YEAR 11 & 12

SUBJECT INFORMATION

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Who is the VCE-VM for?

VCE: COURSE OVERVIEW

VICTORIAN PATHWAYS CERTIFICATE (VPC)

The Victorian Pathways Certificate is designed for a limited cohort of students in Years 11 and 12 who are not ready to undertake the VCE or the VCE Vocational Major for various reasons.

Who is the VPC for?

- Students in Year 11 and 12 who cannot participate in the VCE (including the Vocational Major).
- Students who have missed significant periods of learning.

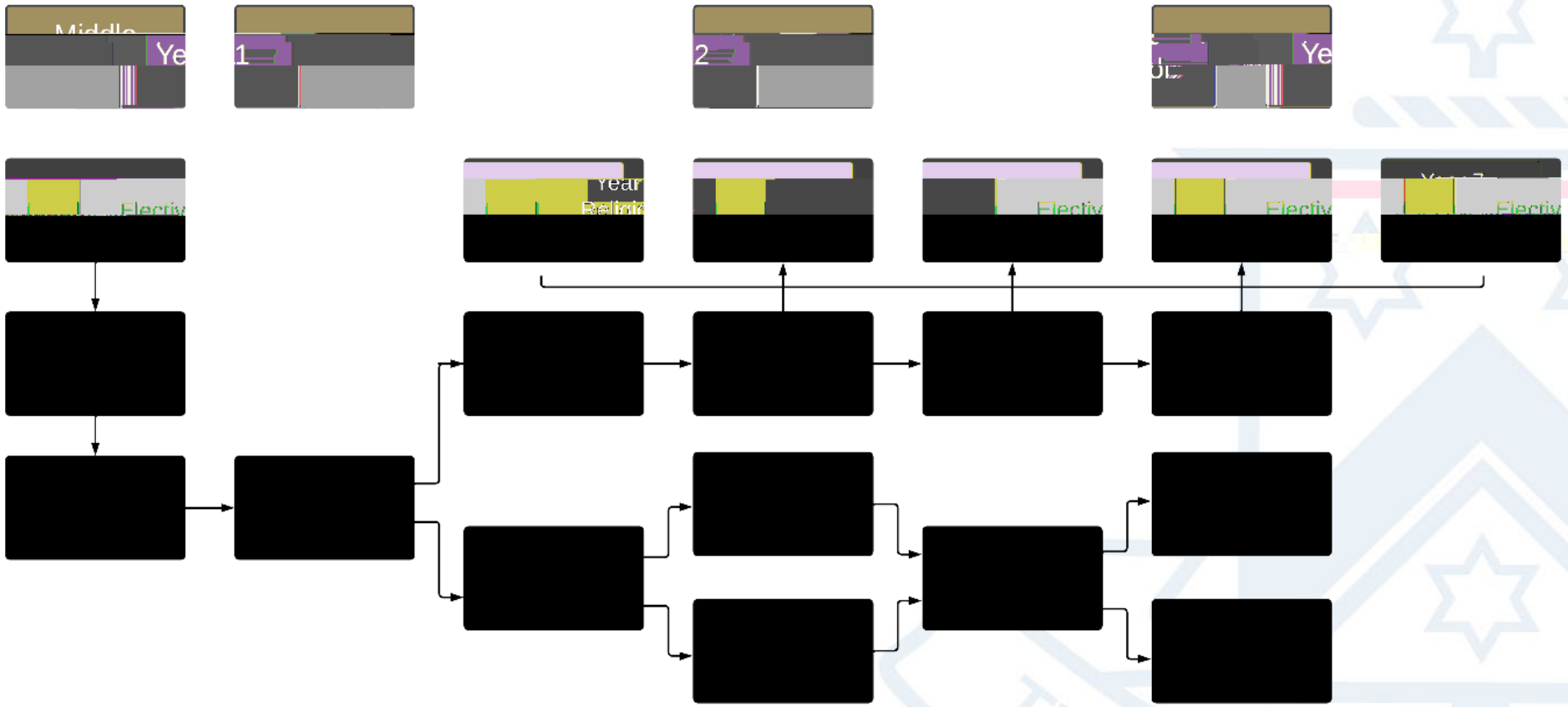
IMPORTANT CONTACTS

To learn more about the Year 11 curriculum and learning pathways offered at Thomas Carr College, please refer to the below contacts.

