All Souls St Gabriels School

Senior Curriculum
Curriculum Handbook
(For students planning to graduate in 2021)

The primary purpose of this handbook is to provide specific subject information so that students will be able to make informed choices of subjects to study in their senior years of schooling.

The final two years of schooling in the Queensland education system are described as post-compulsory years. They also form the majority of a young person's learning in the Senior Phase of Learning.

These years should therefore, not be treated as just another two years of schooling, but more of a two year course enabling the young adult to mature and gain specific knowledge and skills to lead to further education or employment.

Information regarding all senior subjects can also be obtained from the Queensland Curriculum and Assessment Authority's (QCAA) web site:
www.qcaa.qld.edu.au
The QCAA also offer a web site devoted to career planning:
www.studentconnect.qcaa.qld.edu.au

A message from the Headmaster …

Dear Parents and Students,

Whilst preparation for the Senior Years and beyond might be daunting for most, it is also an exciting time as you begin to plan for life after school.

It is important to remember that this is a journey. You don't have to have all the answers, and most students entering their final year of schooling are still unclear of exactly what they want to do. My suggested approach is to keep it simple. Listen to advice, do your research, and ask questions. All the very best with your decision making, I look forward to sharing your journey and stories of success over the next two years.

Mr Darren Fleming
Headmaster

All information in this handbook
is correct at time of publication
but subject to change.

CONTENTS

* Subject / Course only counts for one input in to the calculation of an ATAR.

Please note – Not all subjects will necessarily begin in Term 4 2019. If numbers are not sufficient to make a class economically feasible, a decision may be made to suspend that subject for a period of time.

(04/06/18)

THE SUCCESSFUL SENIOR STUDENT

Success in any venture is the result of two factors, motivation and ability. If you know why you want to achieve something and you have the required skills *you will reach your goal.*

MOTIVATION

Why do you intend to continue school education in the Senior Phase of Learning?
Some reasons and considerations:

You cannot obtain employment and wish to return to senior schooling until this is possible.

If this is your reason, please take care! Returning to school can easily decrease your job prospects if you come back unwillingly and unprepared to genuinely attempt school work. Low achievement coupled with poor comments about your industry and attitude will make an employer wary of your apparent inability to work.
Returning to school simply to escape unemployment may penalize your future possibilities if you leave school with a poor record and have to compete with younger school leavers who may have good Year 10 results, or compete with students of your own age who have either a good senior record or are experienced from already being in the workforce for two years.

Your parents consider you too immature to join the workforce and want you to stay in a more controlled environment until the end of senior schooling.

While this is an important reason, it must be considered carefully. It will only succeed if you are prepared to do your best. Certainly evidence suggests that maturity and a fair performance in senior can enhance your job prospects. If you are in this category, we suggest you continue to study subjects you are successful in and perhaps take Applied* subjects (which do not count towards the calculation of an Australian Tertiary Admissions Rank – ATAR). These subjects are more practical and allow you to develop good work / industry related skills.

You need senior qualifications to gain your chosen employment.

Quite simply, your personality and two years of consistent school results which indicate that you always work to the best of your ability are the best way to enhance your employment prospects. Few jobs require specific senior subjects so choose yours according to your interests and achievements. A poor school performance will certainly decrease your career chances.

You intend to go to Tertiary Studies.

Tertiary entrance is HIGHLY COMPETITIVE. If you do not have regular study habits and a good level of achievement in Year 10, it is not likely that your senior results will be sound enough to ensure entry to a tertiary institution. To be successful, you need both a high level of ability and sound study habits. If you are unable to spend a minimum of three hours each night doing homework and study, you would be wise to reconsider your future.

ABILITY

Are senior studies difficult?
Yes, they are more difficult than Year 10 and below.

The School Work Itself

You will have more to do. It will involve more individual research and assignments and you will find the work more difficult as it requires lots more understanding. Courses emphasize much more process while content still plays a big part.

More Demands on your Time
Not only prep (homework) and study (15-20 hours/week outside school) demand your attention, but also time for sport, cultural activities and social occasions. Family or personal commitments may claim a lot of your attention and emotional energy.

Peer Pressure
From friends who are working. They may have more money, spare time and apparent freedom. This may make it harder for you to settle down to your studies.

Frustration
You may have noticed that your drive for independence is making you more critical of those close to you, your family, teachers and school friends. Their demands on you could lead you to feel frustrated. Recognize both the things you can change, those things you can't change, and develop the wisdom to know the difference.

HAVING BOTH MOTIVATION AND ABILITY WILL LEAD TO SUCCESS

WHAT IS CURRICULUM?

Many people (students, parents, teachers) believe 'curriculum' is confined to the subjects offered by a school e.g. English, Maths, Science, etc. However, 'curriculum' covers far more than just subjects offered. 'Curriculum' is the total program of an educational institution. Although much of this handbook is taken up with subject descriptions, it is important that it also describes the total curriculum of All Souls St Gabriels School.

Mind, Body & Spirit

Christian Education
- Christian Education is informally taught through the School's Chapel services. Students are required to attend the weekly Eucharist (Holy Communion) service and other special occasions. The Chapel and Chaplaincy program seeks to expound and promote the ethics and values of humility, justice and compassion embedded in the Christian tradition and Scriptures.
- All Souls St Gabriels School is a Christian school which welcomes people of all faiths and nationalities. We strive to develop the mind, body and spirit of the individual, by providing strong, positive leadership and a caring, extended family environment.
- As part of the individual's spiritual growth and development, the School provides a study of the Christian faith in the Anglican tradition and a study of the gospels and their relevance today.
- The ideal of service, as stated in the School motto "Servire Regnare", is emphasised in all aspects of school life.

Pastoral Care
- A very crucial part of the curriculum is Pastoral Care. Pastoral Care broadly refers to the way in which the personal interests and needs of students and staff are addressed. In essence, it is the school's expression of concern for the development of each person, so that personal growth and social, emotional, intellectual and physical development are nurtured.

Work / Industry Placement
- Students in their senior years of schooling can participate in Work / Industry Placement which can be arranged by the School to be completed during school holidays. Residential students may choose to do their Work / Industry Placement in their home town, or they may remain in Charters Towers and arrange their own accommodation.

- Students usually find this a very worthwhile experience and an ideal opportunity to gain first-hand knowledge of a particular type of work / industry and the workforce in general.

