



YEAR 9

Last updated September 6, 2023

English	
Mathematics	
Science	
History	
Outdoor Education Studies	
Positive Education	
Agriculture and Land Management	
Health and Physical Education	
Chinese (Manderin)	
French	
Japanese	
Geography	
History Elective: People and Events of the 21st Centuries	
Music	
Visual Arts	
Positive Health	
Assessment, Reporting and Feedback	

# O1 Academic Focus

The academic programme at Timbertop is the bedrock upon which challenge, success and resilience is built. Whilst the isolation of our community, life in Units and the outdoor programme stand out in the minds of anyone who has heard of Timbertop, the academic programme is where our students put their perseverance, creativity and courage to the test each day. Alongside the multifaceted physical and pastoral programmes, for four and a half days a week, students are involved in a full Year 9 academic programme with a timetable much like any other school.

At Timbertop, our driving ethos is to best prepare our students for the academic rigour of learning in Senior School at the Corio Campus whilst harnessing the opportunities that our unique context affords. Students are thoroughly supported in building their subject specific knowledge within the framework of embedding core skills of critical, analytical and creative thinking.

## ELECTIVE SUBJECTS

Students choose five semester units from the following. Some subjects must be studied for semester 1 and 2, some can be studied in either and some may be studied in both. Must be studied in both semesters (therefore two units):

- Chinese Continuers (Mandarin)
- French Continuers
- Japanese Continuers
- Academic Support Elective (see notes below)

#### Can be studied in one or both semesters:

• Music (Students must study a musical instrument and take private music lessons on campus)

• Geography: (semester 1) Bushfires and Biomes, (semester 2) Globalisation and Sustainability

## Can be studied in one semester only (curriculum is repeated each semester)

- Health and Physical Education
- Agriculture and Land Management
- History (Powers in the 20th and 21st Centuries)
- Visual Art

When selecting subjects, it is critical to make a thoughtful choice as these selections dictate the timetable. Subject changes are very difficult after the timetable has been created and changes cannot be guaranteed.

# O2 SUBJECT OVERVIEW

# English

The opportunities afforded to students in the English classroom at Timbertop are aimed to equip them with the language and forms to express their unique experiences and perspectives. Through a study of poetry, short stories, contemporary media, drama and a novel, students explore and reflect on their personal understanding of the world gained from interpreting various representations of life matters in texts. We place emphasis on creating a community of inquiry through literature examination and analysis, argumentative and persuasive writing, group discussion, oral presentation, and peer review. Literacy is at the heart of the English Curriculum and students are supported in building their grammar and spelling without the assistance of technology. This can provide an additional challenge for students used to using word processing technology.

## **Mathematics**

The Mathematics course is based on the Year 9 Victorian Curriculum with the opportunity of added enrichment throughout the course of each topic. Throughout the year the students will consolidate and develop their numerical knowledge and work towards more complex applications in problem solving situations. Creative learning activities will be embedded throughout the course with the students given opportunities to work bothindividually and collaboratively.

The course covers the following topics:

#### Measurement

- Calculate the areas of composite shapes
- Calculate the surface area and volume of cylinders and solve related problems

## Pythagoras and Trigonometry

- Investigate Pythagoras' Theorem and its application to solving simple problems involving right angled triangles
- Apply trigonometry to solve right-angles triangle problems

#### Indices and Scientific Notation

- Apply index laws to numerical expressions with integer indices
- Express numbers in scientific notation

#### Linear Equations and Relations

- Solve linear equations algebraically including pronumerals on both sides of equals sign andbracket
- Solving problems with linear equations and transpose formulae and literal equations
- Sketch linear graphs using the coordinates of two points

### Algebraic techniques

- Using pronumerals, simplifying algebraic expressions and fractions
- Expanding and factorising algebraic expressions
- Simplifying algebraic fractions –multiplication & division
- Applications of algebra

## Introduction to quadratic equations and graphs

• Graph simple non-linear relations with and without the use of digital technologies and solve simple related equations

## **Probability & Statistics**

• Identify everyday questions and issues involving at least one numerical and at least one categorical variable, and collect data directly and from secondary sources

- Compare data displays using mean, median and range to describe and interpret numerical data sets in terms of location (centre) and spread
- Calculate relative frequencies, and assign probabilities to outcomes and determine probabilities for events

All students are required to learn, practise and apply mathematical skills and techniques, utilise knowledge within a problem solving context and to communicate mathematical method and process in a clear and effective format. Generally mathematical method makes up 40% of each test or assignment mark.