QUESTION	CONTACT PERSON

RELIGIOUS EDUCATION

Religious Education Pathways



Religious Education (TCCRE): Year 12

Course Overview

The senior religious education course offers students a unique opportunity to explore how religion intersects with various aspects of the contemporary world. It is designed to provide students with an opportunity to delve deeper into the various subjects that they find intriguing while examining the perspectives and teachings of the Catholic Church. This course offers a range of elective topics that allow students to explore the connections between their academic interests and the rich tradition of Catholic faith. By investigating the connections between religion and specific areas of human life, this course encourages critical thinking-5.9 (o)-2 (.4 .t)2.7 (0

Future Pathways

This study prepares students for employment and/or further study at the tertiary level or in fields such as anthropology, theology, philosophy, sociology, journalism, politics, and international relations.

Texts and Traditions Units 1 & 2

Course Overview

Studying VCE Texts and Traditions helps students understand the relationship between religious traditions and their sacred texts. By examining these texts, students gain a deeper understanding of the foundation and basis of these traditions. Sacred texts act as a reference for the tradition's organisation, rituals, values, and beliefs, both historically and in today's world. Students explore the texts in their original contexts and investigate their historical impact. They also learn different methods of interpretation and analyse the texts as literature. This study promotes independent and critical thinking, essential for various fields that involve analysing and interpreting written texts.

Learning Focus

Unit 1: Texts in Traditions

In this unit, students focus on the importance of sacred texts in a religious tradition. This unit introduces basic

Texts And Traditions Units 3 & 4

Course Overview

The study of VCE Texts and Traditions enables students to comprehend the connection between religious traditions and their holy writings. Through the examination of these texts, students acquire a more profound insight into the fundamental principles and origins of these traditions. Sacred writings serve as a guide for the organisation, rituals, values, and beliefs of a given tradition, both in the past and in contemporary society. Students delve into the texts within their original contexts and explore their historical influence. They also learn diverse approaches to interpretation and analyse the texts as pieces of literature. This course fosters independent and critical thinking, which is crucial in various fields that involve the analysis and interpretation of written works.

Learning Focus

Unit 3: Texts and the Early Tradition

The texts of a certain religion are really important because they tell us about specific events, stories, laws, c4/i3.7 (ag9 ()13p

Future Pathways

This study prepares students for employment and/or further study at the tertiary level or in fields such as education, theology, law, medicine, human geography, and business.

Learning Focus

Literature Units 1 & 2

Course Overview

The study of VCE Literature fosters students' enjoyment and appreciation of the artistic and aesthetic merits of stories and storytelling and enables students to participate more fully in the cultural conversations that take place around them. By reading and exploring a diverse range of established and emerging literary works, students become increasingly empowered to discuss texts. As both readers and writers, students extend their creativity and high order thinking to express and develop their critical and c 0 -1.2 TD 0.0011 Tc 0.0078 Tw (a)8.1 (nd)-2.1 (r)-1.2 (e)3.7 (a)8.1 (t)3.7 (i)3.7 (v)-1.2 (e)3.7 (t)3.7 (h)-1.2 (i)3.7 (n)-1.2 (k)-1.2 (i)3.7 (n)-1.2 (g)-1.2 (a)8.1 (b)-1.2 (o)8.1 (u)-1.2 (t)3.7 (t)3.7 (e)3.7 (x)-1.2 (t)3.7 (s)-1.2 (.)-2.1 (T)6.9 (h)-1.2 (e)3.7 (y)-1.2 (a)8.1 (l)3.7 (s)-1.2 (o)8.1 (

MATHEMATICS

Mathematics Pathways

Foundation Mathematics Units 3 & 4

Course Overview

Foundation Mathematics Units 3 and 4 provide for the continuing mathematical development of students with respect to problems encountered in practical contexts in everyday life at home, in the community, at work and in study.