Sport and Physical Activity
- All students are encouraged to participate in some form of physical activity. This can be achieved by studying Physical Education, studying Sport and Recreation*, studying Certificate III in Fitness*, by participating in inter-school teams, through regularly scheduled activities and through inter-house competitions.

Debating and Public Speaking
- Senior students have the opportunity to be in the senior Debating Team. Inter-school debates are held in Term 3 each year.
- Students are encouraged to participate in various speaking competitions that occur throughout the school year at the local level and inter-school level beyond Charters Towers, e.g. Rostrum, Lions Youth Speaks for Australia.

Subjects Offered
- The School offers a very flexible and broad range of subjects in an attempt to best meet the needs of all of our students. Detailed descriptions of each subject are presented in the following sections of this handbook.

TIPS FOR SUBJECT SELECTION

In making your subject choices the **first things you should consider** are the following:

INTEREST
Study what you enjoy. It is difficult to maintain enthusiasm and interest when you do not like what you are doing.

CAPABILITY
Study subjects you believe you have the ability to achieve good results. It does you no good to do poorly in a subject at which you are not capable.

This leads to two **secondary questions that must be addressed:**
1. What do you intend doing after senior schooling?
2. What are your strengths and weaknesses?

- If the job or tertiary course you intend doing after senior schooling has certain subject pre-requisites, then these need to be taken. If they conflict with your strengths and weaknesses, then maybe you have to reconsider the situation and either aim for a less demanding level (e.g. an Associate Diploma rather than a Degree), or perhaps you need to consider a different career area.
- Examine your Year 10 results and realistically isolate your strengths and weaknesses. Try to build on your strengths and eliminate your weaknesses. If you don't really know what you are going to do after senior schooling, then look at where your natural abilities lie. Are you more suited to Humanities or Commerce type subjects? (History / Geography / Economics) Do you cope better with the more abstract subjects? (Mathematics / Science) Maybe your interest lies in artistic subjects? (Drama / Music / Visual Art / Visual Arts in Practice*)
- An interest in a particular area usually makes that subject/s easier to study.
- Don't just drift into senior schooling. Make a deliberate decision to strive towards achieving a specific goal.

SENIOR EDUCATION PROFILE

Students in Queensland are issued with a Senior Education Profile (SEP) upon completion of senior studies. This profile may include a:

- statement of results
- Queensland Certificate of Education (QCE)
- Queensland Certificate of Individual Achievement (QCIA).

For more information about the SEP see: www.qcaa.qld.edu.au/senior/certificates-qualifications/sep

STATEMENT OF RESULTS

Students are issued with a statement of results in the December following the completion of a QCAA-developed course of study. A new statement of results is issued to students after each QCAA-developed course of study is completed.

A full record of study will be issued, along with the QCE qualification, in the first December or July after the student meets the requirements for a QCE.

QUEENSLAND CERTIFICATE OF EDUCATION (QCE)

Students may be eligible for a Queensland Certificate of Education (QCE) at the end of their senior schooling. Students who do not meet the QCE requirements can continue to work towards the certificate post-secondary schooling. The QCAA awards a QCE in the following July or December, once a student becomes eligible. Learning accounts are closed after nine years; however, a student may apply to the QCAA to have the account reopened and all credit continued.

QUEENSLAND CERTIFICATE OF INDIVIDUAL ACHIEVEMENT (QCIA)

The Queensland Certificate of Individual Achievement (QCIA) reports the learning achievements of eligible students who complete an individual learning program. At the end of the senior phase of learning, eligible students achieve a QCIA. These students have the option of continuing to work towards a QCE post-secondary schooling.

AUSTRALIAN TERTIARY ADMISSION RANK (ATAR) ELIGIBILITY

The calculation of an Australian Tertiary Admission Rank (ATAR) will be based on a student's:

- best five General subject results or
- best results in a combination of four General subject results plus an Applied* subject result or a Certificate III or higher VET qualification.

The Queensland Tertiary Admissions Centre (QTAC) has responsibility for ATAR calculations.

ENGLISH REQUIREMENT

Eligibility for an ATAR will require satisfactory completion of a QCAA English subject.

Satisfactory completion will require students to attain a result that is equivalent to a Sound Level of Achievement in one of five subjects — English, Essential English, Literature, English and Literature Extension or English as an Additional Language.

While students must meet this standard to be eligible to receive an ATAR, it is not mandatory for a student's English result to be included in the calculation of their ATAR.

SENIOR SUBJECTS

The QCAA develops four types of senior subject syllabuses — General, Applied*, Senior External Examinations and Short Courses. Results in General and Applied* subjects contribute to the award of a QCE and may contribute to an Australian Tertiary Admission Rank (ATAR) calculation, although no more than one result in an Applied* subject can be used in the calculation of a student's ATAR. Extension subjects are extensions of the related General subjects and are studied either concurrently with, or after, Units 3 and 4 of the General course.
Typically, it is expected that most students will complete these courses across their senior years. All subjects build on the F–10 Australian Curriculum.

GENERAL SUBJECTS
General subjects are suited to students who are interested in pathways beyond senior secondary schooling that lead primarily to tertiary studies and to pathways for vocational education and training and work. General subjects include Extension subjects.

APPLIED* SUBJECTS
Applied* subjects are suited to students who are primarily interested in pathways beyond senior secondary schooling that lead to vocational education and training or work.

SENIOR EXTERNAL EXAMINATION
The Senior External Examination consists of individual subject examinations provided across Queensland in October and November each year by the QCAA.

SHORT COURSES*
Short Courses* are developed to meet a specific curriculum need and are suited to students who are interested in pathways beyond senior secondary schooling that lead to vocational education and training and establish a basis for further education and employment. They are informed by, and articulate closely with, the requirements of the Australian Core Skills Framework (ACSF). A grade of C in Short Courses aligns with the requirements for ACSF Level 3.
For more information about the ACSF see: https://www.education.gov.au/australian-core-skills-framework

SYLLABUS UNDERPINNING FACTORS

All senior syllabuses are underpinned by:

- literacy — the set of knowledge and skills about language and texts essential for understanding and conveying content
- numeracy — the knowledge, skills, behaviours and dispositions that students need to use mathematics in a wide range of situations, to recognise and understand the role of mathematics in the world, and to develop the dispositions and capacities to use mathematical knowledge and skills purposefully.

