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The Year 10 program at Kilvington consists of core and elective studies. The aim of the program is to provide breadth and depth of study and allow students the opportunity to begin their VCE studies. The VCE (Victorian Certificate of Education) is administered by the Victorian Curriculum and Assessment Authority (VCAA).

Core Program
In Year 10, students will complete nine core studies which are listed below:
- English
- Mathematics
- Science
- Geography
- History
- Physical Education and Health

Elective Program
In Year 10, students will complete four elective units over the course of the year, or two units per semester. Electives provide an opportunity for students to pursue studies in subjects in which they have an interest and ability. The electives are divided into two blocks. The two blocks contain a range of VCE and non-VCE subjects.

As part of a Year 10 Program students may study one Units 1 and 2 VCE Subject (including accelerated Maths Methods or an external VCE or VET subject).

Subject Selection form:
- Needs to be signed by the student and parent
- Must be signed off by both the House Dean and Year 9 Coordinator for approval
- A copy of the Year 9 Semester One report and COR comments/marks for relevant subjects must be included

Prerequisite for VCE study in Year 10:
- Student needs to have an overall score greater than 75% in the related subject
- Year 9 Science for VCE Psychology or Biology / Year 9 Maths for Accounting / Year 9 PE/Health for VCE PE or HHD
- Approval may be given for extenuating circumstances

Students for whom studying a VCE subject is not recommended will have a meeting with House Dean and Learning Support, Counsellor or Careers Counsellor as required. Under special circumstances, students wanting to study two or more Units 1 and 2 VCE Subjects (internally and/or externally) must fill out the Application Form for Enrolment in Multiple Units 1 and 2 Studies and will meet with House Dean to sign off approval.

Students should have an overall score of at least 80% in relevant subjects to study multiple VCE subjects.

Elective units are semester length however language studies and VCE units are taken as a double unit sequence.

Important points for LOTE studies: If you intend to study French or Japanese in VCE, you must choose to study the language at Year 10 in both Semester 1 and 2. This will take up two of your elective choices.

VCE Electives
- Accounting
- Biology
- Health and Human Development
- Information Technology
- History
- Physical Education
- Psychology

Other Electives
- Art
- Drama
- Ethics in Leadership
- Food Technology
- French
- Japanese
- Making Choices – An introduction to Economics and the Australian Economy
- Music
- Media
- Protest
- Introduction to Physics
- Short and Sweet
- Visual Communication Design

While we endeavour to meet students’ preferences, this may not always be possible due to limitation of class size and timetables. In most cases, elective classes will not run unless there is a minimum of 10 students.
Resource Centre Services

**Information Access**
The McKie Resource Centre caters for all students from ELC to VCE and provides a comprehensive collection of print, audio-visual and online resources that support the curriculum and audio visual equipment. There is an extensive collection of picture books and novels for recreational reading for all year levels. We are open daily during term time and students are welcome to make use of the refurbished McKie Resource Centre which is a central light-filled space that provides a comfortable and quiet library environment.

The staff of the McKie Resource Centre – Mrs Jane Viner, Mr Jordan Adams and Ms Vanessa Walker aim to provide a caring, student and staff friendly well-resourced environment for reading, research, relaxation and individual study.

The Resource Centre has a dedicated Junior Library area where ELC and Junior classes visit regularly with their teachers to enjoy literature and develop their researching skills. Year 3 – 6 Junior School students can visit at lunchtime with a library pass from their class teacher.

For secondary students, the Resource Centre provides a wide selection of print and electronic resources to support the Curriculum, as well as a comprehensive collection of novels for recreational reading. Students in English classes from Year 7 – 10 enjoy a regular wide reading session.

Information and digital literacy skills are taught cooperatively with classroom teachers to enhance student learning outcomes and lifelong learning. Displays promoting faculty weeks, local, regional, national and global events and issues are a regular part of the resource centre environment. An appreciation of literature and the love of reading is encouraged by the staff, displays and the development of the collection.

All students from Early Learning to Year 12 are welcome to borrow resources and it is their responsibility to ensure they are returned or renewed to enable others to share the resources. Non-returned, lost or damaged resources will be billed to school accounts on a term basis. Students receive a reminder via their class teacher or tutor. Junior School parents receive an email for overdue items. Please contact one of the library team members with any queries or email library@kilvington.vic.edu.au

Open daily in Term time: Library Hours: 8.00am to 5.00pm Monday to Thursday and 8.00am to 4.00pm on Friday.
Year 10 Core Program
Career Development

All Year 10 students throughout the year will undertake an introduction to career development to assist them with subject selection for VCE and to encourage them to start thinking about life beyond Kilvington.

Students are made aware of the importance of choosing subjects that keep as many options open to them as possible. Some University courses have specific prerequisites and students need to ensure they choose their subjects with this in mind.

Some of the areas covered in these sessions include:

- All about the VCE (Study scores, the ATAR, prerequisites etc.)
- Discussions encouraging students to plan ahead, keep their options open, consider different jobs, decide what is right for them and know their interests and passions
- [www.myfuture.edu.au](http://www.myfuture.edu.au) – initial questionnaire getting students to think about what they like doing, what skills they have and what is important to them in terms of a job
- Using the Job Guide and Careers websites
- Careers Testing - Work Aspect Preference Scale or Occupational Search Inventory
- Creating a sample VCE program and then using the VTAC Guide to look at post secondary course options
- Preparation for work experience for interested students
- Writing a resume and an introductory letter
Course Description
The English curriculum is built around the three interrelated strands of Language, Literature and Literacy. Together the strands focus on developing students’ knowledge, understanding and skills in listening, reading, viewing, speaking, writing and creating.

Students engage with a variety of texts for enjoyment. They interpret, create, evaluate, discuss and perform a wide range of literary texts in which the primary purpose is aesthetic, as well as texts designed to inform and persuade. These include various types of media texts, including newspapers, film and digital texts, fiction, nonfiction, poetry, dramatic performances and multimodal texts, with themes and issues involving levels of abstraction, higher order reasoning and intertextual references.

Depth studies and inquiry questions at this year level encourage
- The development of a critical understanding of the contemporary media, and the differences between media texts
- The exploration of texts that explore themes of human experience and cultural significance
- The development of interpersonal relationships
- The examination of ethical and global dilemmas within real world and fictional settings
- The consideration of the above from a variety of perspectives
- The critical examination of informative texts (from credible/verifiable sources)
- Exploring and developing creative writing and a personal voice
- Developing effective speaking and authentic listening skills

Learning Outcomes
- Evaluate how text structures can be used in innovative ways by different authors
- Develop and justify their own interpretations of texts
- Explain different viewpoints, attitudes and perspectives through the development of cohesive and logical arguments
- Develop their own style by experimenting with language features, stylistic devices, text structures and images
- Demonstrate understanding of grammar, vary vocabulary choices for impact, and accurately use spelling and punctuation when creating and editing texts

Assessment
- Oral and multimedia presentations to small and large groups
- Written tasks including imaginative, informative and persuasive texts
- Peer and self-assessment and reflection
- End of semester examination
Geography

Course Description
There are two units of study in Year 10: Environmental Change and Management; and Geographies of Human Wellbeing

Learning Outcomes
Students will develop their geographical knowledge and understanding of the following:

Environmental Change and Management
- The human induced environmental changes that challenge sustainability
- The environmental worldviews of people and their implications for environmental management
- The Aboriginal and Torres Strait Islander Peoples’ approaches to custodial responsibility and environmental management in different regions of Australia
- The study of one of the following types of environment: land, inland water, coast, marine or urban, including a comparative analysis of examples selected from Australia and at least one other country
- The application of human-environment systems thinking to understanding the causes and likely consequences of the environmental change being investigated
- The application of geographical concepts and methods to the management of the environmental change being investigated
- The application of environmental, economic and social criteria in evaluating management responses to the change

Geographies of Human Wellbeing
- The different ways of measuring and mapping human wellbeing and development, and how these can be applied to measure differences between places
- The reasons for spatial variations between countries in selected indicators of human wellbeing
- The issues affecting the 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
- The reasons for and consequences of spatial variations in human wellbeing on a regional scale within India or another country of the Asia region, and in Australia at the local scale
- The role of international and national government and non-government organisations’ initiatives in improving human wellbeing in Australia and other countries

Assessment
- Mapping and data interpretation
- Written responses
- Oral presentations
- Multimedia presentations
- Tests
- Students will be assessed individually and/or in pairs and small groups
The Modern World and Australia

Course Description
The History 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 twentieth century became a critical period in Australia’s social, cultural, economic and political development. 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.

