

# **Learning at Mount Carmel College**

Dear Students,

This subject guide is produced to provide you with information about the curriculum at Mount Carmel College in Years 9 and 10.

The values of our College are Courage, Compassion and Justice and these values are developed through the interactions and the curriculum you are offered.

As young women of the future, you are guided towards becoming independent learners; self-directed, emotionally intelligent and spiritually centred. Contemporary education is about producing just, caring and responsible citizens.

It is important that you choose subjects that develop to your natural gifts, as well as aiming for improvements in areas of challenge. During this stage of your schooling, you are encouraged to try a range of subjects and to discover where your strengths and interest lie.

Explore, discover and enjoy.

Fiona Nolan

Principal



# **Contents**



4	Project Based Learning	16
5 6	Science and Mathematics STEM	<b>17</b>
7	Mathematics Methods	18
7 8 8 9	<b>Technologies</b> Food Studies Textiles, Design and Technology Digital Technologies	19 19 20 20
<b>10</b> 10	Vocational Education and Training (VET)	<b>21</b> 21
11 11 12 12	Introduction to Construction Introduction to Metal Trades	22 22
13 13 14 14 14		
<b>15</b> 15	Guilford Young College (GYC) is the Registered Training Provider (RTO) – Provider No: 1129	
	5 6 7 7 8 8 8 9 10 10 11 11 12 12 12 13 13 14 14 14 14	Science and Mathematics STEM  Mathematics Methods  Technologies Food Studies Textiles, Design and Technology Digital Technologies  Vocational Education and Training (VET) Introduction to Hospitality Introduction to Construction Introduction to Metal Trades  Introduction to Metal Trades  Guilford Young College (GYC) is the Registered Training

# **Curriculum in Years 9 and 10**

The Years 9 and 10 curriculum offers a breadth of opportunity for all our students in a wide range of learning areas including Theology and Spirituality, English, Mathematics, Science, Humanities and Social Sciences, Health and Physical Education, Languages (Japanese), Technologies and The Arts.

Following the rich foundational experience provided in Years 7 and 8, learning is deepened in Years 9 and 10 where students have the opportunity to focus on areas of interest, take on new challenges, explore strengths and develop a deeper understanding of themselves as learners, before moving onto Senior Secondary Courses.

# **Compulsory Subjects**

In Years 9 and 10 all students study six compulsory subjects:

- Theology and Spirituality
- English
- Health and Physical Education
- History
- Mathematics
- Science

#### **Electives**

In addition to the above compulsory subjects, students are asked to select three elective subjects each year. They are encouraged to participate in a wide range of offerings, making an informed and balanced selection from across the Learning Areas. A number of electives are offered to both Year 9 and 10 students and many of these run as two-year alternating programs. Students may choose to complete one or two years of the program as each year covers different content. Students are, however, encouraged to participate in a diverse set of electives as this will enable them to gain an appreciation of the variety of learning opportunities available to them and may assist in establishing preferred pathways into Senior Secondary education and beyond.

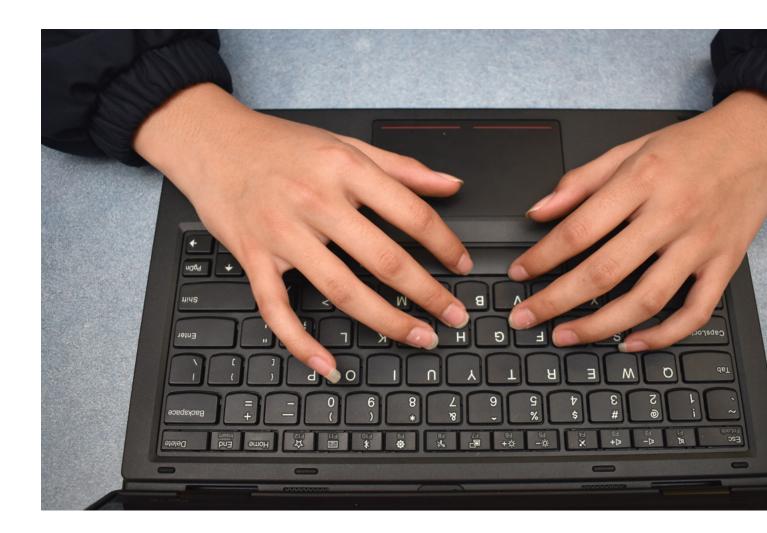
Core subjects in Years 9 and 10 provide a firm foundation for Senior Secondary subjects. In most cases not studying a particular Year 9 or Year 10 elective will not preclude the study of that subject or related subjects at Senior Secondary level. In a few cases, continuing subjects through Years 9 and 10 is advisable if students wish to choose them in Years 11 and 12. Please read the subject information in this Guide or seek advice from Heads of Department or subject teachers in relation to particular pathways.

Possible 2021 Year 9 and 10 elective subjects are:

- Visual Arts
- Dance
- Drama
- Music.
- English Pathways
- Sport Science
- Athlete Development
- Outdoor and Environmental Studies
- Global Worlds
- Introduction to Sociology and Psychology (Year 10 only)
- Child Studies
- Legal Studies and Business
- Japanese
- Project Based Learning
- STEM
- Mathematics Methods (Year 10 only)
- Food Studies
- Textiles, Design and Technology
- Digital Technologies
- Vocational Education and Training
- Introduction to Hospitality (VET)
- Introduction to Construction (VET)
- Introduction to Metal Trades (VET)

Guilford Young College (GYC) is the Registered Training Provider (RTO) – Provider No: 1129

# **Subject Selection Process**



While students will be offered the full range of subjects in the initial stages of the subject selection process, some subjects may not attract sufficient student interest to make them viable in 2021.