GENERAL SYLLABUSES AND SHORT COURSES
In addition to literacy and numeracy, General syllabuses and Short Courses are underpinned by 21st century skills – attributes and skills students need to prepare them for higher education, work and engagement in a complex and rapidly changing world. These include critical thinking, creative thinking, communication, collaboration and teamwork, personal and social skills, and information & communication technologies (ICT) skills.

APPLIED* SYLLABUSES

In addition to literacy and numeracy, Applied* syllabuses are underpinned by:

- applied learning — the acquisition and application of knowledge, understanding and skills in real-world or lifelike contexts
- community connections — the awareness and understanding of life beyond school through authentic, real-world interactions by connecting classroom experience with the world outside the classroom
- core skills for work — the set of knowledge, understanding and non-technical skills that underpin successful participation in work.

VOCATIONAL EDUCATION AND TRAINING* (VET*)

Students can access VET* programs through the school if it:

- is a registered training organisation (RTO)
- has a third-party arrangement with an external provider who is an RTO
- offers opportunities for students to undertake school-based apprenticeships or traineeships.

All Souls St Gabriels School is associated with a number of RTOs. Many of these RTOs use the facilities of the Dalrymple Trade Training Centre (DTTC). For further details read the back section in this Handbook and see the School VET & Workplacement / Apprenticeship / Traineeship Co-ordinator.

At the time of printing this handbook, courses in the industry areas of agriculture, age care, business, conservation and land management, construction, electro-technology, engineering, hospitality and mining are being offered by a variety of RTOs at the DTTC.

Other courses are also in the planning stages for introduction in coming years.

SCHOOL-BASED APPRENTICESHIPS / TRAINEESHIPS

Students wishing to complete the first year of an Apprenticeship / Traineeship while still completing some senior schooling subjects have this option open to them. For further details read the back section in this Handbook and see the School VET & Workplacement / Apprenticeship / Traineeship Co-ordinator.

GENERAL SYLLABUS DOCUMENTS

General subject syllabus documents consist of a course overview and assessment.

GENERAL SUBJECTS – COURSE OVERVIEW

General syllabus documents are developmental four-unit courses of study.

Units 1 and 2 provide foundational learning, allowing students to experience all syllabus objectives and begin engaging with the course subject matter. It is intended that Units 1 and 2 are studied as a pair. Assessment in Units 1 and 2 provides students with feedback on their progress in a course of study and contributes to the award of a QCE.

Students should complete Units 1 and 2 before starting Units 3 and 4.

Units 3 and 4 consolidate student learning. Assessment in Units 3 and 4 is summative and student results contribute to the award of a QCE and to ATAR calculations.

EXTENSION SUBJECTS – COURSE OVERVIEW
Extension subjects are extensions of the related General subjects and include external assessment. Extension subjects are studied either concurrently with, or after, Units 3 and 4 of the General course of study.

Extension syllabuses are courses of study that consist of two units (Units 3 and 4). Subject matter, learning experiences and assessment increase in complexity across the two units as students develop greater independence as learners.

The results from Units 3 and 4 contribute to the award of a QCE and to ATAR calculations.

GENERAL SUBJECTS – UNITS 1 AND 2 ASSESSMENT
Schools decide the sequence, scope and scale of assessments for Units 1 and 2. These assessment items should reflect the local context. Teachers determine the assessment program, tasks and marking guides that are used to assess student performance for Units 1 and 2.

Units 1 and 2 assessment outcomes provide feedback to students on their progress in the course of study. Schools should develop at least *two* but no more than *four* assessments for Units 1 and 2. At least *one* assessment must be completed for *each* unit.

Schools report satisfactory completion of Units 1 and 2 to the QCAA, and may choose to report levels of achievement to students and parents/carers using grades, descriptive statements or other indicators.

GENERAL & EXTENSION SUBJECTS – UNITS 3 AND 4 ASSESSMENT
Students complete a total of *four* summative assessments — three internal and one external — that count towards the overall subject result in each General subject.

Schools develop *three* internal assessments for each senior subject to reflect the requirements described in Units 3 and 4 of each General syllabus.

The three summative internal assessment items need to be endorsed by the QCAA before they are used in schools. Students' results in these assessment items are externally confirmed by QCAA assessors. These confirmed results from internal assessment are combined with a single result from an external assessment, which is developed and marked by the QCAA. The external assessment result for a subject contributes to a determined percentage of a students' overall subject result. For most subjects this is 25%; for Mathematics and Science subjects it is 50%.

GENERAL & EXTENSION SUBJECTS – INSTRUMENT-SPECIFIC MARKING GUIDES
Each syllabus provides instrument-specific marking guides (ISMGs) for summative internal assessments.

The ISMGs describe the characteristics evident in student responses and align with the identified assessment objectives. Assessment objectives are drawn from the unit objectives and are contextualised for the requirements of the assessment instrument.

Schools cannot change or modify an ISMG for use with summative internal assessment.

As part of quality teaching and learning, schools should discuss ISMGs with students to help them understand the requirements of an assessment task.

GENERAL & EXTENSION SUBJECTS – EXTERNAL ASSESSMENT
External assessment is summative and adds valuable evidence of achievement to a student's profile.

External assessment is:

- common to all schools
- administered under the same conditions at the same time and on the same day
- developed and marked by the QCAA according to a commonly applied marking scheme.

The external assessment contributes a determined percentage (see specific subject guides — assessment) to the student's overall subject result and is not privileged over summative internal assessment.

APPLIED* SYLLABUS DOCUMENTS

Applied* subject syllabus documents consist of a course overview and assessment.

APPLIED* SUBJECTS – COURSE OVERVIEW

Applied* syllabus documents are developmental four-unit courses of study.

Units 1 and 2 of the course are designed to allow students to begin their engagement with the course content, i.e. the knowledge, understanding and skills of the subject. Course content, learning experiences and assessment increase in complexity across the four units as students develop greater independence as learners.

Units 3 and 4 consolidate student learning. Results from assessment in Applied* subjects contribute to the award of a QCE and results from Units 3 and 4 may contribute as a single input to ATAR calculation.

A course of study for Applied* syllabus documents includes core topics and elective areas for study.

APPLIED* SUBJECTS – ASSESSMENT

Applied* syllabus documents use *four* summative internal assessments from Units 3 and 4 to determine a student's exit result.