Learning Focus

The areas of study for Units 3 and 4 are 'Algebra, number and structure', 'Data analysis, probability, and statistics', 'Discrete mathematics' and 'Space and measurement'. All four areas of study are to be completed over the two units, and content equivalent to two areas of study covered in each unit. The selected content for each unit uses contexts present in students' other studies, work and personal or other familiar situations,

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General Mathematics Units 3 & 4

Course Overview

Foundation Mathematics Units 3 and 4 provide for the continuing mathematical development of students with respect to problems encountered in practical contexts in everyday life at home, in the community, at work and in study.

Learning Focus

The areas of study for Units 3 and 4 are 'Algebra, number and structure', 'Data analysis, probability and statistics', 'Discrete mathematics' and 'Space and measurement'. All four areas of study are to be completed over the two units, and content equivalent to two areas of study covered in each unit. The selected content for each unit uses contexts present in students' other studies, work and personal or other familiar situations, and in national and international contexts, events and developments.

Students are expected to be able to apply techniques, routines and processes involving rational and real arithmetic, sets, lists and tables, contemporary data displays, diagrams, plans, geometric objects and constructions, algebra, algorithms, measures, equations and graphs, with and without the use of technology.

The use of numerical, graphical, geometric, symbolic and statistical functionality of technology for teaching and learning mathematics, for working mathematically, and in related assessment, is to be incorporated throughout each unit as applicable.

Assessment

Students will be able to:

Mathematical Methods Units 1 & 2

Course Overview

Mathematical Methods Units 1 and 2 provide an introductory study of simple elementary functions of a single

Mathematical Methods Units 3 & 4

Course Overview

The study of Mathematical Methods (CAS) Units 3 and 4, can be taken alone or in conjunction with either Specialist Mathematics Units 3 and 4 or General Mathematics Units 3 and 4. Mathematical Methods (CAS) Units 3 and 4 provides for the study of simple elementary functions, transformations and combinations of these functions, algebra, calculus, probability and statistics, and their applications in a variety of practical and theoretical contexts.

Learning Focus

In Units 3 and 4 there is a clear progression of skills and knowledge in each area of study. Students are expected to be able to apply techniques, routines and processes involving rational and real arithmetic, sets, lists and tables, diagrams and geometric constructions, algebraic manipulation, equations, graphs, differentiation, anti-differentiation, integration and inference across a range of different functions, with and without the use of technology.

Areas of Study

- Functions and graphs
- Algebra
- Calculus
- Probability and Statistics

Assessment

Students define and explain key concepts and apply a range of related mathematical routines and procedures. They apply mathematical processes to non-routine contexts, and they are able to use numerical, graphical-b-0nTd( )Tj-T33.072 -1.217 T(s)5.367 (u)-5.46-2.1 (6.53 0 l p)0.6 (41 (a)-256.386 0 1 Tf0.001 Tc 0ry84)0.7 s6i4

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HEALTH AND PHYSICAL EDUCATION

Health and Physical Education Pathways

Outdoor and Environmental Studies Units 3 & 4 : Accelerated Study Year 11

Course Overview

The accelerated study of VCE Outdoor and Environmental Studies provides students with the skills and knowledge to safely participate in activities in outdoor environments and to respect and value diverse environments. The blend of direct practical experience of outdoor environments with theory-based study enabbbioendudersnt-vudiof aab aionsni p

Physical Education Units 1 & 2

Course Overview

The study of VCE Physical Education enables students to integrate a contemporary understanding of the theoretical underpinnings of performance and participation in physical activity with practical application. Through engagement in physical activities, VCE Physical Education enables students to develop the knowledge and skills required to critically evaluate influences that affect their own and others' performance and participation in physical activity.