The content provides opportunities to develop historical understanding through key concepts, including evidence, continuity and change, cause and effect, perspectives, empathy, significance and contestability. These concepts may be investigated within a particular historical context to engender an understanding of the past and to provide a focus for historical inquiries.

Learning Outcomes
The key inquiry questions at this year level are
• How did the nature of global conflict change during the twentieth century?
• What were the consequences of World War II? How did these consequences shape the modern world?
• How was Australian society affected by other significant global events and changes in this period?
• What developments in popular culture most affected Australia after World War II?

The depth studies undertaken by students at this year level will be
• World War II
• Rights and Freedoms
• Popular Culture (1945 – present)

Historical Skills tested will include
• Use of historical terms and concepts
• Identification and selection of questions about the past
• Evaluation and reliability of primary and secondary sources
• Identification of origin and purpose of primary and secondary sources
• Synthesis of a range of sources
• Identification and analysis of the different perspectives of people from the past
• Identification and analysis of different historical interpretations
• Development of explanations and discussions using a range of sources

Assessment
• Analysis of written and visual documents
• Written tasks
• Oral and multimedia presentations
• End of semester examination(s)
General Mathematics

Course Description
The Year 10 General Mathematics course is designed to consolidate the basics of Year 10 Mathematics and provide a solid foundation for Year 11 General Mathematics. It is only appropriate for students planning to terminate their study of mathematics at the end of Year 10, or just study General Mathematics in Year 11. Year 10 General Mathematics does not cover the assumed knowledge for Mathematical Methods.

In Year 10 General Mathematics, students expand binomial expressions and find unknown values after substitution into formulas. They solve problems involving linear equations and inequalities. They make the connection between algebraic and graphical representations of relations. Students find the gradient of a line segment and sketch linear relations. They solve everyday problems involving rates and ratios. They construct histograms and back-to-back stem-and-leaf plots. They make sense of the position of the mean and median in skewed, symmetric and bi-modal displays to describe and interpret data. They compare data sets by referring to the shapes of the various data displays. They calculate quartiles and inter-quartile ranges. Students solve problems involving simple interest.

Learning Outcomes

Number and Algebra
- Apply the distributive law to the expansion of algebraic expressions
- Substitute values into formulas to determine an unknown
- Solve problems involving linear equations, including those derived from formulas
- Solve linear inequalities and graph their solutions on a number line
- Solve linear simultaneous equations, using algebraic and graphical techniques
- Find the gradient of a line segment
- Sketch linear graphs using the coordinates of two points
- Solve a range of problems involving rates and ratios, with and without digital technologies
- Solve problems involving simple interest
- Connect the compound interest formula to repeated applications of simple interest
- Solve problems involving flat rate depreciation, reducing balance depreciation and hire-purchase

Statistics and Probability
- Identify everyday questions and issues involving at least one numerical and at least one categorical variable, and collect data directly from secondary sources
- Construct back-to-back stem-and-leaf plots and histograms, and describe data using terms including ‘skewed’, ‘symmetric’ and ‘bi-modal’
- Compare data displays using mean, median and range to describe and interpret numerical data sets in terms of location (centre) and spread
- Determine quartiles and inter-quartile range
- Construct and interpret box plots and use them to compare data sets
- Compare shapes of box plots to corresponding histograms and dot plots
- Use scatter plots to investigate and comment on relationships between two numerical variables
- Investigate and describe bivariate numerical data where the independent variable is time
- Evaluate statistical reports in the media and other places by linking claims to displays, statistics and representative data

Assessment
- Skills topic tests
- Problem solving tasks
- End of semester examinations
Mainstream Mathematics

Course Description
In Year 10, students solve problems involving linear equations and inequalities. They make the connections between algebraic and graphical representations of relations. Students solve surface area and volume problems relating to composite solids. They recognise the relationships between parallel and perpendicular lines. Students apply deductive reasoning to proofs and numerical exercises involving plane shapes. Students expand binomial expressions and factorise monic quadratic expressions. They find unknown values after substitution into formulas. They perform the four operations with simple algebraic fractions. Students solve simple quadratic equations and pairs of simultaneous equations. They use triangle and angle properties to prove congruence and similarity. Students use trigonometry to calculate unknown angles in right-angled triangles. They list outcomes for multi-step chance experiments and assign probabilities for these experiments.

Learning Outcomes
By the end of Year 10 students will:

Number and Algebra
- Factorise algebraic expressions by taking out a common algebraic factor
- Simplify algebraic products and quotients using index laws
- Apply the four operations to simple algebraic fractions with numerical denominators
- Expand binomial products
- Factorise monic and non-monic quadratic expressions using a variety of strategies
- Solve problems involving linear equations, including those derived from formula
- Solve linear inequalities and graph their solutions on a number line
- Solve linear simultaneous equations, using algebraic and graphical techniques
- Solve problems involving parallel and perpendicular lines
- Explore the connection between algebraic and graphical representations of relations
- Solve simple quadratic equations using a range of strategies
- Solve simple exponential equations
- Describe, interpret and sketch parabolas
- Define rational and irrational numbers and perform operations with surds and fractional indices
- Use the definition of a logarithm to establish and apply the laws of logarithms

Measurement and Geometry
- Solve problems involving surface area and volume for prisms, cylinders and composite solids
- Formulate proofs involving congruent triangles and angle properties
- Apply logical reasoning, including the use of congruence and similarity, to proofs and numerical exercises involving plane shapes
- Solve right-angled triangle problems including those involving direction and angles of elevation and depression
- Apply Pythagoras’ theorem and trigonometry to solving three-dimensional problems

Statistics and Probability
- Describe the results of two and three-step chance experiments, both with and without replacements; assign probabilities to outcomes and determine probabilities of events; investigate the concept of independence
- Use the language of ‘if ....then, ‘given’, ‘of’, ‘knowing that’ to investigate conditional statements and identify common mistakes in interpreting such language
- Use scatter plots to investigate and comment on relationships between two numerical variables

Assessment
- Skills topic tests
- Problem solving tasks
- End of semester examinations
Physical Education and Health

Course Description
Students work in a variety of groups to develop teamwork and adapt different roles within the team.

The Physical Education domain at Kilvington Grammar School is a dynamic and sequential program which focuses on the four dimensions of 1) acquiring and developing skills, 2) selecting and applying skills, 3) tactics and compositional ideas and 4) evaluating and improving performance.

