ONE IN CHRIST

XAVIER COLLEGE

Year 11 Subject Handbook

2023

A CATHOLIC CO-EDUCATIONAL COLLEGE

Educating in the Salesian Tradition

Dear Families,

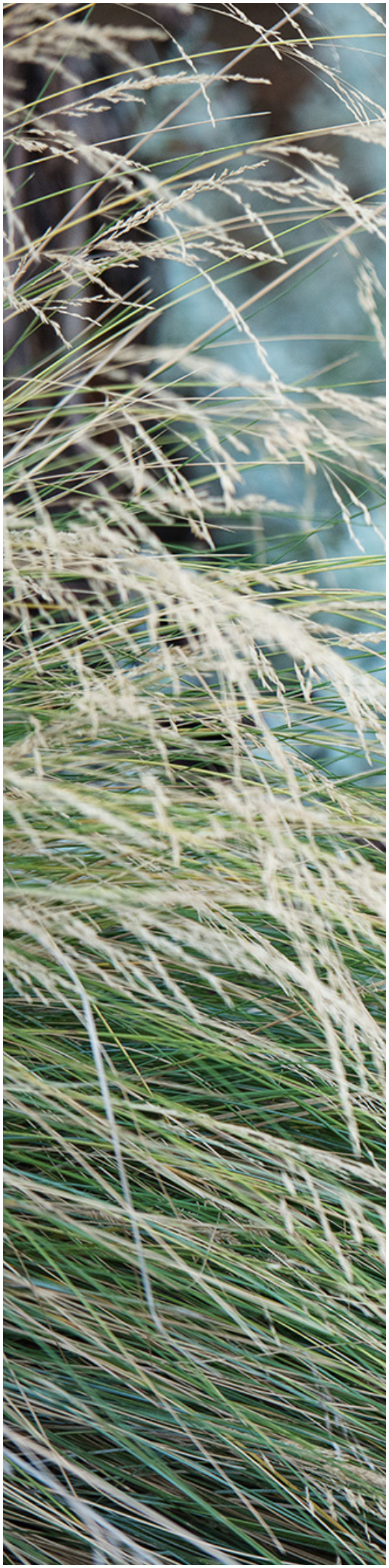
This Handbook presents information which will assist Students and Parents of the Xavier College Community to understand the purpose, structure and ethos of this Catholic School.

Family, School and Church are the partners in this educational enterprise. To choose Xavier College as the environment in which one will work, study, live for the better part of each weekday, is to choose a situation permeated with the spirit of the Gospel; a situation which aims at the total well-being of the young, that is, education in its widest sense.

The Handbook gives a detailed overview of the Year 11 Curriculum. This is a critical time for students as the choices that are made will have a huge impact on the direction they take in the next few years. I encourage students and families to read the Handbook carefully and seek clarification whenever there is doubt.

Let us support each other in this task, whether we are parents, educators or students. We are all Co-workers in the saving mission of the Church.

Mr Mark Flaherty
Principal



Contents

South Australian Certificate of Education (SACE) 4
Year 10-12 Pathways 6
Choosing a Course for Year 11 8

Religious Education 9
Religious Education (Integrated Learning) 9

The Arts 10
Creative Arts 10
Drama 10
Music Experience and Music Advanced 11
Visual Arts – Art 11

Design, Technology & Engineering 12
Digital Communication Solutions 12
Material Solutions - Metal 12
Material Solutions - Wood 13
Certificate II in Engineering Pathways - MEM20413 13

English 14
Essential English 14
English 14
English Literary Studies 15

Health & Physical Education 15
Food and Hospitality 15
Health and Wellbeing 16
Physical Education 16

Humanities 17
Business Innovation 17
Modern History 17
Legal Studies 18
Society and Culture 18
Workplace Practices (Stage 2) 19

Mathematics 20
Essential Mathematics 20
General Mathematics 20
Mathematical Methods 21
Specialist Mathematics 21

Science 22
Agriculture 22
Biology 22
Chemistry 23
Earth and Environmental Science 23
Physics 24
Psychology 24
Scientific Studies 25

Research Project (Stage 2) 26

South Australian Certificate of Education (SACE)

Students who successfully complete their senior secondary education are awarded the South Australian Certificate of Education (SACE). The SACE is an internationally recognised qualification that paves the way for young people to move from school to work or further training and study. The certificate is based on two stages of achievement: Stage 1 (predominantly undertaken in Year 11) and Stage 2 (predominantly Year 12).

How do students get the SACE?

To gain the SACE, students complete about two years of full-time study which most students spread over three years. There are two stages:

- Stage 1, with most subjects undertaken in Year 11
- Stage 2, with most subjects undertaken in Year 12

Note that students will undertake compulsory Stage 1 Personal Learning Plan and Religious Education as Stage 1 Integrated Learning in year 10. Students will also undertake compulsory Stage 2 Research Project and Religious Education as Stage 2 Integrated Learning in Year 11.

Each subject or course successfully completed earns 'credits' towards the SACE, with a minimum of 200 credits required for students to gain the certificate.

Students will receive a grade from A to E for each subject in Stage 1 and A+ to E- for each subject in Stage 2.

For compulsory subjects, students will need to achieve a C- grade or better

The compulsory elements are:

- Personal Learning Plan (10 credits at Stage 1 level – subject completed in Year 10)
- Literacy – at least 20 credits from a range of English subjects or courses (Stage 1)
- Numeracy – at least 10 credits from a range of Mathematics subjects or courses (Stage 1)
- Research Project – an in-depth major project (10 credits at Stage 2)
- Other Stage 2 subjects totalling at least 60 credits.

The remaining 90 credits can be gained through additional Stage 1 or Stage 2 subjects or SACE Board-recognised courses of a student's choice.

What is Community Learning?

Students are able to earn SACE credits for learning undertaken in the community. Information on community-based courses can be found at: https://www.sace.sa.edu.au/learning/community-learning.

Students can also count recognition for learning gained through informal community activities such as coaching a sporting team, being the primary carer of a family member, or leading an environmental project in the community. Students will need to provide evidence of their learning for assessment so that the SACE Board can recognise these other kinds of community learning.

SACE Planner

You can download the SACE planner as a pdf document at the SACE Board website. Follow this link to find it: SACE Planner [PDF].

University and TAFE Entry

Students who complete the SACE are eligible for university entry, provided they meet certain requirements. For university entry, students must complete at least 90 credits at Stage 2. Of these 90 credits, at least 70 credits must be from Tertiary Admissions Subjects (TAS) and the other 20 either from TAS subjects, Recognised Studies, or a mix of the two. Universities also specify required subjects for some of their courses.

TAFE SA recognises the SACE as meeting the entry requirements for most of its courses. It also considers a variety of other qualifications and experiences in its entry and selection processes.

Studying Successfully in Secondary School

The key ingredients to successful completion of school are:

- Regular attendance;
- Organisation and time management skills;
- Involvement in a range of well-balanced activities;
- Persistence.