When making elective subject selections, students are asked to nominate five subjects, in preferential order. Students should give careful consideration to the order of all five preferences as these determine subject lines. The fourth or fifth options may be used to finalise student subject allocations if the first three preferences cannot be accommodated.

Ms Valery Kullrich and Ms Julia O'Rourke

Co-Director of Teaching and Learning

# Inclusion, Differentiation and Student Support

Mount Carmel College is an inclusive College offering a range of support programs to meet the needs of all our students.

We are committed to upholding the Inclusion and Extended Learning Policies of the College. The Student Support and Enrichment team provides support for teachers and students to allow all to engage with the curriculum at an optimal level and fully participate in school life. The College offers assistance for students who may require extra support to develop their literacy, numeracy or general learning skills.

The College prides itself on catering for all its students, including students with additional learning needs. Life skills, social skills and transition programs are provided for students who require individualised support.

## **Extended Learning**

Mount Carmel College values and nurtures the individual needs of gifted and talented students by providing optimal academic challenge within the classroom and a variety of extracurricular opportunities. High quality curriculum differentiation is combined with teacher support and enrichment opportunities to allow students to meet their potential.

Gifted and talented students are identified using a range of testing and observation methods. These students are supported and extended in specific areas to match their learning profiles, interests and needs.

Some opportunities for acceleration and extension include the Mathematics Methods course, Science and Engineering Challenge, Debating, UTAS Mathematics and STEM extension courses, workshops with visiting authors and a variety of competitions and events for enrichment.



# **Visual Arts**

The Visual Arts link social, cultural and spiritual action and belief and inform our relationships with other people and our environment. The study of Visual Arts offers the opportunity for the promotion and recognition of individuality of thought, interpretation and expression, and for communication of ideas. Students gain an awareness of self, strength in problem-solving, resilience and a greater awareness of the value of diversity through producing art works which express their personal style, thoughts and feelings.

#### Years 9 and 10 Electives

### Visual Arts (9/10 VA)

This elective is offered to students in both Years 9 and 10 and runs as a two year alternating program. Students may choose to complete one or two years of the program as each year covers different content.

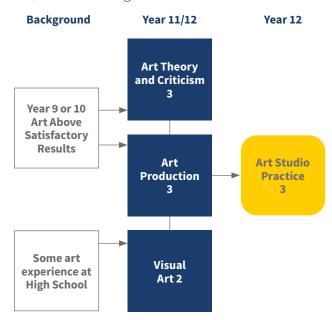
The Year 9 and 10 elective, Visual Arts builds on Years 7 and 8 knowledge and skills. Visual Arts consists of studio-based units – e.g. drawing, painting, design, installation art, printmaking etc. This course provides students with the opportunity to further develop their artistic skills through

making and appreciating art works. Students will produce works reflecting a continuing development of technical skill acquisition and the ability to be creatively and conceptually expressive. The maintaining of an art journal facilitates deeper thinking, research, experimentation and refinement in designing of art works, as well as preparing students for the rigours of pre-tertiary Years 11 and 12 Art subjects. Students work towards a more studio-based approach to their studies, where specialisation allows for extensive experimentation, generation of ideas, individuality of interpretation of subjects and exploration of the potential of materials, techniques and processes.

Students who successfully study Visual Arts from Years 7 through to 9 will commence their own chosen area of art making in the Independent Studio Practice Unit at the beginning of Term 2 in Year 10. Their body of work will culminate in an end of year public exhibition.

Study of this elective in Years 9 and 10, provides a sound foundation for further study in Years 11 and 12 in the Visual Arts and other design based subjects.

### Art, Craft and Design



# **Dance**

Dance is a fun and stimulating class that allows students to engage in the freedom of movement, while also enhancing their capacity for learning. Dance encourages students to think beyond the use of verbal language by communicating through creative, physical and emotional expression.

Recent studies have proven that dancing regularly can significantly improve brain function by stimulating particular neurological connections. By engaging in regular dance classes, students can increase their physical and mental wellbeing while also increasing their kinesthetic intelligence and developing their problem solving, risk taking and higher-order thinking skills.

## Dance (9/10 DA)

This elective is offered to students in both Years 9 and 10 and runs as a two year alternating program. Students may choose to complete one or two years of the program as each year covers different content.

In Years 9 and 10, students build on their knowledge and skills through practical application. A continued focus on the development of technical execution will enhance the students' skillsets and understanding of the fundamentals of dance.

This is done through regular barre, centre and corner progressions, as well as general strength and flexibility exercises. Students will also gain a greater understanding of the many and varied aspects of live performance - from the perspectives of both the performer and the audience.

There will also be a focus on building greater body awareness through the study of safe dance practice. Lastly, students will explore the concepts embedded within choreography and will be given the opportunity to create their own choreography as well as participating in other works.

This course is open to all students with an open mind and positive attitude to dance, whether you are considering a career as a professional dancer or you are just interested in having some fun while learning new skills.

This course also provides a pathway to Dance in Years 11 and 12.

# **Drama**

Drama is an art form founded on the principles of thinking and relating, communication, expression, creativity and enactment. Confidence and self-esteem are enhanced as students develop performance skills. Our focus is a very practical one. Students learn that Drama is about people and the study of Drama is really a study of themselves – acting skills are also life skills. Drama helps to nurture and enhance students' critical and creative thinking in an environment that promotes creativity and individuality.