Schools should develop at least *two* but no more than *four* internal assessments for Units 1 and 2 and these assessments should provide students with opportunities to become familiar with the summative internal assessment techniques to be used for Units 3 and 4.

Applied* syllabuses do not use external assessment.

APPLIED* SUBJECTS – INSTRUMENT-SPECIFIC STANDARDS MATRIXES

For each assessment instrument, schools develop an instrument-specific standards matrix by selecting the syllabus standards descriptors relevant to the task and the dimension/s being assessed. The matrix is shared with students and used as a tool for making judgments about the quality of students' responses to the instrument. Schools develop assessment items to allow students to demonstrate the range of standards.

ESSENTIAL ENGLISH & ESSENTIAL MATHEMATICS – COMMON INTERNAL ASSESSMENT

Students complete a total of *four* summative internal assessments in Units 3 and 4 that count toward their overall subject result. Schools develop *three* of the summative internal assessments for each senior subject and the other summative assessment is a common internal assessment (CIA) developed by the QCAA.

The CIA for Essential English and Essential Mathematics is based on the learning described in Unit 3 of the respective syllabus. The CIA is:

- developed by the QCAA
- common to all schools
- delivered to schools by the QCAA
- administered flexibly in Unit 3
- administered under supervised conditions
- marked by the school according to a common marking scheme developed by the QCAA.

The CIA is not privileged over the other summative internal assessment.

ESSENTIAL ENGLISH & ESSENTIAL MATHEMATICS –
SUMMATIVE INTERNAL ASSESSMENT — INSTRUMENT-SPECIFIC STANDARDS

The Essential English and Essential Mathematics syllabus documents provide instrument-specific standards for the three summative internal assessments in Units 3 and 4.

The instrument-specific standards describe the characteristics evident in student responses and align with the identified assessment objectives. Assessment objectives are drawn from the unit objectives and are contextualised for the requirements of the assessment instrument.

SENIOR EXTERNAL EXAMINATIONS

A Senior External Examination syllabus sets out the aims, objectives, learning experiences and assessment requirements for each of these subjects.

Results are based solely on students' demonstrated achievement in examinations. Work undertaken before an examination is not assessed.

The Senior External Examination is for:

- low candidature subjects not otherwise offered as a General subject in Queensland
- students in their final year of senior schooling who are unable to access particular subjects at their school
- adult students (people of any age not enrolled at a Queensland secondary school)
- to meet tertiary entrance or employment requirements
- for personal interest.

Senior External Examination results may contribute credit to the award of a QCE and contribute to ATAR calculations.

For more information about the Senior External Examination, see: www.qcaa.qld.edu.au/senior/see

SENIOR EXTERNAL EXAMINATION – ASSESSMENT

The Senior External Examination consists of individual subject examinations that are held once each year in Term 4. Important dates and the examination timetable are published in the Senior Education Profile (SEP) calendar, available at: https://www.qcaa.qld.edu.au/senior/sep-calendar

Results are based solely on students' demonstrated achievement in the examinations. Work undertaken before an examination is not assessed. Results are reported as a mark and grade of A–E. For more information about results, see the QCE and QCIA policy and procedures handbook, Section 10.

SHORT COURSES*

Short Courses* are one-unit courses of study. A Short Course* includes topics and subtopics. Results contribute to the award of a QCE. Results do not contribute to ATAR calculations.

Short Courses are available in:

- Literacy*
- Numeracy*
- Aboriginal and Torres Strait Islander Languages*
- Career Education*

SHORT COURSE* - ASSESSMENT

A Short Course* uses two summative school-developed assessment items to determine a student's exit result. Short Courses* do not use external assessment.

The Short Course* syllabus provides instrument-specific standards for the two summative internal assessment items.

COMPOSITE / CONCURRENT CLASSES & ALTERNATIVE SEQUENCE SYLLABUS DOCUMENTS

To keep the breadth of curriculum offering in the senior years of All Souls St Gabriels School, a number of subjects will be conducted in either a composite or concurrent classroom.

COMPOSITE CLASSROOM

Students studying the same subject in their second last and last year of senior schooling complete the same learning objectives, same content and same assessment tasks (to different degrees of complexity) in the same room. The content structure would follow an approved 'Alternative Sequence' supplied by the QCAA – Alternative Sequence Unit 1 (ASU1), ASU2, ASU3 then ASU4.

Only 17 of the QCAA 60 General Syllabus documents have an approved 'Alternative Sequence' document.

At the time of printing this handbook, All Souls St Gabriels School is planning to conduct the following subjects using the 'Alternative Sequence' document – Biology, Drama, Economics, Modern History & Physics.

CONCURRENT CLASSROOM

Students studying the same subject in their second last and last year of senior schooling complete different learning objectives, study different content and complete similar assessment tasks in the same room. The content structure will follow the standard syllabus order – Units 1&3 at the same time – Units 2&4 at the same time.

BIOLOGY

Biology provides opportunities for students to engage with living systems.

Students develop their understanding of cells and multicellular organisms. They engage with the concept of maintaining the internal environment. They study biodiversity and the interconnectedness of life. This knowledge is linked with the concepts of heredity and the continuity of life.

Students learn and apply aspects of the knowledge and skills of the discipline (thinking, experimentation, problem-solving and research skills), understand how it works and how it may impact society. They develop their sense of wonder and curiosity about life; respect for all living things and the environment; understanding of biological systems, concepts, theories and models; appreciation of how biological knowledge has developed over time and continues to develop; a sense of how biological knowledge influences society.

Students plan and carry out fieldwork, laboratory and other research investigations; interpret evidence; use sound, evidence-based arguments creatively and analytically when evaluating claims and applying biological knowledge; and communicate biological understanding, findings, arguments and conclusions using appropriate representations, modes and genres.

Pathways

A course of study in Biology can establish a basis for further education and employment in the fields of medicine, forensics, veterinary, food and marine sciences, agriculture, biotechnology, environmental rehabilitation, biosecurity, quarantine, conservation and sustainability.

Objectives

By the conclusion of the course of study, students will:

- describe and explain scientific concepts, theories, models and systems and their limitations
- apply understanding of scientific concepts, theories, models and systems within their limitations
- analyse evidence
- interpret evidence
- investigate phenomena
- evaluate processes, claims and conclusions
- communicate understandings, findings, arguments and conclusions.

Structure (Please note: ASSG offers this subject using the Alternative Sequence option.)

