



Bacchus Marsh Grammar

2021 Senior School Handbook

Year 9 and Year 10

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Key Personnel

Principal Senior Deputy Principal – School Operations

Deputy Principal – Head of Senior School / Senior Child Protector Officer Deputy Principal – Student Wellbeing and Pastoral Care Assistant Principal – Deputy Head Senior School Assistant Principal – Head of Middle School Assistant Principal – Deputy Head of Middle School Assistant Principal – Director of Studies Assistant Principal – Teaching and Learning

Careers Practitioner VCAL and VET Coordinator Duke of Edinburgh Coordinator

Head of Year Levels

Head of Year 12 Head of Year 11 Head of Year 10 Head of Year 9 Head of Year 8

Directors

Humanities Mathematics and Science Technology and Art Physical Education, Sport and Health Performing Arts Mr Andrew Neal Mr Kevin Richardson

Mrs Debra Ogston

Mrs Rosalind Pittard

Mrs Erin Thornton Mr Dean Pepplinkhouse Mrs Kelly Dilges Mr Ben Davie Mr Leigh Park

Ms Alice Wu-Tollis Ms Deanna Carr Mr Michael Howell

Mrs Natalie Desira Mr Justin Cooper Mr Michael Howell Mr Tony Castrignano Ms Cindy Daniel

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The Structure

Year 9 and 10 runs as a two year program, whereby students select subjects for both Year 9 and 10 to develop an individualized course for the two years. This course will then lead into their VCE selections allowing them to pursue their interests and begin refining pathways for the future. However, it is also believed that Year 9 and 10 is a time for students to experiment with new and interesting subjects and to challenge themselves academically. Students should select a course that offers them a wide range of subjects and experiences. Students select their Year 9 subjects in Semester Two of Year 8 and their Year 10 subjects in Semester Two of Year 9.

Some subjects are exclusive to either Years 9 or 10 and must be selected at the appropriate level. There are requirements for what must be selected in Years 9 and 10. Please refer to the Year 9 and 10 Subject Selection Requirements table on page 4 for these details.

Pre-VCE courses are designed to be taken the year before commencing the VCE subject, so care needs to be taken as to when these subjects are selected.

The Leadership Program

As part of each child's growth and development throughout their schooling at Bacchus Marsh Grammar, students in Years 9 and 10 are required to take part in the Year 9 and 10 Leadership Program. Throughout the 2-year period, each child will be involved in a range of activities during Pastoral Care and term time.

In Year 9, students are required to complete the Bronze Duke of Edinburgh's International Award. This International Award involves completing a minimum of three months of Physical Activity, three months Community Service, three months learning a skill and participation in an Adventurous Journey (School Camp). In conjunction with the Duke of Edinburgh's International Award, students also participate in:

- Developing public speaking skills
- Creating a Careers portfolio and experiencing mock interviews for employment
- Identifying personal strengths and setting goals
- Community Service activities
- Creating a Leadership Portfolio containing reflections from all sessions attended

Students will also be involved in dance lessons in preparation for the Year 10 Celebration Evening.

In Year 10, students are encouraged to begin working towards their Silver Duke of Edinburgh's International Award. They will continue to be involved in activities during Pastoral Care to develop their leadership skills and personal strengths. These activities include:

- Study Skills sessions
- Stress management workshops
- Work Experience Preparation
- Keys Please Driver Education

The main focus will be on preparation for the Celebration Evening Dance and completing the Leadership Certificate.

A requirement of the Gold Certificate is completion of either a work experience placement or an attendance at a higher education or vocational open day or experience day.

Students can elect to participate in Work Experience during the Term 2-3 break. The aim of Work Experience is for students to develop skills in a workplace environment. Students will need to source and arrange this themselves.

At the conclusion of the program, Year 10 students will be involved in a formal interview to discuss the growth and development of their leadership skills and qualities. A Celebration Evening for all Year 10 students will then be held towards the end of the year at a venue off campus. It is on this night that those students who have completed all of the requirements of the program will be officially recognized for their outstanding contributions and will be awarded with the Bacchus Marsh Grammar Gold Leadership Certificate.

The Cambridge IGCSE

Cambridge IGCSE is the world's most popular international qualification for 14 to 16-year olds. It is recognized by leading universities and employers worldwide and is an international passport to progression and success. Developed over 25 years ago, it has been tried, tested and trusted by schools worldwide. The subjects that Bacchus Marsh Grammar offers are year-long subjects and will culminate in a final external examination in October/November.

VCE Acceleration

At Bacchus Marsh Grammar we recommend that all students accelerate in at least one VCE subject. This will enable students to develop the skills required for VCE success and provide them with valuable experience. It will also contribute to their ATAR (Australian Tertiary Admissions Rank). Therefore, in Year 9, students should consider which subject they would like to accelerate in Year 10. Additionally, an option to accelerate a VCE subject in Year 9 is available for selected students but only by invitation.

Please note: There are some studies where acceleration is not recommended:

- Chemistry
- Economics
- English
- Languages
- Mathematical Methods
- Physics
- Specialist Mathematics

Regarding Mathematics:

- General Mathematics (Unit 1 & 2) leads to Further Mathematics (Unit 3 & 4).
- Mathematical Methods (Unit 1 & 2) may lead to Units 3 & 4 in Further Mathematics, Mathematical Methods and/or Specialist Mathematics
- Specialist Mathematics (Units 3 & 4) can only be undertaken if Mathematical Methods (Units 3 & 4) is also being studied.
- Only two Unit 3 & 4 sequences of Mathematics count towards the primary four of the ATAR, however, a third Unit 3 & 4 sequence will be counted in the fifth or sixth subject, contributing 10% to the ATAR.

VET

Bacchus Marsh Grammar offers students the opportunity to complete VET courses on campus in the following subjects: Hospitality Food and Beverage, Music Industry and Business Certificate.

VCAL

The Victorian Certificate of Applied Learning (VCAL) is a hands-on option for students. It gives students practical work related skills, as well as the literacy, numeracy and personal skills they need to take them into further training or their ideal job.

VCAL increases pathways for young people into training and work, through a focus on applied learning. VCAL students are equipped to make informed choices about their future career directions. Through an integrated project-based curriculum and work experience, students are able to decide whether an apprenticeship, Vocational Education and Training (VET) qualification, further education or employment is the right choice for them.

The VCAL program at Bacchus Marsh Grammar is an integrated community project-based learning approach completed in collaboration with the Duke of Edinburgh's International Award and four weeks of work experience. Students plan, design and implement community projects in order to meet their compulsory VCAL strands of Literacy, Numeracy, Work-Related Skills and Personal Development and related outcomes. VCAL can start in Year 10 at Bacchus Marsh Grammar.

Subject Selection Process

The Year 9/10 Program is based on a common core curriculum which also allows students to personalise their learning program through individual subject selection. We encourage students to consider their time in Years 9 and 10 as an opportunity to sample a range of subjects which will then assist them to make informed choices when planning their courses at VCE.

When selecting subjects students should consider the following:

- Select subjects that they are good at, enjoy and will find challenging.
- Include subjects which together form a balanced curriculum i.e. English, Mathematics, Science, Humanities, Arts & Technology.
- Be realistic in their aspirations and subject selections.
- Try a range of subjects to enable informed subject selections for VCE. Students should not select subjects because:
 - Their brother or sister did it.
 - Their friends are doing it.
 - They may or may not have certain teachers.

Year 9 and 10 Subject Selection Requirements

Learning Areas	Minimum number of semester subjects over two years	Requirements		
English	4	Year 9 - Must complete English in each semester Year 10 - Must complete English and/or Literature each semester.		
Mathematics	4	Year 9 - Must complete Mathematics in Semester 1 Year 9 - Must complete Methods or General in Semester 2 Year 10 - Must complete Methods or General in each semester. *Extension Maths is in addition to this requirement		
Humanities	4	Must complete Australian History in one semester Select a minimum of three other Humanities semester subjects over the two years.		
Science	3	Select a minimum of three Science semester subjects over the two years.		
Physical Education, Sport and Health	2	Year 9 - Must complete one semester of the PE/Sport/Health subject. Year 10 - Must complete one semester of the PE/Sport/Health subject		
The Arts and Technology	1	Select a minimum of one The Arts & Technology semeste subject over the two years.		
Additional Subjects	6	Select remaining subjects from any of the subject areas.		
Total	24			

Pathways for VCE Studies available at BMG in 2021

Learning Area	Year 7 Year 8 Year 9 Year 10		Year 10	Year 11 Unit 1/2	L/2 Year 12 Unit 3/4	
English	English Literacy	English Literacy	English Year 9 English Year 10 Extension English (by invitation) Extension English (by invitation) Introduction to Literature invitation) Literature Extension Introduction to Literature Literature Extension Pre-VCE English Language VCAL Literacy		English English Language Literature VCAL Literacy	English English Language Literature VCAL Literacy
Mathematics	Maths Numeracy	Maths Numeracy	Maths General Maths Year 9 Math Methods Year 9 Extension Math I Extension Math I	General Maths Year 10 Math Methods Year 10 Extension Maths I Extension Maths II VCAL Numeracy VCE Acceleration in Maths	General Maths* Math Methods Specialist Maths VCAL Numeracy	Further Maths Math Methods Specialist Maths VCAL Numeracy
Humanities History History Australian History Humanities History Australia & the World Wars Conflict in Asia Germany in the Twentieth Century Project-based History				, ,	History-Global Empires* History- Twentieth Century	History- Australian History- Revolutions
	Geography	Geography	Human Geography: Global Issues Physical Geography: Dynamic Eartl Human Geography: Urban Manage Accounting and Economics	Geography* Accounting*	Geography Accounting	
			Australian Politics and Legal Studie Global Citizenship and Democracy Personal Finance The Business World	Australian and Global Politics*	Global Politics	
			VET Certificate II in Business		Business Management*	Business Management
					Economics	Economics
					Legal Studies*	Legal Studies VET Certificate II
			Ethics		in Business	in Business
	French	French	Philosophy French Year 9 Pre-VCE French		French	French
	Indonesian	Indonesian	Indonesian Year 9 Pre-VCE Indonesian		Indonesian	Indonesian
	Japanese	Japanese	Japanese Year 9 Pre-VCE Japanese	Japanese	Japanese	
			VCE Acceleration in Humanities			
Science	Science	Science	Pre-VCE Chemistry Pre-VCE Physics Pre-VCE Biology		Biology* Chemistry	Biology Chemistry
			Pre-VCE Environmental Science Pre-VCE Psychology Psychology I Forensic Science - Biology		Environmental Science*	Environmental Science
			Forensic Science - Physics and Che Health & Disease	mistry	Physics	Physics
			Child Development IGCSE Physical Science Mechatronic Systems Flight Technology - Fundamental Flight Technology - Multirotor Housing Design & Technology		Psychology*	Psychology
			VCE Acceleration in Science			

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Physical Education, Sport and Health	Physical Education Sport	Physical Education Sport	PE/Sport/Health (Boys) I Year 9 PE/Sport/Health (Girls) I Year 9 PE/Sport/Health (Boys) II Year 10 PE/Sport/Health (Borls) II Year 10 Elite Sports Training I Year 9 Elite Sports Training II Year 9 Elite Sports Training III Year 10 Elite Sports Training IV Year 10 Advance Fitness Exercise Physiology Global Health & Development Injury Prevention & Control Unit 1&2 Outdoor and Environmental Studies (Year 10 only) VCE Acceleration in PE, Sport and Health	Physical Education* Health and Human Development* Unit 3&4 Outdoor and Environmental Studies (Year 11 only)	Physical Education Health and Human Development
The Arts and Technology	Art	Art	Pre-VCE Art Pre-VCE Studio Art Media Studies Photography I Photography II Viscomm I Viscomm II Dance I Dance II	Art* Media* Studio Arts* Visual Communication Design Dance*	Art* Media* Studio Arts* Visual Communication Design Dance
	Drama	Drama	Drama I Shakespeare on Stage Pre-VCE Drama	Drama*	Drama
	Music	Music	Music Performance I Music Performance II Music Performance III Music Performance IV	VCE VET Music Industry*	VCE VET Music Industry
	Food Technology	Food Technology	Hospitality - Cafe Food for the Future Understanding Food	Food Studies* VCE VET Hospitality*	Food Studies VCE VET Hospitality
	Coding	Coding	Computing - Advanced Programming Computing - Games Programming	Computing *	Computing: Software Development
	Design & Technology	Design & Technology	CAD & CAM Design Mechatronic Systems Flight Technology - Fundamental Flight Technology - Multirotor Textile Design - Fundamental Textile Design - Processes Wood Design - Fundamental Wood Design - Fundamental Wood Design & Technology IGCSE Design & Technology VCE Acceleration in VCE The Arts and Technology	Systems Engineering* Product Design and Technology* (Textiles/Wood)	Systems Engineering Product Design and Technology (Textiles/Wood)

Please note: The Unit 1 & 2 subjects marked with an asterisk (*) are on offer to Year 10 students in 2020 for VCE Acceleration.