Students who do not attend school regularly place themselves at serious risk of not completing school successfully. Such students fall behind with class work, miss important input and frequently fail to complete required assessment tasks. Students should work with subject and oratory teachers to ensure that they meet deadlines for assessment tasks.

It is essential that parents who plan to take family holidays with students during term time discuss those plans and the likely impact on the student's study program with the student's House Director of Teaching & Learning.

As students move up through the school they will be required to manage a fairly substantial work load and must therefore have good organisation and time management skills. The use of SEQTA will assist students to keep track of what must be done and when.

Students should work with subject and oratory teachers to ensure that they meet deadlines for assessment tasks.

Students should continue to be involved in all aspects of a balanced adolescent life including attendance at school, completion of homework, participation in social activities and involvement in some physical exercise. There is no reason why that well balanced life can't include part-time work as well for senior students. What is important is keeping the balance right. Obviously, for success a student's study must be the first priority.

What is VET and how can I do it?

VET refers to Vocational Education and Training. VET brings industry and schools together to clearly articulate pathways through secondary school to employment, enhance career education and improve outcomes for students and employers. VET pathways have been designed in partnership with industry to identify qualifications appropriate for school students that contain the skills, knowledge and experience valued by employers.

Depending on the needs of employers, VET pathways include qualifications at Certificate II and III level that industry considers suitable for school students. VET pathways can also be undertaken in the workplace through an apprenticeship or traineeship. Importantly, the pathways allow for school subjects and VET to be delivered concurrently so that students can complete their qualification and their SACE.

VET pathways are reviewed annually to ensure that they remain relevant to students and industry and lead to meaningful employment. VET pathways do incur costs to the individual, although depending upon student option subsidies can be accessed through the VETRO process. If interested in following a VET pathway, students are encouraged to discuss this with their House Director – Teaching & Learning and the Coordinator-Careers Transition, and VET.

Expectations of Senior Students

Students at Year 11 and 12 are expected to demonstrate leadership within the life of the school. This includes participation in all school activities (eg: Year 12 Retreat, Sports Days, Liturgical celebrations etc), wearing the uniform correctly and supporting younger students in any difficulties they face.

Senior School students are generally considered to have made a positive choice to remain at school. This is a choice, which we at Xavier College strongly encourage. Senior students are expected to demonstrate a desire and intention to learn. This desire and intention to learn will be demonstrated by:

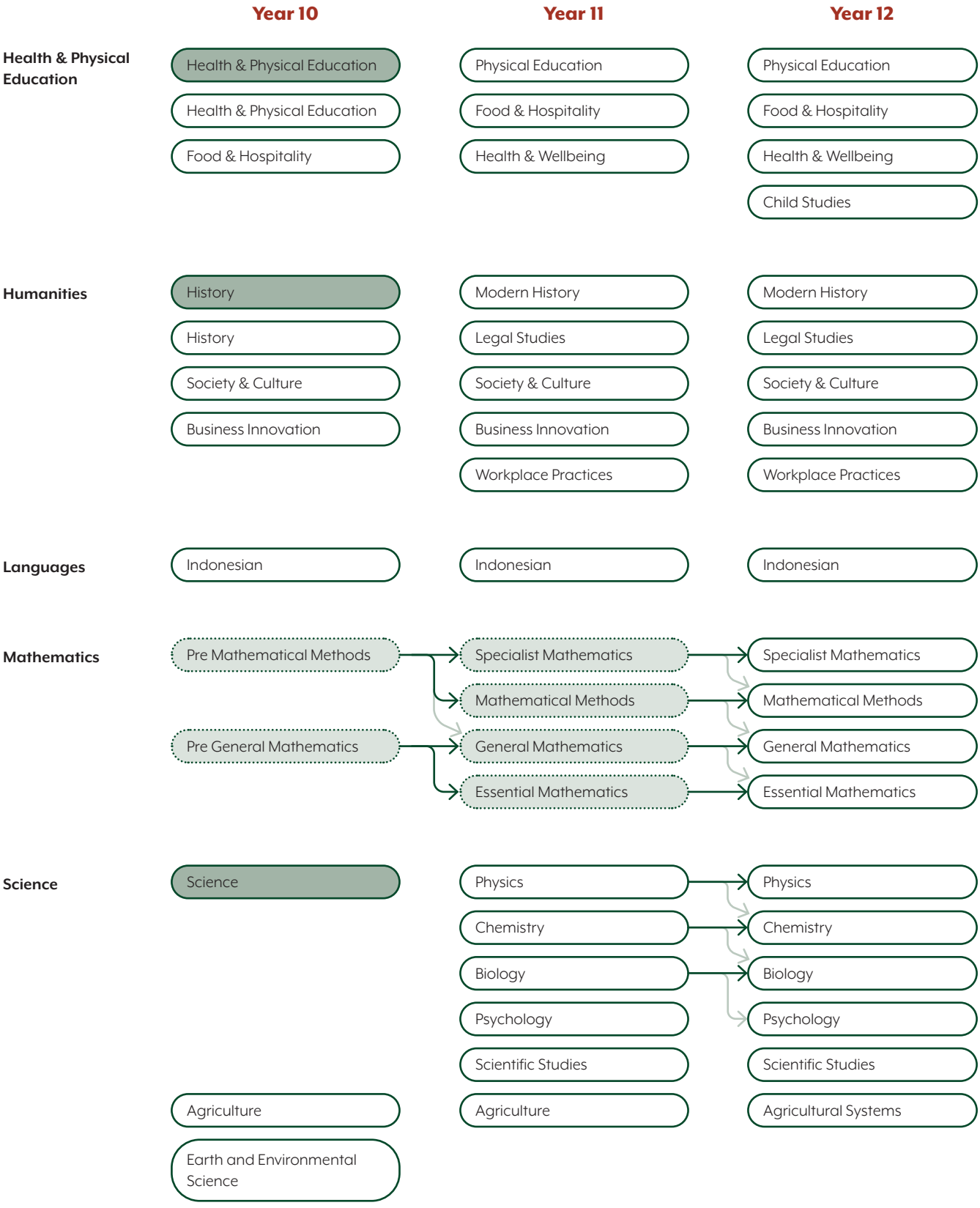
1. Attending lessons punctually;
2. Being prepared for lessons with the appropriate materials and equipment;
3. Conducting oneself in class such that other students can learn and the teacher can teach;
4. Completing required in class and homework tasks;
5. Submitting all required work according to the Assessment Deadlines Policy;

Year 10-12 Pathways

The following tables shows pathways from year 10 to year 12 including prerequisites for some subjects.