The main topics studied include:
- Striking Sports
- Coaching
- Footy Codes
- Racquet Sports
- Alternative Sports

Assessment
- Skill Acquisition in striking sports, racquet sports and footy codes
- Coaching skills
- Reflection on activities

Health
- Health at Year 10 continues to focus on raising awareness of a variety of current health issues concerning adolescents

The main topics studied include:
- Change, challenge and risk – safe partying and risk taking behaviour
- Mental Health
- Road safety
- Body systems

Assessment
- Road Safety presentation
- Body systems test
- Mental Health
Science

Course Description
The course is devised to continue to assist the student to develop skills of quantitative analysis and interpretation. Students are given a broad overview of the key learning areas in order to assist them to select Science at VCE level. Students are challenged to examine scientific concepts that play an important role in today’s society and to understand the science that underpins their lives. Important to this is the use of computer-based electronic experimentation.

The main topics studied include:
- Origin of Species
- Organising Elements (Properties and Structure)
- Genetics
- Using Chemistry (Interaction and Change)
- Motion and Forces
- Systems In Space
- Dynamic Earth

Learning Outcomes
On completion of this course the student should be able to:
- Evaluate theories concerning evolution of organisms
- Relate the properties of fundamental groupings of substances to the nature of their constituent particles
- Describe the similar characteristics of groups of elements in the periodic table
- Specify the characteristics, chemical reactions and usefulness to society of groups of similar substances
- Represent chemical change, using chemical symbols and formulas
- Explain how different forces act together to affect the motion of objects
- Describe relationships between force, mass, acceleration and velocity, using quantitative data

Assessment
- Topic tests
- Practical skills and reports
- Assignments
- End of semester examination(s)
Year 10 VCE Electives
Accounting

Unit 1 - Establishing and Operating a Service Business

Course Description
This unit focuses on the establishment of a small business and the accounting and financial management of the business. Students are introduced to the processes of gathering, recording, reporting and analysing financial data and information used by internal and external users. Recording and reporting is restricted to the cash basis.

Students examine the role of accounting in the decision-making process using single entry recording of financial data and information for the owner of a service business. Where appropriate, the accounting procedures developed in each area of study should incorporate the application of accounting principles and the qualitative characteristics of accounting information.

Area of Study
Going into business
A potential small business owner needs to make many decisions before commencing the operations of the business. Students will investigate:
- Forms of business ownership, including sole trader, partnership and companies
- Reasons for establishing a small business
- Factors that lead to the success or failure of a small business
- The role of professionals, such as accountants, business advisors and professional organisations in providing advice to achieve business success
- Internal and external sources of finance including features, advantages and disadvantages
- Resources needed to establish a small business

Recording and reporting accounting data and information
In this area of study students investigate the role of accounting in the generation of financial data and information for the owner of a service business. The focus is on the recording and reporting of financial data and information using a single entry recording system. Students are required to use both manual and ICT methods in the recording and reporting process.

This knowledge includes:
- Accounting principles and qualitative characteristics of accounting information
- Definition of the accounting elements: assets, liabilities, owner’s equity, revenue and expenses
- The accounting equation
- Classification of current and non-current items in the balance sheet
- The two-fold effect of transactions on the balance sheet
- Source and business documents for a service business: cash receipts, cheque butts, memos, bank statements, invoices
- Techniques for the recording of cash receipts and payments from source documents, including the recording of the Goods and Services Tax (GST) where the amount of the GST is identified
- Special journals: cash receipts and cash payments
- Internal control procedures, including cash control and the bank reconciliation process
- Accounting reports and cash budgeting

Learning Outcomes
- On completion of this unit the student should be able to describe the resources and explain and apply the knowledge and skills necessary to set up a small business
- On completion of this unit the student should be able to identify, record, report and explain the financial data and information for the owner of a service business, using a combination of manual and ICT methods

Assessment
- Tests
Accounting

Unit 2 - Accounting for a Trading Business

Course Description
This unit focuses on accounting for a single activity sole trader. Using the accrual approach, students use a single entry recording system for the recording and reporting of cash and credit transactions stock. They use financial and non-financial information to evaluate the performance of a business. Using these evaluations, students suggest strategies to the owner on how to improve the performance of the business.

Where appropriate, the accounting procedures developed in each area of study should incorporate the application of accounting principles and the qualitative characteristics of accounting information.

Area of Study
- Recording Financial Data and Reporting Financial Information
- ICT in Accounting
- Evaluation of Business Performance

Learning Outcomes
- Record and report financial data and information for a sole trader
- Record and report financial data and information using an accounting software package for a single activity sole trader
- Explain and evaluate the role of ICT in the accounting process
- Select and use financial and non-financial information to evaluate a business
- Suggest strategies that will improve business performance

Assessment
- Tests
- Report
Biology

Unit 1 - How do Living Things Stay Alive?

Course Description
Biology is the study of life processes, ranging from the tiniest cells to vast ecosystems. This exciting VCE subject is now extended to year 10 students through this elective. Students must choose this elective in both semesters.

In Unit 1 students are introduced to some of the challenges to an organism in sustaining life. Students examine the cell as the structural and functional unit of life, from the single celled to the multicellular organism, and the requirements for sustaining cellular processes in terms of inputs and outputs. They analyse types of adaptations that enhance the organism’s survival in a particular environment and consider the role homeostatic mechanisms play in maintaining the internal environment. Students investigate how a diverse group of organisms form a living interconnected community that is adapted to, and utilises, the abiotic resources of its habitat.

Areas of Study
How do organisms function?
Students will investigate and explain how cellular structures and systems function to sustain life. Although the internal structure of a cell varies, all cells require a relatively stable internal environment for optimal functioning. Whether life forms are unicellular or multicellular, or heterotrophic or autotrophic, whether they live in a deep ocean trench, a tropical rain forest, an arid desert or on the highest mountain peak, all individual organisms are faced with the challenge of obtaining nutrients and water, exchanging gases, sourcing energy and having a means of removal of waste products. In particular, they will look at:
- Cell size, structure and function
- The structure and function of the cell membrane
- Energy transformations in respiration and photosynthesis
- Organ systems in the human body

How do living systems sustain life?
In this area of study students examine the structural, physiological and behavioural adaptations of a range of organisms that enable them to survive in a particular habitat and to maintain a viable population size over time. Students consider the distinction between the external and internal environment of an organism and examine how homeostatic mechanisms maintain the internal environment within a narrow range of values for factors including temperature, blood glucose and water balance. They explore the importance and implications of organising and maintaining biodiversity and examine the nature of an ecosystem in terms of the network of relationships within a community of diverse organisms. In particular, they will look at:
- Survival through adaptations and regulation
- Organising biodiversity
- Relationships between organisms within an ecosystem

Practical Investigation
The investigation requires the student to develop a question, plan a course of action to answer the question, undertake an investigation to collect the appropriate primary qualitative and/or quantitative data, organise and interpret the data and reach a conclusion in response to the question.

Unit Outcomes
On completion of this unit students should be able to:
- Investigate and explain how cellular functions and systems function to sustain life
- Explain how various adaptations enhance the survival of an individual organism, investigate the relationships between organisms that form a living community and their habitat, and analyse the impacts of factors that affect population growth
- Complete an extended practical investigation
Course Description
Following on from Unit 1, Unit 2 focuses on cell reproduction and the transmission of biological information from generation to generation. Students learn that all cells are derived from pre-existing cells through the cell cycle. They examine the process of DNA replication and compare cell division in both prokaryotic and eukaryotic organisms. Students explore the mechanisms of asexual and sexual reproductive strategies, and consider the advantages and disadvantages of these two types of reproduction. The role of stem cells in the differentiation, growth, repair and replacement of cells in humans is examined, and their potential use in medical therapies is considered.