## Science

The course follows the Australian Science Curriculum that enhances the development of the three interrelated strands of scientific inquiry skills, science as a human endeavour, and science understanding. The course builds on the knowledge and skills gained in Year 8. The students are encouraged to work scientifically by using a range of methods to collect data, manipulate and present data in appropriate ways, draw conclusions and relate them to the aim of the investigation being undertaken. The course includes four main areas, which utilise an appropriate balance of theoretical and practical learning methods.

#### Semester 1

The year begins with an introduction to "Science at Timbertop" which involves studies of wood boilers and the related concepts of heat transfer and move on to explore sound and light energy. The Light and Optics unit aims to develop students' understanding of properties of light, including reflection and refraction. Students then apply their learning to develop efficient housing design principles. The study of Chemistry at Timbertop builds on the student's prior knowledge of the Periodic Table. It aims to strengthen students'understanding of atomic structure and the relationships between element groups. This knowledge is applied, in particular, to an examination of nuclear chemistry and basic chemical reactions.

#### Semester 2

The students are introduced to the role of the interacting body systems in maintaining homeostasis and responding to stimuli, with a focus on how the body responds to exercise. Students then learn about reproductive cells and organs in animals and plants, and analyse

how the processes of sexual and asexual reproduction enable the survival of species. In Earth and Space Science, students will do a deep dive into the flow of energy and matter in an ecosystem and the chemistry involved in combustion, photosynthesis and cellular respiration. Finally, the students consider the human impacts that influence the carbon cycle, and conduct a field study on the carbon sequestration capabilities of local ecosystems.

# History

(AUSTRALIAN CURRICULUM) (Compulsory, either semester)

The Australian Curriculum History subject is concerned with the 'Making of the Modern World', focusing on the period between 1750 and 1918. This was an important stage in human history where Industrial Revolution in Britain, led to a rapid change in the way people lived, worked and thought. Nationalism and imperialism were the flavours of the day, leading to the expansion of European powers around the world, including Australia. These factors also contributed to the start of World War One, and students explore the significance of this conflict.

Students engage with these concepts by completing a range of critical and creative tasks, tests and formative work. They will also learn about the nature and significance of the war in the world and Australian History. Completing this will provide students with an appreciation of the impact of war generally, and its lasting legacy on the world. In addition to this, students explore the European settlement of Australia with a focus on analysing historical sources and the effects of the contact (intended and unintended) and conflict between European settlers and Aboriginal and Torres Strait Islander Peoples.

## **Outdoor Education Studies**

(Compulsory, year long)

The Outdoor Programme commences with students camping out and learning the practical and theoretical skills that allow them to safely engage in the challenges presented throughout Term 1. This training culminates with a hike up Mt Timbertop. The remainder of the term involves students undertaking a series of increasingly difficult two-and-a-half-day hikes which take them through the rugged and remote Victorian High Country. These experiences provide opportunities for the students to engage positively with risk, connect them directly with the environment and develop their resilience, independence, and reliance upon each other. The

final Three Day Hike presents the first opportunity for students to choose their level of challenge, so by the end of the term they have experienced what it means to survive, and even thrive, all while t the edges of their physical, emotional, and social limits. Term 1 concludes with an overnight solo experience which provides students with some time to reflect on their achievements and growth throughout the Term 1 Outdoor Programme.

In Term 2, students explore new terrain during a four-day Unit-based hike. This trip allows students to focus on the group dynamics of their Unit and provides opportunities for individuals to demonstrate leadership. A second opportunity for a solo experience is provided in Term 2, but with an increased period in which to reflect. A unit-based Rogaine competition, where units race to collect markers around campus and on top of Mt Timbertop, concludes semester 1 in the outdoors.