Key

	Year 10	Year 11	Year 12
Religious Education	Religious Education (Integrated Learning Stage 1)	Religious Education (Integrated Learning Stage 2)	Religious Education (Integrated Learning Stage 2)
Arts	Visual Arts	Visual Arts	Visual Arts
	Creative Arts	Creative Arts	Creative Arts
	Drama	Drama	Drama
	Music	Music Advanced	Music Studies
		Music Experience	Music Exploration
			Music Performance - Ensemble
			Music Performance - Solo
Design & Technology	Design & Technology - Metal	Digital Communication Products	Digital Communication Products
	Design & Technology - Wood	Material Solutions - Metal	Material Solutions - Wood
	Digital Technologies	Material Solutions - Wood	Industry & Entrepeneurial Solutions - Metal
		Certificate II in Engineering Pathways	
Cross Disciplinary	Personal Learning Plan	Research Project	
		Community Studies	Community Connections
English	English	English Literary Studies	English Literary Studies
		English	English
		Essential English	Essential English


Year 10
Year 11
Year 12
Health & Physical Education
Health & Physical Education
Health & Physical Education
Food & Hospitality
Physical Education
Food & Hospitality
Health & Wellbeing
Physical Education
Food & Hospitality
Health & Wellbeing
Child Studies
Humanities
History
History
Society & Culture
Business Innovation
Modern History
Legal Studies
Society & Culture
Business Innovation
Workplace Practices
Modern History
Legal Studies
Society & Culture
Business Innovation
Workplace Practices
Languages
Indonesian
Indonesian
Indonesian
Mathematics
Pre Mathematical Methods
Pre General Mathematics
Specialist Mathematics
Mathematical Methods
General Mathematics
Essential Mathematics
Specialist Mathematics
Mathematical Methods
General Mathematics
Essential Mathematics
Science
Science
Agriculture
Earth and Environmental Science
Physics
Chemistry
Biology
Psychology
Scientific Studies
Agriculture
Physics
Chemistry
Biology
Psychology
Scientific Studies
Agricultural Systems

Choosing a Course for Year 11

Students will make initial choices in Term 3 and final subject choices will be confirmed towards the end of Semester 2. Subjects will be offered on the basis of student choices and the ability of the College to resource those subjects.

In selecting your course students should:

1. Ensure choices fit the SACE rules;
2. Ensure that any pre-requisite study has been completed;
3. Check pathways and pre-requisites for further study in Years 11 & 12;
4. Choose units which will allow success but also be challenging;
5. Consider their own talents, abilities and interests – not what friends are doing;
6. Consider the recommendations of previous subject teachers.

Who to contact for advice

Directors of Teaching and Learning		
de Sales	Mrs Kim Thomas	kthomas@xavier.catholic.edu.au
Handley	Mr Kieran Sankey	ksankey@xavier.catholic.edu.au
Mazzarello	Mr Costas Efthymiou	cefthymiou@xavier.catholic.edu.au
Occhiena	Mr Christian Bateman	cbateman@xavier.catholic.edu.au

VET, Careers & Transition from School to Work or Further Study	
Mrs Renee Hutchins	rhutchins@xavier.catholic.edu.au

Inclusive Education / Special Learning Needs	
Mrs Jo Bakker	jbakker@xavier.catholic.edu.au

Subject Specialists – Curriculum Leaders		
Religious Education	Ms Nadine Smart	nsmart@xavier.catholic.edu.au
The Arts	Mrs Andrea Duregon	aduregon@xavier.catholic.edu.au
Design, Technology & Engineering	Mr Gregg Steele	gsteele@xavier.catholic.edu.au
English	Ms Taryn Stevens	tstevens@xavier.catholic.edu.au
Humanities	Ms Amelia Vogelsang	avogelsang@xavier.catholic.edu.au
Health & PE	Mrs Brenna Wood	bwood@xavier.catholic.edu.au
Mathematics	Mr Stephen Monach	smonach@xavier.catholic.edu.au
Science	Mr Michael Terwel	mterwel@xavier.catholic.edu.au

Religious Education (Integrated Learning)

Religious Education is a compulsory part of Year 11 at Xavier College and will be taught using the Integrated Learning SACE subject. Integrated Learning allows students to learn and explore more about the Catholic faith in conjunction with developing their capabilities in the SACE. Students have the opportunity to delve into the *Crossways* curriculum in the following areas: God Us and Faith, Sacred Texts, Church for the World, and Moral Life. Students gain an appreciation of, and respect for, the different ways in which people develop an understanding and knowledge of religion as something living and dynamic, and the ways in which they think, feel and act because of their religious beliefs.

SACE Credits

10

Stage 2 Assessment

Students demonstrate evidence of their learning through the following assessment types:

School-based Assessment	Weighting
Practical Inquiry	40%
Connections	30%

External Assessment	Weighting
Personal Endeavour	30%

Information on the External Assessment at Stage 2

Personal Endeavour

The personal endeavour is a report of a maximum of 1000 words for a 10-credit subject. This assessment will be marked by an external assessor appointed by the SACE Board. The teacher and the external assessor make a decision about the quality of the personal endeavor with reference to performance standards.

Creative Arts

In Creative Arts, students have opportunities to specialise in study within and across the arts disciplines of dance, drama, music and the visual arts: art and design. Students participate in the processes of development and the presentation of finished or realised creative arts products. Creative arts products may take the form of musicals, plays, or concerts, visual artefacts, digital media, film and video, public arts projects, community performances, presentations and installations, and in vocal groups or other ensembles. This subject outline gives schools the opportunity to vary the content and/or school-based assessment to develop local programs that suit their needs and interests.

In Creative Arts students undertake a specialised study within or across one or more arts disciplines.

SACE Credits

One semester of Creative Arts contributes 10 credits towards the SACE. It can be selected for one semester.

Content

Creative Arts is highly self-directed and requires students to be capable of working independently. Students choose the focus of their own Art discipline. They actively participate in the development and presentation of creative arts products. These may take the form of (but not limited to), visual art, craft and design works, digital media, film and video, public arts projects, presentations and installations. Students analyse and evaluate creative arts products in different contexts and from various perspectives, and gain an understanding and appreciation of the ways in which creative arts contribute to and shape the intellectual, social, and cultural life of individuals and communities.

Drama

Telling stories and representing our humanity to each other are basic human activities. They are the essence of drama. Students learn by participating in creative problem-solving; generating, analysing, and evaluating ideas; developing personal interpretations of texts; learning to set goals and working collaboratively to achieve them; rehearsing, workshopping, and improvising solutions; as well as presenting their product or performance. Students have the opportunity to develop their curiosity and imagination, creativity, individuality, personal identity, self-esteem, and confidence. They also have opportunities to improve their skills in experimentation, communication, self-discipline, collaboration, teamwork, and leadership. Students learn to acknowledge and respect diversity and different perspectives on the world.

SACE Credits

One semester of Drama contributes 10 credits towards the SACE. It can be selected for one semester.

Content

Students explore the ways in which theories and practices have shaped, and continue to shape, the dramatic arts. Through written, oral, and practical tasks, students deepen and personalise their understanding of the genre. Students investigate, research, develop, and demonstrate their understanding of an area of interest by creating a product (e.g. a performance, a design brief), for a real or hypothetical presentation. In this area of study, students learn to discuss, analyse, and reflect on dramatic elements in their own work and/or the work of other people. They explore the ways in which theatre styles enhance the relationship of text–actor–audience, from the perspective of writer, director, designer, or technician.