Year 9/10 Subject Selection Planning Form

Each semester you will complete 6 subjects, totaling 24 subjects over the two years.

Fill in all of the lightly shaded boxes across Year 9 & 10 with the following requirements in mind:

- A minimum of 3 subjects from Science
- Australian History
- A minimum of 3 other subjects from Humanities
- A minimum of 1 subject from The Arts and Technology

Fill in the reserve subjects in the darker shaded boxes. These subjects are used if your selected preferences are not available.
 * In the Web Preferences program you will only need to enter your subject preferences for Year 9. You must list all your subjects in order of preference, with the subject that you most wish to undertake being listed first. You will complete the subject selection process in the Web Preferences program again for Year 10.

	Year 9				Year 10	
	Subject	Notes			Subject	Notes
1	English Year 9	Compulsory		1		English Year 10 or Literature
2	English Year 9	Compulsory		2		English Year 10 or Literature
3	Maths Year 9	Compulsory		3		Maths: Methods or General
4		Maths <mark>:</mark> Methods or Gen <mark>eral</mark>		4		Maths: Methods or <mark>G</mark> eneral
5	PE/Sport/Health	Compulsory		5	PE/Sport/Health	Compulsory
6				6		
7				7		
8				8		
9			110	9		
10				10		
11				11		
12				12		

Reserve Subjects (in order of preference)					
1.	2.	3.	4.		
5.	6.	7.	8.		

Web Preferences Access Guide

Web Preferences is a web publication that allows students to enter their subject preferences on-line. This access guide details the procedures to access and use Web Preferences.

Step 1 – Internet Access

Before you begin, make sure that you have access to a computer that has the following: an Internet connection and access to a printer.

Year 9 & 10 subject preferences open Friday 17th August and **close at 9pm Sunday 30th August** (printed forms are due to the Tutor Teachers by Monday 31st August).

Step 2 – Accessing and logging into Web Preferences

Students will receive an email titled 'Web Preferences Access Guide'.

Select the link provided in the email 'Click to open Web Preferences' to access the Login page.

Enter the Student Access Code and Password provided to you in the email. (Note the entries are case sensitive).

If there is an error in entering either the Student Code or Password, an error message in red text will be displayed at the bottom of the page.

Step 3 – Home Page

To view the details of each subject available for selection, click on the 'View Subject Details' button.

To continue, click on the button 'Return to Home Page'.

To select or change your preferences, click on the 'Add New Preferences' button.

An Initial Instructions page will appear. Once you have read these instructions click the "Continue" button.

Step 4 - Subject Preference Selection

On the Preferences Selection page, follow the instructions on this page to select subjects from the drop down list boxes. When you have finished, click on the 'Submit Selected Preferences' button.

Step 5 – Preferences Validation

The 'Preferences Validation' page will display all your preferences in the order you have selected them. If you are happy with your preferences then continue by clicking the 'Submit Valid Preferences' button which will open a page titled 'Preference Receipt'.

* Remember to preference in order from the subjects you most wish to do.

Alternatively, if you would like to make changes to the preferences you have entered, click on the "Cancel" button and this will take you back to the Preferences Selection page.

Step 6 – Preference Receipt

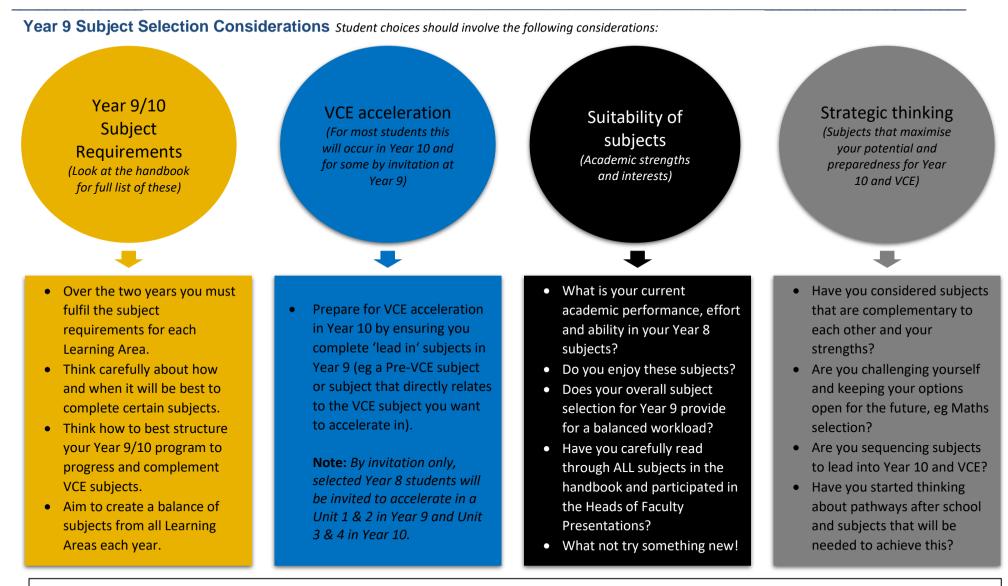
You can print your 'Preference Receipt' page by clicking on the 'Open Print View' button and clicking the 'Print Receipt' button. Ensure the printed receipt is signed by both student and parent, then return to the Tutor Teacher by Monday 3rd September.

For your own records, print or download and save a second receipt.

To continue, click on the 'Return to Home Page' button.

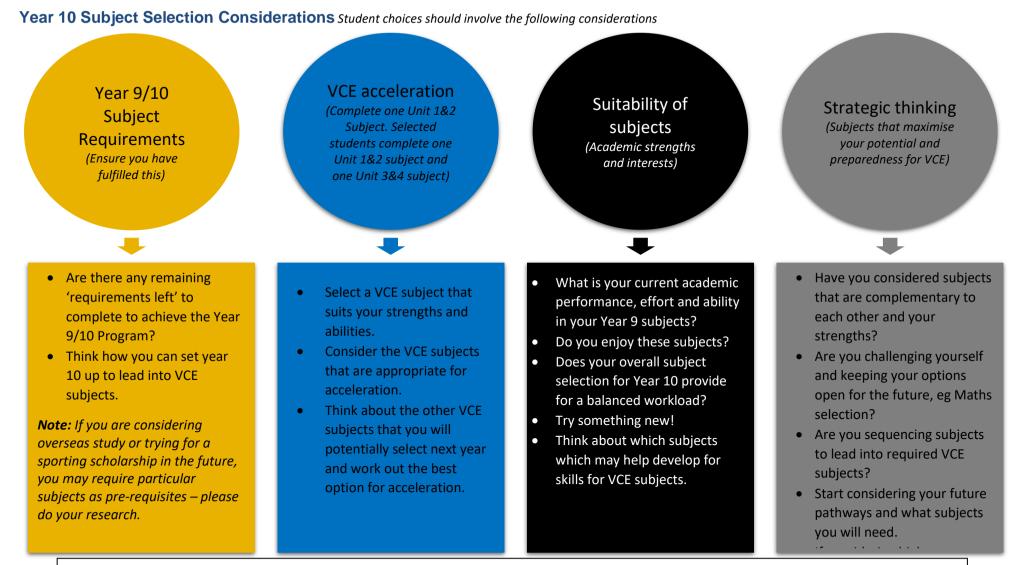
If you want to change your preferences repeat the process by clicking the 'Add New Preferences' button (you can submit up to three completed preferences by the due date), otherwise exit by clicking the 'Log out' button.

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It is the responsibility of the student to carefully consult VTAC for all course information. This includes pre-requisites, selection rank adjustments and additional requirements. Students must use the correct tertiary admissions information based on the year of entry – Current Year 9s have the Tertiary Entrance Year of 2025. Pre-requisite information is only published for students in Year 10 every August. Year 9 students should access this information as a reference guide only.

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It is the responsibility of the student to carefully consult VTAC for all course information. This includes pre-requisites, selection rank bonuses and additional Requirements. Students must use the correct tertiary admissions information based on the year of entry. Eg. Current Year 9 would be accessing course information however this will not be available until August 2021 on the VTAC website

Subject Descriptions

ENGLISH

English (Year 9)

In Year 9 English, students develop their skills in the following areas; reading and creating texts, reading and comparing texts, analysing and presenting arguments and NAPLAN. Students show their understanding of texts through discussion, comprehension activities and by writing analytical and creative responses. In addition, they study the ideas, themes and narrative techniques in several texts and compare the ideas and techniques in two or more texts. Students analyse arguments and the use of persuasive language in a range of media texts and they write their own persuasive responses to a topical issue. Students prepare for the NAPLAN tests with a focus on reading, language conventions, personal and persuasive writing. They undertake regular comprehension and skill building activities, including grammar, vocabulary, spelling, punctuation, and writing techniques.

Links to VCE subjects: English Please note: This subject runs for a full year. Contact Person: Mr Geoff Gainey <gaineyg@bmg.vic.edu.au

English (Year 10)

English in Year 10 focuses on the appreciation and challenges of reading, writing, speaking and listening, in the context of exploring the meaning of a variety of literary texts and media texts, and the need to continually practise and improve a student's knowledge and use of language. Students reflect on their interpretations and those of others. Students analyse the ways in which authors construct meaning and position readers. Students respond in a variety of ways in order to demonstrate their understanding of core knowledge and skills.

Links to VCE subjects: English Please note: This subject runs for a full year. Contact Person: Mr Geoff Gainey <gaineyg@bmg.vic.edu.au

Introduction to Literature (Genre Texts)

Introduction to Literature focuses on genre texts. Fantasy, romance and crime are often favoured genres for students who enjoy reading and the rationale of this unit is to allow students to explore literary analysis using texts in a range of popular genres. Students will gain skills in interpreting texts, close-passage analysis, understanding adaptations of texts, applying perspectives to texts and understanding how texts inspire other texts. Introduction to Literature challenges students who enjoy reading to study texts more critically and deeply.

Links to VCE subjects:

Literature

Please note: This subject runs for one semester. Introduction to Literature is more accessible than Extension Literature. Students may study this subject instead of one semester of Year 10 English.

Contact Person: Mr Geoff Gainey <gaineyg@bmg.vic.edu.au

Literature Extension (Classic Texts)

In Literature Extension students will study texts from the past that we consider classics. Students will continue to practise interpreting texts, close-passage analysis, understanding adaptations of texts, applying perspectives to texts and understanding how texts inspire other texts. Literature Extension is designed to prepare students for the study of VCE Literature.

Links to VCE subjects:

Literature

Please note: This subject runs for one semester. Literature Extension is more difficult than Introduction to Literature. Students may study this subject instead of one semester of Year 10 English.

Contact Person: Mr Geoff Gainey <<u>gaineyg@bmg.vic.edu.au</u>

Pre-VCE English Language (Year 10)

English Language focuses on the relationship between language and society; in particular, it focuses on national and group identities, formal and informal language and globalization and power. In this subject, students read widely to develop their analytical skills and understanding of linguistics. English Language is a grammatically robust subject that requires students to analyse language in many social contexts. English Language allows students to explore the concepts that will be studied in Units 1-4.

Links to VCE subjects: English Language Please note: This subject runs for one semester. This subject is for Year 10 students only. Contact Person: Mr Geoff Gainey <gaineyg@bmg.vic.edu.au

VCAL Literacy

To select this subject, students must apply for the full VCAL program. Application forms are available from the VCAL Coordinator or the Year Level Coordinator. Successful applicants will be notified.