Semester 2 begins with students undertaking an overnight Winter Expedition on Mt Stirling, and each Unit sleeps in the GGS Hut. Over this period, they learn the basics of cross-country skiing while exploring a transformed Mt Stirling under a blanket of snow. The adventure then progresses to a four-day Unit-based backcountry expedition on the Bogong High Plains. Students camp on snow and spend their time exploring the Bogong High Plains on skis, digging snow shelters and kitchens, and being fully immersed in the winter alpine environment.

Term 4 enables students to capitalise on their experiences and resilience developed over the year. Students exercise a new level of choice and agency in the Outdoor Programme as they undertake a range of increasingly ambitious and challenging hikes. Punctuating these hikes are a range of trips which expose students to different ways of being in the natural world. Such opportunities include testing a group's capacity to survive living life with minimal equipment, living for three days in a way informed by the traditional Taungurung people, and even a vintage 1960s style 'free range' Timbertop hike. The students then finish their year in the outdoors with a Four Day Hike, which for many involves exploring the distant peaks of Mt McDonald and The Razor-Viking. The year concludes with the Six Day Hike where students plan their own route and logistics to enable them to be entirely self sufficient as they make one final journey through the Victorian High Country.

## Positive Education

(Compulsory, year long)

Positive Education is embedded throughout the Timbertop Programme. The scope and sequence of the topic is built around the six pillars for living a flourishing life. These founding principles are: Positive Purpose, Positive Emotions, Positive Accomplishment, Positive Health, Positive Relationships, and Positive Meaning. Students discover their Signature Character Strengths which in turn increases their self-awareness. Students focus on topics such as Diversity, Sleep, Gratitude, Savouring, Active Constructive Responding and Teamwork. Students have many opportunities to practise the application of this knowledge in their daily lives at Timbertop. This is important preparation as they move to Senior School and life beyond.

# Agriculture and Land Management

(Either semester)

The Timbertop campus is set on 325 hectares, approximately 200 hectares of which is farming land. It is well-suited to provide students with an exciting introduction to a diverse skills by their involvement with the School's Murray Grey beef cattle, prime lamb enterprise and other working aspects of the Timbertop farm.

Students are offered one semester to study these sub-systems. Semester 1 is offered during Summer and Autumn and semester 2 is offered during Winter and Spring, therefore, the fieldwork covered during a semester will vary, depending on the operations occurring during that season. In both semesters the students will study sustainable agriculture practices, basic economics, pasture and land management, animal production including animal husbandry, reproduction and digestion. The primary aim is to optimise the use of all resources, including natural assets, labour and energy without contributing to environmental degradation.

It is expected that over the year all students studying this elective, whatever their background, will be exposed to a range of practical skills, ethical decisions and problem solving experiences in a unique environment. The subject places strong emphasis on practical learning and creative education with the students being given the opportunity to work in the field on every possible occasion. These lessons will be of value to them in all of their present and future studies.

# Health and Physical Education

(Either semester)

Health and Physical Education at Timbertop encompasses sport education, fitness testing and evaluation, running technique analysis, and basic human physiology focusing on the body's response to exercise.

Over the course of the year students improve their co-ordination, fine and gross motor skills and their knowledge of game sense whilst participating in a broad range of activities. To further develop their physical capabilities, a range of games and sports that enhance all areas of skill-based and health-related fitness components are incorporated. These activities include Waterpolo, Netball, Ultimate Frisbee, Touch Football and a range of modified games. Students also implement ways to improve the quality of their own and others' performance through observation and video analysis.

The classroom-based health course is contextualised around the unique Timbertop programme. This begins by comparing the health and fitness elements of different physical activities and how each contribute to overall health and physical performance. Students analyse and evaluate the Timbertop physical programme and further develop their understanding about what is happening physiologically to their bodies as they increase their cardiovascular fitness, strength and endurance. They also analyse their own running technique using their knowledge of running anatomy and biomechanics.

In the second half of the semester students are given the opportunity to collaborate creatively by developing a game or modifying an existing sport which they then teach, coach and facilitate to their peers, whilst learning about specific game sense and sporting strategies and tactics

# Chinese (Manderin)

#### (Both semesters)

The Chinese programme at Timbertop requires that students have had a minimum of 100 hours instruction in Mandarin Chinese throughout Year 7 and 8, in a school where a language other than Mandarin is the main language of instruction. They must be familiar with Pinyin, and must be able to recognise the 150 most commonly used Hanzi characters.