Areas of Study

How does reproduction maintain the continuity of life?
In this area of study students consider the need for the cells of multicellular organisms to multiply for growth, repair and replacement. They examine the main events of the cell cycle in prokaryotic and eukaryotic cells. Students become familiar with the key events in the phases of the cell cycle, and focus on the importance of the processes involved in a cell's preparation for cell division. Students investigate and use visualisations and modelling to describe the characteristics of each of the phases in mitosis. Cytokinesis is explained for both plant and animal cells. Students describe the production of gametes in sexual reproduction through the key events in meiosis and explain the differences between asexual and sexual reproduction in terms of the genetic makeup of daughter cells. Students consider the role and nature of stem cells, their differentiation and the consequences for human prenatal development and their potential use to treat injury and disease. In particular, students will focus on:

- The cell cycle
- Asexual and sexual reproduction
- Cell growth and cell differentiation, including the use of stem cells

How is inheritance explained?
In this area of study students build on their understanding of the nature of genes and the use of genetic language to read and interpret patterns of inheritance and predict outcomes of genetic crosses. Students apply their genetic knowledge to consider the social and ethical implications of genetic applications in society. In particular, they will look at:

- Genomes, genes and alleles
- Chromosomes
- Genotypes and phenotypes
- Pedigree charts, genetic cross outcomes and genetic decision-making

Investigation of an issue
In this area of study students apply and extend their knowledge and skills developed in Areas of Study 1 and/or 2 to investigate an issue involving reproduction and/or inheritance. They communicate the findings of their investigation and explain the biological concepts, identify different opinions, outline the legal, social and ethical implications for the individual and/or species and justify their conclusions. Material for the investigation can be gathered from laboratory work, computer simulations and modelling, literature searches, global databases and interviews with experts.
Biology

Unit 2 - How is Continuity of Life Maintained?

Unit Outcomes
On completion of this unit students should be able to:

• Compare the advantages and disadvantages of asexual and sexual reproduction, explain how changes within the cell cycle may have an impact on cellular or tissue system function and identify the role of stem cells in cell growth and cell differentiation and in medical therapies.

• Apply an understanding of genetics to describe patterns of inheritance, analyse pedigree charts, predict outcomes of genetic crosses and identify the implications of the uses of genetic screening and decision making related to inheritance.

• Investigate and communicate a substantiated response to a question related to an issue in genetics and/or reproductive science.
Unit 1 - The Health and Development of Australia’s Youth

Unit Description
This unit focuses on the health and development of Australia’s youth as well as the many factors that influence their health and development. Students investigate one health issue in detail and analyse personal, community and government strategies or programs that affect youth health and development.

Areas of Study
Understanding youth health and development:
• Definitions of physical, social, emotional and intellectual development
• Characteristics of, and interrelationships between, physical, social, emotional and intellectual development during the lifespan stage of youth
• Definitions of health and the limitations of these definitions
• Characteristics of, and interrelationships between, physical, social and mental dimensions of health
• Measurements of health status
• The health status of Australia’s youth
• Biological determinants of health and development of Australia’s youth
• The interrelationships between health and development during the lifespan stage of youth

Youth issues:
• The function of major nutrients for the development of hard tissue, soft tissue, blood tissue and energy
• The consequence of nutritional imbalance in a youth’s diet on short and long-term health and development
• Food selection models as tools to promote healthy eating during youth
• Determinants of the health and development of Australia’s youth, including behavioural, physical environment and social environment
• Health issues facing Australia’s youth
• The key features of one health issue for Australia’s youth, including:
  ~ Its impact on all dimensions of health and development
  ~ Its incidence, prevalence and changes over time (trends)
  ~ Determinants of health that act as risk and/or protective factors
  ~ Government, community and personal strategies or programs designed to promote health and development of youth
  ~ The range of health care services available to youth and their rights and responsibilities in accessing and using relevant services (including Medicare)

Unit Outcomes
On completion of this unit the student should be able to:

• Describe the dimensions of, and interrelationships within and between youth health and development, and analyse the health status of Australia’s youth using appropriate measurements
• Describe the factors that have an impact on the health and development of Australia’s youth
• Outline health issues relevant to Australia’s youth, and in relation to a specific health issue, analyse strategies or programs that have an impact on youth health and development

Assessment
• Written tests
• Written reports
• Case study analysis tasks
• End-of-unit examination
Health and Human Development

Unit 2 - Individual Human Development and Health Issues

Unit Description
This unit focuses on the health and development for the lifespan stages of prenatal, childhood and adulthood. In this unit students identify issues that affect the health and development of Australia’s mothers and babies, children and adults. Students investigate health issues in detail and analyse personal, community and government strategies and programs relevant to these stages of the lifespan.

Areas of Study
Prenatal health and individual development
- The process of fertilisation
- Physical development from conception to birth
- The health status of Australia’s pregnant women and unborn babies
- Determinants that have an impact on health and development during the prenatal stage of the lifespan, including biological, behavioural, physical environment and social environment
- Determinants that act as risk and/or protective factors in relation to one health issue such as spina bifida, low birth weight, foetal alcohol syndrome or gestational diabetes
- Government, community and personal strategies and programs designed to promote health and development of pregnant women and unborn children

Child health and individual development
- Physical, social, emotional and intellectual development from birth to late childhood
- The principles of individual human development
- The health status of Australia’s children
- Determinants of the health and development of Australia’s children, including biological, behavioural, physical environment and social environment
- Determinants that act as risk and/or protective factors in relation to one health issue such as asthma, falls and injuries, food allergies, juvenile arthritis or type 1 diabetes
- Government, community and personal strategies and programs designed to promote the health and development of children
Health and Human Development

Unit 2 - Individual Human Development and Health Issues

Adult health and individual development
- The different classifications of the stages of adulthood
- Characteristics of physical development during adulthood
- The social, emotional and intellectual development associated with the stages of adulthood and ageing
- The health status of Australia’s adults
- Determinants of health and development of Australia’s adults, including biological, behavioural, physical environment and social environment
- Determinants that act as risk and/or protective factors in relation to one health issue such as cardiovascular disease, cancer, type 2 diabetes, obesity or mental illness
- Government, community and personal strategies and programs designed to promote health and individual human development of adults

Unit Outcomes
On completion of this unit the student should be able to:
- Describe and explain the factors that affect health and development during the prenatal stage of the lifespan
- Describe and explain the factors that affect the health and development of Australia’s children
- Describe and explain the factors that affect the health and development of Australia’s adults

Assessment
- Written tests
- Written reports
- Case study analysis tasks
- End-of-unit examination
Unit 1

Unit Description
In this unit students focus on how data, information and networked digital systems can be used to meet a range of users’ current and future needs. In Area of Study 1 students collect primary data when investigating an issue, practice or event and create a digital solution that graphically presents the findings of the investigation. In Area of Study 2 students examine the technical underpinnings of wireless and mobile networks, and security controls to protect stored and transmitted data, to design a network solution that meets an identified need or opportunity. They predict the impact on users if the network solution were implemented. In Area of Study 3 students acquire and apply their knowledge of information architecture and user interfaces, together with web authoring skills, when creating a website to present different viewpoints on a contemporary issue.

Students study the following software tools: software to create graphic solutions, web authoring tools and project management tools.

Areas of Study

Data and graphic solutions
In this area of study students conduct an investigation into an issue, practice or event and through the systematic collection, interpretation and manipulation of primary data they create a graphic solution, such as an infographic, that represents their findings. Graphic solutions could include charts, flowcharts, diagrams, images, hierarchies, animations, maps and timelines.