Drama students need to be capable of working independently and collaboratively, and also have the confidence and ability to present to an audience in the roles of actor, writer, designer and technician.

Music Experience and Music Advanced

Students develop an understanding of the elements of music and apply this understanding to create their own music as performances, arrangements, or compositions. They develop their musical literacy through responding to and reflecting on their own and others' musical works.

One semester of Music contributes 10 credits towards the SACE. It can be selected for one or two semesters. To study Music at Year 12, 20 credits at Year 11 must be taken.

Students can enrol in Stage 1 – Music Experience programs or Stage 1 – Music Advanced programs.

Music Experience is designed for students with emerging musical skills and provides opportunities for them to develop their musical understanding and skills in creating and responding to music. Music Experience programs provide pathways to Stage 2 Music Performance — Ensemble, Music Performance — Solo, and/or Music Explorations.

Music Advanced is designed to extend students' existing musical understanding and skills in creating and responding to music. They provide pathways to Stage 2 Music Performance - Ensemble, Music Performance - Solo, Music Explorations and/or Music Studies.

SACE Credits

One semester of Creative Arts contributes 10 credits towards the SACE. It can be selected for one semester.

Content

The subject consists of the following strands:

- Understanding music
- Creating music
- Responding to music

Students will present at least two creative works, one of which should be a performance and one should be an arrangement or a composition.

Students should undertake at least one musical literacy task, which enables them to demonstrate their musical literacy skills, communicate their musical ideas, and use appropriate musical terminology.

Visual Arts – Art

In Visual Arts students express ideas through practical work using drawings, sketches, diagrams, models, prototypes, photographs and/or audio visual techniques leading to resolved pieces. Students have opportunities to research, understand and reflect upon visual art works in their cultural and historical contexts.

The broad area of Art includes both artistic and crafting methods and outcomes, including the development of ideas, research, analysis and experimentation with media and techniques, resolution and production.

Semester 1 and 2 are run independently of each other. The focus in Semester 1 and 2 will be different allowing students to select Arts subjects for two semesters if they choose.

One semester of Visual Arts contributes 10 credits towards the SACE. It can be selected for one or two semesters.

SACE Credits

One semester of Visual Arts contributes 10 credits towards the SACE. It can be selected for one or two semesters.

Content

In the Visual Arts - Art Course at Xavier College students continue to develop their own personal style and expand their skills in both 2D and 3D art medias and techniques including (but not limited to) clay, printmaking, drawing, painting and produce finished art works.

Students research, analyse, explore and experiment with media and technique, and resolve and produce practical work. They use visual thinking and investigation to develop ideas and concepts, refine technical skills, and produce imaginative solutions. Students learn to communicate personal ideas, beliefs, values, thoughts, feelings, concepts and opinions, and provide observations of their lived or imagined experiences in visual form.

Digital Communication Solutions

In Design, Technology and Engineering, students use the design and realisation process to engineer solutions for the development of products or systems. In Stage 1 students use the design and realisation process. They learn to create a design brief that provides the basis for the development of potential solutions to design problems and review design features, processes, materials and production techniques to assist with the realisation of the solution. The subject provides a flexible framework that encourages students to be creative, innovative and enterprising. They apply critical problem-solving skills and incorporate technologies to address design problems and challenges. This context involves using symbols, signs, behaviour, speech, light, images, sound, or other data to design and make products that communicate information. Students produce outcomes that demonstrate the knowledge and skills associated with manipulation of digital communication media.

SACE Credits

.One semester of Communication Products contributes 10 credits towards the SACE. It can be selected for one or two semesters.

Content

Semester 1 and 2 are run independently of each other. Students intending to study 2 semesters would need an alternative context for the second semester. Note that students require some prior knowledge of the software they would use in their context as may not be explicitly taught.

Examples of contexts for Digital Communication Solutions include:

- multimedia
- photography
- web design

Material Solutions - Metal

In Design, Technology and Engineering, students use the design and realisation process to engineer solutions for the development of products or systems. In Stage 1 students use the design and realisation process. They learn to create a design brief that provides the basis for the development of potential solutions to design problems and review design features, processes, materials and production techniques to assist with the realisation of the solution. The subject provides a flexible framework that encourages students to be creative, innovative and enterprising. They apply critical problem-solving skills and incorporate technologies to address design problems and challenges. This context involves the use of a diverse range of manufacturing technologies such as tools, machines, and/or systems to create a product using appropriate metals. Students produce outcomes that demonstrate the knowledge and skills associated with using systems, processes, and materials such as metal.

SACE Credits

Semester 1 and 2 are run independently of each other. The focus in Semester 1 and 2 will be different allowing students to select Material Solutions - Metal for two semesters. Each semester of study contributes 10 credits towards the SACE.

Content

Semester 1: Oxy Acetylene welding, Metal Inert Gas (MIG) welding / machining / metal fabrication

Semester 2: Tungsten inert gas (TIG) welding / machining / metal fabrication

Material Solutions - Wood

In Design, Technology and Engineering, students use the design and realisation process to engineer solutions for the development of products or systems. In Stage 1 students use the design and realisation process. They learn to create a design brief that provides the basis for the development of potential solutions to design problems and review design features, processes, materials and production techniques to assist with the realisation of the solution. The subject provides a flexible framework that encourages students to be creative, innovative and enterprising. They apply critical problem-solving skills and incorporate technologies to address design problems and challenges. This context involves the use of a diverse range of manufacturing technologies such as tools, machines, and/or systems to create a product using appropriate timbers. Students produce outcomes that demonstrate the knowledge and skills associated with using systems, processes, and materials such as timber.

SACE Credits

Semester 1 and 2 are run independently of each other. The focus in Semester 1 and 2 will be different allowing students to select Material Solutions - Timber for two semesters. Each semester of study contributes 10 credits towards the SACE.

Content

Semester 1: Carcase furniture construction

Semester 2: Leg and rail furniture construction

Certificate II in Engineering Pathways - MEM20413

This qualification delivers broad-based underpinning skills and knowledge in a range of engineering and manufacturing tasks which will enhance the graduates' entry-level employment prospects for apprenticeships, traineeships, or general employment in an engineering-related workplace. To complete the qualification, students are required to complete all 4 core units and 8 elective units.

Please note that the course is delivered on site at Xavier College one day a week for the full year by a qualified TAFE lecturer.

Please note that this course attracts additional costs.