Students with no prior knowledge of Chinese (Mandarin), unfortunately cannot be accommodated at Timbertop. Likewise, students with Chinese background or who are experienced users of the language are not suitable for this course, as it is designed for learners

of Chinese as a foreign language. Those students who use Chinese as one of their main forms of communication, or have had more than one year in a school where Chinese is one of the main languages of instruction, cannot study Chinese in the Timbertop programme. They may pursue other avenues in Senior School that will cater for their advanced knowledge of the language.

At Timbertop, students who elect to study Mandarin Chinese will continue to develop all four macro skills of listening, speaking, reading and writing. By the end of the year, students will be able to comprehend short texts in Chinese related to the topics in the textbook. Students will be able to participate in simple conversations regarding everyday topics, and will be able to write more extended sentence patterns, structured paragraphs and small written pieces. Language learning will always be supported by social and cultural contexts.

## French

### (Both semesters)

The Timbertop French course is designed for students who have received at least two prior years of French instruction, thus equipping them with sound grammatical and vocabulary knowledge. It is a course in which students continue to develop the four macro skills of speaking, listening, reading and writing in order to gather information relevant to various situations in everyday life, both at Timbertop and generally. Major thematic topics include: The Timbertop programme and school life; the French-speaking world; holidays and leisure activities; as well as discussion of personal and physical attributes applying to themselves, family, and friends. Grammatically, the course instructs students in the use of pronouns, modal verbs, interrogation, negation, adjective placement and agreement, and different tenses including the present, near and simple future, perfect and imperfect past tense and the imperative. This is done by encouraging the students to consider English grammar in greater depth, and drawing parallels between the two languages.

Semester 1 focusses primarily on creating a solid foundational knowledge of all grammatical elements covered in year 9 as well as improving students' French comprehension skills. Semester 2 focusses on putting this knowledge into practice and applying it to further develop and expand on communication skills.

Classroom activities are varied and consist of role plays, small group conversations, frequent verb/vocabulary tests and grammatical instruction, supplemented by games, drills and class

discussions designed to encourage effective language acquisition. The course material is cumulative, and requires students to commit themselves to a consistent and efficient programme of study and revision.

By the end of the year, students are able to participate in everyday written and spoken French communication. The Timbertop course aims to foster an interest in the French language and to develop a level of proficiency therein that is appropriate for a smooth transition to senior-level French.

# Japanese

(Both semesters)

The Japanese programme at Timbertop requires that students have some prior knowledge of the language, in particular, both Hiragana and Katakana scripts. Students need to have received about 100 hours of tuition during Years 7 and 8 in order to attempt this course. Students who have no prior knowledge of Japanese, unfortunately, cannot be accommodated at Timbertop. During the Timbertop year, the four macro skills of speaking, listening, reading and writing are given equal attention in class activities and assessment. Learning about the culture of Japan is an integral part of each topic covered. Content areas include school life and time, locations and the Timbertop campus and seasons and events.

Grammatically, the course builds students' understanding of the Japanese sentence structure and particle use. The past tense, negative tense and past negative tenses of verbs and adjectives are taught during the year. Students have the opportunity to practice new grammatical structures through classroom activities such as: a Q&A about the daily routines at Timbertop, touring their peers through the Timbertop campus, role plays, workbook exercises and classroom games.

Students have the opportunity to practise their conversation skills with the Japanese teacher in class and through a class speaking competition encouraging students to use new language structures. They develop these skills over the year to prepare for the end of Term 4 oral test. The students will begin to accelerate their study of Japanese Kanji script in preparation for further studies at Senior School.

# Geography

(Either or both semesters)

#### Semester 1

Semester I focuses on the physical Geography of the local environment whilst encouraging individual inquiry and development of individual geographical skills. Students learn to understand how Bushfires start and the effect fire has on natural environments. The case study of Black Saturday is used a springboard for understanding the role that humans play in managing the land, as well as the impact that fire has on communities and individuals. Bushfires linked students to learning about the Australian Alpine region, as they proposed arguments for and against the importance of conservation of the endemic biodiversity. Their understanding of world Biomes and the vulnerability of the Alpine Biome informed this study, wherein they proposed changes to land use in the Alpine National Park, from various perspectives.