Unit 1	Unit 2	Unit 3	Unit 4
Cells and multicellular organisms • Cells as the basis of life • Multicellular organisms	**Maintaining the internal environment** • Homeostasis • Infectious diseases	**Biodiversity and the interconnectedness of life** • Describing biodiversity • Ecosystem dynamics	**Heredity and continuity of life** • DNA, genes and the continuity of life • Continuity of life on Earth

Assessment
Schools devise assessments in Units 1 and 2 to suit their local context.

In Units 3 and 4 students complete four summative assessment items. The results from each of the assessments are added together to provide a subject score out of 100. Students will also receive an overall subject result (A–E).

Summative assessment

<table>
<tr><th colspan="2">Unit 3</th><th colspan="2">Unit 4</th></tr>
<tr><td>Summative internal assessment 1 (IA1):
• Data test</td><td>10%</td><td rowspan="2">Summative internal assessment 3 (IA3):
• Research investigation</td><td rowspan="2">20%</td></tr>
<tr><td>Summative internal assessment 2 (IA2):
• Student experiment</td><td>20%</td></tr>
<tr><td colspan="4">Summative external assessment (EA): 50%
• Examination</td></tr>
</table>

CAREERS AND DEVELOPMENT* (CAD)

This is a compulsory subject at All Sous St Gabriels School. Students cover a range of personal growth and career development units. Students start their Senior Education and Training (SET) Plan in Year 10 and then use CAD time in their senior years to review this plan.

Basic course structure:
- Unit 1: Beginning the senior phase of learning
- Unit 2: Designing your future
- Unit 3: Skills for success after school.

The aim is to engage students in learning that develops positive attitudes and values about being an active lifelong participant in managing their career.

The personal growth units are designed to assist students to:
- Increasingly accept greater responsibility for their learning
- Develop and maintain positive relationships in life and work
- Develop constructive behaviours that maintain a positive self-concept
- Participate in leadership activities
- Participate in community service activities
- Make significant decisions about their future pathways to further education, training and employment.
- Develop a range of skills that are required for work and further education and training, such as planning, organising, thinking flexibly, communicating well and working in teams.
- Be flexible and persistent learners, appreciating the need for lifelong learning.

CERTIFICATE III FITNESS*

At the time of publishing this document, the School has a recommended online provider for the theory component of this course. The practical component is also administered by this provider. This qualification reflects the role of instructors who perform a range of activities and functions within the fitness industry.
Successful completion of Certificate III in Fitness contributes eight (8) credits towards a student's QCE.
Future pathways may include jobs providing exercise instruction for group or gym programs within locations such as gyms, fitness facilities and community facilities. A range of career pathway options including an alternative entry into university can also exist, including exercise physiologist, Physical Education teacher and sports scientist.

While there are no specific prerequisite requirements for choosing this subject the following skills and interests will be beneficial:
- sound level of achievement in English, Science and Physical Education;
- language, Literacy and Numeracy skills to be able to understand content; and
- a high capacity and interest in physical activity is essential.

Some of the skills and knowledge that are developed in the course include being able to:
- identify clients' fitness requirements and advice on facilities and services;
- develop basic fitness programs for fitness industry clients;
- provide the applied exercise science required for fitness instructors;
- educate clients on the application of basic anatomy and physiology and understand the functional significance of these structures in relation to movement and exercise;
- provide basic nutritional information and advice to fitness industry clients, who have no dietary or nutritional concerns; and
- instruct and supervise clients in fitness using basic fitness industry equipment.

Assessment
- Workbooks
- Assignments
- Oral questions
- Observation in simulated work place
- Practical Assessment
- Structured Work Placement (in students own time)

Out of Class/Prep Expectations
Online class sessions allow students the opportunity to study this course in addition to their full school load without missing the chance to compete any particular school subject because of timetable constraints.

It is also expected that students will also allocate time outside of school-time each week to review concepts, complete additional reading and preparation for assessment tasks. There will also be times where students are required to participate in practical assessment outside of school-time (eg: individual client training sessions or group sessions).

Service Agreement
This is a two-year course. The RTO will provide each student with every opportunity to complete the certificate in this time. Late entry students to this course must catch up the units missed in order to complete the certificate. Those students who do not complete the Certificate but achieve at least one unit will receive a Statement of Attainment. This information is correct at time of publication but subject to change.

CHEMISTRY

Chemistry is the study of materials and their properties and structure.

Students study atomic theory, chemical bonding, and the structure and properties of elements and compounds. They explore intermolecular forces, gases, aqueous solutions, acidity and rates of reaction. They study equilibrium processes and redox reactions. They explore organic chemistry, synthesis and design to examine the characteristic chemical properties and chemical reactions displayed by different classes of organic compounds.

Students develop their appreciation of chemistry and its usefulness; understanding of chemical theories, models and chemical systems; expertise in conducting scientific investigations. They critically evaluate and debate scientific arguments and claims in order to solve problems and generate informed, responsible and ethical conclusions, and communicate chemical understanding and findings through the use of appropriate representations, language and nomenclature.

Students learn and apply aspects of the knowledge and skills of the discipline (thinking, experimentation, problem-solving and research skills), understand how it works and how it may impact society.

Pathways

A course of study in Chemistry can establish a basis for further education and employment in the fields of forensic science, environmental science, engineering, medicine, pharmacy and sports science.

Objectives

By the conclusion of the course of study, students will:

- describe and explain scientific concepts, theories, models and systems and their limitations
- apply understanding of scientific concepts, theories, models and systems within their limitations
- analyse evidence
- interpret evidence
- investigate phenomena
- evaluate processes, claims and conclusions
- communicate understandings, findings, arguments and conclusions.

Structure

Unit 1	Unit 2	Unit 3	Unit 4
Chemical fundamentals — structure, properties and reactions • Properties and structure of atoms • Properties and structure of materials • Chemical reactions — reactants, products and energy change	**Molecular interactions and reactions** • Intermolecular forces and gases • Aqueous solutions and acidity • Rates of chemical reactions	**Equilibrium, acids and redox reactions** • Chemical equilibrium systems • Oxidation and reduction	**Structure, synthesis and design** • Properties and structure of organic materials • Chemical synthesis and design

Assessment

Schools devise assessments in Units 1 and 2 to suit their local context.

