between society and the discipline of law. Students study the legal system and how it regulates activities and aims to protect the rights of individuals, while balancing these with obligations and responsibilities. An understanding of legal processes and concepts enables citizens to be better informed and able to constructively question and contribute to the improvement of laws and legal processes. This is important as the law is dynamic and evolving, based on values, customs and norms that are challenged by technology, society and global influences.

Legal Studies explores the role and development of law in response to current issues. The subject starts with the foundations of law and explores the legal process in Australia. Throughout the course, students analyse issues and evaluate how the rule of law, justice and equity can be achieved in contemporary contexts.

The primary skills of inquiry, critical thinking, problem solving and reasoning empower Legal Studies students to make informed and ethical decisions, and recommendations. Learning is based on an inquiry approach that develops reflection skills and metacognitive awareness. Through inquiry, students identify and describe legal issues, explore information and data, analyse, evaluate to make decisions or propose recommendations, and create responses that convey meaning. These are critical skills that allow students to think strategically in the 21st century. Legal Studies enhances students' abilities to contribute in an informed and considered way to legal challenges and change, both in Australia and globally.

# MODERN HISTORY

Modern History has two main aims. First, Modern History seeks to have students gain historical knowledge and understanding about some of the main forces that have contributed to the development of the Modern World. Second, Modern History aims to have students think historically and form a historical consciousness in relation to these same forces. The first aim is achieved through the thematic organisation of Modern History around four of the forces that have helped to shape the Modern World — ideas, movements, national experiences and international experiences. To fulfil both aims, Modern History uses a model of inquiry learning.

Modern History benefits students as it enables them to thrive in a dynamic, globalised and knowledge-based world. Through Modern History, students will acquire an intellectual toolkit consisting of 21st century skills. This ensures students of Modern History gain a range of transferable skills that will help them forge their own pathways to personal and professional success, as well as become empathetic and critically-literate citizens who are equipped to embrace a multicultural, pluralistic, inclusive, democratic, compassionate and sustainable future.

# **TEACHING AND LEARNING OFFICE**

This publication was produced by the Teaching and Learning Office. The details about the various courses on offer contained in this guide were correct at the time of publication but may change from time to time as necessary to respond appropriately to student needs and the College's response to the Australian Curriculum.

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