#### Semester 2

Geographies of interconnections focuses on investigating how people, through their choices and actions, are connected to places throughout the world in a wide variety of ways, and how these connections help to make and change places and their environments. Term 3 examines the various ways that corporations do, or do not, contribute to global social wellbeing and environmental sustainability. They track how popular products, such as bottled water, exemplify the positive and negative impacts of globalisation. This leads to a study on sustainability in the building industry as students explore how we can create homes that work with the environment, rather than against it. This cumulates in a creative design project for a sustainable building on campus.

# History Elective: People and Events of the 21st Centuries

#### (Either semester)

Elective History at Timbertop focuses on the people and events that played a role in shaping the modern world. A focus is placed on the context of each period of time and the legacy which historical figures and events left behind. A study of the political compass and some of the major ideological ideas of the time, aids in understanding the views and opinions of important individuals from the 20th and 21st century. Following the investigation of a significant person in history, students turn their attention to some major events: the fateful

sinking of the Titanic, the Great Depression, the Cold War and the September 11 terrorist attacks. Emphasis is placed on looking at an event from different angles, assessing the causes and effects of these events and exploring narratives from different points of view. This elective provides excellent contextual knowledge for VCE and IB History courses in Years 11 and 12 and supports the development of historical thinking skills that are applied in all senior classes.

# Music

#### (Either or both semesters)

Students can choose the Music elective through the entire year or can elect either semester. It is recommended that more experienced musicians are better suited to choosing second semester as the course is progressive through the year. Beginner students are welcome to enrol and would preferably choose the first semester of the elective. Students must be enrolled in instrumental/vocal tuition to participate in music as an elective subject from the beginning of the year.

The Music Elective course contains practical units of composition and performance. Students are formed into groups to play or sing in a variety of styles in large or small ensembles, as well as developing a solo repertoire. Other areas covered include aural comprehension, theory, creative organisation and a broad overview of the history of music. Students are encouraged to consider this elective if they intend to take music as a subject in Senior School.

#### Private Instrumental/Vocal Tuition:

Tuition is available in most instruments. Instrumentalists and vocalists are encouraged to take Music Ensemble as well as having private lessons. Students have timetabled weekly lessons and supervised practice sessions. Unfortunately, due to the isolation of the campus, lessons on some instruments cannot be guaranteed. In the situation where only a minimal number of students enrol in an instrument, lessons in that instrument may also be unavailable. Students can enrol in multiple lessons. All enrolments are done via Hive.

No instruments can be provided at Timbertop. Hire can be arranged through the Corio campus. Instruments that are owned by the student should be covered by personal insurance and repair of instruments is also problematic, so replacement strings, reeds, etc relevant to your chosen instrument is useful. Hard cases are also recommended to protect instruments. Guitarists will also need to bring their own tuner and capo, as well as a lead if they are using

school amplification. Amplifiers and any other electrical equipment cannot be brought into the school.

Students do not have to choose the music elective subject in order to have private tuition. However, students who take the elective must be enrolled in private tuition from the beginning of the year. There is a minimum practice requirement and students are encouraged to make use of other times when available.

We encourage students at every skill level to consider being a part of the music program. Students need to commit time and effort to learn an instrument but as we encourage them to follow their interests, many students begin lessons in this year. There are solo and ensemble performance opportunities for all instrumental or voice students both within and outside the school. Monday Concerts in the Chapel are a much-loved part of the Timbertop routine as are End of Term Concerts held throughout the year.

## Visual Arts

#### (Either semester)

Students explore a variety of media including drawing, stencil work and painting in both watercolours and acrylic. Through the study of artists and their works, students are taught the elements of Art and how to use technical terms to analyse and appreciate works of art. The rules of perspective are taught, as are the basic principles of colour, tone and hue. Several pieces are completed during the semester including landscapes, portraiture, still lifeand the design of a logo. In all these projects, the use of a Visual Diary is a vital component of the planning and exploratory process. Students are encouraged to assess their own completed art works and reflect upon the development stages involved.