MATHEMATICS

Mathematics Year 9

All students will complete a common Mathematics course in Semester One Year 9. This course is the study of pattern in number, space, logic and structure. Essential mathematical activities include calculating, proving, applying, investigating, modelling and problem-solving. Students will study Rates and Ratio, Probability, Statistics, Indices and Measurement.

Links to VCE subjects: Mathematics Geography Systems Engineering Please note: This subject runs in Semester one only. Contact Person: Dr Debra Penny <<u>pennyd@bmg.vic.edu.au</u>

General Mathematics Year 9

During Semester Two, Year 9 students must select either General Mathematics or Mathematical Methods. General Mathematics is more widely accessible and provides for different combinations of student interests. It prepares students for the study of VCE Further Mathematics in Year 12 as well as providing essential numeracy skills required for everyday life. Students will study Financial Mathematics, Algebra, Linear Equations and Graphs, Trigonometry and Geometry.

Links to VCE subjects General Mathematics Further Mathematics Please note: This subject runs in Semester Two only. Contact Person: Dr Debra Penny <<u>pennyd@bmg.vic.edu.au</u>

Mathematical Methods Year 9

In Semester Two of Year 9, students must select either General Mathematics or Mathematical Methods. Mathematical Methods is a rigorous mathematics course for students who demonstrate higher levels of competency. There is an emphasis on algebraic skills and for students to think mathematically. It prepares students for the study of VCE Mathematical Methods or Specialist Mathematics. Students will study Linear Equations, Linear Graphs, Geometry, Trigonometry and Algebra.

Links to VCE subjects: Mathematical Methods Specialist Mathematics Chemistry Physics Please note: This subject runs in Semester Two only. It is aimed at students with higher competency levels. Contact Person: Dr Debra Penny pennyd@bmg.vic.edu.au

General Mathematics Year 10

General Mathematics is more widely accessible and provides for different combinations of student interests. It prepares students for the study of VCE Further Mathematics in Year 12, as well as providing essential numeracy skills required for everyday life. Students will study Arithmetic, Financial Mathematics, Linear Equations and Graphs, Networks, Matrices, Univariate Data and Bivariate Data.

Links to VCE subjects: General Mathematics Further Mathematics Please note: This subject runs for a full year. Contact Person: Dr Debra Penny <<u>pennyd@bmg.vic.edu.au</u>

Mathematical Methods Year 10

Mathematical Methods is a rigorous mathematics course for students who demonstrate higher levels of competency. There is an emphasis on algebraic skills and for students to think mathematically. It prepares students for the study of VCE Mathematical Methods or Specialist Mathematics. Students will study Linear Equations, Linear Graphs, Quadratics, Probability, Functions and Transformations, Exponentials and Logarithms and Circular Functions.

Links to VCE subjects:

Mathematical Methods Specialist Mathematics Chemistry Physics **Please note:** This subject runs for a

Please note: This subject runs for a full year. It is aimed at students with higher competency levels. Students must have taken Year 9 Mathematical Methods as a pre-requisite.

Contact Person: Dr Debra Penny <<u>pennyd@bmg.vic.edu.au</u>

Extension Mathematics I

This subject is designed for capable mathematicians who are intending to study VCE Mathematical Methods and potentially Specialist Mathematics. This course introduces advanced concepts and skills, each taken from the VCE Mathematical Methods or Specialist Mathematics curriculum. It therefore acts as a solid preparation for those aiming for high results in Year 12 Mathematics. Students entering this course are expected to have achieved an overall standard of 'B' grades or above in their current mathematics course. Students will study Algebra, Linear Programming and Geometry.

Links to VCE subjects:

Mathematical Methods

Specialist Mathematics

Please note: This subject runs for one semester. It is important that the student's mathematical ability is strong enough to cope with this level of extension.

Contact Person: Dr Debra Penny pennyd@bmg.vic.edu.au

Extension Mathematics II

This subject is designed for capable mathematicians who are intending to study VCE Mathematical Methods and potentially Specialist Mathematics. This course introduces advanced concepts and skills, each taken from the VCE Mathematical Methods or Specialist Mathematics curriculum. It therefore acts as a solid preparation for those aiming for high results in Year 12 Mathematics. Students entering this course are expected to have achieved an overall standard of 'B' grades or above in their current mathematics course. Students will study Number Systems, Calculus and Sampling and Distributions.

Links to VCE subjects:

Mathematical Methods Specialist Mathematics Please note: This subject runs for one semester. It is important that the student's mathematical ability is strong enough to cope with this level of extension. Contact Person: Dr Debra Penny cpennyd@bmg.vic.edu.au

VCAL Numeracy

To select this subject, students must apply for the full VCAL program. Application forms are available from the VCAL Coordinator or the Year Level Coordinator. Successful applicants will be notified.

VCE Acceleration in Mathematics

General Mathematics Units 1 & 2

General Mathematics provides for different combinations of student interests and preparation for the study of Further Mathematics Unit 3 and 4. The areas of study for General Mathematics Unit 1 and Unit 2 are 'Algebra and structure', 'Arithmetic and number', 'Discrete mathematics', 'Graphs of linear and non-linear relations' and 'Statistics'.

In undertaking these units, 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 and graphs. They should have facility with relevant mental and by-hand approaches to estimation and computation. The use of technology is incorporated throughout each unit as applicable.

Links to VCE subjects:

Unit 3 & 4 Further Mathematics Please note: This subject runs for a full year. Contact Person: Dr Debra Penny cpennyd@bmg.vic.edu.au

HUMANITIES

HISTORY

Australian History

In this subject, students study aspects of Australian History from the mid-19th century to the present day with a view to determining the extent to which Australia has embraced multiculturalism. Topics include the reaction to the Chinese during the Gold Rush, Federation and the White Australia Policy, Indigenous Australians and the fight for reconciliation, Post-War immigration and the move towards multiculturalism, Asian immigration after the Vietnam War and the impact of 9/11 on Australia's social and political policies.

Links to VCE subjects: History: Twentieth Century History: Global Empires History: Australian History: Revolutions Please note: This subject runs for one semester. It is compulsory for all students to undertake this subject at some time during Year 9 or 10. Contact Person: Ms Celia Patterson <<u>pattersonc@bmg.vic.edu.au</u>

Australia and the World Wars

This subject examines major themes and principal events of Australia's involvement in World War 1 and World War 2. Key focus areas of World War 1 include the Gallipoli campaign, The Western Front and the mythology of the Anzac legend. The bombing of Darwin in 1942, Japanese expansion in the Pacific and Australia's alliance with America are key topics for World War 2. Students will develop their historical writing skills and will develop their ability to use historical concepts such as cause and effect, empathy and significance.

Links to VCE subjects: History: Twentieth Century History: Australian Please note: This subject runs for one semester. Contact Person: Ms Celia Patterson <<u>pattersonc@bmg.vic.edu.au</u>

Conflict in Asia

In this subject, students study the conflict in Asia that arose from a transformation and reorganization of power in the region. Students concentrate on Asia in three contexts that demonstrate the shift from European imperial control to the formation and development of intense nationalist movements and anti-colonial activity that saw Asia become the frontier of the global Cold War. Students explore Japan from 1868 – 1905, China from 1937 – 1949 and the Cold War period from 1945 – 1975 focusing on China, Korea and Vietnam. Students develop an understanding of key ideological concepts such as nationalism, communism and democracy that were central to nation building and international relations in the region and which continue to impact the political and economic agenda of Asia today.

Links to VCE subjects: History: Twentieth Century History: Global Empires History: Australian History: Revolutions Global Citizenship and Democracy Please note: This subject runs for one semester. Contact Person: Ms Celia Patterson <patterson@bmg.vic.edu.au

Germany in the Twentieth Century

In this subject, students study the impacts of the Treaty of Versailles including its repercussions on both Weimar and interwar Germany. Students investigate the reasons for Germany's turn toward dictatorial rule and explore the reasons for Hitler's rise to power. Students also inquire about the impact of Nazism on Germany, with a focus on the increase of Anti-Semitism, Germany's reemergence as a European and world power and the Holocaust. Students will attend a powerful excursion to the Jewish Holocaust Centre in Elsternwick where they will hear a survivor's testimony.

Links to VCE subjects: History: Twentieth Century Please note: This subject runs for one semester. Contact Person: Ms Celia Patterson: <<u>pattersonc@bmg.vic.edu.au</u>

Project-based History

This subject provides students with the opportunity to explore two history topics of special interest. Wars, music, transport, art, immigration, sport and ancient societies are just some examples of areas that students might like to investigate. In undertaking this subject, students will develop a range of skills that are relevant for any other Year 9/10 History subject as well as for any subject area where structured writing is important. Students can expect that their skills in the following areas will be improved: locating relevant information in books and on the internet, organising information logically, redrafting written work taking feedback into consideration and presenting information orally.

Links to VCE subjects: History: Twentieth Century History: Global Empires History: Australian History: Revolutions Please note: This subject runs for one semester. Contact Person: Ms Celia Patterson <<u>pattersonc@bmg.vic.edu.au</u>

GEOGRAPHY

Human Geography: Global Issues

This subject provides students with the opportunity to collect, explore and analyse data relating to the movement of people across the globe. In undertaking this study, students will develop a geographic understanding of human wellbeing and the underlying factors that impact it, then using their skills, explore crises such as food security, climate change and conflict as significant drivers of human migration. Students will gain valuable skills in research and have the opportunity to complete field work as part of their studies.

Links to VCE subjects: Environmental Science Geography Global Politics Health and Human Development Please note: This subject runs for one semester. Contact Person: Ms Celia Patterson <<u>pattersonc@bmg.vic.edu.au</u>

Physical Geography: Dynamic Earth

This subject explores the natural processes that cause physical change within our ever-evolving world. Students study three main processes; river geomorphology, coastal geomorphology and climate change. These processes have been selected due to their relevance to Bacchus March, Victoria and the world. Students are guided in their study of these processes by three overarching questions: What was the Earth like in the past? Why does the Earth change? What are the impacts of this change? In order to develop a deep understanding of these processes, students will be provided with a field work opportunity and will complete a guided research task.

Links to VCE subjects: Environmental Science Geography Please note: This subject runs for one semester. Contact Person: Ms Celia Patterson <pattersonc@bmg.vic.edu.au

Human Geography: Urban Management

This subject provides students with the opportunity to investigate rapidly growing urban populations around the world and the impacts of growth on humans and the environment. This subject explores key management considerations such as the management of natural hazards and human behaviour whilst also promoting human well-being through urban design. Students will explore the impacts of these management decisions through a field work project in Melbourne.

Links to VCE subjects: Geography Environmental Science Please note: This subject runs for one semester. Contact Person: Ms Celia Patterson <pattersonc@bmg.vic.edu.au

COMMERCE

Accounting and Economics

Accounting is the process of recording, reporting, analysing and interpreting financial data, which is then communicated to users of this information. By way of introduction, students will study the practical aspects of accounting and learn to record the day to day financial transactions of a small business into specific accounting journals. In the Economics unit of study, students will explore contemporary events and issues affecting the performance of Australia's economy and the impact on living standards through the understanding of the economic concepts of Gross Domestic Product, unemployment rates and inflation and how they affect the domestic economy.

Links to VCE subjects:

Accounting Economics Business Management Please note: This subject runs for one semester. Contact Person: Mr Rob de Wit <dewitr@bmg.vic.edu.au

Australian Politics and Legal Studies

This subject gives students essential information on how the government and the legal system impact every aspect of their lives now and in the future. This subject explores the essential role of government and the legal system in Australian and students get a chance to explore the concepts of criminal and civil law. This subject explores key concepts of law, the courts, and the Australian political system. It provides a good background into how our system works. The topical nature of the coursework also encourages students to explore local and national issues so that they may become more interested, active and involved citizens.

Links to VCE subjects: Legal Studies Australian and Global Politics History Please note: This subject runs for one semester. Contact Person: Ms Erin Thornton<thorntone@bmg.vic.edu.au

Global Citizenship and Democracy

In this subject, students build on the fundamentals of the Australian political and legal system to understand Australia's place in the world. Students will gain an understanding of who holds power and how power is distributed and used. Once students understand how Australia operates in a political and legal sense, they will develop their understanding of Australia's place in the world in a global sense, focusing on Australia's role in the Asia-Pacific region. Students will consider the implications of foreign policy and international law and how this impacts Australia and our neighbours. Students will also investigate the implications of International Law and analyze the challenges faced by organizations that work in the domain. Students will develop their skills in applying case studies, analysing scenarios and demonstrating connections to current issues.