Students develop and apply a detailed understanding of data, including its types, characteristics, sources and methods of acquisition. Relevant primary data is collected and then evaluated to determine its suitability for manipulation. When acquiring this data, students consider risks associated with using data owned by other people or organisations, and apply strategies and techniques for acknowledging legal requirements and ethical responsibilities. Students apply computational thinking skills when extracting meaning from data and apply design thinking knowledge and skills to create graphic information for the purpose of informing, educating or persuading an audience.

• Networks
In this area of study students investigate how networks with wireless capability allow data and information to be exchanged locally and within the global environment. Students examine the hardware and software components and procedures required to connect and maintain a wireless network. Students apply this technical knowledge to create the design for a network with wireless capability that meets a need or opportunity, identifying its components and how data and information are transmitted. Students use a software tool to depict the components of their network and its interactions.

• Collaboration and communication
In this area of study students examine how the use of particular information systems within specified contexts can cause tensions and conflicts between different stakeholders. Students develop the ability to critically appraise how information systems are used and how individuals can be empowered to shape their use.

Working in virtual or face-to-face teams, students use web authoring software to create a website, designed for viewing on a mobile device, which presents an overview of an issue associated with one field. When designing their website students apply their knowledge of information architecture such as structuring sets of information to facilitate navigation and allowing users choices about levels of detail. They evaluate the merits of storing their website and its content in the cloud or on a private server.
Unit 2

Unit Description
In this unit students focus on data and how the application of computational, design and systems thinking skills support the creation of solutions that automate the processing of data. In Area of Study 1 students develop their computational thinking skills when using a programming or scripting language to create solutions. They engage in the design and development stages of the problem-solving methodology. In Area of Study 2 students develop a sound understanding of data and how a range of software tools can be used to extract data from large repositories and manipulate it to create visualisations that are clear, usable and attractive, and reduce the complexity of data. In Area of Study 3 students apply all stages of the problem-solving methodology to create a solution using database management software and explain how they are personally affected by their interactions with a database system.

Students study the following software tools: programming/scripting language, database software and visual thinking tools.

Areas of Study
Programming
Students focus on using a programming or scripting language that can support object-oriented programming to create working software modules. These languages provide users with greater flexibility than application software, as specific sets of instructions can be implemented to create solutions that are purpose designed.

Students develop skills in interpreting teacher-provided solution requirements and in designing working modules. They apply knowledge and skills associated with the design and development stages of the problem-solving methodology. Students also apply computational and design thinking skills when preparing design specifications and transforming them into working modules through the use of programming or scripting languages.

- Data analysis and visualisation
  Students learn to use software tools to access, select and, where appropriate, manipulate authentic data from large data repositories, and to present the key aspects of the data in an appropriate visual form. Once the data has been isolated and checked for its integrity, students create data visualisations that assist in reducing the complexity of data by using designs that illustrate patterns, connections and structure. These visualisations should minimise the effort required by readers to interpret complex data and they need to be clear, usable and relevant. Some data visualisation tools allow presentations to be dynamic and/or interactive. Appropriate visualisation forms include graphs, charts, spatial relationships, maps, histograms and network diagrams (nodes and edges).

- Data management
  Students are introduced to the structure of databases and their applicability in a range of settings. They apply systems thinking skills when considering the effects of their interactions with information systems that use databases.

Unit Outcomes
On completion of Units 1&2 the student should be able to:
- Use ICT tools and techniques, produce a solution in response to an identified need
- Create visual presentations such as multimedia presentations
- Deliver oral presentations supported by a visual presentation
- Develop an electronic learning journal, such as a blog, to record learning progress
- Complete written reports using ICT
Music Performance

Unit 1

Unit Description
This unit focuses on performance in solo and group contexts, studying approaches to performance and performing and developing skills in aural comprehension. Students present a solo and group performance, demonstrate prepared technical work and perform previously unseen music.

Areas of Study

Performance skill development
- Practice and performance of the solo technical work on the main instrument for development and maintenance of control and dexterity, range of styles and performance techniques
- Practice and performance of prepared program of solo and group work by a range of composers and/or performers with differentiation between the works
- Interpretation and, where appropriate, improvisation in the style being prepared or for the performance
- Performance techniques showing cooperation and empathy with an accompanist as appropriate to the instrument
- Presentation techniques of music performance appropriate to the style presented in the work.
- Fluent performance of unprepared material

Music craft
- Approaches used by other performance to optimise performance that can assist the development of the students work
- Selected influences on the works being prepared for the performance
- Ways of improving identified aspects of the student’s performance

Music language for performance
- Different ways scales forms, harmony, duration and texture are used individually and in combination by a range of composers, arrangers and creators of music
- Scale forms, including major harmonic and both melodic minor forms
- Diatonic intervals in a melodic context
- Chords and chord progression in major and minor keys
- Rhythms, including those in simple quadruple and triple time
- Structures of melodies in a variety of major and minor keys
- Conventions in music notation that will assist students to increase sensitivity in interpreting music

Unit Outcomes
On completion of this unit students should be able to:

- Perform a program of contrasting solo and group works, selected solo technical works and works that demonstrate unprepared performance skills
- Analyse and evaluate the selected influences on works being prepared for performance and approaches that can be used to optimize performance of those works
- Describe how instruments are used in combination using selected elements of music, and recognize, sing and write scales, intervals, chords and rhythms using conventions in music notation

Assessment
- Performance
- Analysis and Evaluation Tasks
- Presentations
- Practical Work
Music Performance

Unit 2

Unit Description
This unit continues the development of accuracy, control, flexibility and dexterity in music performance skills on an instrument as a soloist and in a group. Students interpret and perform a range of styles using a diverse range of performance techniques and complete a major composition.

Areas of Study
Performance skill development
- Practice and performance of solo technical work on the main instrument for development and maintenance of accuracy, control, flexibility and dexterity, range of styles and performing techniques
- Practice and performance of a prepared program of solo and group works by a range of composers and/or performers
- Interpretation and where appropriate improvisation of the style being prepared for performance
- Performance techniques showing cooperation and empathy with an accompanist where appropriate to the instrument
- Presentation techniques of music performance appropriate to the style represented in the work
- Background of composers and/or performers and socio-cultural and/or geographic influences relevant to performance of selected work
- Fluent performance of unprepared material
- Expressive use of solo instruments in combination, including balance of dynamics and tones, and blend of tones

Contextual issues and analysis of works
- Background of composers and/or performers and issues relevant to the performance of selected works
- Form or structure of works looking at the whole work or a major section of a work
- Characteristic patterns in selected works that are expressive or have meaning
- Characteristic ways textures are used to shape the musical statement in selected works
- Characteristics of selected works that are typical of historical music stylistic periods
- Characteristics of composer's and/or performer's individual styles presented in selected works
- Characteristics in selected works that use elements of music and combine elements of music
- Expressive use of solo instruments in combination, including balance of dynamics and tones and blend of tones
- Music examples and other graphic representation in selected works

Music language for performance
- Rhythms structures for recognition, singing and transcription
- Pitch structures for recognition, singing and transcription
- Conventions in traditional music notation on a music manuscript
- Characteristic and idiomatic use of instruments in orchestrations and arrangements
- Expressive use of solo instrument/s in combination, including balance of dynamics and tones and blend of tones

Creative organisation of sound
- Aspects of music language used in devising original work include range and characteristics of different instruments in orchestrations and arrangements
- Use of instruments in combination
- Music forms and structures
- Conventions in traditional music notation on music manuscript
Music Performance

Unit 2

Unit Outcomes
On completion of this unit students should be able to:

- Demonstrate developing performance and presentation skills in performing a program of contrasting solo and group works, selected technical work and work that demonstrates unprepared performance
- Discuss the contextual issues and describe the characteristics and style represented in the works, the structure of the works and expressive features relevant to performance of works selected for performance
- Recognise, sing and write scales, interval and chords; transcribe rhythms and melodies; use conventions in music notations and describe how instruments are used in combination
- Devise a composition or improvisation that uses music language drawn from an analysis of selected works prepared for performance

Assessment
- Performance
- Technical Work
- Composition Folio
Physical Education

Unit 1 - Bodies in Motion

Unit Description
In this unit students explore how the body systems work together to produce movement and analyse this motion using biomechanical principles. They are introduced to the aerobic and anaerobic pathways utilised to provide the muscles with the energy required for movement and the basic characteristics of each pathway. Students apply biomechanical principles to improve and refine movement. Students also study injury prevention and rehabilitation strategies.