This study equips students with the appropriate knowledge and skills to plan, develop and maintain their involvement in physical activity, sport and exercise across their lifespan and to understand the physical, social, emotional and cognitive health benefits associated with being active.

Learning Focus

Unit 1: The human body in motion

- How does the musculoskeletal system work to produce movement?
- How does the cardiorespiratory system function at rest and during physical activity?

Unit 2: Physical activity, sport and society

- What are the relationships between physical activity, sport, health and society?
- What are the contemporary issues associated with physical activity and sport?

Assessment

The student's performance on each outcome is assessed using the following:

- Structured questions
- Case study analysis
- Written reports
- Reflective folio
- Oral presentations

Contribution to Overall Semester Score

- Assessment Tasks: 60%
- Semester Examinations: 40%.

Future Pathways

Students may continue to study Physical Education Units 3 and 4.

Physical Education Units 3 & 4

Learning Focus

HUMAN ITIES

Humanities Pathways

Accounting Units 1 & 2

Course Overview

Accounting Units 3 & 4

Course Overview

In Unit 3 & 4 Accounting, students study the accounting concepts and practices used by businesses to measure and report financial performance. This course covers a range of topics, including accounting for partnerships, companies and non-profit organisations, as well as the preparation of financial statements and the analysis of financial performance. Students will learn how to apply accounting principles to real-world scenarios, develop their analytical and problem-solving skills, and gain a deep understanding of the role of accounting in business decision-making.

Learning Focus

Unit 3: Financial accounting for a trading business

Business Management Units 1 & 2

Course Overview

In Business Management students explore factors affecting business ideas and the internal and external environments within which businesses operate, as well as the effect these have on business planning. Students consider the importance of the business sector to the national economy and on social wellbeing.

Students also explore the establishment phase of the business and the legal requirements involved in doing so. Students investigate the essential features of effective marketing and consider the best way to meet the needs of the business in terms of staffing and financial record keeping.

Learning Focus

Unit 1: Planning a business

Students will investigate the concept of entrepreneurship and how businesses create ideas and foster ideas to emerge. Students consider the decisions that need to be made before a business is established by exploring factors in the internal and external environments.

Business Management Units 3 & 4

Course Overview

In Business Management students examine the ways in which people at various levels within a business organisation manage resources to achieve the objectives of the organisation. This includes the management of people and the operations system.

Students develop an understanding of the complexity, challenges and rewards that come from business change and how a business can best prepare themselves for the implementation and sustainability of the change.

Learning Focus

Unit 3: Managing a Business

Students identify the importance of managing people

Economics Units 1 & 2

Course Overview

In Economics students explore their role in the economy, how they interact with businesses, and the role of the government in the Australian economy. Students examine economic models where consumers and businesses engage and investigate contemporary examples and case studies to enhance their understanding of economic concepts.

Students consider the link between economic activity and economic growth and investigate how these factors raise living standards. Students analyse issues from local, national and international perspectives to explore a range of economic issues.

Learning Focus

Unit 1: Economic decision-making

In this unit students explore their role in the economy, how they interact with businesses, and the role of the government in the economy. Students are introduced to and explore fundamental economic concepts. They examine basic economic models where consumers and businesses engage in mutually beneficial transactions and investigate the motivations behind both consumer and business behaviour.

Key topics include:

- Thinking like an economist
- Decision-making in markets
- Behavioural economics

Unit 2: Economic issues and living standards

In this unit students consider the link between economic activity and economic growth and investigate the importance of economic growth in raising living standards. They evaluate the benefits and costs of continued economic growth and consider the extent to which our current measurements of living standards are adequate. Students undertake an applied economic analysis of two contemporary economics issues from a local, national and international perspective. They use the tools of data collection, analysis, synthesis and evaluation to examine the issue through an economics lens.