Units of Competency	
MEM13014A	Apply principles of occupational health and safety in the work environment
MEM16006A	Organise and communicate information
MEM16008A	Interact with computing technology
MEM18001C	Use hand tools
MEM18002B	Use power tools/handheld operations
MEMPE001A	Use engineering workshop machines
MEMPE002A	Use electric welding machines
MEMPE003A	Use oxy-acetylene and soldering equipment
MEMPE004A	Use fabrication equipment
MEMPE005A	Develop a career plan for the engineering and manufacturing industry
MEMPE006A	Undertake a basic engineering project
MEMPE007A	Pull apart and re-assemble engineering mechanisms
MSAENV272B	Participate in environmentally sustainable work practices
MSAPCI101A	Adapt to work in industry
MSAPMSUP106A	Work in a team

Essential English

Stage 1 Essential English is designed from the Senior Secondary Australian Curriculum. The subject caters for students with a range of preferred learning styles.

Students will be recommended for this course by their Year 10 English teacher in consultation with their House Director – Teaching and Learning.

SACE Credits

One semester of Essential English contributes 10 credits towards the SACE. If selected, it must be for both semesters to meet the literacy requirement of the SACE.

Content

In this course students will respond to and create texts in and for a range of personal, social, cultural, community, and/or workplace contexts. The content includes Responding to Texts and Creating Texts. Students will also focus on how language choices are used to create meaning and how to use language to establish and maintain connections with people in different contexts including social, cultural, community, workplace, and/or imagined contexts.

English

Stage 1 English is designed from the Senior Secondary Australian Curriculum. The subject caters for students with a range of preferred learning styles and prepares students for all Stage 2 English subjects.

SACE Credits

One semester of English contributes 10 credits towards the SACE. It can be selected for both semesters to meet the literacy requirement of the SACE.

Content

The content includes Responding to Texts, Creating Texts and an Intertextual Study. Students will analyse the interrelationship between author, text and audience with an emphasis on how language and stylistic features present ideas and perspectives of our world through the study of novels, films, drama and poetry. Students also explore how the purpose of a range of text types is achieved through the application of textual conventions and stylistic features which work to position the audience to respond to ideas and perspectives. Students also have the opportunity to reflect on their personal values in response to ideas and perspectives presented in texts.

Students demonstrate their learning through a range of written, oral and multimodal assessments. Students will complete four assessments in each semester, including one intertextual study pairing two or more texts based on author, genre or text type.

English Literary Studies

Stage 1 English Literary Studies is designed from the Senior Secondary Australian Curriculum. The subject caters for students looking to study either Stage 2 English Literary Studies or Stage 2 English.

SACE Credits

Stage 1 English Literary Studies is studied as one 10-credit subject in the second semester in lieu of Stage 1 English.

Stage 1 English Literary Studies allows students to achieve the literacy requirement in the SACE.

Content

Stage 1 English Literary Studies focuses on the skills and strategies of critical thinking needed to interpret texts. The content includes Responding to Texts, Creating Texts and an Intertextual Study. Students will analyse the interrelationship between author, text and audience with an emphasis on how language and stylistic features present ideas and perspectives of our world through the study of novels, films, drama and poetry. Students also explore how the purpose of a range of text types is achieved through the application of textual conventions and stylistic features which work to position the audience to respond to ideas and perspectives. Students also have the opportunity to reflect on their personal values in response to ideas and perspectives presented in texts. To prepare students for the content of Stage 2 English Literary Studies, this subject will also expose students to studies not covered in Stage 1 English such as a study of a range of short texts and a study of critical perspectives.

Students demonstrate their learning through a range of written, oral and multimodal assessments. Students will complete four assessments, including one intertextual study pairing two or more texts based on author, genre or text type.

Food and Hospitality

In Food and Hospitality, students focus on the dynamic nature of the food and hospitality industry in Australian society. They develop an understanding of contemporary approaches and issues related to food and hospitality. Students work independently and collaboratively to achieve common goals. They develop skills and safe work practices in the preparation, storage and handling of food, complying with current health and safety legislation. Students investigate and debate contemporary food and hospitality issues and current management practices.

SACE Credits

One semester of Health and Wellbeing contributes 10 credits towards the SACE. It can be selected for one or two semesters.

Content

For a 10-credit subject, students complete one Practical Action task and two Issue Inquiry tasks. Stage 1 Health and Wellbeing consists of the following concepts:

- Health and Literacy
- Health and Detriments
- Social Equity
- Health Promotion

Possible topics to explore include mental and emotional health, personal wellbeing, first aid (both physical and mental), and adolescent health.

Health and Wellbeing

In Health and Wellbeing students develop their knowledge, skills, and understanding and make decisions regarding health and wellbeing. They consider the role of health and wellbeing in different contexts and explore ways of promoting positive outcomes for individuals, local communities, and global society. Through Health and Wellbeing, students individually and collaboratively explore and develop skills as agents and advocates for change and consider moral and ethical perspectives, as well as evaluating current trends and issues that impact health and wellbeing.

SACE Credits

One semester of Health and Wellbeing contributes 10 credits towards the SACE. It can be selected for one or two semesters.

Content

For a 10-credit subject, students complete one Practical Action task and two Issue Inquiry tasks. Stage 1 Health and Wellbeing consists of the following concepts:

- Health and Literacy
- Health and Detriments
- Social Equity
- Health Promotion

Possible topics to explore include mental and emotional health, personal wellbeing, first aid (both physical and mental), and adolescent health.

Physical Education

In Physical Education students gain an understanding of human functioning and physical activity, and an awareness of the community structures and practices that influence participation in physical activity. Students explore their own physical capacities and analyse performance, health, and lifestyle issues. They develop skills in communication, investigation, and the ability to apply knowledge to practical situations.

SACE Credits

One semester of Physical Education contributes 10 credits towards the SACE. It can be selected for one or both semesters.

Content

For a 10-credit subject, students complete two or three practicals.

The focus areas provide the scope for the knowledge, skills and capabilities that students develop. Learning is delivered through an integrated approach in which opportunities are provided for students to undertake, and learn through, a wide range of authentic physical activities. Students explore movement concepts and strategies through these physical activities to promote performance and participation outcomes.

- Focus Area 1: In movement
- Focus Area 2: Through movement
- Focus Area 3: About Movement

Business Innovation

Students begin to develop the knowledge, skills, and understandings to engage in business contexts in the modern world. Students collect and analyse financial and business information and develop and extend their financial awareness and skills in decision-making. Students apply these skills in the development of business models for start-up and existing businesses. They consider how digital and emerging technologies may present opportunities to enhance business models and analyse the responsibilities and impact of proposed business models on global and local communities. Students develop these skills through participating in the exciting "Shark Tank" program.

SACE Credits

One semester of Business Innovation contributes 10 credits towards the SACE. It can be selected for one semester.

Content

The learning strands are:

1. Finding and solving problems
2. Financial awareness and decision-making
3. Business information and communication
4. Global, local, and digital connections

These are studied through:

1. Start-up business
2. Existing business

Modern History

The study of history gives students the opportunity to make sense of a complex and rapidly changing world by connecting past and present. Through the study of past events, actions, and phenomena students gain an insight into human nature and the ways in which individuals and societies function. Students research and review sources within a framework of inquiry and critical analysis.

In Modern History students explore changes to the world since 1750.