#### **Drama (9/10 DR)**

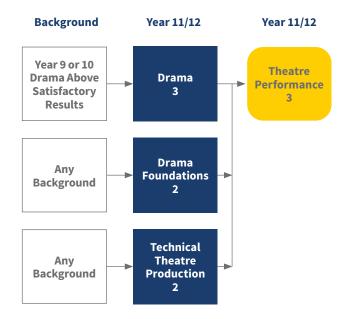
This elective is offered to students in both Years 9 and 10 and runs as a two year alternating program. Students may choose to complete one or two years of the program as each year covers different content.

The elective course for Drama in Years 9 and 10 is engaging and rewarding, further developing students' skills as individual performers and ensemble members. Students studying Drama have a wide range of opportunities to develop and sustain different roles and characters for given circumstances and intentions. They perform devised and scripted drama in different forms, styles and performance spaces. They collaborate with others to plan, direct, produce, rehearse and refine performances. They select and use elements of stagecraft, narrative and structure in directing and acting to engage audiences. They refine performance and expressive skills in voice and movement to convey dramatic action.

Years 9 and 10 study a range of topics. These may include voice techniques, character creation, tableaux, monologue, duologue, movement, improvisation, story-telling, script writing, clowning and comedy, Australian Drama, Greek Theatre, small screen acting, Theatre appreciation and criticism and a major class production. These units will be selected to best suit the cohort from year to year.

The Drama course caters for the full range of participants, from those with little background knowledge to more experienced students.

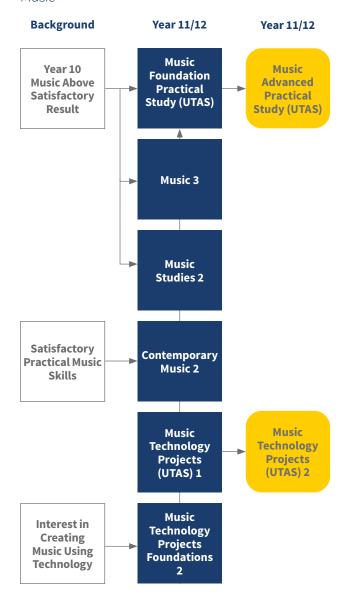
Drama



# Music

The study of Music uniquely contributes to students' emotional, physical, social and cognitive growth. Making music can take many forms. It can be an exercise in finding and expressing a personal voice; or it can be a relationship-building, collaborative experience. Participating in the Music Program is an enjoyable, personally satisfying and creatively stimulating way to make a valuable and worthwhile contribution to the life of the College.

#### Music



#### Music (9/10 MS)

This elective is offered to students in both Years 9 and 10 and runs as a two year alternating program. Students may choose to complete one or two years of the program as each year covers different content.

In Years 9 and 10, students engage in music making through a variety of contexts. As performers, they demonstrate skills and knowledge in their chosen instruments (including voice), both as soloists and ensemble members, performing repertoire relevant to their instrument and prior experience.

As composers, students create, shape, refine, record and notate musical ideas in a range of forms and styles including Musical Theatre, Minimalism, Serialism, and Film Music, among others on a rotating basis from year to year

As audience members, students respond to music, demonstrating a command of the language and concepts of music. Through research and critical study, they develop a rich knowledge of the contemporary and historical contexts of musical works and practices, including the investigation of an area of particular interest to the individual student.

Students also have the option of taking the Music Technology stream, where they can learn about sound production and recording techniques. This replaces one or more music performance tasks.

Whilst learning an instrument or voice with an instrumental music teacher is encouraged and is of great benefit to students undertaking this course, it is not a mandatory requirement.

# **English**

English programs at Mount Carmel College aim to promote critical thinking and effective communication whilst students engage with literature in various mediums and forms.

Drawing on the Australian Curriculum, English is organised into three inter-related strands- Language, Literature and Literacy- that support students' knowledge, understanding and skills in listening, reading, viewing, speaking and writing

# English Pathways (9/10 EP)

This elective is offered to students in both Years 9 and 10 and runs as a two year alternating program. Students may choose to complete one or two years of the program as each year covers different content.

English Pathways is designed to further develop students' analytical, creative, critical thinking and communication skills in preparation for their future studies in English.

English Pathways will develop learners as proficient and articulate communicators of English by extending and refining their language, literacy and literature skills.

Students will be exposed to a range of texts in various mediums and forms. They will analyse and respond creatively and critically to literary texts drawn from the past and present. They will engage with texts from a range of genres and contexts, with an emphasis on Australian literature. These include various types of media texts, including newspapers, film and digital texts, fiction, non-fiction and poetry.

Emphasis is given to developing skills in crafting writing, both through workshop processes and through investigation of other writers' approaches. Students will undertake personal reading and viewing programs designed to support and extend their work, responding personally, creatively and critically.

Students will be given the opportunity to further develop their time management and proofreading skills, and will effectively use strategies for planning, editing and refining their work to ensure accuracy of spelling, vocabulary, punctuation and grammar.