Areas of Study

Body Systems and Human Movement
- In this area of study students examine the systems of the human body and how they translate into movement. Through practical activities they explore the major components of the musculoskeletal, cardiovascular and respiratory systems and their contributions and interactions during physical activity. Anaerobic and aerobic pathways are introduced and linked to the types of activities that utilise each of the pathways.

Biomechanical Movement Principles
- In this area of study students examine biomechanical principles underpinning physical activity and sport. Through their involvement in practical activities, students investigate and analyse movements in a variety of activities to develop an understanding of how the correct application of biomechanical principles leads to improved performance.

Injury Prevention and Rehabilitation
- In this area of study, students focus on sports injury risk management strategies used to reduce the risk of injury to the participant/athlete, and the rehabilitation practices and processes an individual/athlete may use to prepare themselves for a return to sport and physical activity. Students analyse and demonstrate a range of different strategies that may be implemented at a club, an administration, a coaching or an individual level.

Unit Outcomes
On completion of this unit the student should be able to:

- Collect and analyse information from, and participate in, a variety of practical activities to explain how the musculoskeletal, cardiovascular and respiratory systems function, and how the aerobic and anaerobic pathways interact with the systems to enable human movement
- Collect and analyse information from, and participate in, a variety of practical activities to explain how to develop and refine movement in a variety of sporting actions through the application of biomechanical principles
- Observe, demonstrate and explain strategies used to prevent sports injuries, and evaluate a range of techniques used in the rehabilitation of sports injuries

Assessment
- Tests
- Oral Presentation
- Laboratory Report
- Research Project
Physical Education

Unit 2 - Sports Coaching and Physically Active Lifestyles

Unit Description
This unit explores a range of coaching practices and their contribution to effective coaching and improved performance of an athlete. Students are introduced to physical activity and the role it plays in the health and wellbeing of the population. Through a series of practical activities, students gain an appreciation of the level of physical activity required for health benefits and investigate how participation in physical activity varies across the lifespan. They explore a range of factors that influence participation in regular physical activity, and collect data to identify perceived barriers and the ways in which these barriers can be overcome.

Areas of Study

Effective Coaching Practices
• In this area of study students focus on the roles and responsibilities of a coach as well as looking at coaching pathways and accreditation. Students apply the various coaching skills by participating in practical coaching activities.

Physically Active Lifestyles
• This area of study focuses on the range of physical activity options in the community. Health benefits of participation in regular physical activity and health consequences of physical inactivity and sedentary behaviour are explored at individual and population levels. Students explore the dimensions of the National Physical Activity Guidelines and investigate the current status of physical activity and sedentary behaviour from an Australian perspective. Students investigate factors that facilitate involvement in physical activity and consider barriers to participation for various population groups. Students create and implement a program that encourages compliance with the National Physical Activity Guidelines for a given age group.

Decision Making in Sport
• This detailed study introduces students to an understanding of games and sport, including how they are categorised. Through a series of practical activities students analyse and interpret different strategies and tactics used within game situations, and approaches to coaching that develop a player’s ability to implement an appropriate strategic decision.

Unit Outcomes
On completion of this unit the students should be able to:

• Demonstrate their knowledge of, and evaluate, the skills and behaviours of an exemplary coach, and explain the application of a range of skill learning principles used by a coach
• Collect and analyse data related to individual and population levels of participation in physical activity, and sedentary behaviour, and create and implement strategies that promote adherence to Australia’s Physical Activity and Sedentary Behaviour Guidelines
• Explain the importance of interpreting game play and selecting appropriate tactics and strategies in sports

Assessment
• Tests
• Oral Presentation
• Laboratory Report
• Research Project
Unit Description
Human development involves changes in thoughts, feelings and behaviours. In this unit students investigate the structure and functioning of the human brain and the role it plays in the overall functioning of the human nervous system. Students explore brain plasticity and the influence that brain damage may have on a person’s psychological functioning. They consider the complex nature of psychological development, including situations where psychological development may not occur as expected. Students examine the contribution that classical and contemporary studies have made to an understanding of the human brain and its functions, and to the development of different psychological models and theories used to predict and explain the development of thoughts, feelings and behaviours.

Areas of Study

How does the brain function?
In this area of study students examine how our understanding of brain structure and function has changed over time and how the brain enables us to interact with the external world around us. They analyse the roles of specific areas of the brain and the interactions between different areas of the brain that enable complex cognitive tasks to be performed. Students explore how brain plasticity and brain damage can affect a person’s functioning. The particular areas focussed on are:
- Role of the brain in mental processes and behaviour
- Brain plasticity and brain damage

What influences psychological development?
The psychological development of an individual involves complex interactions between biological, psychological and social factors. In this area of study students explore how these factors influence different aspects of a person's psychological development. They consider the interactive nature of hereditary and environmental factors and investigate specific factors that may lead to development of typical or atypical psychological development in individuals, including a person’s emotional, cognitive and social development and the development of psychological disorders. The students will explore:
- The complexity of psychological development
- Atypical psychological development

Student-directed research investigation
In this area of study students apply and extend their knowledge and skills developed in Areas of Study 1 and/or 2 to investigate a question related to brain function and/or psychological development. Students analyse the scientific evidence that underpins the research in response to a question of interest. They then communicate the findings of their research investigation and explain the psychological concepts, outline contemporary research and present conclusions based on the evidence.

Learning Outcomes
Students should be able to:
- describe how understanding of brain structure and function has changed over time, explain how different areas of the brain coordinate different functions, and explain how brain plasticity and brain damage can change psychological functioning
- identify the varying influences of nature and nurture on a person’s psychological development, and explain different factors that may lead to typical or atypical psychological development
- investigate and communicate a substantiated response to a question related to brain function and/or development, including reference to at least two contemporary psychological studies and/or research techniques
Unit 2 - How Do External Factors Influence Behaviour and Mental Processes?

Unit Description
A person’s thoughts, feelings and behaviours are influenced by a variety of biological, psychological and social factors. In this unit students investigate how perception of stimuli enables a person to interact with the world around them and how their perception of stimuli can be distorted. They evaluate the role social cognition plays in a person’s attitudes, perception of themselves and relationships with others. Students explore a variety of factors and contexts that can influence the behaviour of an individual and groups. They examine the contribution that classical and contemporary research has made to the understanding of human perception and why individuals and groups behave in specific ways.