The Semester 1 course focuses on the history of the Cuban and Palestinian Revolutions, and the world's Indigenous Peoples. The Semester 2 course focuses on the history of the US Civil Rights Movement, the Suffragette Movement, and the Russian Revolution.

SACE Credits

One semester of Modern History contributes 10 credits towards the SACE. It can be selected for one or both semesters.

Content

Students study two or more topics, one of which may be an elective topic.

- Topic 1: Imperialism - The British or Ottoman Empires.
- Topic 2: Decolonisation - in Asia or Africa.
- Topic 3: Indigenous peoples - in the Americas or Australia.
- Topic 4: Social Movements - the civil rights movements in the USA, workers' movements,
- women's movements, student movements, LGBTQ rights movements, peace and anti-war movements, environmental movements, language rights movements.
- Topic 5: Revolution - Russia, China, Cuba.
- Topic 6: Elective - may be designed by the teacher or negotiated with the student.

Legal Studies

Stage 1 Legal Studies focuses on the use of laws and legal systems to create harmony within dynamic and evolving communities. Through an inquiry-based process, students explore and develop their understanding of the concepts of rights, fairness and justice, power, and change. These concepts are examined in the context of law-making, law enforcement, and dispute resolution, and are applied to a range of contemporary Australian issues.

Through Legal Studies, students develop an appreciation and awareness of their role as a citizen in the Australian legal system, the skills to communicate their ideas, and the confidence to make informed and effective decisions regarding legal issues.

SACE Credits

One semester of Legal Studies contributes 10 credits towards the SACE. It can be selected for one semester.

Content

- Focus area 1: Law and communities
- Focus area 2: Victims and the Law
- Focus area 3: Government and Law Making

Society and Culture

In Society and Culture, students explore and analyse how people, societies, cultures, and environments interact. Using an interdisciplinary approach, they analyse the structures and systems of contemporary societies and cultures.

Students learn about the ways in which societies constantly change and are affected by social, political, historical, environmental, economic, and cultural factors. They investigate the ways in which people function in groups and communicate within and across cultural groups. They develop the skills and experience to understand how individual and group involvement can influence change, and to consider the consequences of a range of possible social actions. Students will explore how factors such as gender, ethnicity, racism, class, and power structures affect the lives and identities of individuals and groups.

SACE Credits

One semester of Society and Culture contributes 10 credits towards the SACE. It can be selected for one semester.

Content

Students study two topics:

- one topic with a focus on an Australian context e.g., advantage and disadvantage in contemporary Australia
- one topic with a focus on a global context e.g., terrorism, human trafficking.

Workplace Practices (Stage 2)

In Workplace Practices students develop knowledge, skills, and understanding of the nature, type and structure of the workplace. They learn about the changing nature of work, industrial relations, legislation, safe and sustainable workplace practices, and local, national, and global issues in an industry and workplace context. Students can undertake learning in the workplace and develop and reflect on their capabilities, interests, and aspirations. The subject may include the undertaking of vocational education and training (VET) as provided under the Australian Qualifications Framework (AQF).

SACE Credits

One semester of Workplace Practices contributes 10 credits towards the SACE. It must be selected for both semesters.

Stage 2 Content

There are three focus areas of study of this subject:

- Industry and Work Knowledge
- Vocational Learning
- Vocational Education and Training (VET)

Students must include the following areas of study:

Industry and Work Knowledge, and

Vocational Learning and/or Vocational Education and Training (VET).

For the Industry and Work Knowledge component, students undertaking:

Workplace Practices A (10-credits) and/or Workplace Practices B (10 credits), study two or more negotiated topics in each subject;

Workplace Practices (20-credits), study the three or more topics from the list below:

Topic 1: Work in Australian Society

Topic 2: The Changing Nature of Work

Topic 3: Industrial Relations

Topic 4: Finding Employment

Topic 5: Negotiated Topic.

Stage 2 Assessment

Students demonstrate evidence of their learning through the following assessment types:

School-based Assessment	Weighting
Folio	25%
Performance	25%
Reflection	20%

External Assessment	Weighting
Investigation	30%

Information on the External Assessment at Stage 2

Investigation

The Investigation may be either a practical investigation or an issues investigation.

Practical Investigation

Students undertake a practical investigation based on a product, task, or service in which they have been involved. The practical investigation may be presented in written, oral or multimodal form. Students complete a report on their practical investigation in which they document the process of planning, making, delivering, and evaluating.

The report should be up to a maximum of 1000 words for a 10-credit subject, or 2000 words for a 20-credit subject, if in written form, or the equivalent in other forms.

Issues Investigation

Students undertake an investigation of a local, national, and/or global issue, culture or environment relating to the focus industry. It should be based on one or more of the topics studied. The issues investigation may be presented in written, oral or multimodal form.

The report should be up to a maximum of 1000 words for a 10-credit subject, or 2000 words for a 20-credit subject, if in written form, or the equivalent in other forms.

The investigation is double marked, firstly by the student's teacher and secondly by an external assessor appointed by the SACE Board. The teacher and the external assessor make a decision about the quality of the investigation with reference to the performance standards.

Essential Mathematics

Mathematics at Stage 1 is a compulsory subject and Essential Mathematics will be offered as two 10-credit units at Stage 1 and a 20-credit subject at Stage 2. The first unit of Essential Mathematics will provide students with opportunities to meet the compulsory components of SACE requirements. The second unit will focus on preparation for Stage 2 Essential Mathematics. This subject is intended for students planning to pursue a career in a range of trades or vocations.

SACE Credits

One semester of Essential Mathematics contributes 10 credits towards the SACE. If selected, it must be for both semesters. Completion of 10 credits of Stage 1 Essential Mathematics with a C grade or better, or 20 credits of Stage 2 Essential Mathematics with a C- grade or better, will meet the numeracy requirement of the SACE.

Recommendations: Students should successfully complete the Year 10 General Mathematics course.

Content

Stage 1 Essential Mathematics consists of the following list of six topics:

- Topic 1: Calculations, Time, and Ratio
- Topic 2: Earning and Spending
- Topic 3: Geometry
- Topic 4: Data in Context
- Topic 5: Measurement
- Topic 6: Investing

General Mathematics

Mathematics at Stage 1 is a compulsory subject and General Mathematics will be offered as two 10-credit units at Stage 1 and a 20-credit subject at Stage 2. The first unit of General Mathematics will provide students with opportunities to meet the compulsory components of SACE requirements. The second unit will focus on preparation for Stage 2 General Mathematics. Successful completion of this subject at Stage 2 prepares students for entry to tertiary courses requiring a non-specialised background in mathematics.

SACE Credits

One semester of General Mathematics contributes 10 credits towards the SACE. If selected, it must be for both semesters. Completion of 10 credits of Stage 1 General Mathematics with a C grade or better, or 20 credits of Stage 2 General Mathematics with a C- grade or better, will meet the numeracy requirement of the SACE.