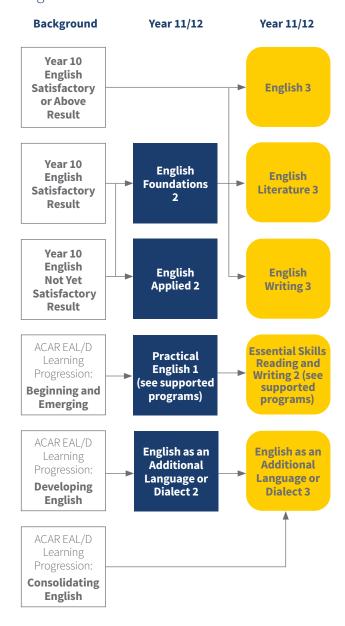
Students will be given the opportunity to work cooperatively and collaboratively with others and are encouraged to exercise initiative and independence.

This course is aimed at students who have a passion for studies in English and those who wish to further develop key skills in preparation for the rigorous and challenging nature of English at a senior secondary level.

English Pathways will include elements of:

- Creative writing
- Film and documentary studies
- · Journalism and media studies
- Novel study (classic and modern texts)

### English



# Health and Physical Education

Health and Physical Education (HPE) contributes significantly to the development of the whole student. It aims to provide students with the knowledge to make healthy lifestyle choices and to assist them as they face complex life decisions in environments that are changing rapidly.

HPE plays an important role in maintaining physical activity participation to enhance health and wellbeing. A wide range of practical activities are designed to improve physical skills, develop fitness and encourage lifelong participation.

#### Years 9 and 10 Electives

# Year 9/10 Sport Science (9/10 SP)

This elective is offered to students in both Years 9 and 10 and runs as a two year alternating program. Students may choose to complete one or two years of the program as each year covers different content.

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Sport Science has a heavy theoretical focus designed to allow students the opportunity to develop skills, knowledge and understanding of issues related to human movement and sporting performance.

#### **Course Units**

Years A & B

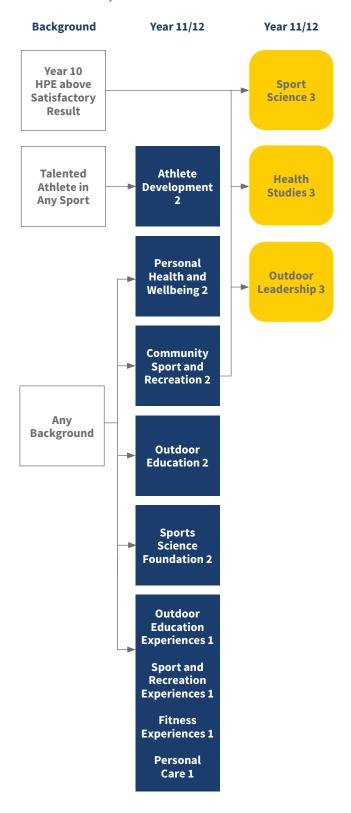
#### Year A (2020):

- Skill Acquisition
- Coaching Children
- Sports Psychology
- Sports Analysis (Biomechanics)

#### Year B (2021):

- Body Systems
- Exercise Physiology
- Fitness Assessment and Development
- Technology in Sport

# Health and Physical Education



## **Athlete Development (9/10 AD)**

This elective is offered to students in both Years 9 and 10 and runs as a two year alternating program. Students may choose to complete one or two years of the program as each year covers different content.

This course allows students to fully commit to completing a personalised competition preparation program designed for their preferred sport and personal circumstances. Athlete Development requires a high level of motivation and is based around individual need and ability.

When selecting this course the following requirements must be satisfied.

- a) Students are completing in a recognised sporting competition in the year they undertake the course.
- Students selecting this course will be required to complete an additional written application and may be required to attend a suitability interview with the Head of Department.
- c) Students may not select Sport Science as an elective in the same year due to similar course content.
- d) Students enrolling in this course will be required to pay a supplementary levy of \$100 to subsidise the activities.

#### **Course Units**

Years A & B

#### Year A (2020):

- Goal Setting
- Fitness Testing
- Recovery
- Coaching/Umpiring
- Technical Training
- Training Diaries

### Year B (2021):

- Basic Physiology
- Strength and Conditioning
- Measuring Performance
- · Competition Preparation
- Injury Prevention
- Training Diaries

# Year 9/10 Outdoor and Environmental Studies (9/10 OE)

This elective is offered to students in both Years 9 and 10 and runs as a two year alternating program. Students may choose to complete one or two years of the program as each year covers different content.

Students completing their second year will be offered additional opportunities to extend their existing skills and demonstrate leadership. Completion of one or two years of this program will prepare students well for Outdoor Education and Outdoor Leadership subjects in Year 11 and 12, however, it is not a prerequisite of either.

Outdoor and Environmental Studies encompasses learning about self, others and the environment through a variety of theoretical, practical and experiential learning activities

Outdoor and Environmental Studies provides a context for students to develop self-reliance, interdependence and leadership in outdoor and natural environments, and to understand and explore human-nature relationships in theory and through self-reflection.

Students are engaged in outdoor and adventurous activities that promote the development of an adventurous spirit with an emphasis on managing personal risks, conducting safe journeys in nature, and the value of life-long outdoor recreation for enjoyment, health and well-being, and understanding nature.

A reflective Journal is a central component of the course and provides the opportunity for students to explore their sense of self, their motivation and their reactions towards experiences and environments. The reflective journal is crucial in consolidating the link between the theoretical and practical elements of study.

Aspects of this course are inherently physically challenging and include exposure to the elements through various activities which may include kayaking, white water rafting, bushwalking, climbing and other outdoor pursuits. Further to this, some basic outdoor clothing will be required by students, including warm insulating layers such as thermal and fleece garments, a waterproof coat with hood and sturdy and durable footwear.