In Units 3 and 4 students complete four summative assessment items. The results from each of the assessments are added together to provide a subject score out of 100. Students will also receive an overall subject result (A–E).

Summative assessment

<table>
<tr><th colspan="2">Unit 3</th><th colspan="2">Unit 4</th></tr>
<tr><td>Summative internal assessment 1 (IA1):
• Data test</td><td>10%</td><td rowspan="2">Summative internal assessment 3 (IA3):
• Research investigation</td><td rowspan="2">20%</td></tr>
<tr><td>Summative internal assessment 2 (IA2):
• Student experiment</td><td>20%</td></tr>
<tr><td colspan="4">Summative external assessment (EA): 50%
• Examination</td></tr>
</table>

DRAMA

Drama fosters creative and expressive communication. It interrogates the human experience by investigating, communicating and embodying stories, experiences, emotions and ideas that reflect the human experience. It engages students in imaginative meaning-making processes and involves them using a range of artistic skills as they make and respond to dramatic works.

Students experience, reflect on, understand, communicate, collaborate and appreciate different perspectives of themselves, others and the world in which they live. They learn about the dramatic languages and how these contribute to the creation, interpretation and critique of dramatic action and meaning for a range of purposes. They study a range of forms, styles and their conventions in a variety of inherited traditions, current practice and emerging trends, including those from different cultures and contexts.

Students learn how to engage with dramatic works as both artists and audience through the use of critical literacies. The study of drama develops students' knowledge, skills and understanding in the making of and responding to dramatic works to help them realise their creative and expressive potential as individuals. Students learn to pose and solve problems, and work independently and collaboratively.

Pathways

A course of study in Drama can establish a basis for further education and employment in the field of drama, and to broader areas in creative industries and cultural institutions, including arts administration and management, communication, education, public relations, research and science and technology.

Objectives

By the conclusion of the course of study, students will:

- demonstrate an understanding of dramatic languages
- apply literacy skills
- apply and structure dramatic languages
- analyse how dramatic languages are used to create dramatic action and meaning
- interpret purpose, context and text to communicate dramatic meaning
- manipulate dramatic languages to create dramatic action and meaning
- evaluate and justify the use of dramatic languages to communicate dramatic meaning
- synthesise and argue a position about dramatic action and meaning.

Structure (Please note: ASSG offers this subject using the Alternative Sequence option.)

Unit 1	Unit 2	Unit 3	Unit 4
Share How does drama promote shared understandings of the human experience? • cultural inheritances of storytelling • oral history and emerging practices • a range of linear and non-linear forms	**Reflect** How is drama shaped to reflect lived experience? • Realism, including Magical Realism, Australian Gothic • associated conventions of styles and texts	**Challenge** How can we use drama to challenge our understanding of humanity? • Theatre of Social Comment, including Theatre of the Absurd and Epic Theatre • associated conventions of styles and texts	**Transform** How can you transform dramatic practice? • Contemporary performance • associated conventions of styles and texts • inherited texts as stimulus

Assessment

Schools devise assessments in Units 1 and 2 to suit their local context.

In Units 3 and 4 students complete four summative assessment items. The results from each of the assessments are added together to provide a subject score out of 100. Students will also receive an overall subject result (A–E).

Summative assessment

<table>
<tr><th colspan="2">Unit 3</th><th colspan="2">Unit 4</th></tr>
<tr><td>Summative internal assessment 1 (IA1):
• Performance</td><td>20%</td><td rowspan="2">Summative internal assessment 3 (IA3):
• Project — practice-led project</td><td rowspan="2">35%</td></tr>
<tr><td>Summative internal assessment 2 (IA2):
• Project — dramatic concept</td><td>20%</td></tr>
<tr><td colspan="4">Summative external assessment (EA): 25%
• Examination — extended response</td></tr>
</table>

ECONOMICS

Economics encourages students to think deeply about the global challenges facing individuals, business and government, including how to allocate and distribute scarce resources to maximise well-being.

Students develop knowledge and cognitive skills to comprehend, apply analytical processes and use economic knowledge. They examine data and information to determine validity, and consider economic policies from various perspectives. They use economic models and analytical tools to investigate and evaluate outcomes to draw conclusions.

Students study opportunity costs, economic models and the market forces of demand and supply. They dissect and interpret the complex nature of international economic relationships and the dynamics of Australia's place in the global economy. They develop intellectual flexibility, digital literacy and economic thinking skills.

Pathways

A course of study in Economics can establish a basis for further education and employment in the fields of economics, econometrics, management, data analytics, business, accounting, finance, actuarial science, law and political science.

Economics is an excellent complement for students who want to solve real-world science or environmental problems and participate in government policy debates. It provides a competitive advantage for career options where students are aiming for management roles and developing their entrepreneurial skills to create business opportunities as agents of innovation.

Objectives

By the conclusion of the course of study, students will:

- comprehend economic concepts, principles and models
- select data and economic information from sources
- analyse economic issues
- evaluate economic outcomes
- create responses that communicate economic meaning.

Structure (Please note: ASSG offers this subject using the Alternative Sequence option.)

Unit 1	Unit 2	Unit 3	Unit 4
Markets and models • The basic economic problem • Economic flows • Market forces	**Modified markets** • Markets and efficiency • Case options of market measures and strategies	**International economics** • The global economy • International economic issues	**Contemporary macroeconomics** • Macroeconomic objectives and theory • Economic management

Assessment

Schools devise assessments in Units 1 and 2 to suit their local context.

In Units 3 and 4 students complete four summative assessment items. The results from each of the assessments are added together to provide a subject score out of 100. Students will also receive an overall subject result (A–E).

Summative assessment

Unit 3		Unit 4	
Summative internal assessment 1 (IA1): • Examination — combination response	25%	Summative internal assessment 3 (IA3): • Examination — extended response to stimulus	25%
Summative internal assessment 2 (IA2): • Investigation — research report	25%	Summative external assessment (EA): • Examination — combination response	25%

ENGLISH

English focuses on the study of both literary texts and non-literary texts, developing students as independent, innovative and creative learners and thinkers who appreciate the aesthetic use of language, analyse perspectives and evidence, and challenge ideas and interpretations through the analysis and creation of varied texts.

Students are offered opportunities to interpret and create texts for personal, cultural, social and aesthetic purposes. They learn how language varies according to context, purpose and audience, content, modes and mediums, and how to use it appropriately and effectively for a variety of purposes. Students have opportunities to engage with diverse texts to help them develop a sense of themselves, their world and their place in it.