Recommendations: Students should complete the Year 10 General Mathematics course to a level of a C grade or better, and worked in consultation with the House Director of Teaching and Learning.

Content

Stage 1 General Mathematics consists of the following list of six topics:

- Topic 1: Investing and borrowing
- Topic 2: Measurement
- Topic 3: Statistical Investigation
- Topic 4: Applications of Trigonometry
- Topic 5: Linear Functions and their Graphs
- Topic 6: Matrices and Networks.

Mathematical Methods

Mathematics at Stage 1 is a compulsory subject and Mathematical Methods will be offered as two 10-credit units at Stage 1 and a 20-credit subject at Stage 2. The first unit of Mathematical Methods will provide students with opportunities to meet the compulsory components of SACE requirements. The second unit will focus on preparation for Stage 2 Mathematical Methods. Successful completion of Stage 2 Mathematical Methods provides the foundation for further study in mathematics, economics, computer sciences, and the sciences. It prepares students for courses and careers that may involve the use of statistics, such as health or social sciences. When studied together with Specialist Mathematics, this subject can be a pathway to engineering, space science, and laser physics.

SACE Credits

One semester of Mathematical Methods contributes 10 credits towards the SACE. If selected, it must be for both semesters. Completion of 10 credits of Stage 1 Mathematical Methods with a C grade or better, or 20 credits of Stage 2 Mathematical Methods with a C- grade or better, will meet the numeracy requirement of the SACE.

Recommendations: Students should complete the Year 10 Mathematical Methods course to a level of a B grade or better.

Content

Stage 1 Mathematical Methods consists of the following list of six topics:

- Topic 1: Functions and graphs
- Topic 2: Trigonometry
- Topic 3: Counting and Probability
- Topic 4: Statistics
- Topic 5: Growth and Decay
- Topic 6: Introduction to Differential Calculus.

Specialist Mathematics

Specialist Mathematics will be offered as two 10-credit units at Stage 1 and a 20-credit subject at Stage 2. Specialist Mathematics is designed to be studied in conjunction with Mathematical Methods at both Stage 1 and Stage 2. Successful completion of this subject leads to study in a range of tertiary courses such as mathematical sciences, engineering, computer science, and physical sciences. Students envisaging careers in related fields will benefit from studying this subject.

SACE Credits

One semester of Specialist Mathematics contributes 10 credits towards the SACE. If selected, it must be for both semesters. Completion of 10 credits of Stage 1 Specialist Mathematics with a C grade or better, or 20 credits of Stage 2 Specialist Mathematics with a C- grade or better, will meet the numeracy requirement of the SACE.

Recommendations: Students should complete the Year 10 Mathematical Methods course to a level of a B grade or better.

Content

Stage 1 Specialist Mathematics consists of the following list of six topics:

- Topic 1: Arithmetic and Geometric Sequences and Series
- Topic 2: Geometry
- Topic 3: Vectors in the Plane
- Topic 4: Trigonometry
- Topic 5: Matrices
- Topic 6: Real and Complex Numbers

Agriculture

Students analyse benefits and risks of different methods of agricultural production, and develop their awareness of how agriculture impacts on their lives, society, and the environment. They develop skills in critical thinking that inspire them to explore strategies and possible solutions to address major challenges now and in the future related to the global food supply. They explore and understand agricultural science as a human endeavour, and are encouraged to pursue future pathways, including in agriculture, horticulture, land management, agricultural business practice, natural resource management, veterinary science, food and marine sciences, biosecurity, and quarantine.

SACE Credits

One semester of Agriculture and Horticulture contributes 10 credits towards the SACE. It can be selected for one or both semesters.

Content

Students study topics within one, or a combination of, the following themes:

Topic 1: Principles of Agriculture

- Anatomy and Physiology
- Plant and Animal Health
- Agriculture Production Skills
- Innovation and Technology.

Topic 2: Enterprise Management

- Plant and Animal Production
- Marketing Methods
- Business Planning
- Environmental Management.

Biology

In Biology, students develop their understanding of biological systems, the components of these systems and their interactions, how matter flows and energy is transferred and transformed in these systems, and the ways in which these systems are affected by change at different spatial and temporal scales.

SACE Credits

One semester of Biology contributes 10 credits towards the SACE. It can be selected for one or both semesters.

Content

There are four topics:

- Topic 1: Cells and Microorganisms
- Topic 2: Infectious Disease
- Topic 3: Multicellular Organisms
- Topic 4: Biodiversity and Ecosystem Dynamics

In Units 1 and 2, students examine the continuity of biological systems and how they change over time in response to external factors. In Unit 1, students analyse the similarities and differences between cells of all living things. Students also learn about the conditions necessary for the growth and survival of microorganisms, their role in decomposition and food spoilage, and innovative uses of microorganisms. In Unit 2, students investigate system change and continuity in response to changing external conditions and pathogens; they investigate homeostasis and the transmission and impact of infectious disease at cellular and organism levels; and they consider the factors that encourage or reduce the spread of infectious disease at the population level.

In Units 3 and 4, students build on prior learning to develop their understanding of relationships between structure and function in a range of biological systems, from ecosystems to single cells and multicellular organisms. In Unit 3, students investigate the interdependent components of the cell system and the multiple interacting systems in multicellular organisms. In Unit 4, students analyse abiotic and biotic ecosystem components and their interactions, using classification systems for data collection, comparison and evaluation.

Chemistry

In Chemistry, students develop their understanding of chemical systems, and how models of matter and energy transfers and transformations can be used to describe, explain and predict chemical structures, properties and reactions.

SACE Credits

One semester of Chemistry contributes 10 credits towards the SACE. It must be selected for both semesters. To study Chemistry at Year 12, 20 credits at Year 11 must be taken.

Content

There are six topics:

- Topic 1: Materials and their atoms.
- Topic 2: Combinations of atoms.
- Topic 3: Molecules.
- Topic 4: Mixtures and solutions.
- Topic 5: Acid and bases.
- Topic 6: Redox reactions.

In Topic 1, students investigate the physical properties of a range of materials and how these properties relate to their uses. Students explore and discuss how scientists attempted to represent and organize data about elements in meaningful and useful ways, leading to the development of the modern periodic table of elements as a means of identifying trends, patterns, and relationships.

In Topic 2, students explore the different types of primary bonding - metallic, ionic, and covalent - as well as secondary interactions, and use models of bonding to develop and extend their understanding of the chemistry behind the macroscopic properties of materials.

In Topic 3, students explore the three-dimensional arrangement of simple molecules and the principles that explain these structures.

In Topic 4, students investigate the properties of polar and non-polar liquids, their miscibility with other liquids, and their capacity to act as solvents.

In Topic 5, students use contemporary models to investigate and explain the nature of acids and bases, and their properties and uses.

In Topic 6, students examine redox reactions using a variety of approaches, and explore a range of redox reactions and differences in metal reactivity.