Areas of Study
What influences a person’s perception of the world?
Human perception of internal and external stimuli is influenced by a variety of biological, psychological and social factors. In this area of study students explore two aspects of human perception – vision and taste – and analyse the relationship between sensation and perception of stimuli. They consider how biological, psychological and social factors can influence a person’s perception of visual and taste stimuli, and explore circumstances where perceptual distortions of vision and taste may occur. The particular areas studied are:
- Sensation and perception
- Distortions of perception

How are people influenced to behave in particular ways?
A person’s social cognition and behaviour influence the way they view themselves and the way they relate to others. In this area of study students explore the interplay of biological, psychological and social factors that shape the behaviour of individuals and groups. They consider how these factors can be used to explain the cause and dynamics of particular individual and group behaviours, including attitude formation, prejudice, discrimination, helping behaviour and bullying. Students examine the findings of classical and contemporary research as a way of theorising and explaining individual and group behaviour. The students will explore:
- Social cognition
- Social influences on behaviour

Student-directed practical investigation
In this area of study students design and conduct a practical investigation related to external influences on behaviour. The investigation requires the student to develop a question, plan a course of action to answer the question, undertake an investigation to collect the appropriate primary qualitative and/or quantitative data, organise and interpret the data and reach a conclusion in response to the question. The investigation relates to knowledge and skills developed in Areas of Study 1 and/or 2 and is undertaken by the student using either quantitative or qualitative methods, including experiments, surveys, questionnaires, observational studies and/or rating scales

Learning Outcomes
Students should be able to:
- Compare the sensations and perceptions of vision and taste, and analyse factors that may lead to the occurrence of perceptual distortions
- Identify factors that influence individuals to behave in specific ways, and analyse ways in which others can influence individuals to behave differently
- Design and undertake a practical investigation related to external influences on behaviour, and draw conclusions based on evidence from collected data
Year 10 Electives
Art

Elective Description
Year 10 provides a foundation for studying Studio Arts Unit 1 at the VCE level. Students refine their skills in creating and presenting two and three dimensional artworks using a range of forms, techniques and processes. They document and annotate the development of ideas and processes when making their own artworks. When responding to visual artworks from past and present at this level, students will analyse the expressive ways in which art elements, principles, techniques and processes are used. Students will develop appropriate arts language through studying key art movements and their impact on society and culture.

Learning Outcomes
On completion of this elective Year 10 students will:

- Explore and make artworks which focus on themes, issues and ideas
- Structure and present artworks appropriate to chosen styles and forms
- Analyse and interpret the content, structure and aesthetic qualities of artworks
- Analyse the characteristics and role of art in different cultural contexts

Assessment
- Folio
- Artworks
- Visual analysis
- Evaluation
**Elective Description**
Year 10 Drama elective offers an intensive course to enhance performance and text analysis skills. Students are given the opportunity to explore character through the exploration of naturalism and non-naturalism. Students will use a range of play-making techniques and creative process including researching, improvising, writing, analysing and interpreting.

Practical performance tasks and self-reflection will form the basis for assessment.

**Learning Outcomes**
On completion of this elective students should be able to:

- Consolidate a solid understanding of dramatic elements and theatre conventions
- Create ensemble performances using an array of stimulus
- Reflect, analyse and evaluate performance
- Develop stagecraft elements in the production of a play or monologue

**Assessment**

- Group performance including the development process
- Evaluation of group performance
- Monologue performance
- Stagecraft element project
- Evaluation of monologue performance and development process
- Improvisational skills
Ethics in Leadership

Elective Description
This semester long elective unit at Year 10 is ideal for students interested in applying their leadership knowledge and skills to various real life contexts. The focus of this course is on ethics and leadership. Rather than viewing leadership as a position, an emphasis will be placed on considering leadership as a developmental process with an ethical perspective. This unit aims to combine subject specific knowledge and content, with the development of a range of identified capacities such as critical thinking, presentations skills, decision making and conflict resolution.

Areas of Study
Ethical Frameworks
Students will be introduced to a number of ethical frameworks and will critically examine different understandings and approaches to ethical theory and practice. Various case studies will be introduced to allow students to grapple with the challenges of ethical conduct.

Power and Legitimacy
Leadership is often viewed hierarchically and can involve a dynamic characterised by power. This module will explore the relationship between power and legitimacy using historical and contemporary literature.

Chaos, Conflict and Courage
The focus of this module will be on change and innovation along with the commonly associated side effects of these processes. Students will look at how disorder, tension and uncertainty can influence leadership and the role of moral courage in ethical leadership.

Learning Outcomes
On completion of this elective students should be able to:

- Demonstrate an understanding of contemporary leadership theory and practice as they apply to different contexts
- Practice relevant leadership capacities by applying them to various scenarios and cases. Understanding what influences group and team dynamics. Know strategies that will maximise effectiveness within leadership
- Know how to facilitate change and innovation and deal with some of the challenges which result from these processes

Assessment
- Written persuasive piece
- Oral presentation
- Group project- Social justice
Elective Description
The ability to design and produce appealing food products to meet a range of needs and desires is the major focus of the Year 10 Food Technology elective “Eat Well, Live Well”. This elective addresses many components of menu planning through theoretical and practical activities. Students will enhance their knowledge of nutrition and increase their understanding of the relationship between food choices and diet-related illness. They will develop skills in designing, preparing and evaluating food for a range of occasions and dietary requirements. Students will also gain an understanding of the physical and sensory properties of food and how they influence food preparation and food choice. The final section of the elective looks at the influence of technology on food products and food choices.

This elective provides students with useful information and skills for the future as well as providing an excellent introduction for those wishing to study either Food and Technology or Health and Human Development in VCE.

Learning Outcomes
On completion of this elective students should be able to:
- Understand factors affecting food choices
- Utilise menu planning for a range of occasions and requirements, e.g. daily meals, formal meals, meals for special dietary requirements
- Physical and sensory properties of foods and their influence on food preparation and food choice
- Understand food presentation and food styling skills
- Understand the influence of technology on the food industry, e.g. development of new products, genetic modification, food packaging

Students should also have further developed their skills in:
- Producing and evaluating a range of food products
- Applying safe and hygienic work practices during food preparation

Assessment
- Written and practical tests
- Written reports
- Production reviews
- Folio
Elective Description
At this level, the context involves language and content drawn from the world of teenage experience and topics from other key learning areas.

Tasks are not totally familiar and some general knowledge is now assumed. There is an emphasis on tasks which involve information gaps, as well as specific reading and writing skills, such as the ability to skim a reading text or use linking devices to develop cohesion in the construction of a written text. Writing tasks include questionnaires, dramatic episodes and diary entries. Writing tasks also involve the presentation of information for different audiences, and different text types. Students are able to identify changes of time or relationship through an increased number of tenses.

Texts vary in length and structure, the amount of unfamiliar vocabulary, the linguistic density, the clarity of structure, and the organisation and familiarity of content. Students read and listen to a range of texts, both factual and fictional, and are able to word process and reformat a limited range of texts from one text type to another.

Learning Outcomes
Listening
Demonstrate comprehension of factual and non-factual information drawn from topics of interest and other areas of the curriculum by summarising, explaining, identifying pros and cons, and transforming the information into visual or tabulated form

Speaking
Provide factual information to sustain a conversation in a range of situations which reflect best communicative practice

Reading
Describe and comment on themes, characters and events in fictional texts, and identify and comment on information and ideas in factual texts

Writing
Write letters, emails, scripts, reports, film review, brochure, personal letters and stories that involve making choices, explaining, summarising, classifying and drawing conclusions

Assessment
- Unit tests which assess macro-skill of listening, reading, writing and speaking
- Vocabulary tests
- Cultural research report on activities outside school life in the Target language
- Role-plays, filming
- Film Review
- Grammar Assessment
- End of semester examinations
Japanese

Elective Description
At this level students understand and use Japanese within the world of teenage experience and interests (e.g. pen pals, the weekend, entertainment, sports, work). They use Japanese for a variety of purposes in spoken and written texts to describe and elaborate, to express points of view and clarify reasons. They can identify gist and details from a range of oral and written texts, and are able to convey the information and ideas obtained in a different text type from the original source.