Students enrolling in this course will be required to pay a supplementary levy of \$400 to subsidise the activities and training. This levy is dependent on student numbers and will be finalised in December, 2020. Students selecting this course will be required to complete an additional written application and may be required to attend a suitability interview.

# **Humanities and Social Sciences**

Humanities and Social Sciences provides an understanding of the world in which we live, and how people can participate as active and informed citizens with skills needed for the twentyfirst century.

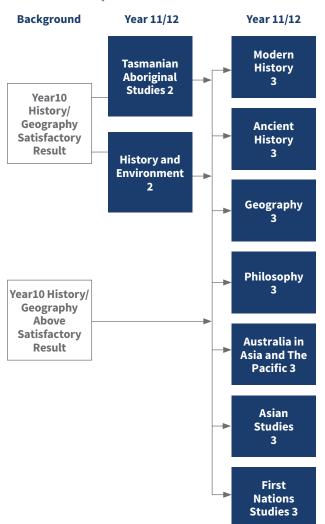
A number of electives in Years 9 and 10 allow students to pursue further study of Humanities:

#### Year 10 Elective

# An Introduction to Sociology and Psychology (Year 10) (10 ISP)

Would you like to know why people or groups think or act in a certain way? An Introduction to Sociology and Psychology may provide you with some answers. This subject serves an introduction to both sociology and psychology. Students will study a semester of each subject.

## Humanities subjects



The aim of this course is to give students an understanding of the different theories, methods and language used in both sociology and psychology. Students will have the opportunity to engage in data collection and analysis, report writing, research investigations and case studies.

This subject provides a pathway for those wishing to study the behavioural sciences at college. As well, the subject provides a pathway for students who wish to undertake vocational courses in areas such as aged care and child care.

## Sociology

Sociology is the study of society and how well we interact together. It includes studying the social interactions between different groups, societies and cultures.

Possible units of study include:

- Socialisation
- · The Nature Nurture debate
- · Class conflict and inequities
- · Crime and deviance
- Changing role of families
- Social movements and cults.

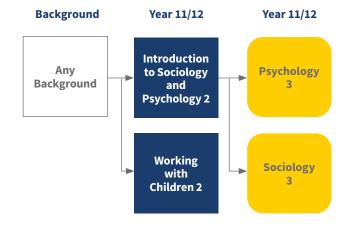
#### **Psychology**

Psychology is the scientific study of the mind and behaviour. It is about how humans behave, think and feel. Students who study psychology gain a deeper understanding of themselves and other people.

Possible units of study may include:

- · Research methods
- How the brain functions
- Sleep and dreams
- Memory and learning
- Personality

# Sociology and Psychology



#### Years 9 and 10 Electives

# Child Studies (9/10 CS)

Students can only study this subject once in Years 9/10. This course is available to both Year 9 and 10 students.

The aim of Child Studies is for students to become knowledgeable in child development from preconception through to and including the early years. Students will develop the skills needed to positively influence the development and wellbeing of children.

Possible units of study Include:

- · Conception, pregnancy and birth
- Newborn care
- Safety and wellbeing
- · Families and parenting
- Development and play
- Maternal and child health in the developing world

Child Studies students have the opportunity to undertake practical work when they assist with the Early Years classes. Child Studies has realistic infant simulators allowing students to experience the reality of caring for a newborn.

### **Legal Studies and Business (9/10 LS)**

Students can only study this subject once in Years 9/10 This course is available to both Year 9 and 10 students.

This course is available to both Year 9 and 10 students and Is modelled on the Australia Curriculum subjects: Civics & Citizenship and Economics & Business, with students studying both subjects over the course of the year.

Students may study this course in either Year 9 or Year 10.

A number of contemporary issues, events and case studies are studied in Civics and Citizenship. Students learn about the way the Australian legal system works and discuss the Australia's court system, including its role in applying and interpreting Australian law. Possible topics to be studied include: democracy, Australian government, political parties, criminal and civil law and human rights.

When studying Economics and Business, students will look at the decisions that governments and businesses make. They will focus on the way people in business organise, manage and facilitate the production of goods and services in the Australian economic system. Students will also learn to appreciate the role and nature of business, including marketing and business structure.

# Global Worlds (9/10 GLB)

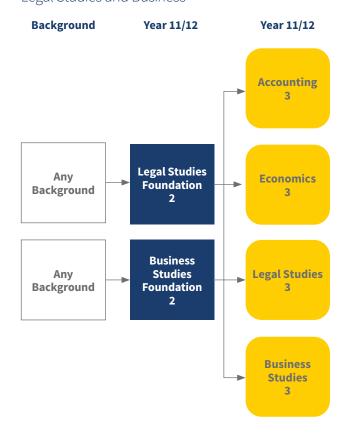
Students can only study this subject once in Years 9/10. This course is available to both Year 9 and 10 students.

This subject, designed for both Years 9 and 10, will provide students with an understanding of past and contemporary global events and issues. Students will discover how global events have and will continue to shape the word in which they live. As their global awareness develops, they will be able appreciate the ever-changing nature of the world, empathise with the experiences and circumstances of other people, form opinions, and develop as global citizens.

The course will be divided into two core units of study. Unit one will examine events and issues from a contemporary historical perspective and the second unit, from a geographical perspective.