Earth and Environmental Science

This subject emphasises ways in which Earth materials and processes generate environments, including habitats, where organisms live; the natural processes and human influences that induce changes in physical environments; and ways in which organisms respond to those changes.

Through their study of Earth and Environmental Science, students develop and extend their inquiry skills, including in designing and undertaking investigations, and collecting and analysing primary and secondary data. Students are assessed via practical and research investigations, as well as skills and applications tasks.

SACE Credits

Earth and Environmental Science can be taken as a 10 credit SACE subject in one semester.

Content

Students will study three of the topics below:

Topic 1: Turbulent Earth – students look at natural hazards that occur and how deeper understanding can help mitigate the effects of them for various communities.

Topic 2: Composition of the geosphere - students study the rock cycle and minerals as well as the development of soils and fossil evidence to develop an earth history

Topic 3: Processes in the geosphere – students consider the energy transformations deep within the structure of the earth which continue to influence contemporary natural events

Topic 4: The Earth's atmosphere – students explore the composition and structure of the atmosphere and its influence on weather and climate

Topic 5: Importance of the hydrosphere – students consider the influence of water on the major systems of earth including weather, climate and ecosystems.

Topic 6: Biosphere – students explore fossil evidence for the development of diverse life forms as well as the interactions of various systems in sustaining life.

Physics

In Physics, students develop their understanding of the core concepts, models and theories that describe, explain and predict physical phenomena.

SACE Credits

One semester of Physics contributes 10 credits towards the SACE. It must be selected for both semesters. To study Physics at Year 12, 20 credits at Year 11 must be taken.

Content

There are five topics:

- Topic 1: Linear motion and forces
- Topic 2: Electric circuits
- Topic 3: Energy and momentum
- Topic 4: Waves
- Topic 5: Nuclear models and radioactivity.

In topic 1, students acquire the skills and understanding to describe and explain motion in a variety of formats, including algebraic and graphical representations. They use the equations of motion and various graphical methods to elicit quantitative and qualitative information about moving objects that undergo constant acceleration. Students consolidate their understanding of forces and the effect that forces have on the motion of objects, using Newton's Laws of Motion.

In topic 2, students explore the concept of electric charge and the requirements for electric current and investigate the concepts of potential difference, current, resistance, electric power, and efficiency. These concepts are applied to direct current (DC) electric circuits.

In topic 3, students investigate the law of the conservation of energy and the law of the conservation of momentum.

In topic 4, students develop an understanding of how the wave model can be used to describe, explain, and predict the transfer of energy through matter and space. Students investigate a range of mechanical waves, and compare them with light waves. This leads to an understanding of a number of wave-related phenomena, including reflection, refraction, resonance, diffraction, polarisation, dispersion, and interference. Students also learn about the electromagnetic spectrum.

In topic 5, students build on their understanding of the basic structure of the nucleus and the uses of radiation to develop an understanding of the concepts involved in the complex structure of the nucleus, stable and unstable nuclei, radioactivity, nuclear fission, and nuclear fusion. This understanding includes the concepts of nuclear force, nuclear reactions, radioactive decays, and mass–energy equivalence

Psychology

The study of psychology enables students to understand their own behaviours and the behaviours of others. It has direct relevance to their personal lives. Psychological knowledge can be applied to improve outcomes and the quality of experience in various areas of life, such as education, intimate relationships, child rearing, employment and leisure.

Stage 1 and Stage 2 Psychology build on the scientific method by involving students in the collection and analysis of qualitative and quantitative data. By emphasising evidence-based procedures (i.e. observation, experimentation and experience) the subject allows students to develop useful skills in analytical and critical thinking, and in making inferences.

SACE Credits

One semester of Psychology contributes 10 credits towards the SACE. It can be selected for one or both semesters.

Content

The subject consists of the Introduction to Psychology topic and two topics:

Topic 1: Introduction to Psychology

Topic 2: Lifespan Psychology

Topic 3: Forensic Psychology

Topic 4: Sport Psychology

Topic 5: Emotion

Scientific Studies

In Scientific Studies students develop their knowledge of scientific principles and concepts, the ability to use that knowledge to identify questions, issues, opportunities, and challenges and the capacity to acquire new knowledge through their own investigations. Students develop the skills and abilities to explain scientific phenomena and to draw evidence-based conclusions from the investigation of science-related issues.

Students have the opportunity to initiate and participate in discussions on how science impacts on their own lives and on society and the environment. Students undertake scientific investigations, both practical and issues based, to develop their knowledge and understanding.

SACE Credits

One semester of Scientific Studies contributes 10 credits towards the SACE. It can be selected for one or both semesters.

Content

The unifying theme is 'The implications of human intervention through science'. From this the teacher will decide one of the following 2 main topics:

Topic 1: Household Science

Topic 2: Physics of Amusement Parks

For either topic students will be assessed on their skills, knowledge, and understanding of the three integrated strands:

- understanding of scientific concepts
- science as a human endeavour
- science inquiry skills.

Research Project

Students will:

- choose a topic of interest—it may be linked to a SACE subject, personal interest or a workplace or community context.
- learn and apply research processes and knowledge and skills specific to their research topic.
- record their research, resolve their research question and evaluate what they have learnt.

The content of the Research Project comprises:

Students choose a research topic that is based on an area of interest, and one or two capabilities that are relevant to their research. They use the research framework as a guide to developing their research and their chosen capabilities, and apply knowledge and skills specific to their research topic to resolve their research question.

Students evaluate the research processes they use, the challenges and opportunities experienced and the quality of their outcome.

SACE Credits

The Research Project is a 10 credit compulsory subject of the SACE and as such must be completed with a C- grade or better.

Assessment

Students demonstrate evidence of their learning through the following assessment:

School-based Assessment	Weighting
Folio (preliminary ideas and research proposal, planning, research development, and analysis)	30%
Research outcome	40%

External Assessment	Weighting
Evaluation (RPB) or Review (RPA)	30%

Information on the External Assessment

Research Project A

Students:

- prepare a 150–200 word written summary of research project, processes used, and outcome. The summary provides background information for the assessors and forms part of the review.
- choose, in consultation with their teacher, the best form in which to present their evaluation for external assessment. This can be in 1 format or a combination of written, visual, and/or oral forms.
- prepare 1500 words maximum if written or 10 minutes maximum if presented orally or multi-modally (excluding the written summary).
- Research Project A contributes to the Australian Tertiary Admissions Rank (ATAR).

Research Project B

Students:

- prepare a 150–200 word written summary of research project, processes used, and outcome. The summary provides background information for the assessors and forms part of the evaluation.
- must present their evaluation in written form. It can include visual material such as photographs and diagrams integrated into the written text.
- prepare 1500 words maximum (excluding the written summary).

Research Project B contributes to the Australian Tertiary Admissions Rank (ATAR).

XAVIER COLLEGE PO Box 1566, Gawler SA 5118 **E** info@xavier.catholic.edu.au
T 08 8521 4500 **W** xavier.catholic.edu.au **ABN** 16 096 753 010