Key topics include:

- Economic activity
- Applied economic analysis of local, national and international economic issues

Assessment

Students will complete:

- Case Studies and Structured Questions

Contribution to Overall Semester Score

- Assessment Tasks: 60%
- Semester Examinations: 40%

Future Pathways

- Units 3 and 4 Economics

Geography Units 1 & 2

Course Overview

In Geography students examine natural and human events, how and why they change and occur. Students develop a better understanding of their own place and its spaces and those in other parts of the world. Students interpret information presented in a variety of formats including maps, graphs, diagrams and images. Students will examine the process of hazard events, consider their causes and impacts and look at human responses to these hazardous events. Students also investigate the characteristics of tourism,

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Geography Units 3 & 4

Course Overview

In Geography students focus on two investigations of geographical change: change to land cover and change to land use. Students analyse the processes that result in changes to land cover and evaluate the

History: Modern History Units 1 & 2

Course Overview

In Modern History, students investigate the nature of social, political, economic, and cultural change in the later part of the 19th Century and the first half of the 20th Century. Modern History provides students with an opportunity to explore the significant events, ideas, individuals, and movements that shaped the conditions of the modern world. Students investigate the nature and impact of the Cold War and challenges and changes to social, political, and economic structure in the second half of the 20th Century. Students learn about the establishment of the United Nations in 1945 and its intentions to address future world conflict.

Learning Focus

Unit 1: Change and Conflict

In this unit students investigate the nature of social, political, economic and cultural change in the 20th century. Students explore significant events leading up to and including WW1, and WW2. Sden WW3.7 (ic)5 (e)8.8 -4..9 (

History Revolutions: Units 3 & 4

Course Overview

In Revolutions, students investigate the significant historical causes and consequences of political revolution. Students study the events, people, movements and ideas that drive political, economic and social change in our modern world, within the context of the French and Russian Revolutions. Students explore the events and factors that sparked these revolutions and analyse the way regimes and societies were eliminated and changed.

Learning Focus

Students investigate the causes of the French and Russian Revolutions, with a focus on the revolutionary ideas, leaders, movements and events that occurred. Students investigate the weakness in the existing regimes and the extent to which these regimes were unable to respond to the changing political, economic and/or social scene.

Students examine the development of the new political order and the emerging society, and the challenges faced by the revolutionary governments, for example: political dissent, civil war, economic breakdown, wars of foreign intervention and resistance to revolutionary forces. Students delve into the debates that exist between historians, analysing historical commentaries, evaluating differing viewpoints and establishing through critical analysis, judgements regarding how successful revolutions and revolutionaries have been in bringing about change.

Key topics include:

- The French Revolution (1774- 4 August 1789)
- The Russian Revolution (1896 – 26 October 1917)

Assessment

- Evaluation of Historical Sources
- Historical Inquiries

Contribution to Study Score

- Unit 3 Coursework: 25%
- Unit 4 Coursework: 25%
- End of year 2 hour Written Examination: 50%

Future Pathways

Historical Studies, Archaeology, Art historian, Museum curator, Research Officer, Teacher, Cultural Heritage Officer, Anthropology.

Legal Studies Units 1 & 2

Course Overview

In Legal Studies students examine the processes of law-

Legal Studies Units 3 & 4

Course Overview

In Legal Studies, students examine the methods and institutions in the justice system and consider their appropriateness in determining criminal cases and resolving civil disputes. Students explore matters such as the rights available to an accused and to victims in the criminal justice system. Students explore how the

VETSmall Business

Course Overview

The VCE VET Small Business program aims to provide participants with the knowledge, skills, and competency that will enhance their training and employment prospects within small business contexts across a range of industry sectors.

Learning Focus

The VCE VET Small Business program comprises one certificate II with VCE VET credit at Units 1 to 4 level, including a Units 3 and 4 sequence. Certificates II are typically completed over two years.