Students understand that language learning involves problem solving and they learn more complex aspects of grammar. They can read 100 kanji and are able to write 400 characters in length using hiragana, katakana and kanji. They learn about language change, and some of the reasons why this happens.

Students learn about modern Japan as well as more traditional aspects of Japanese culture. Historical places are researched and there are a few cultural activities. Their study of Japanese is enhanced by the use of technology, such as accessing websites and using a Japanese word processor.

Learning Outcomes
On completion of this course the student should be able to:

Listening
Demonstrate comprehension of factual and non-factual information including gist, opinions, and ideas, by using information, for example, to provide concrete reasons for actions or decisions

Speaking
Present and exchange information about experiences and topics of interest, clarify ideas, and give explanations, reasons and opinions

Reading
Read at least 100 kanji and demonstrate comprehension of text by identifying and explaining facts and ideas, and conveying information in a different text type

Writing
Use hiragana, katakana and at least 80 kanji to write texts of approximately 400 characters to convey information, ideas, opinions, reasons and explanations using linked sentences and a range of text types

Assessment
- Vocabulary & kanji quizzes and unit tests
- Oral tests
- Cultural research assignment and presentation
- End of semester exams
**Media**

**Elective Description**
This elective is intended to provide the practical skills and theoretical grounding for VCE Media. Ideal for those considering career pathways in Communication, Design, TV, Film, Journalism, Photography, Advertising, IT, PR or Marketing industries.

**Area of Study**
In this subject, you will learn about the Media Industry, what the Media is, and about different forms of Media that exist. We will look at a range of examples of existing Media and learn about the ideas they represent and the audiences those ideas are aimed at. How media is produced for a specific target audience, and the processes of representation, selection and omission are explored.

A range of practical tasks including print, photography and film making will be explored. You will create your own media products including advertising posters and short films, using the Adobe Creative Suite of software.

Theories such as film analysis, production elements, media processes and media representation will be discussed.

**Assessment**
Students have practical and theoretical assessments tasks to complete during this course as well as written homework.

The tasks may include:
- Practical projects, the production of a range of outcomes including short films, stop motion and/or animations
- Print layout projects using photography and editing and image manipulation software
- Written and annotation/ tests
Making Choices - An Introduction to Economics and the Australian Economy

Elective Description
Making Choices is an elective which aims to improve the economic knowledge and financial literacy of students to assist them in making informed and wise choices. As consumers, we are constantly faced with choices and the desire to use scarce resources to satisfy our needs and wants. This subject analyses how markets work and includes a class simulation activity. It also considers the way values affect economic decision making of consumers, producers and governments. Students will also examine the role and significance of savings and investment and develop skills to successfully plan and manage personal finances.

Learning Outcomes
Knowledge and understanding gained will include:

- The basic economic problem
- How markets work and what might happen when a surplus or shortage is evident
- The financial institutions that operate in the Australian economy
- The importance of being an informed consumer
- Planning and managing personal finances through learning budgeting and developing strategies to spend money wisely
- The investment options available such as property, shares, superannuation and term deposits
- The concept of "risk" versus "return"
- Business structures

Leads to VCE Economics and Business subjects (Business Management and Accounting) in general.

Assessment
- Tests
- The Sharemarket Game
- Class participation
Introduction to Physics

Introduction to Physics is a one semester elective that allows students to explore scientific practical techniques. Students are expected to develop skills and an understanding of the analytical methods used in mechanical physics, electrical engineering, and electro-chemistry. Students will undertake various construction and problem solving activities to understand the fundamentals involved in various concepts in physics, engineering and chemistry. The course, while very practical, will also engage students in investigative projects to research the theory behind some of the phenomenon studied in this elective.

**Elective Description**

- The physics component of the course involves studying various aspects of mechanical physics including straight line motion and projectile motion. The physics component will also include the study of fundamental aspects of electricity and electrical circuits.

- The engineering component of the course involves the study of various properties of materials and their uses in structures like bridges. Properties of materials such as elasticity, strength and Young’s modulus would be studied. Students would learn how these properties determine the use of materials in structures like bridges and aircraft wings.

- The chemistry component involves the study of electrochemical cells. The study of redox reactions and their application to simple cells to provide energy will be the focus. This will involve the practical component of galvanic cells and simple batteries.

**Learning Outcomes**

- study fundamental quantities involved in describing straight line motion
- learn to measure or calculate the magnitude of various quantities in straight line motion
- study the aspects of motion of an object under the influence of gravity
- study the application of projectile motion in various sports including AFL and cricket
- learn about the fundamentals of electricity in terms of moving charges
- learn to create basic electrical circuits and measure quantities such as current and voltage
- learn about qualities of materials such as strength, elasticity and Young’s modulus
- relate the various properties of materials to their uses in various situations
- learn the basic electron transfers involved in oxidation and reduction half cells
- determine how half cells are put together to form galvanic cells using an electrochemical series
- relate the theory of galvanic cells to energy transfer and hence study simple batteries

**Assessment**

- Practical tasks x 6
- Video worksheets
- Research assignments x 2
- Invention
- End of semester test
**Protest**

**Elective Description**
“Silence becomes cowardice when occasion demands speaking out the whole truth and acting accordingly.” — Mahatma Gandhi

“The time has come to say fair’s fair” Midnight Oil

Protest posters, marches, blogs, speeches, tweets, songs, stories, films, YouTube clips…all reflect the world as it is and as it could be. How do all these images, words and music manipulate our emotions?

**Learning Outcomes**
Explore a diverse range of texts from the past and present to examine how acts of protest have shaped the world in which we live:
- We will investigate the protest songs of artists who are civil rights activists, anti-war or who make us aware of social issues such as land rights
- We will consider how individuals, communities and acts of protest intersect and are now reported by ‘citizens as journalists’ – everyday people using their phones to express their opinions globally or to report the actions of others in crises, as seen, for instance, in the 2012 ‘Arab Spring’ and the ensuing revolution in Egypt

We will consider how protest is an important aspect in the shaping of identity and in the development of empathy for the plight of others

**Assessment**
- Creating a wide range of print, oral and digital texts
- Role plays
- Debates
Short and Sweet

Elective Description
Explore the world of short stories and films: read, write and create them! You will be engaged in different activities which aim to develop your understanding of the major features of short stories and films, your language skills, cultural awareness, critical thinking skills and creativity.

Learning Outcomes
- Students will be encouraged to critically read and view texts
- Students will read short stories, plays, novels, poetry and view short films from a range of genres and periods

Assessment
- Students write their own story (play or poetry) or develop a given story outline
Visual Communication Design

Elective Description
Year 10 provides a foundation for studying Visual Communication Design Unit 1 at the VCE level. This elective offers students the opportunity to explore a range of digital and manual media in the creation of design solutions. The unit will cover technical drawing specifications and the design process where students will develop skills in freehand and instrumental drawing and applying and analysing the design elements and principles. Students will research, annotate, develop their own ideas and produce final designs in response to a set design brief. With each task, students are expected to follow and document each step of the design process in their visual diary.

The research component of this course is based on analysing visual communications from past and present designers.

Learning Outcomes
On completion of this elective Year 10 students will:

- Explore and make solutions in response to specific design problems
- Structure and layout presentations appropriate to chosen styles
- Analyse and interpret the purpose, audience and context of visual communications
- Analyse the characteristics and role of design in different cultural contexts

Assessment
- Design theory
- Design process – visual diary
- Final designs
- Evaluation