- The nature of the Cold War and emergence of superpowers
- The struggle for peace in the Middle East
- Challenges to Peace and Security
- How migration transformed Australia since 1945
- Global food production and security
- The impact information and communication technologies are used to connect people to services, information and other places
- The global growth of tourism and effects on the future of places

# Legal Studies and Business



# Languages other than English (LOTE)

# Years 9 and 10 Elective **Japanese (9/10 JP)**

Studying another language helps us to become more responsible and global citizens, improves our cognitive development and literacy skills, makes us stronger communicators and inspires us to be more accepting of other people's cultural, social and individual differences.

As Australia's economic, cultural and educational engagement with Asia grows, Japanese continues to be a significant language for young Australians to learn. In an Increasingly globalised world, knowing another language broadens opportunities in career and other future life experiences.

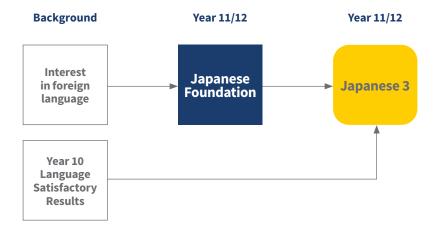
Japanese in Year 9 and 10 builds on the skills and knowledge developed in Years 7 and 8. Students use both adapted and authentic spoken and written texts to obtain and share information in the areas of listening, speaking, reading and writing. Themes such as self and family, directions and travel, daily life and future aspirations are explored, as platforms to develop these skills.

Students undertake a range of hands-on learning activities using the target language. This may include, but is not limited to, scavenger hunts, card or board games, creating picture books or manga comics, designing travel itineraries, engaging in cultural practices, sampling Japanese food, or film-making. There is also opportunity for cultural exchanges in Hobart or Japan (optional).

In Year 9 and 10 Japanese, continued attention is given to developing global perspectives and to facilitating effective intercultural communication skills. By drawing comparisons to their own language, students are encouraged to further develop their analytical and critical literacy skills. Throughout this course, students are also encouraged to become independent learners, where the development of self-study skills are fostered.

This course provides a pathway to Japanese in Years 11 and 12.

#### Japanese



# **Project Based Learning**

### Years 9 and 10 Elective

# **Project Based Learning (9/10 PBL)**

Students can only study this subject once in Years 9/10. This course is available to both Year 9 and 10 students.

Please note that students who select this course are required to fill out a written application and may be required to attend an interview with the Head of Department, Humanities and Social Sciences.

Project Based Learning has been designed to provide students the opportunity to undertake research and supported projects that allow them to solve problems, communicate ideas and learn in a personalised and meaningful context. It is expected that students will undertake three to four projects throughout

the year as well as developing research skills necessary to be able to achieve this. Project Based Learning provides students with the ability to explore their learning in an area of personal interest.

Working closely with their teacher, students will be supported in their personal and academic growth. Students will develop key skills and dispositions of a self-directed, self-managing learner. Such skills will include:

- · planning and organising
- inquiry, problem solving and decision making
- making connections, synthesising, applying and transferring knowledge and skills
- creative, critical and reflective thinking
- communicating and collaborating with others.



# Science and Mathematics

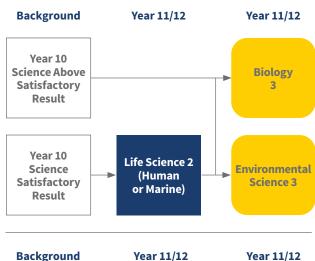
# Science

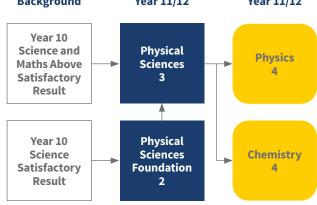
In STEM, students are encouraged to question and investigate using the scientific method and to work together to communicate their developing understanding of phenomena. Through guided research, students also appreciate the cultural and historical development of key ideas and consider how they may contribute to this continual refinement of knowledge and practice. Students are encouraged and supported to discover the role of STEM in their daily lives.

#### **Mathematics**

Through further mathematical study, students acquire the mathematical knowledge, ways of thinking and confidence to use Mathematics in their daily lives, and to use technology to assist this. Students are further introduced to the role of proofs and the skills required for presenting and interpreting mathematical arguments. Studies into irrational numbers, calculus and trigonometric relationships reinforces that mathematics utilizes skills of interpretation, communication, observation, representation and application.

#### Science





### Years 9 and 10 Elective

#### **STEM (9/10 STM)**

This elective is offered to students in both Years 9 and 10 and runs as a two year alternating program. Students may choose to complete one or two years of the program as each year covers different content.

This subject lets you explore Science, Technology, Engineering and Maths topics that are not components of the existing Science and Maths curriculum, in ways that are hands-on, creative and unusual. Two units per STEM area are covered each year. Year B (2021) will include:

#### **Science:**

- Marine Science: learn about the different regions in our oceans and how they are studied, interact with Tasmanian marine scientists and undertake a class marine study of the D'Entrecasteaux Channel (working with the Marine Discovery Centre).
- Microbes: learn about the positive and negative impacts that microbes have on our lives. Learn the techniques for safely testing and growing cultures and explore the uses of microbes in the production of food.

#### **Technology:**

- Working with Wood II: following the Design Cycle, create your own wooden wonder and learn how to apply different resin finishes
- Working with Plastics: explore the different types of plastics and their purpose, and create usable household Items

#### **Engineering:**

- Robotics: working with the UTAS STEM outreach team, learn how to build a real-life robot and program robotic solutions
- Theme Park Engineering: explore the work of a theme park engineer, and design, build and test your own!