Links to VCE subjects:

Australian and Global Politics Global Politics Legal Studies History Geography Please note: This subject runs for one semester. Contact Person: Ms Erin Thornton <<u>thorntone@bmg.vic.edu.au</u>

Personal Finance

This subject aims to develop a student's awareness of financial literacy and planning across a range of everyday issues concerning money matters, financial choices, earning and living. It highlights the need for individuals to be financially literate to meet future challenges and make informed and responsible monetary decisions. It will assist students to make meaning of a range of life skills essential in the real world. This subject includes topics such as budgeting, wise-spending strategies, common investment options and scams, fraud and identity theft. This is a subject that teaches real life skills.

Links to VCE subjects:

Business Management Accounting Economics Please note: This subject runs for one semester. Contact Person: Ms Deanna Carr <<u>carrd@bmg.vic.edu.au</u>

The Business World

This subject introduces students to the dynamic and constantly changing world of business. It investigates contemporary business issues or events and explores the ways in which businesses make decisions. In studying this subject, students will develop transferable skills that will enable them to interpret business events, understand customer behaviours and participate in business activities. The areas of study explored include: entrepreneurship, innovation in business, the planning process in operating a small business, business communication and marketing strategies, management skills and personal characteristics of successful business managers, current business events, and new innovations or developments in business.

Links to VCE subject: Business Management Please note: This subject runs for one semester. Contact Person: Mr Garry Mayberry <<u>mayberryg@bmg.vic.edu.au</u>

VET Certificate II in Business

The Certificate II in Business is an entry-level VET (Vocational Education Training) course designed to prepare students for their first steps into a position in business with training in customer service, communication, producing digital text documents and organizing and prioritizing daily work activities. This course aims to get students ready for working in the business industry. At the successful conclusion of this year long course, students will be awarded the nationally recognized Certificate II in Business.

Links to VET subjects:

Through this certificate, students will develop the employability skills required to be successful including: effective communication, initiative, problem solving, organizing and planning, teamwork and the use of business and ICT equipment. This course is aimed at enabling students to develop practical work place skills. Student will complete module work to prove their competency in the course and will be awarded a VET Certificate II in Business at the successful completion of this course.

Links to VCE subjects:

VCE Business Management Please note: This subject runs for a full year. It is only available to Year 10 students. Contact Person: Ms Deanna Carr <<u>carrd@bmg.vic.edu.au</u>

Ethics

In Ethics, students gain an understanding of, and empathy for, the many issues that face society. Topics covered include: theoretical foundations of ethical thinking, ethical debates, morality in society, and dominant and emerging social values. Students complete tasks that complement classroom discussions of historical and contemporary ethical issues.

Links to VCE subjects: English Philosophy Legal Studies Biology History Languages Media Studies Please note: This subject runs for one semester. Contact Person: Ms Sarah Hunter<hunters@bmg.vic.edu.au

Philosophy

In Philosophy, students study the critical methods of argument and analysis that have been developed by philosophers in response to critical questions such as the nature of existence and reality. Students explore key concepts of epistemology, metaphysics and ethics. Students study and apply differing theories. They engage in evaluating, communicating and observing different viewpoints with critical thinking skills.

Links to VCE subjects:

English Legal Studies Philosophy History Art **Please note:** This subject runs for one semester. **Contact Person:** Ms Sarah Hunter <<u>hunters@bmg.vic.edu.au</u>

LOTE

French Year 9

This subject develops the students' ability to understand French and also provides students with a direct means of access to the rich and varied cultures of francophone communities around the world. Studying a language other than English contributes markedly to the overall education of students in the areas of communication, cross-cultural understanding, cognitive development, literacy and general knowledge. A second language is highly desired by employers and future workplaces will be global ones. Students studying Year 9 French will focus on the specific topics for daily life: work, weekend activities and holidays, going out and food shopping. They will further develop their skills in listening, speaking, grammar, reading and writing.

Links to VCE subjects:

French

Please note: This subject runs for a full year. Students must have studied French in Year 8 to select this subject in Year 9. Contact Person: Mrs Fiona Erhardt <<u>erhardtf@bmg.vic.edu.au</u>

Pre-VCE French (Year 10)

To study Year 10 French, students must have at least studied one semester of French in Year 9. French is still considered one of the major world languages and is very useful when studied in conjunction with Travel and Tourism, Business and Banking, Food and Hospitality, Medicine, Law and Politics, in particular. Studying a language other than English contributes markedly to the overall education of students in the areas of communication, cross-cultural understanding, cognitive development, literacy and general knowledge. Students in Year 10 French will focus on the specific topics of holidays, jobs, culture and tradition, famous French attractions, health and illness, past events and friendship issues. They will develop skills in listening, speaking, grammar, vocabulary, reading and writing. This course will fully prepare students for VCE French.

Links to VCE subjects:

French

Please note: This subject runs for a full year. Students must have studied French in Year 9 to select this subject in Year 10. Contact Person: Mrs Fiona Erhardt <<u>erhardtf@bmg.vic.edu.au</u>

Indonesian Year 9

The Year 9 Indonesian program offers students the opportunity to develop their language skills and their cultural understanding of Indonesia. Continuing to learn this language will provide students with essential communication skills, an intercultural capability and an understanding of the role of language and culture in human communication. Students will study specific topics including hobbies and sport, holidays and celebrations, housing and the environment.

Links to VCE subjects:

Indonesian

Please note: This subject runs for a full year. Students must have studied Indonesian in Year 8 to select this subject in Year 9. Contact Person: Mrs Fiona Erhardt <<u>erhardtf@bmg.vic.edu.au</u>

Pre-VCE Indonesian (Year 10)

The Year 10 Indonesian program offers students the opportunity to further develop their language skills and their cultural understanding of Indonesia. Continuing to learn this language will provide students with essential communication skills, an intercultural capability, and an understanding of the role of language and culture in human communication. Students will study specific topics including pertukaran siswa - student exchange, semoga cepat sembuh - get well soon, desa dan kota - village and city and dari dulu sampai sekarang - then and now (Indonesian history and politics).

Links to VCE subjects:

Indonesian

Please note: This subject runs for a full year. Students must have studied Indonesian in Year 9 to select this subject in Year 10. Contact Person: Mrs Fiona Erhardt <<u>erhardtf@bmg.vic.edu.au</u>

Japanese Year 9

Students work through the course book, iiTomo 3+4. Topics covered include 'My Personal History,' 'What language do you speak?' and 'Is fast food healthy?' The units cover hobbies, nationalities, languages and Australian and Japanese food. Students also learn the past-tense of verbs and adjectives, and the Te-Form. Students learn 11 new kanji characters, as well as 46 katakana characters. Students also develop their skills in reading, writing, speaking and listening.

Links to VCE subjects:

Japanese

Please note: This subject runs for a full year. Students must have studied Japanese in Year 8 to select this subject in Year 9. Contact Person: Mrs Fiona Erhardt <<u>erhardtf@bmg.vic.edu.au</u>

Pre-VCE Japanese (Year 10)

Students begin the year studying the theme 'My Personal World' which reviews many Year 9 structures and introduces new ones. Students then return to using the course book, iiTomo 3+4, to study the topics 'End of School Trip' and 'Part-Time Jobs'. By using the course-book and the kanji workbook, students learn approximately 20 new kanji characters. They learn the potential and plain form of verbs and review their use of adjectives. Students will also develop their skills in reading, writing, speaking and listening.

Links to VCE subjects:

Japanese

Please note: This subject runs for a full year. Students must have studied Japanese in Year 9 to select this subject in Year 10. Contact Person: Mrs Fiona Erhardt <<u>erhardtf@bmg.vic.edu.au</u>

VCE Acceleration in Humanities

History Units 1 & 2: Global Empires

Unit 1 examines how the Portuguese, Spanish, French, British and Dutch empires harnessed new ideas and technologies to usurp the power of the established empires of Venice, China and the Ottoman Empire, thus entrenching their ideas and influence across the globe. In Unit 2, students explore the operation of European colonies and the challenges they faced from within and without.

Links to VCE subjects:

Unit 3 & 4 History: Australian

Unit 3 & 4 History: Revolutions

Please note: This subject runs for a full year. Students will still need to complete the compulsory 9/10 Australian History semester subject during Year 9 or 10. This subject is by invitation only.

Contact Person: Ms Celia Patterson pattersonc@bmg.vic.edu.au

Geography Units 1 & 2

The study of Geography is a structured way of exploring, analysing and understanding the characteristics of places that make up our world. Geographers are interested in key questions concerning places and geographic phenomena: What is there? Where is it? Why is it there? What are the effects of it being there? How is it changing over time and how could it change in the future? How is it different from other places and phenomena? How are places and phenomena connected?

Students explore these questions through fieldwork and the investigation of a wide range of secondary sources. These methods underpin the development of a unique framework for understanding the world, enabling students to appreciate its complexity, the diversity and interactions of its environments, economies and cultures, and the processes that helped form and transform them. In Units 1&2 students study Hazards and Disasters and Tourism.

Links to VCE subjects:

Unit 3 &4 Geography Unit 3 & 4 Environmental Science Please note: This subject runs for a full year. Contact Person: Ms Celia Patterson <pattersonc@bmg.vic.edu.au

Accounting Units 1 & 2

VCE Accounting explores the financial recording, reporting, analysis and decision-making processes of a sole proprietor of a small business. Students study both theoretical and practical aspects of accounting. They collect, record, report and analyse financial data, and report, classify, verify and interpret accounting information, using both manual methods and information and communications technology (ICT). Students apply critical thinking skills to a range of business situations to model alternative outcomes and to provide accounting advice to business owners. In business decision-making, financial as well as ethical considerations (incorporating social and environmental aspects) are taken into account. In Units 1 & 2 students study the Role of accounting in business and Accounting and decision-making for a trading business.

Links to VCE subjects:

Unit 3 & 4 Accounting Please note: This subject runs for a full year. Contact Person: Mr Rob De Wit <<u>dewitr@bmg.vic.edu.au</u>

Australian and Global Politics Unit 1 & 2

VCE Australian and Global Politics is the study of contemporary power at both national and global levels. Through this study students explore, explain, analyse and evaluate national and global political issues and events. Australian and Global Politics offers students the opportunity to engage with key political, social and economic issues, and to become informed citizens, voters and participants in their local, national and international communities. In Units 1 & 2 students study Ideas, actors and power and global connections.

Links to VCE subjects:

Unit 3 & 4 Global Politics Please note: This subject runs for a full year. Contact Person: Ms Erin Thornton <<u>thorntone@bmg.vic.edu.au</u>

Business Management Units 1 & 2

VCE Business Management examines the ways businesses manage resources to achieve objectives. The VCE Business Management study design follows the process from the first idea for a business concept, to planning and establishing a business, through to the day-to-day management of a business. It also considers changes that need to be made to ensure continued success of a business. Students develop an understanding of the complexity of the challenges facing decision makers in managing these resources. A range of management theories is considered and compared with management in practice through contemporary case studies drawn from the past four years. Students learn to propose and evaluate alternative strategies to contemporary challenges in establishing and maintaining a business. In Units 1 & 2 students study Planning a business and Establishing a business.

Links to VCE subjects:

Unit 3 & 4 Business Management **Please note:** This subject runs for a full year. **Contact Person:** Mr Garry Mayberry <<u>mayberryg@bmg.vic.edu.au</u>

Legal Studies Units 1 & 2

VCE Legal Studies examines the institutions and principles which are essential to Australia's legal system. Students develop an understanding of the rule of law, law-makers, key legal institutions, rights protection in Australia, and the justice system.

By applying knowledge of legal concepts and principles to a range of actual and/or hypothetical scenarios, students develop their ability to use legal reasoning to argue a case for or against a party in a civil or criminal matter. They consider and evaluate recent and recommended reforms of the criminal and civil justice systems, and engage in an analysis of the extent to which our legal institutions are effective and our justice system achieves the principles of justice. For the purposes of this study, the principles of justice are fairness (fair legal processes are in place, and all parties receive a fair hearing), equality (all people are treated equally before the law, with an equal opportunity to present their case), and access (understanding of legal rights and ability to pursue their case). In Units 1 & 2, students study Guilt and liability and Sanctions, remedies and rights.