Students communicate effectively in Standard Australian English for the purposes of responding to and creating texts. They make choices about generic structures, language, textual features and technologies for participating actively in literary analysis and the creation of texts in a range of modes, mediums and forms, for a variety of purposes and audiences. They explore how literary and non-literary texts shape perceptions of the world, and consider ways in which texts may reflect or challenge social and cultural ways of thinking and influence audiences.

Pathways

A course of study in English promotes open-mindedness, imagination, critical awareness and intellectual flexibility – skills that prepare students for local and global citizenship, and for lifelong learning across a wide range of contexts.

Objectives

By the conclusion of the course of study, students will:

- use patterns and conventions of genres to achieve particular purposes in cultural contexts and social situations
- establish and maintain roles of the writer/speaker/signer/designer and relationships with audiences
- create and analyse perspectives and representations of concepts, identities, times and places
- make use of and analyse the ways cultural assumptions, attitudes, values and beliefs underpin texts and invite audiences to take up positions
- use aesthetic features and stylistic devices to achieve purposes and analyse their effects in texts
- select and synthesise subject matter to support perspectives
- organise and sequence subject matter to achieve particular purposes
- use cohesive devices to emphasise ideas and connect parts of texts
- make language choices for particular purposes and contexts
- use grammar and language structures for particular purposes
- use mode-appropriate features to achieve particular purposes.

Structure

Unit 1	Unit 2	Unit 3	Unit 4
Perspectives and texts • Examining and creating perspectives in texts • Responding to a variety of non-literary and literary texts • Creating responses for public audiences and persuasive texts	**Texts and culture** • Examining and shaping representations of culture in texts • Responding to literary and non-literary texts, including a focus on Australian texts • Creating imaginative and analytical texts	**Textual connections** • Exploring connections between texts • Examining different perspectives of the same issue in texts and shaping own perspectives • Creating responses for public audiences and persuasive texts	**Close study of literary texts** • Engaging with literary texts from diverse times and places • Responding to literary texts creatively and critically • Creating imaginative and analytical texts

Assessment

Schools devise assessments in Units 1 and 2 to suit their local context.

In Units 3 and 4 students complete four summative assessment items. The results from each of the assessments are added together to provide a subject score out of 100. Students will also receive an overall subject result (A–E).

Summative assessment

Unit 3		Unit 4	
Summative internal assessment 1 (IA1): • Extended response — written response for a public audience	25%	Summative internal assessment 3 (IA3): • Extended response — imaginative written response	25%
Summative internal assessment 2 (IA2): • Extended response — persuasive spoken response	25%	Summative external assessment (EA): • Examination — analytical written response	25%

ESSENTIAL ENGLISH*

Essential English develops and refines students' understanding of language, literature and literacy to enable them to interact confidently and effectively with others in everyday, community and social contexts. Students recognise language and texts as relevant in their lives now and in the future and learn to understand, accept or challenge the values and attitudes in these texts.

Students engage with language and texts to foster skills to communicate confidently and effectively in Standard Australian English in a variety of contemporary contexts and social situations, including everyday, social, community, further education and work-related contexts. They choose generic structures, language, language features and technologies to best convey meaning. They develop skills to read for meaning and purpose, and to use, critique and appreciate a range of contemporary literary and non-literary texts.

Students use language effectively to produce texts for a variety of purposes and audiences and engage creative and imaginative thinking to explore their own world and the worlds of others. They actively and critically interact with a range of texts, developing an awareness of how the language they engage with positions them and others.

Pathways

A course of study in Essential English promotes open-mindedness, imagination, critical awareness and intellectual flexibility — skills that prepare students for local and global citizenship, and for lifelong learning across a wide range of contexts.

Objectives

By the conclusion of the course of study, students will:

- use patterns and conventions of genres to achieve particular purposes in cultural contexts and social situations
- use appropriate roles and relationships with audiences
- construct and explain representations of identities, places, events and concepts
- make use of and explain the ways cultural assumptions, attitudes, values and beliefs underpin texts and influence meaning
- explain how language features and text structures shape meaning and invite particular responses
- select and use subject matter to support perspectives
- sequence subject matter and use mode-appropriate cohesive devices to construct coherent texts
- make mode-appropriate language choices according to register informed by purpose, audience and context
- use language features to achieve particular purposes across modes.

Structure

Unit 1	Unit 2	Unit 3	Unit 4
Language that works • Responding to a variety of texts used in and developed for a work context • Creating multimodal and written texts	**Texts and human experiences** • Responding to reflective and nonfiction texts that explore human experiences • Creating spoken and written texts	**Language that influences** • Creating and shaping perspectives on community, local and global issues in texts • Responding to texts that seek to influence audiences	**Representations and popular culture texts** • Responding to popular culture texts • Creating representations of Australian identifies, places, events and concepts

Assessment

Schools devise assessments in Units 1 and 2 to suit their local context.

In Units 3 and 4 students complete four summative assessment items. Schools develop three summative internal assessments and the common internal assessment (CIA) is developed by the QCAA.

Summative assessment

Unit 3	Unit 4
Summative internal assessment 1 (IA1): • Extended response — spoken/signed response	Summative internal assessment 3 (IA3): • Extended response — Multimodal response
Summative internal assessment 2 (IA2): • Common internal assessment (CIA)	Summative internal assessment (IA4): • Extended response — Written response

ESSENTIAL MATHEMATICS*

Essential Mathematics is a subject only offered to students who don't require a higher level mathematics for their career choice and have experienced difficulty in Mathematics previously.

Entry will be determined by subject availability, demand, Year 10 performance and discussion with teaching staff.

It should be noted that this subject will not be recognised by universities for tertiary entrance, and that most trades (e.g. electrician) prefer General Mathematics or higher, so students may be better advised to study General Mathematics. It is strongly recommended that students research the prerequisites for their chosen field.

Essential Mathematics' major domains are Number, Data, Location and time, Measurement and Finance.

Essential Mathematics benefits students because they develop skills that go beyond the traditional ideas of numeracy.

Students develop their conceptual understanding when they undertake tasks that require them to connect mathematical concepts, operations and relations. They learn to recognise definitions, rules and facts from everyday mathematics and data, and to calculate using appropriate mathematical processes.