#### **Mathematics:**

- Puzzlemania: explore the different types of mathematical problems, practice a range of techniques for solving and communicating about maths problems and create your own puzzle
- Maths Escape Room: explore the creation of escape rooms

   what planning and resources are required and work
   together to create a Maths Escape room at MCC.

#### Year 10 Elective

# Mathematics Methods (Year 10) (10 MM)

This course is an extension Mathematics course offered to any Year 10 student who has achieved a high standard of assessment in Year 9 Mathematics. This syllabus focuses on developing knowledge and skills in the areas of function and equation study, calculus, probability and algebraic processes.

This is a course for students with a great interest in Mathematics, who wish to continue with pre-tertiary and tertiary study of Mathematics. If a student intends to study Mathematics Methods TQA 3 or TQA 4 in Year 11 and Mathematics Specialised TQA 4 in Year 12, she needs to study Mathematics Methods concurrently with the Mathematics 10A syllabus during Year 10.

#### **Mathematics Background** Year 11/12 Year 11/12 Year 10 **Mathematics Mathematics Mathematics** Methods **Specialised** Methods 4 Foundation 3 4 or Equivalent **Mathematics** Year 10 Additional Methods **Foundations** Advanced **Mathematics** 3 A Year 10 General **Mathematics** Above **Mathematics** Satisfactory 3 Result General Year 10 General **Mathematics Mathematics Mathematics** Satisfactory **Foundations** 3 Result 2 Workplace Maths 2 Year 10 **Preliminary Mathematics Mathematics** Not Yet Stages 1-4 (see Satisfactory supported programs) Result **Everyday** Mathematics 1 (see supported programs)

# **Technologies**

# Years 9 and 10 Electives

# Food Studies (9/10 DTF)

This elective is offered to students in both Years 9 and 10 and runs as a two year alternating program. Students may choose to complete one or two years of the program as each year covers different content.

Food Studies includes both practical and theoretical components and builds on the Year 7 and 8 Design and Technologies course. Students will be encouraged to use their problem solving skills and think innovatively to create designed solutions for products, services and environments within the food specialisation context.

Students work individually and collaboratively to manage their design projects while considering the sustainability, economic and ethical impacts of their decisions. There is a strong focus on nutrition, food safety and hygiene throughout the course.

A range of real world topics are explored, including food equity and food waste which are issues that affect the population on a global and local scale. Students will gain an understanding of the relationship between nutrition and health as they plan meals and adhere to national food selection tools such as the Australian Guide to Healthy Eating and the Australia Dietary Guidelines.

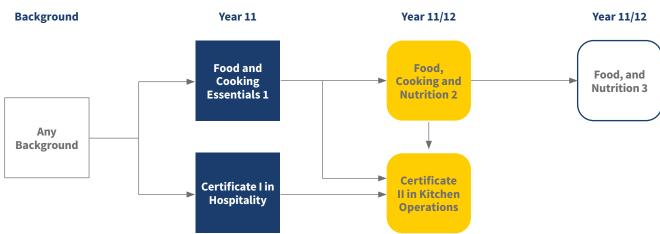
Students will investigate the latest food trends and advancements in food technology as applied to food product development, production and preparation. They will also gain experience in costing recipes and preparing food for service as they cater for a number of school events.

Units may include:

- nutrition
- · food equity
- food product development
- · food in Australia
- · food service
- food for specific needs
- food for special occasions
- food trends.

This course provides a pathway to further study In Years 11 and 12.

## **Food Studies**



# **Textiles, Design and Technology (9/10 TDT)**

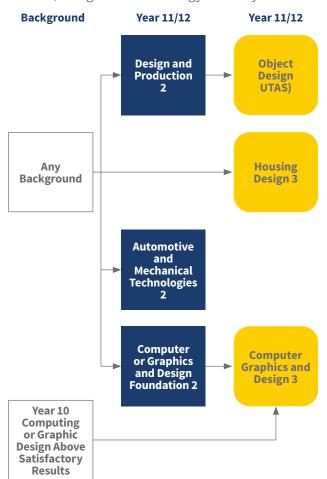
This elective is offered to students in both Years 9 and 10 and runs as a two year alternating program. Students may choose to complete one or two years of the program as each year covers different content.

This course builds upon the practical skills and knowledge gained in Design and Technology in Year 7 and 8. Students will develop their creative and critical thinking skills through a range of practical projects and focus study areas such as; design, fashion illustration, Australian and international designers, textile art, e-textiles, computer aided design (CAD), sustainability and properties and performance of textiles and materials. A range of current issues within the Textile Industry will be investigated, including the impact of fast- fashion on the environment and ethical and unethical production practices.

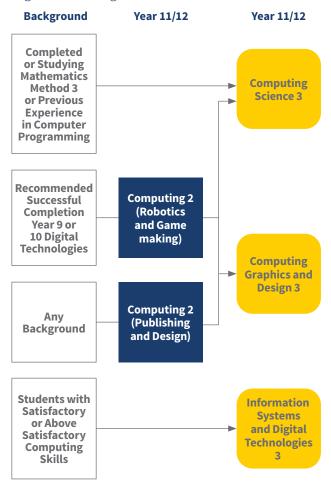
Students will use the design process to creatively respond to design briefs to construct items such as clothing, accessories and textile art. They will gain knowledge of the elements and principles of design and learn how to apply these to their projects. Students will also be given the opportunity to enter Wool4School, an annual nationwide design competition run by The Woolmark Company.

This course also provides a pathway to further study in Year 11 and 12.