Links to VCE subjects:

Unit 3 & 4 Legal Studies Please note: This subject runs for a full year. Contact Person: Ms Erin Thornton <<u>thorntone@bmg.vic.edu.au</u>

SCIENCE

Pre-VCE Chemistry

Chemistry is the science which helps us to understand what matter consists of. Science is used to explain natural phenomena at the molecular level as well as create new substances such as materials and polymers. This subject is designed to prepare students for the study of Chemistry at VCE and provide them with the fundamentals in terms of content knowledge and skills.

Links to VCE subjects: Chemistry Please note: This subject runs for one semester. It is a pre-requisite for VCE Chemistry. Contact Person: Ms Susanna Mandic mandics@bmg.vic.edu.au

Pre-VCE Physics

Physics is the science which explains the workings of nature and the physical universe. This is significant for understanding our place in the universe. This subject is designed to prepare students for the study of Physics at VCE and provide them with the fundamentals in terms of content knowledge and skills.

Links to VCE subjects:

Physics

Please note: This subject runs for one semester. It is a pre-requisite for VCE Physics. Contact Person: Ms Kate Graham-Wood<graham-woodk@bmg.vic.edu.au

Pre-VCE Biology

Biology is the science of living things. Living things have found ways to live in all the habitats found on Earth. Biology is the study of these organisms and the strategies that they have evolved to enable them to survive and interact with the non-living environment. This subject is designed to prepare students for the study of Biology at VCE level and provides them with the fundamentals of study in terms of content knowledge and skills.

Links to VCE subjects:

Biology

Please note: This subject runs for one semester. It is a pre-requisite for VCE Biology. Contact Person: Ms Tania O'Brien<<u>obrient@bmg.vic.edu.au</u>

Pre-VCE Environmental Science

Pre-VCE Environmental Science provides the opportunity for students to understand the structure, function and diversity of natural ecosystems on this planet and evaluate the impact of human activities on them. Students examine strategies to maintain and protect the ecological health of the environment while meeting the needs and desires of human populations. Environmental Science investigates the interactions between natural and human systems. Students study the Earth's spheres and how they interact with biogeochemical cycles. They also gain practical experience in monitoring ecosystems.

Links to VCE subjects:

Environmental Science

Geography

Please note: This subject runs for one semester. It is a pre-requisite for VCE Environmental Science. Contact Person: Ms Fiona Davidson<<u>davidsonf@bmg.vic.edu.au</u> & Ms Serena Richards richardss@bmg.vic.edu.au

Pre-VCE Psychology

Pre-VCE Psychology introduces students to the study of human behaviour. Students explore the varying fields of psychology including educational, environmental, forensic, health, sports, clinical, social, developmental and organisational psychology. Students investigate the brain and examine the concept of mental well-being and apply its principles to increased performance in a range of aspects of their daily lives. The subject also investigates the factors that influence the learning of new behaviours and improve memory.

Links to VCE subjects: Psychology Please note: This subject runs for one semester. Contact Person: Mr Leigh Park <<u>parkl@bmg.vic.edu.au</u>

Psychology I

Psychology I is a foundation subject that explores the nature and development of mind and behaviour in both humans and animals. Topics investigated include what is psychology, personality psychology, forensic psychology, and sensation and perception. Students develop an understanding of themselves and their relationship with others in society. Students have the opportunity to design and conduct first-hand investigations into human behaviour.

Links to VCE subjects: Psychology Biology Health and Human Development Please note: This subject runs for one semester. Contact Person: Mr Leigh Park parkl@bmg.vic.edu.au

Forensic Science - Biology

Forensic Science is the application of sciences such as Biology to help solve matters of law. The biology side of Forensic Science can help investigators determine the identity of an unknown suspect through fingerprint identification, blood and DNA typing, examinations of hair and fibres, autopsy procedures, using anthropology to exam remains and entomology to use insects to help determine a time of death as well as looking at the role of pollens at crime scenes. It can also help work out what happened at a crime scene by understanding how blood spatter patterns may have occurred. Students will study all of these topics and gain practical experience in how to take and analyse fingerprints, make and analyse blood splatter patterns and examine autopsy procedures as well as other forensic procedures.

Links to VCE subjects: Biology Please note: This subject runs for one semester.

Contact Person: Ms Tania O'Brien obrient@bmg.vic.edu.au

Forensic Science – Physics and Chemistry

Forensic Science is the application of sciences such as Physics, Chemistry, Computer Science and Engineering to help solve matters of law. The physics components of Forensic Science can help investigators to understand the causes of road traffic accidents by analysing all the factors involved such as the condition of the car, whether the car was speeding, road conditions, and what the weather was like. They also analyse and report on shooting crimes involving ballistics. The chemistry components of Forensic Science can help investigators learn the composition and source of evidence such as drugs, poisons and trace materials and analyse handwriting and inks used in ransom, forgery and counterfeit cases. Students will study all of these topics and gain practical experience in how to analyse and report on various situations.

Links to VCE subjects: Chemistry Physics Please note: This subject runs for one semester. Contact Person: Ms Kate Graham-Wood<graham-woodk@bmg.vic.edu.au

Health and Disease

We live in an age when a focus on health and the way to minimise disease is paramount. Students learn about various types of pathogens and microbial techniques that assist in the identification of disease. The immune system is explored and students discover how the human body fights infectious diseases. Prevention and treatment of disease is also considered. Non-infectious diseases are explored through the use of biotechnology with a specific focus on genetic disorders.

Links to VCE subjects: Biology Please note: This subject runs for one semester. Contact Person: Ms Natalie Desira <desiran@bmg.vic.edu.au

IGCSE Physical Sciences

The Cambridge IGCSE Physical Science syllabus helps learners to understand the technological world in which they live, and take an informed interest in Science and scientific developments. They learn about the basic principles of Physical Science through a mix of theoretical and practical studies. As they progress, learners gain an understanding of how science is studied and practised, and become aware that the results of scientific research can have both good and bad effects on individuals, communities and the environment.

Please note: This subject runs for a full year and is assessed with an external examination. Contact Person: Dr Debra Penny pennyd@bmg.vic.edu.au

Child Development

This course aims to provide foundation knowledge about the human development of children aged 0-5 years old. It considers elements of developmental psychology including the framework of social, physical, intellectual, cognitive and emotional development. Students will develop a scientific appreciation of investigating developmental milestones. Students will enhance their ability to apply their knowledge and understanding of child development to their own interactions with babies, parents and children whilst developing an awareness of different cultures and what constitutes a family in a variety of communities.

Links to VCE subjects: Health and Human Development Psychology Please note: This subject runs for one semester. Contact Person: Ms Debra Penny < pennyd@bmg.vic.edu.au & Ms Alice Wu-Tollis< wu-tollisa@bmg.vic.edu.au

VCE Acceleration in Science

Biology Units 1 & 2

Biology seeks to understand and explore the nature of life, past and present, through four themes: how living things stay alive, how living things reproduce, how cellular processes help cells maintain life, and how life changes over time.

VCE Biology enables students to investigate the dynamic relationships between organisms, their interactions with the non-living environment, and the processes of life, from the molecular world of the cell to that of the whole organism, that maintain life and ensure its continuity. Students will learn about the ways that cells and organisms reproduce and communicate. They will study how genetics can describe patterns of inheritance including the use of genetic screening and decision making related to inheritance. Students will learn about structural, physiological and behavioural adaptations that help organisms to survive in their habitats.

An important feature of VCE Biology is the opportunity for students to undertake laboratory experimentation, microscopy and fieldwork including practical investigations. Students pose questions, formulate hypotheses, collect and analyse data, evaluate methodologies and results, justify conclusions, make recommendations and communicate their findings. In Units 1 & 2, students study the following: How do living things stay alive? How is continuity of life maintained?

Links to VCE subjects: Unit 3 & 4 Biology Please note: This subject runs for a full year. Contact Person: Ms Tania O'Brien <obrient@bmg.vic.edu.au

Environmental Science Units 1 & 2

VCE Environmental Science enables students to understand Earth as a set of four inter dependent systems: the atmosphere, biosphere, hydrosphere and lithosphere. Students explore how the relationships between these systems produce environmental change over a variety of time scales. They investigate the extent to which humans modify their environments and the consequences of these changes in local and global contexts with a focus on pollution, biodiversity, energy use and climate change.

An important feature of VCE Environmental Science is the opportunity for students to undertake laboratory investigations, fieldwork that may also involve the use of technologies and sampling techniques, case studies, simulations and practical investigations. Students pose questions, formulate hypotheses, collect and analyse data, evaluate methodologies and results, justify conclusions and communicate their findings. They investigate and evaluate issues, changes and alternative proposals by considering both longer and shorter term consequences for the individual, the environment and society. In Units 1 & 2, students study the following: How are Earth's systems connected? How can pollution be managed?

Links to VCE subjects:

Unit 3 & 4 Environmental Science Please note: This subject runs for a full year. Contact Person: Ms Fiona Davidson<dvaidsonf@bmg.vic.edu.au & Ms Serena Richards richardss@bmg.vic.edu.au

Psychology Units 1 & 2

VCE Psychology enables students to explore how people think, feel and behave through the use of a biopsychosocial approach. Students explore the connection between the brain and behaviour by focusing on several key interrelated aspects of the discipline: the interplay between genetics and environment, individual differences and group dynamics, sensory perception and awareness, memory and learning, and mental health.

An important feature of VCE Psychology is the opportunity for students to undertake a range of inquiry tasks both collaboratively and independently. Inquiry methodologies can include laboratory experimentation, observational studies, self-reports, questionnaires, interviews, rating scales, simulations, animations, examination of case studies and literature reviews. Students pose questions, formulate research hypotheses, operationalise variables, collect and analyse data, evaluate methodologies and results, justify conclusions, make recommendations and communicate their findings. As well as an increased understanding of scientific processes, students develop capacities that enable them to critically assess the strengths and limitations of Science, respect evidence-based conclusions and gain an awareness of the ethical, social and political contexts of scientific endeavours. In Units 1 & 2, students study the following: how behaviour and mental processes are shaped, and how external factors influence behaviour and mental processes.

Links to VCE subjects:

Unit 3 & 4 Psychology Please note: This subject runs for a full year. Contact Person: Mr Leigh Park parkl@bmg.vic.edu.au

PHYSICAL EDUCATION, SPORT and HEALTH

PE/Sport/Health – Boys I (Year 9)

Students will learn to measure their own fitness and physical activity levels and identify factors that influence motivation to be physically active. Students will learn to proficiently perform complex movement and manipulative skills and evaluate individual and group tactics and movement patterns within different sports. Students will also analyse the positive and negative health outcomes of a range of personal and community actions and health issues associated with sexuality. Students will take part in the Baby 'Think It Over' Program, explore male and female health issues and participate in sexuality, alcohol and drug awareness activities.

Links to VCE subjects:

Physical Education Health and Human Development Please note: This subject runs for one semester. Contact Person: Mr Andrew Perks <<u>perksa@bmg.vic.edu.au</u>

PE/Sport/Health – Girls I (Year 9)

Students will learn to measure their own fitness and physical activity levels and identify factors that influence motivation to be physically active. Students will learn to proficiently perform complex movement and manipulative skills and evaluate individual and group tactics and movement patterns within different sports. Students will also analyse the positive and negative health outcomes of a range of personal and community actions and health issues associated with sexuality. Students will take part in the Baby 'Think It Over' Program, explore male and female health issues, and participate in sexuality, alcohol and drug awareness activities.

Links to VCE subjects: Physical Education Health and Human Development Please note: This subject runs for one semester. Contact Person: Mr Andrew Perks <<u>perksa@bmg.vic.edu.au</u>

PE/Sport/Health – Boys II (Year 10)

Students will learn to proficiently perform complex movement and manipulative skills and evaluate individual and group tactics and movement patterns within different sports including Fitness, Tennis, Australian Rules Football and European Handball amongst others. They will maintain regular participation in moderate to vigorous physical activity and analyse and evaluate their level of involvement in physical activity. Students will investigate the skeletal and muscular components of the human body. Students will also concentrate on improving their physical fitness, linking their fitness testing to the components of fitness and analysing the contribution of energy systems to various activities. Students will participate in drug and alcohol awareness and be made aware of responsible decision-making.