# O3 Positive Health

Positive Health at Timbertop focuses on the importance of physical, mental and sexual health and wellbeing. Throughout the year, students participate in a range of Positive Health sessions, from small-group activities to whole-school events. The scope and sequence of the Positive Health programme at Timbertop is aligned with the Victorian Curriculum. Students learn about gender and sexuality, puberty, healthy relationships, consent, contraception, the issues surrounding pornography and safe partying. The programme is designed so that students leave Timbertop with a greater understanding of their rights and responsibilities as a young person. All topics are explored in a sensitive manner, so that our students are equipped with accurate and age-appropriate information as they navigate their adolescent years.

# O4 Assessment, Reporting and Feedback

AT THE START: At the heart of our approach to assessment, feedback and reporting at GGS is a belief that all students can continually improve and experience positive progress in their learning. We are keen to give our students every opportunity to experience growth and demonstrate their learning as they move through a continuum of experiences in a course of study. Complementing this, with the support of Head of Units, we challenge students to reflect on their learning and set targets and implement strategies that enable them to strive for their personal best. Reportable Assessment grades and feedback will be published through Continuous Reporting via Hive, alongside Learning Behaviour

Statements each term. End of Semester reports will include Head of Unit written reports and a summary Statement of Results for each subject. Regular contact with parents is maintained by telephone or email through the Head of Unit. Should a student be under-performing or not engaging in their learning, our staff will work with them and may be in contact with parents so as to determine a course of action to support or guide the student to better outcomes.

In Year 9, formative assessment occurs to give students feedback on how they are progressing through Units of Work in their subjects. This allows students and their teachers to check for understanding at regular intervals, revisit critical concepts and receive feedback on how to improve. In addition, Mastery Checkpoints are undertaken so that students receive written feedback on their progress and again how to improve or advance their knowledge and skills. Summative assessment is conducted at the end of significant periods of study to provide feedback to students on their achievement against the learning outcomes for that study period and result in a grade being awarded.

# O5 Academic Support

Academic support is designed to cater for all students, not just students with a diagnosed learning disability. It recognises the individual needs of the students at Timbertop. In order to cater for these needs, screening and diagnostic tests are conducted at the commencement of the school year. These tests assist in the identification of students who are either underachieving academically or who have high intellectual potential and need to be challenged. The results are used in conjunction with teacher and parent recommendations.

### Academic Support Programme (ASP) elective

The Academic Support Programme is a subject offered to a small number of students who are in need of extra assistance in literacy and numeracy. These students have been selected through diagnostic testing. This elective provides the necessary time for students to work on specific weaknesses identified by educational psychologists. In addition to this, instruction may be given in time management, involving the setting of short-term and longterm goals; organisation, incorporating the physical work environment; and study skills, involving strategies for effective study habits. This is run as an elective block across both semesters and students must meet a specific criteria to be eligible.

## Other Support Structures

Given the busy nature of the Timbertop programme, students will find that with the loss of weekends and the competing demands for their time, keeping up with their academic workload is challenging. Staff at Timbertop offer a range of extra-help sessions for support out of class times. These are voluntary for students; however, some students may be asked to attend to give them the support they need beyond the normal class time. There is no paid tutoring available at Timbertop, however, for all students the opportunity to get assistance is available, they often just need to ask. In addition, students who experience some difficulty accessing the curriculum may be provided Inclusive Learning Recommendations, which assists them and their teachers to best meet their individual needs. These plans are prepared by the school after discussion with key academic staff, parents and the student, all done on a case-by-case basis.

#### Catering for High Achievers

Timbertop recognises an inclusive definition of giftedness and encourages excellencein all of its forms of intellectual, academic and creative endeavour. There are a range of opportunities to develop musical and artistic talents in the co-curricular programmes. In pure academic pursuits, enrichment is provided to students who show capacity beyond the core offerings. For example, in Mathematics, students can self-select the level of challenge in every part of the course. Classes are not streamed and staff will work with any student to guide them in their studies to achieve their best. Where students have significant prior learning, contact should be made with the Academic office to discuss appropriate subject choices and enrichment opportunities.