The identified units of competency in the VCE VET Small Business program have been selected for

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LANGUAGES

Languages Pathways

Indonesian Units 1 & 2

Course Overview

Indonesian Units 3 & 4

Learning Focus

Unit 3, students will focus on negotiating an agreeable outcome to resolve a personal issue, expressing their ideas, thoughts, and responses in text styles such as personal, informative or imaginative writing. Students analyse and reflect on a selected subtopic to assist in identifying aspects suited to reflection, informing or storytelling. Students consider the language and features of the types of text they encounter to ensure that their writing includes culturally appropriate content. Students need to extract information from three or more texts to identify and interpret key ideas and detail on the selected subtopic.

Unit 4, students will investigate and reflect on aspects of culture and build their knowledge on a product or practice of Indonesian-speaking communities and relate how it can influence ways of individuals and communities interact. They will also persuade a point of view and evaluating ideas and opinions.

Topics studied for Unit 3 and 4 are:

- Future aspirations
- Neighbourhood and community
- The role of Women
- Environmental issues
- The relationship between Indonesia and Australia

Assessment

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Italian Units 1 & 2

Course Overview

The study of Languages contributes to the overall education of students, most particularly in communication skills, intercultural understanding, cognitive development, literacy, and general knowledge. By understanding the process of language learning, students can apply skills and knowledge to other contexts and languages. Learning languages promotes analytical and reflective capabilities. Student study the culture of Italian speaking communities and promotes understanding of different attitudes and values within the wider Australian community and beyond. A broad range of social, economic, and vocational opportunities result from studying a second language. Students are able to engage with Italian-speaking communities in Australia and internationally in a variety of endeavours including business, tourism and education. Additionally, the study of a language in VCE greatly contributes to one's ATAR score, with the Victorian government rewarding students with additional marks as an incentive. The prescribed

Italian Units 3 & 4

Learning Focus

Topics studied for Units 3 and 4 include:

- Immigration after World War II,
- The Environment and Sustainability,
- Adolescents in Italy and Australia
- Italian tourism
- The Education System in Italy and Australia
- General conversation Topics

Assessment

- Participate in a spoken exchange in Italian to resolve a personal issue.
- Interpret information from texts and write responses in Italian.
- Express ideas in a personal, informative, or imaginative piece of writing in Italian.
- Share information, ideas, and opinions in a spoken exchange in Italian.
- Analyse information from written, spoken and viewed texts for use in a written response in Italian.
- Present information, concepts, and ideas in evaluative or persuasive writing on an issue in Italian.
- Key Learning Tasks
- Oral Examination and Written Examination

Contribution To Study Score

- School-assessed coursework for Unit 3 will contribute 25% to the study score.
- School-assessed coursework for Unit 4 will contribute 25% to the study score.
- The end-of-year e448. (I)5.r3AH01w 0.47 0 moluat on

Biology Units 1 & 2

Course Overview

VCE Biology enables students to investigate the processes involved in sustaining life. In undertaking this subject, students develop an understanding that, all life is connected, and all change has consequences that may affect an individual, a species or all life on the planet. Students gain insights into how key science skills underpin much of contemporary biology, and how society applies such skills and concepts to resolve problems and make scientific advancements.

Learning Focus

In Unit 1, students examine the structure and function of cells as the structural and functional unit of life. Students focus on cell growth, replacement and death and the role of stem cells in new and emerging technologies. They explore how systems function through special cells in plants and animals and consider the role internal systems play in maintaining an animal's internal environment.

In Unit 2, students explore reproduction and the transmission of biological information from generation to generation and the impact this has on species diversity. They apply their understanding of chromosomes to explain the process of meiosis.

Students consider how the relationship between genes, and the environment and epigenetic factors influence phenotypic expression. They explain the inheritance of characteristics, analyse patterns of inheritance, interpret pedigree charts and predict outcomes of genetic crosses.