Links to VCE subjects:

Physical Education Health and Human Development Please note: This subject runs for one semester. Contact Person: Mr Andrew Perks cperksa@bmg.vic.edu.au

PE/Sport/Health – Girls II (Year 10)

Students will learn to proficiently perform complex movement and manipulative skills and evaluate individual and group tactics, and movement patterns within different sports including Fitness, Tennis, Australian Rules Football and European Handball, amongst others. They will maintain regular participation in moderate to vigorous physical activity and analyse and evaluate their level of involvement in physical activity. Students will investigate the skeletal and muscular components of the human body. Students will concentrate on improving their Physical Fitness, linking their fitness testing to the components of fitness and analysing the contribution of energy systems to various activities. Students will also participate in drug and alcohol awareness and be made aware of responsible decision-making.

Links to VCE subjects: Physical Education Health and Human Development Please note: This subject runs for one semester. Contact Person: Mr Andrew Perks <<u>perksa@bmg.vic.edu.au</u>

Elite Sports Training I-IV

Elite Sports Training I-IV is a progressive course consisting of four elective units of study, each with a duration of one semester. Students will gain an understanding of the importance of specific strength and conditioning programs and exercises for athletes within chosen sports. They will learn to identify and explain the relationship between physical activity, muscle fatigue and recovery. Students will also identify the need for specific lifting programs to improve sporting performance. Muscular skeletal screenings as well as prehabilitation and rehabilitation programs will also be a focus for all athletes.

Links to VCE subjects:

Physical Education

Please note: This subject runs for one semester. It is aimed at elite sports people. Completion of a fitness test and a written application prior to acceptance is compulsory.

Contact Person: Mr Andrew Perks perksa@bmg.vic.edu.au

Advanced Fitness

Students will gain an understanding of physical activity, analyse movement skills from a physiological perspective, and apply relevant training principles and methods to improve performance within physical activity. Students analyse skill frequencies, movement patterns, heart rates and work to rest ratios to determine the requirements of activities. It examines the way in which energy for activity is created through oxygen and food supplies. Students will analyse the contribution of the energy systems as well as considering the physiological effects of muscle fatigue. Students will also be introduced to the biomechanical and skill acquisition principles used to analyse human movement skills and energy production from a physiological perspective

Links to VCE subjects:

Physical Education. Please note: This subject runs for one semester. Contact Person: Mr Andrew Perks perksa@bmg.vic.edu.au

Exercise Physiology

In this subject, students will gain an understanding of physical activity from a physiological perspective. Exercise Physiology examines the way in which energy for activity is created through oxygen and food supplies. Students will analyse the contribution of the energy systems and consider the physiological effects of muscle fatigue. It is an introduction to the field of sport and exercise science and specifically covers units on energy systems, muscle fatigue and recovery, and oxygen uptake and delivery.

Links to VCE subjects: Physical Education Please note: This subject runs for one semester. Contact Person: Mr Andrew Perks<pperksa@bmg.vic.edu.au

Global Health and Development

Global Health and Development provides students with the opportunity to explore the interrelationships between health and development. Students will analyse the impact of a range of environmental factors that contribute to variations in health and developmental outcomes. Students will be able to evaluate the role of government and international agencies to optimize health and development globally. Students will understand the burden of disease in developing countries in comparison to Australia. They will then analyse the reasons for the differences and the impact on developmental outcomes.

Links to VCE subjects:

Health and Human Development Please note: This subject runs for one semester. Contact Person: Mr Andrew Perks <<u>perksa@bmg.vic.edu.au</u>

Injury Prevention and Control

Injury Prevention and Control provides students with the opportunity to perform, observe and analyse first aid procedures. Students will analyse a range of first aid and sporting case studies and identify the potential risks in sporting situations and in everyday life. Students will be involved in practical activities such as bandaging, taping, creating slings, and attending to fractures. They will be assessed in SALTAPS, RICER and NOHARM.

Links to VCE subjects: Health and Human Development Physical Education Please note: This subject runs for one semester. Contact Person: Mr Andrew Perks cperksa@bmg.vic.edu.au

Unit 1 & 2 Outdoor and Environmental Studies

Outdoor and Environmental Studies is a study of the ways in which humans interact with and relate to natural environments. In this study, both passive and active outdoor activities provide the means for students to develop experiential knowledge of a range of outdoor environments. These activities include snorkeling, surfing, skiing, mountain biking, canoeing, bushwalking, conservation and restoration activities, marine exploration, and community projects.

Links to VCE subjects:

Unit 3 & 4 Outdoor and Environmental Studies Unit 1-4 Environmental Science Unit 1-4 Geography Unit 1-4 Health and Human Development Please note: This subject runs for a full year. Contact Person: Mr Andrew Perks <perksa@bmg.vic.edu.au

VCE Acceleration in Physical Education, Sport and Health

Physical Education Units 1 & 2

VCE Physical Education explores the complex interrelationships between anatomical, biomechanical, physiological and skill acquisition principles to understand their role in producing and refining movement, and examines behavioural, psychological, environmental and sociocultural influences on performance and participation in physical activity. The assimilation of theoretical understanding and practice is central to the study of VCE Physical Education. Students participate in practical activities to examine the core concepts that underpin movement and that influence performance and participation in physical activity, sport and exercise. In Units 1 & 2, students study the following: The human body in motion and physical activity, sport and society.

Links to VCE subjects:

Unit 3 & 4 Physical Education Please note: This subject runs for a full year. Contact Person: Mr Andrew Perks <<u>perksa@bmg.vic.edu.au</u>

Health and Human Development Units 1 & 2

VCE Health and Human Development takes a broad and multidimensional approach to defining and understanding health and wellbeing. Students investigate the World Health Organization's definition and other interpretations of health and wellbeing. Students examine health and wellbeing and human development as dynamic concepts, subject to a complex interplay of biological, sociocultural and environmental factors, many of which can be modified by healthcare and other interventions. Students consider the interaction of these factors, with particular focus on the social factors that influence health and wellbeing.

Students consider Australian and global contexts as they investigate variations in health status between populations and nations. They look at the Australian health care system and research what is being done to address inequalities in health and development outcomes. They examine and evaluate the work of global organisations such as the United Nations and the World Health Organization, as well as non-government organisations and the Australian government's overseas aid program. In Units 1 & 2, students study the following: Understanding health and wellbeing and managing health and development.

Links to VCE subjects:

Unit 3 & 4 Health and Human Development Please note: This subject runs for a full year. Contact Person: Mr Andrew Perks <<u>perksa@bmg.vic.edu.au</u>

THE ARTS and TECHNOLOGY

VISUAL ARTS

Pre VCE Art

In this subject, students are given opportunities to use various materials, techniques, and art forms. Through research, students gain an overview of both traditional and contemporary artists and artworks. They develop their style and explore techniques as they develop and refine a folio of practical work. Students' understanding of art elements and principles are also extended and are applied to set tasks. Students will analyse and discuss their work and the work of other artists using appropriate vocabulary. The ability to develop and express personal ideas and feelings through individual artwork prepares students for folio production in VCE Art.

Links to VCE subjects Studio Art Art Please note: This subject runs for one semester. Contact Person: Ms Jane Todd <<u>toddj@bmg.vic.edu.au</u>

Pre VCE Studio Art

Pre VCE Studio Art provides students with opportunities to understand and appreciate the processes utilised when producing artworks. In the production of their folios student trial, a variety of art forms including, but not limited to, printmaking, painting, ceramics, mixed media and sculpture. Through research, students gain an overview of both historical and contemporary artists, artworks and the requirements and roles for exhibiting artworks. Students will develop and refine their ideas, techniques, materials, and processes throughout the production of their folio preparing them for VCE Studio Art.

Links to VCE subjects Studio Art Art Please note: This subject runs for one semester. Contact Person: Ms Jane Todd <toddj@bmg.vic.edu.au

Media Studies

On completion of Media , students will have prepared and documented a media production design plan for a media film product based on their chosen genre. Students will also have developed production skills using technology within a collaborative team and explained the media production and post-production processes within film. Students analysed the construction of codes and conventions evident in a media narrative and explained how narratives are constructed and distributed, how they are engaged, consumed and read by intended audiences.

Links to VCE subjects:

Media Please note: This subject runs for one semester. Contact Person: Ms Vanessa Kamcev <kamcevva@bmg.vic.edu.au

Photography I

During the Photography I course, students will explore individual ideas by working through the Studio Process. Students explore the use of subject matter, influences, and sources of inspiration in the creation of their own artworks with the opportunity of exploring Studio Portraiture or Fine Art Photography. Students will gain knowledge about how Photography is used as an art form, through their own artmaking and by exploring the artwork of other photographers. The understanding of the Photographic Techniques of Aperture, Shutter Speed, Lighting and Compositions will be developed, along with the incorporation of digital technologies in the creation of artworks.

Links to VCE subjects (including other departments)

Studio Art Art Media Please note: This subject runs for one semester. Contact Person: Ms Nicole Heywood <<u>heywoodn@bmg.vic.edu.au</u>

Photography II

During the Photography II course, students will explore individual ideas by working through the Studio Process. Students explore the use of subject matter, influences, and sources of inspiration in the creation of their own artworks with the opportunity of exploring Still Life Photography through High-Key and Low-Key lighting as well as Photographic Manipulation. Students will gain knowledge about how Photography is used as an art form, through their own artmaking and by exploring the artwork of other photographers. The understanding of the Photographic Techniques of Aperture, Shutter Speed, Lighting and Compositions will be developed, along with the incorporation of digital technologies in the creation of artworks.

Links to VCE subjects (including other departments)

Studio Art Art Media Please note: This subject runs for one semester. Contact Person: Ms Nicole Heywood <heywoodn@bmg.vic.edu.au

Viscomm I

This subject focuses on the communication and environmental design fields. Students have the opportunity to learn how architects, interior and graphic designers use different drawing methods to convey their ideas and how to manipulate and organise design elements and principles to communicate information. Creative, critical and reflective thinking techniques support students to progress through a design process as they generate and develop ideas for their folio working to a set brief. Throughout the semester students explore manual and digital methods using industry standard software from the Adobe Creative Cloud and SketchUp, preparing them for VCE Visual Communication Design.

Links to VCE subjects:

Visual Communication Design Please note: This subject runs for one semester. Contact Person: Ms Karin Nolta <<u>noltak@bmg.vic.edu.au</u>

Viscomm II

This subject focuses on the communication and industrial design fields. Students have the opportunity to learn how product and graphic designers use different drawing methods to convey their ideas and how to manipulate and organise design elements and principles to communicate information. Creative, critical and reflective thinking techniques support students to progress through a design process as they generate and develop ideas for their folio working to a set brief. Throughout the semester students explore manual and digital methods using industry standard software from the Adobe Creative Cloud, SketchUp and Fusion 360 allowing them to employ the use of a laser cutter and 3D printer, preparing them for VCE Visual Communication Design.

Links to VCE subjects:

Visual Communication Design Please note: This subject runs for one semester. Contact Person: Ms Karin Nolta <<u>noltak@bmg.vic.edu.au</u>

PERFORMING ARTS

Dance I

Dance I provides students with opportunities to develop and improve their physical skills and technique. It allows the students to develop a variety of approaches to dance-making and performance as well as enabling them to observe, experience and write about dance in an analytical, critical and reflective manner. Students are required to choreograph solo or duo dance works and perform a learnt group work requiring technique and performance skills.

Links to VCE subjects:

Dance

Drama

Please note: This subject runs for one semester. Students should have some level of prior dance experience before selecting this subject.

Contact Person: Ms Natasha Davey <<u>daveyn@bmg.vic.edu.au</u>

Dance II

Dance II continues to provide opportunities to develop and improve the students' physical skills and dance technique. Students will practise dance-making skills to communicate themes, stories or concepts through movement, costume and music. Students must choreograph solo or duo dance works and perform a learnt group dance requiring a demonstration of artistry through their communication of the theme. In Dance II, professional choreographers and their dance works will be analysed and researched.

Links to VCE subjects:

Dance

Drama

Please note: This subject runs for one semester. Students should have some level of prior dance experience before selecting this subject.