### Textiles, Design and Technology Pathway



### Digital Technologies



### **Digital Technologies (9/10 DT)**

This elective is offered to students in both Years 9 and 10 and runs as a two year alternating program. Students may choose to complete one or two years of the program as each year covers different content.

In Digital Technologies students use computational thinking and processes, techniques and digital systems to create solutions to address specific problems, opportunities or needs in a project based environment. Digital Technologies aims to develop creative and innovative problem solving.

Students analyse problems, design and create digital solutions and evaluate their outcomes. Students engage in both contemporary and emerging technologies throughout their courses.

In this option students have the opportunity to:

- work independently and collaboratively to produce innovative solutions to solve real world challenges
- define and decompose real-world problems, taking into account requirements and evaluating alternative designs against set criteria.
- develop knowledge and understanding of current and emerging digital systems.
- use computational thinking to solve problems using in part the Arduino platform and IoT devices.

# Vocational Education and Training (VET)

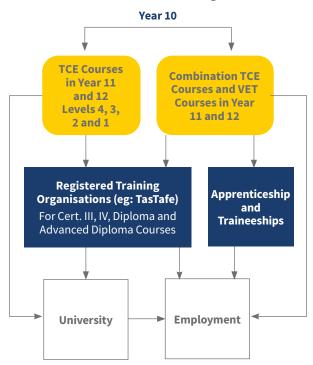
Mount Carmel College is part of the Southern Tasmanian Catholic College Trade Training Centre. Guilford Young College (GYC) is the Registered Training Organisation (RTO) – Provider No: 1129, and issues all statements and certificates for students enrolled in VET courses.

Guilford Young College has a strong Vocational Education and Training (VET) program. The popularity of VET continues to grow and many students have made the transition from VET programs to further training or employment following their VET experience. VET courses are open to students in Year 10.

Please note that VET Hospitality is taught at Mount Carmel and all other courses will be taught at GYC (offsite).

Students enrolling in courses delivered at GYC will be required to pay a supplementary levy of \$200 to subsidise the associated additional transport costs.

# Vocational Education and Training (VET)



#### Year 10 Electives

### **Introduction to Hospitality**

Mount Carmel College students can enrol in the following units of competency. These units provide an excellent introduction to vocational training for the hospitality industry. They will also contribute to SIT10216 Certificate I in Hospitality if students choose to enrol in the full qualification either at Guilford Young College or any other Registered Training Organisation in the future.

- SITXFSA001 Use hygienic practices for food safety
- SITXWHS001 Participate in safe work practices
- SITHCCC003- Prepare and present sandwiches
- SITHCCC002 Prepare and present simple dishes

There is a mixture of theory and practical classes covering:

- Safety
- Teamwork
- Food preparation
- · Food hygiene
- Cleaning
- · Working safely

A supplementary levy of \$50 will be required for this course.

Students will utilise our commercial kitchen bay. Students will also visit industry kitchen premises such as restaurants, hotels, cafeterias, canteens and other catering operations.

Students will develop skills in:

- · Cleaning, kitchen and storage areas
- Personal hygiene
- · Kitchen hygiene
- · Food safety
- Logical and time efficient work flow
- Safe work practices according to WHS principles and procedure
- Attractive arrangement of food

#### **Introduction to Construction**

Mount Carmel College students can enrol in the following units of competency. These units provide an excellent introduction to vocational training for the construction industry. They will also contribute to CPC10111 Certificate I in Construction if students choose to enrol in the full qualification either at Guilford Young College or any other Registered Training Organisation in the future.

- CPCCWHS2001 Apply WHS requirements, policies and procedures in the construction industry
- CPCCWHS1001 Prepare to work safely in the construction industry
- CPCCVE1011A Undertake a basic construction project

This course is designed for students wishing to train for or gain employment in one of the building trades. This is a very popular program and industry employers are seeking motivated students with sound literacy, numeracy and technical skills. The course includes using a variety of tools for the job and reading, calculating and measuring for construction plans or projects.

#### Students will develop skills in:

- communication skills
- safe use of hand and power tools
- how to read plans
- measuring skills
- how to work in a team environment

#### Pathways:

 towards careers in the building trades such as carpentry, joinery, plumbing, electrical, plastering, glazing, painting and decorating.

#### **Introduction to Metal Trades**

Mount Carmel College students can enrol in the following units of competency. These units provide an excellent introduction to vocational training for the metal trades. They will also contribute to MEM20413 Certificate II in Engineering Pathways if students choose to enrol in the full qualification either at Guilford Young College or any other Registered Training Organisation in the future.

- MEM13014A Apply principles of OH&S in the work environment
- MEMPE004A Use fabrication equipment
- MEMPE002A Use electric welding machines

Students have the opportunity to develop skills in welding, using machines for metal folding, making a project and working in engineering workshops.

#### Students will develop skills in:

- · written and graphic communications
- · reading and interpreting drawings
- · problem solving
- hand and power tools
- welding
- workshop safety
- team work

#### **Pathways:**

• towards careers in metal fabrication, machining, welding, jewellery design and manufacturing and plumbing.

It is anticipated that students would travel to either the GYC Hobart or Glenorchy campus once a week. Any student wishing to enrol in one or both of these subjects must first have a discussion with either Ms Julia O'Rourke or Ms Valery Kullrich, Co-Directors of Teaching and Learning.



Guilford Young College (GYC) is the Registered Training Provider (RTO) – Provider No: 1129



A Catholic, Kinder to Year 10 school for girls.
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