Assessment

Students will be assessed against each Outcome using one type of assessment from the list below. For each outcome, at least one task selected from:

- Case study analysis
- Bioinformatics exercises
- Data analysis of generated primary and/or collated secondary data
- Re( )TjEMrte-21.1 (c)- (ved)-20.6 (n)-19.4 (c-19.4 (s)-1.7 o(a)-2.1 (s)-1.8 (e-21.1 (c)- ((.)-9 ((k)-6.9 3 (c)-0.8)1.2 (s)-1.7

Biology Units 3 & 4

Course Overview

In undertaking Units 3 and 4, students explore the importance of the plasma membrane and its permeability to specific solutes. They study nucleic acids and proteins as key molecules in cellular processes and examine the nature of biochemical pathways. At this molecular level students study the human immune system and how it provides immunity to a specific antigen. Students also consider the continual change and challenges to which life on Earth has been subjected. They investigate the relatedness between species and the impact of various change events on a population's gene pool, including technological developments. Students examine the human fossil record and the interrelationships between human biological and cultural evolution.

Learning Focus

Unit 3: What is the role of nucleic acids and proteins in maintaining life?

Students will study the changes in the genetic makeup of a population and in biodiversity over time (including human change) and determine relatedness between species. They also investigate cellular signals, the body's response to antigens, and immunity. The investigation requires the students to identify an aim, develop a question, formulate a hypothesis, and plan a course of action.

Unit 4: How does life change and response to challenges?

Students will study plasma membranes, nucleic acids and proteins, gene structure and regulation, and structure and regulation of biochemical pathways with reference to photosynthesis and respiration.

Assessment

Each outcome consists of one of the following tasks:

- Analysis and evaluation of a selected biological case study
- Ata •nalysis ad75.6 ( )11e1.6 (c)p6 (c)8.2 (s)-4.8 (t)2.i/LBod7(he)8.[s)7.3 (t)6.9 (t)2.7 5(n)1.6 ( )-12.1 (o)8.7(g)5.6 (e)8

Chemistry Units 1 & 2

Course Overview

VCE Chemistry Units 1 and 2 focus on the diversity of materials from the atomic to the molecular level and the uniqueness of water. This course provides the opportunity for independent and collaborative work through experimentation, literature reviews and through hands on approach and simulation.

Learning Focus

Unit 1: How can the diversity of materials be explained?

The development and use of materials for specific purposes is an important human endeavour. In this unit students investigate the chemical properties and practical applications of a range of materials including metals, crystals, polymers, nanomaterials and giant lattices. They explore and explain the relationships between properties, structure and bonding forces within and between particles that vary in size from the visible through to nanoparticles, molecules and atoms. Students are introduced to quantitative concepts in chemistry.

Unit 2: How do chemical reactions shape the natural world?

Chemistry Units 3 & 4

Course Overview

Physics Units 1 & 2

Course Overview

The study of VCE Physics involves collaboratively investigating, understanding and explaining the behaviour of physical phenomena in the Universe. A range of models, including mathematical models, are used to explore, simplify and predict how physical systems behave at varying scales from the very small (quantum and particle physics) through to the very large (astronomy and cosmology).

Beginning with classical ideas and considering their limitations, and then being introduced to more modern explanations of the world, provides a novel lens through which students experience the world

Psychology Units 3 & 4

Course Overview

The nervous system influences behaviour and the way people experience the world. In this unit students examine both macro-level and micro-

Applied Computing Units 1 & 2

Course Overview

Technology continues to evolve rapidly, providing opportunities for enterprising individuals to create new

Applied Computing: Data Analytics Units 3 & 4

Learning Focus

Unit 3: Data analytics in this unit students apply the problem-solving methodology to identify and extract data through the use of software tools such as database, spreadsheet and data visualisation software to create data visualisations or infographics.

Students develop an understanding of the analysis, design and development stages of the problem-solving methodology.

Unit 4: Data Analytics in this unit students focus on determining the findings of a research question by developing infographics or dynamic data visualisations based on large complex data sets and on the security, strategies used by an organisation to protect data and information from threats.

ASSESSMENT

Students will complete:

- Research presentations (oral, multimedia, visual) of innovative solutions
- Written reports
- Annotated visual reports
- Case studies with structured questions
- Design of networks or of working model

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