Contact Person: Ms Natasha Davey <<u>daveyn@bmg.vic.edu.au</u>

Drama I

Drama I develops the students' creative, collaborative, analytical and performance skills. Using Laban's System, and the conventions of Commedia dell'Arte, students explore the power of dramatic movement and improvisation to devise a comic ensemble performance. They will learn how character may be interpreted and performed using the techniques of Stanislavski in a monologue performance. They will describe and evaluate the purpose and processes of their practical work, as well as experience a professional performance which they must analyse and evaluate in extended written responses. This encourages them to develop the academic language of analysis and extend their vocabulary which can be applied in both VCE Drama and other subject areas.

Links to VCE subject: Drama Please note: This subject runs for one semester. Contact Person: Ms Helena Stratakos <stratakosh@bmg.vic.edu.au

Shakespeare on Stage

Shakespeare on Stage is the study of the contexts and performance of Shakespearean drama both from a theoretical and practical perspective. The history, performance styles and the impact of diverse dramatic interpretations are explored and applied in a production of one of Shakespeare's works. Performance analysis works to develop the ability to make connections between characterisation, stagecraft and other dramatic elements to meaningfully demonstrate and explore different ideologies and the human condition. It encourages them to develop the academic language of analysis that can be applied both in VCE Drama and in VCE English subjects. Students will develop a better understanding and appreciation for the language of Shakespeare through performance, as well as written analysis and evaluation in short and extended written responses. Students will develop self-confidence, self-discipline, cooperation, listening and communication skills which will build towards enabling them to create and express themselves.

Links to VCE subject: Drama English Please note: This subject runs for one semester. Contact Person: Ms Helena Stratakos <<u>stratakosh@bmg.vic.edu.au</u>

Pre-VCE Drama

Pre-VCE Drama equips students with the necessary skills for success in VCE Drama. The philosophies, influences and impacts of early 20th Century theatre, in particular Expressionism and Meyerhold, are explored theoretically and practically. This study will give students a comprehensive understanding of non-naturalism, which is necessary to succeed in VCE Drama. Assessments will be in line with VCE Drama so that, on completion of this course, students will have developed an array of knowledge and skills that will be transferable to VCE Drama. Performance analysis works to develop the ability to make connections between characterisation, stagecraft and other dramatic elements to meaningfully demonstrate and explore different ideologies and themes. It encourages students to develop the academic language of analysis that can be applied both in VCE Drama and in other subject areas such as English.

Links to VCE subject: Drama English Please note: This subject runs for one semester. Contact Person: Ms Helena Stratakos <<u>stratakosh@bmg.vic.edu.au</u>

Music Performance I-IV

Music Performance I-IV is a progressive course consisting of four elective units of study, each with a duration of one semester. The course is aimed at developing the students' skills in performance, music notation, musicianship, improvisation and composition. Students are provided with the opportunity to refine their performance craft, both individually and in a class ensemble, in addition to furthering their knowledge and skills in the areas of music theory, analysis and aural studies. Students begin to develop a personal style and become more independent in their approach to exploring, developing and refining their instrumental skills. Performances are essential components of this course and are assessed regularly.

Links to VCE subjects:

VCE/VET Music Industry

Please note: To be considered for this elective, students should currently be having private tuition on their chosen musical instrument (including voice). Students will be required to continue their private lessons throughout the duration of this elective. It is highly recommended that students undertake all four units of study in succession where possible, to enable adequate preparation for VCE/VET Music Industry. Students may select Music Performance I, II, III or IV as individual electives, or all four across 2 years (recommended).

Contact Person: Mr Steven Bell < bells@bmg.vic.edu.au

HOSPITALITY and FOOD

Hospitality – Café

This subject looks into the running of a business in the hospitality industry. Students will research businesses currently in the market and evaluate why they are successful. They will learn about what is required to start and maintain a small food business. This will include government requirements, business policies and procedures. Students will learn the basics of espresso making, customer service and working as part of an effective team. They will work towards operating the BMG Café to put into practice the skills learnt throughout the course. This subject is a small window into the potential of working in the hospitality industry, or for those potentially thinking of being a business owner.

Links to VCE/VET subjects:

VCE VET Hospitality

Business Management

Please note: This subject runs for one semester. It is highly recommended that this subject is completed if considering Hospitality Food and Beverage in VCE.

Contact Person: Mr Jaike Ludewig <<u>ludewigj@bmg.vic.edu.au</u>>

Food for the Future

Food for the Future looks at food and its role in contemporary society. The course investigates the trends of today that affect the way food products are developed and the influences on the food choices we make as consumers. It also reviews how sustainable food production and global food security are factors in food choices and cooking methods. At this level, the students will be equipped with skills to take basic cooking methods to the next level, whereby students will be encouraged to research and create dishes in response to a design brief.

Links to VCE subjects:

Food Studies
Please note: This subject runs for one semester.
Contact Person: Mr Jaike Ludewig <<u>ludewigj@bmg.vic.edu.au</u>>

Understanding Food

Understanding Food aims to extend on the skills and knowledge acquired in the previous compulsory subject of Food Studies in Years 7 & 8, further developing life skills in food selection and preparation. Students will undertake a variety of practical and theoretical lessons, which will allow them to understand the processes occurring during the various methods of cooking, the changes that occur to the food during cooking and foods most suited to each of the cooking methods. Students research recipes of a multicultural nature and present a dish as part of a multicultural banquet. Students will start to cook recipes of greater difficulty and produce two courses in most practical classes. Students will work with design briefs and learn to select recipes that meet these scenarios which may include the dietary needs of particular groups in our society.

Links to VCE/VET subjects: Food Studies VCE VET Hospitality Please note: This subject runs for one semester. Contact Person: Mr Jaike Ludewig <<u>ludewigi@bmg.vic.edu.au</u>>

DIGITAL TECHNOLOGY

Computing –Advanced Programming

To excel in computer programming, students require a set of fundamental IT skills to enable them to manipulate digital data in order to produce robust solutions to increasingly complex problems. In this subject students will explore numbering systems such as binary and hexadecimal, basic and advanced data structures in order to program in Visual Basic at a more expert level. Students will also be introduced to procedures and tools to structure and manage complex projects.

Links to VCE subjects: Computing Computing: Software Development Systems Engineering Please Note: This subject runs for one semester. This subject requires strong mathematical skills. Contact Person: Ms Phillippa Loton <lotonp@bmg.vic.edu.au

Computing - Games Programming

Programming is a huge industry in Australia and worldwide and there is a growing demand for games programmers. In this subject, students assess two software development environments, Game maker and Unity, to help choose which one they will use in their final project. Students also create games resources and develop skills to manage these resources for their final project. Students design and implement their own games using a formal problem solving process.

Links to VCE subjects:

Computing Computing - Software Development Systems Engineering Please note: This subject runs for one semester Contact Person: Ms Phillippa Loton <lotonp@bmg.vic.edu.au

DESIGN TECHNOLOGY

CAD and CAM Design

Computer Aided Design (CAD) is used for creating visual and spatial information in industrial, mechanical, construction, manufacturing, architectural 3D games and many other design fields. CAD is an essential tool used to explore both form and function of design ideas. Computer Aided Manufacturing (CAM) is used to manufacture the CAD product. 3D printing, Laser Cutting and CNC routing are examples of CAM that students can access to fabricate their designed products. This course enables students to create 3D computerized designs and fabricate a prototype or final product. Students will complete a number of CAD and CAM projects while using the Design Technology process of investigating, designing, producing and evaluating. Students will use a journal to record all steps involved in the production sequence: research, sample pieces, final product and a product self-evaluation.

Links to VCE subjects:

Systems Engineering Product Design & Technology – Wood Product Design & Technology – Textiles Visual Communication Design Please note: This subject runs for one semester. Contact Person: Ms Phillippa Loton <<u>lotonp@bmg.vic.edu.au</u>

Mechatronic Systems

The Mechatronic Systems course is a sample of VCE Systems Engineering, requiring students to draw on theory of mechanical and electronic principles to design an integrated system that solves a real world problem. Students will design a product with electronic and control circuitry that interacts with humans and/or its environment, while using the Design Technology process of investigating, designing, producing and evaluating. Students will use a journal to record all steps involved in the production sequence: research, sample pieces, final product and a product self-evaluation. Examples of past student work include a Theremin synthesizer, an Automatic dog feeder, a James Turrell inspired light installation, a car park reversing sensor system and a Retro arcade gaming booth.

Links to VCE subjects:

Systems Engineering Physics Product Design & Technology – Wood Product Design & Technology – Textiles Please note: This subject runs for one semester. Contact Person: Ms Phillippa Loton <<u>lotonp@bmg.vic.edu.au</u>

Flight Technology - Fundamental

Flight Technology - Fundamental is an introductory course exploring the engineering, design and development of flight technologies. Students learn the fundamental principles of flight technologies while designing, constructing and testing aerial vehicles such as gliders, fixed wing drones or rockets. The subject is a fusion of engineering, design, rapid prototyping, problem solving and Science. Participants use rapid prototyping tools such as 3D printers, laser cutting and CNC routing. Students will complete a number of fundamental flight projects while using the Design Technology process of investigating, designing, producing and evaluating. Students will use a journal to record all steps involved in the production sequence: research, sample pieces, final product and a product self-evaluation.

Links to VCE subjects:

Systems Engineering Product Design & Technology – Wood Physics Please note: This subject runs for one semester. Contact Person: Ms Phillippa Loton <<u>lotonp@bmg.vic.edu.au</u>

Flight Technology – Multirotor

Flight Technology - Multirotor is an intermediate course exploring the engineering, design and development of free flight technologies. Students develop their understanding of fundamental principles of the emerging technology of aerial drones. Students will study the flight principles and systems through designing, constructing and testing a range of model drones. Students will gain an understanding of how drones are employed in a wide range of applications. They are replacing traditional technologies and creating new employment opportunities to those who embrace drone technologies. The subject is a fusion of design, engineering, rapid prototyping, problem solving and Science. Students will have access to a fabrication laboratory and gain an understanding of how to use rapid prototyping tools such as 3D printers, laser cutting, CNC routing, CAD and CAM.

Links to VCE subjects: Systems Engineering Product Design & Technology – Wood Physics Please note: This subject runs for one semester. Contact Person: Ms Phillippa Loton <<u>lotonp@bmg.vic.edu.au</u>

Textile Design – Fundamental

In this subject students discover the origins and environmental impacts of natural and man-made fibres. Through practical experiences using a range of equipment, students develop both hand and machine sewing skills. Students use and modify commercial patterns, draft their own patterns and develop an understanding of the properties of various materials. Students create process samples and document idea development in a design folio to demonstrate an understanding of the product design process. Students complete two practical tasks – a cushion and a pair of pyjamas – and undertake research into dyeing methods, such as using indigo dye and Japanese shibori methods.

Links to VCE subjects:

Product Design & Technology – Textiles Product Design & Technology – Wood Please note: This subject runs for one semester Contact Person: Ms Phillippa Loton <<u>lotonp@bmg.vic.edu.au</u>

Textile Design - Processes

This subject provides the means and the context to help students develop creative and critical thinking skills to solve design problems. Students undertake two major practical design tasks using complex processes after working through the product design process. Students produce a design folio documenting the development of original design ideas in response to design briefs. Students explore technologies associated with textile products such as laser cutting and various printing methods. The students' design work is informed by investigations into the history and future of clothing, emerging technologies in design, and specialist designers such as costume designers.

Links to VCE subjects:

Product Design & Technology – Textiles Product Design & Technology – Wood Please note: This subject runs for one semester. Contact Person: Ms Phillippa Loton <<u>lotonp@bmg.vic.edu.au</u>

Wood Design – Fundamental

Wood Design – Fundamental aims to develop a student's foundation woodworking skills with a focus on the design and production of functional objects in wood. Students will develop essential fundamental woodworking skills and manufacturing techniques. Students will complete a number of design projects while using the design technology process of investigating, designing, producing and evaluating. Students will use a journal to record all steps involved in the production sequence: research, sample pieces, a final product and a product self-evaluation.

Links to VCE subjects:

Product Design & Technology - Wood Please note: This subject runs for one semester Contact Person: Ms Phillippa Loton <<u>lotonp@bmg.vic.edu.au</u>

Wood Design – Furniture

Wood Design – Furniture aims to further develop a student's woodworking skills with a focus on the design and production of furniture such as chairs. Students will utilise modern design and manufacturing techniques such as CAD and CAM (laser cutting, CNC routing and 3D Printing). Students will complete a number of wooden furniture projects while using the design technology process of investigating, designing, producing and evaluating. Students will use a journal to record all steps involved in the production sequence: research, sample pieces, a final product and a product self-evaluation.

Links to VCE subjects:

Product Design & Technology – Wood Product Design & Technology – Textiles Please note: This subject runs for one semester. Contact Person: Ms Phillippa Loton <<u>lotonp@bmg.vic.edu.au</u>

Housing Design and Technology

Housing Design and Technology provides an opportunity for students to explore the materials, engineering principles, aesthetics and sustainability factors influencing the design and construction of housing. Students use STELR sustainable housing kits to collect data demonstrating the influence of common building materials and building orientation on energy efficiency. Students conduct research into Australian historical and contemporary architectural designs and materials, including traditional indigenous housing. Students undertake a major design project, creating their own housing design in response to a design brief. Students record creative and critical thinking techniques in a design folio, demonstrating their exploration of the design process. Computer aided design (CAD) software is used to develop original housing designs leading students to create a 3D mock-up of their original housing design solution.

Links to VCE subjects:

Product Design & Technology – Textiles Product Design & Technology – Wood Systems Engineering Please note: This subject runs for one semester. Contact Person: Ms Phillippa Loton <<u>lotonp@bmg.vic.edu.au</u>

IGCSE Design and Technology

The Cambridge IGCSE Design and Technology syllabus enables learners to identify, consider and solve problems through creative thinking, planning and design, and by working with different media, materials and tools. As a result, learners gain greater technical and design awareness while developing skills such as initiative, resourcefulness, enquiry and ingenuity. They also develop the communication skills central to design making and evaluation.

Cambridge IGCSE Design and Technology provides an ideal basis for further study and prepares learners for their future within a rapidly changing technological society.

Please note: This subject runs for a full year and is assessed with an external examination. Contact Person: Ms Phillippa Loton <<u>lotonp@bmg.vic.edu.au</u>

VCE Acceleration in The Arts and Technology

Art Units 1 & 2

VCE Art introduces the role of art, in all forms of media, in contemporary and historical cultures and societies. Students build an understanding of how artists, through their practice and the artworks they produce, communicate their experiences, ideas, values, beliefs and viewpoints. In this study, students view artworks and investigate the working practices of artists from different cultures and periods of time.

VCE Art challenges students to articulate their understanding of the meanings and messages contained within artworks and to examine the effects of artworks upon the viewer. Students develop skills in research, analysis, art history and criticism to interpret and debate the ideas and issues that are raised in artworks and, in response, they form and support personal points of view. Through exploration and experimentation, students develop skills in creative, critical, reflective and analytical thinking to explore, develop and refine visual artworks in a range of art forms, and develop an awareness of appropriate health and safety practices. In Units 1 & 2, students study the following: Artworks, experience and meaning and Artworks and contemporary culture.

Please note: This subject runs for a full year. Contact Person: Ms Jane Todd <<u>toddj@bmg.vic.edu.au</u>

Media Units 1 & 2

The media is ubiquitous in today's world. Working on a personal, local, national and global level, media is deeply embedded within life and culture. It entertains, teaches, informs, and shapes the audience's perceptions of their lives and the worlds in which they live. Stories in all their forms are at the heart of the media and its relationship with audiences. Through stories, narratives are constructed that engage, and are read, by audiences. Representations of ideas, realities and imagination are constructed and deconstructed, remixed and reimagined with ever increasing technological sophistication, ease and speed to engage audiences. Developments in technologies have transformed media at a rapid pace. The interplay between print and broadcast media and multinational-networked data base platforms has enabled creative communication opportunities and reworked notions of key media concepts including audiences, forms and products, storytelling, influence, institutions and industries. In Units 1 & 2, students study the following: Media forms, representations and Australian stories and Narrative across media forms.

Please note: This subject runs for a full year. Contact Person: Ms Jane Todd <<u>toddj@bmg.vic.edu.au</u>

Studio Arts Units 1 & 2

VCE Studio Arts introduces students to the role and practices of artists in society. Student research focuses on critical, reflective and creative thinking, the visual analysis of artworks and the investigation of how artists have interpreted sources of inspiration and influences in their art making. Students examine how artists develop their practice and have used materials, techniques and processes to create aesthetic qualities in art works. They study how artists have developed their style and explored their cultural identity in their art work. Students use this knowledge to inform their own studio practice and to support art making.

The role of artists in society includes their relationships with others in the art industry and the presentation and exhibition of art works in art galleries and exhibition spaces. Students research aspects of the art industry including the presentation, conservation and marketing of art works. In Units 1 & 2, students study the following: Studio inspiration and techniques and Studio exploration and concepts.

Please note: This subject runs for a full year. Contact Person: Ms Jane Todd <<u>toddj@bmg.vic.edu.au</u>

Visual Communication Design Units 1 & 2

The Visual Communication Design study examines the way visual language can be used to convey ideas, information and messages in the fields of communication, environmental and industrial design. Designers create and communicate through visual means to influence the everyday life of individuals, communities and societies. Visual communication design relies on drawing as the primary component of visual language to support the conception and visualisation of ideas. Consequently, the study emphasises the importance of developing a variety of drawing skills to visualise thinking and to present potential solutions. In Units 1 & 2, students study the following: Introduction to visual communication design and Applications of visual communication within design fields.

Please note: This subject runs for a full year. Contact Person: Ms Jane Todd <<u>toddj@bmg.vic.edu.au</u>

VCE Dance develops students' physical skills, personal movement vocabulary, and application of choreographic and analytical

Dance Units 1 & 2

principles. Students create and perform their own dance works as well as studying the dance works of others through performance and analysis. They consider influences on the expressive intention and movement vocabulary of their own dances and also on works created by choreographers working in a range of styles, genres and traditions. Influences on aspects of production in dance works are also studied. In each unit, students are required to undertake systematic dance training to build physical skills and develop their ability to execute safely a diverse range of expressive body actions. Students develop and refine their choreographic skills by exploring personal and learnt movement vocabularies, and ways in which movement can be created and arranged to communicate the expressive intention of the dance-maker. Students perform choreographed or learnt solo and group dance works using different dance-making processes. In Units 1 & 2, students study the following: The body as an instrument of expression and Movement vocabulary and choreographic skills.

Please note: This subject runs for a full year. Contact Person: Ms Natasha Davey <<u>daveyn@bmg.vic.edu.au</u>

Drama Units 1 & 2

The study of Drama focuses on the creation and performance of characters and stories in naturalistic and non-naturalistic ways. Students draw on a range of stimulus material and play-making techniques to develop and present devised work. Students also explore a range of performance styles and conventions, dramatic elements and stagecraft. They use performance and expressive skills to explore and develop role and character. They analyse the development of their own work and performances by other drama practitioners. In Units 1 & 2, students study the following: Dramatic storytelling and Non-naturalistic Australian drama.

Please note: This subject runs for a full year. Contact Person: Ms Helena Stratakos <<u>stratakosh@bmg.vic.edu.au</u>

VCE/VET Music Industry Units 1 & 2

This subject provides students with the opportunity to apply a broad range of knowledge and skills in varied work contexts in the music industry. Units 1 & 2 include genre specific research, composing simple songs or musical pieces and preparing for performances. Units 3 & 4 offer scored assessments and include units such as developing improvisation skills, applying knowledge of genre to music making and performing music as part of a group or as a soloist.

Please note: This subject runs for a full year. Contact Person: Ms Steven Bell <<u>bells@bmg.vic.edu.au</u>

Food Studies Units 1 & 2

VCE Food Studies takes an interdisciplinary approach to the exploration of food, with an emphasis on extending food knowledge and skills and building individual pathways to health and wellbeing through the application of practical food skills. VCE Food Studies provides a framework for informed and confident food selection and food preparation within today's complex architecture of influences and choices. Practical work is integral to Food Studies. In Units 1 & 2 students study the following: Food origins and Food makers.

Please note: This subject runs for a full year. Contact Person: Ms Jacqueline Huxtable <<u>huxtablej@bmg.vic.edu.au</u>

VCE/VET Hospitality Food & Beverage Units 1 & 2

The VCE VET Hospitality program is drawn from a national training package and offers portable qualifications which are recognised throughout Australia. These qualifications provide students with the knowledge and skills to prepare them for a diverse range of occupations in the hospitality industry. At BMG, we offer as part of the VCE program, the **SIT20316 Certificate II in Hospitality which** prepares students with a limited range of hospitality operational skills and basic knowledge. It includes units such as: preparing/serving expresso coffee, non-alcoholic beverages, food and beverage service, advice on food, and functional transactions.

During the year, students work towards completing the key competencies in theory and practical work. Students are enrolled as William Angliss TAFE students and complete <u>compulsory</u> school holiday programs at the TAFE in Melbourne CBD. Please be aware that this commitment requires one full week in the June/July holidays for Yr. 11 students in a back -of-house role. This is followed by two full weeks for Yr. 12 with one during the June/July holidays and the other during the September holidays. At this time, front-of-house competencies are completed and assessed. All other work is completed on campus at BMG. A study score is available for this subject.

Please note: This subject runs for a full year. Contact Person: Ms Jacqueline Huxtable <<u>huxtablej@bmg.vic.edu.au</u>

Computing Units 1 & 2

VCE Computing provides students with opportunities to acquire and apply knowledge and skills to use digital systems efficiently and effectively when creating digital solutions both individually and as part of a network.

VCE Computing focuses on the application of a problem-solving methodology, and strategies and techniques for managing information systems in a range of contexts, to create digital solutions that meet specific needs. The study examines each component of an information system (data, people, processes and digital systems) and how their interrelationships affect the types and quality of digital solutions. Through a structured approach to problem solving, incorporating computational, design and systems thinking, students are equipped to orient themselves towards the future, with an awareness of the technical and societal implications of digital systems. In Units 1 & 2, students study the following: Computing.

Please note: This subject runs for a full year. Contact Person: Ms Phillippa Loton <<u>lotonp@bmg.vic.edu.au</u>

Systems Engineering Units 1 & 2

VCE Systems Engineering is a hands on fusion of design thinking, industrial design, engineering, mechanics, robotics, electro-technologies and digital technologies. Students select what product they wish to manufacture and thus their topic focus. The course involves the design, creation, operation and evaluation of integrated systems which mediate and control many aspects of human experience. Integral to Systems Engineering is the identification and quantification of systems goals, the development of alternative system design concepts, trial and error, design trade-offs, selection and implementation of the best design, testing and verifying that the system is well built and integrated, and evaluating how well the completed system meets the intended goals. In Units 1 & 2, students study the following: Mechanical systems and Electro-technological systems.

Please note: This subject runs for a full year. Contact Person: Ms Phillippa Loton <<u>lotonp@bmg.vic.edu.au</u>

Product Design and Technology Units 1 & 2 (Textiles or Wood)

Product design is a response to changing needs and aims to improve quality of life by designing creative, innovative and sustainable products. Product design is enhanced through knowledge of social, technological, economic, historical, ethical, legal, environmental and cultural factors. These factors influence the aesthetics, form and function of products. Central to VCE Product Design and Technology is design thinking which is applied through the product design process providing a structure for creative problem solving. The design process involves identification of a real need, problem or opportunity that is then articulated in a design brief. The need, problem or opportunity is investigated and informed by research to aid the development of solutions that take the form of physical, three-dimensional products. Development of these solutions requires the application of technology and a variety of cognitive and physical skills, including design thinking, drawing and computer-aided design, testing processes and materials, planning, construction, fabrication and evaluation.

For VCE Product Design and Technology students assume the role of a designer-maker. In adopting this role, they develop and apply knowledge of factors that influence design and address the design factors relevant to their design situation. The knowledge and use of resources is integral to product design. These resources include a range of materials, and the tools, equipment and machines needed to safely transform these materials into products. Increasingly, the importance of sustainability is affecting product design and development, and so is at the forefront throughout the product life cycle. In Units 1 & 2, students study the following: Sustainable product redevelopment and Collaborative design.

Please note: This subject runs for a full year. Contact Person: Ms Phillippa Loton <<u>lotonp@bmg.vic.edu.au</u>





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