Students interpret and use mathematics to make informed predictions and decisions about personal and financial priorities. This is achieved through an emphasis on estimation, problem-solving and reasoning, which develops students into thinking citizens.

Pathways

A course of study in Essential Mathematics can establish a basis for further education and employment in the fields of trade, industry, business and community services. Students learn within a practical context related to general employment and successful participation in society, drawing on the mathematics used by various professional and industry groups.

Objectives

By the conclusion of the course of study, students will:

- select, recall and use facts, rules, definitions and procedures drawn from Number, Data, Location and time, Measurement and Finance
- comprehend mathematical concepts and techniques drawn from Number, Data, Location and time, Measurement and Finance
- communicate using mathematical, statistical and everyday language and conventions
- evaluate the reasonableness of solutions
- justify procedures and decisions by explaining mathematical reasoning
- solve problems by applying mathematical concepts and techniques drawn from Number, Data, Location and time, Measurement and Finance.

Structure

Unit 1	Unit 2	Unit 3	Unit 4
Number, data and graphs • Fundamental topic: Calculations • Number • Representing data • Graphs	**Money, travel and data** • Fundamental topic: Calculations • Managing money • Time and motion • Data collection	**Measurement, scales and data** • Fundamental topic: Calculations • Measurement • Scales, plans and models • Summarising and comparing data	**Graphs, chance and loans** • Fundamental topic: Calculations • Bivariate graphs • Probability and relative frequencies • Loans and compound interest

Assessment

Schools devise assessments in Units 1 and 2 to suit their local context.

In Units 3 and 4 students complete four summative assessments. Schools develop three summative internal assessments and the common internal assessment (CIA) is developed by the QCAA.

Summative assessment

Unit 3	Unit 4
Summative internal assessment 1 (IA1): • Problem-solving and modelling task	Summative internal assessment 3 (IA3): • Problem-solving and modelling task
Summative internal assessment 2 (IA2): • Common internal assessment (CIA)	Summative internal assessment (IA4): • Examination

FOOD & NUTRITION

Food & Nutrition is the study of food in the context of food science, nutrition and food technologies, considering overarching concepts of waste management, sustainability and food protection.

Students explore the chemical and functional properties of nutrients to create food solutions that maintain the beneficial nutritive values. This knowledge is fundamental for continued development of a safe and sustainable food system that can produce high quality, nutritious solutions with an extended shelf life. Their studies of the food system include the sectors of production, processing, distribution, consumption, research and development.

Students actively engage in a food and nutrition problem-solving process to create food solutions that contribute positively to preferred personal, social, ethical, economic, environmental, legal, sustainable and technological futures.

Pathways

A course of study in Food & Nutrition can establish a basis for further education and employment in the fields of science, technology, engineering and health.

Objectives

By the conclusion of the course of study, students will:

- recognise and describe food and nutrition facts and principles
- explain food and nutrition ideas and problems
- analyse problems, information and data
- determine solution requirements and criteria
- synthesise information and data to develop ideas for solutions
- generate solutions to provide data to determine the feasibility of the solution
- evaluate and refine ideas and solutions to make justified recommendations for enhancement
- make decisions about and use mode-appropriate features, language and conventions for particular purposes and contexts.

Structure

Unit 1	Unit 2	Unit 3	Unit 4
Food science of vitamins, minerals and protein • Introduction to the food system • Vitamins and minerals • Protein • Developing food solutions	**Food drivers and emerging trends** • Consumer food drivers • Sensory profiling • Labelling and food safety • Food formulation for consumer markets	**Food science of carbohydrate and fat** • The food system • Carbohydrate • Fat • Developing food solutions	**Food solution development for nutrition consumer markets** • Formulation and reformulation for nutrition consumer markets • Food development process

Assessment

Schools devise assessments in Units 1 and 2 to suit their local context.

In Units 3 and 4 students complete four summative assessment items. The results from each of the assessments are added together to provide a subject score out of 100. Students will also receive an overall subject result (A–E).

Summative assessment

Unit 3		Unit 4	
Summative internal assessment 1 (IA1): • Examination	20%	Summative internal assessment 3 (IA3): • Project — folio	30%
Summative internal assessment 2 (IA2): • Project — folio	25%	Summative external assessment (EA): • Examination	25%

GENERAL MATHEMATICS

General Mathematics' major domains are Number and algebra, Measurement and geometry, Statistics, and Networks and matrices, building on the content of the P–10 Australian Curriculum.

General Mathematics is designed for students who want to extend their mathematical skills beyond Year 10 but whose future studies or employment pathways do not require calculus.

Students build on and develop key mathematical ideas, including rates and percentages, concepts from financial mathematics, linear and non-linear expressions, sequences, the use of matrices and networks to model and solve authentic problems, the use of trigonometry to find solutions to practical problems, and the exploration of real-world phenomena in statistics.

Students engage in a practical approach that equips learners for their needs as future citizens. They learn to ask appropriate questions, map out pathways, reason about complex solutions, set up models and communicate in different forms. They experience the relevance of mathematics to their daily lives, communities and cultural backgrounds. They develop the ability to understand, analyse and take action regarding social issues in their world.

Pathways

A course of study in General Mathematics can establish a basis for further education and employment in the fields of business, commerce, education, finance, IT, social science and the arts.

Objectives

By the conclusion of the course of study, students will:

- select, recall and use facts, rules, definitions and procedures drawn from Number and algebra, Measurement and geometry, Statistics, and Networks and matrices
- comprehend mathematical concepts and techniques drawn from Number and algebra, Measurement and geometry, Statistics, and Networks and matrices
- communicate using mathematical, statistical and everyday language and conventions
- evaluate the reasonableness of solutions
- justify procedures and decisions by explaining mathematical reasoning
- solve problems by applying mathematical concepts and techniques drawn from Number and algebra, Measurement and geometry, Statistics, and Networks and matrices.

Structure

Unit 1	Unit 2	Unit 3	Unit 4
Money, measurement and relations • Consumer arithmetic • Shape and measurement • Linear equations and their graphs	**Applied trigonometry, algebra, matrices and univariate data** • Applications of trigonometry • Algebra and matrices • Univariate data analysis	**Bivariate data, sequences and change, and Earth geometry** • Bivariate data analysis • Time series analysis • Growth and decay in sequences • Earth geometry and time zones	**Investing and networking** • Loans, investments and annuities • Graphs and networks • Networks and decision mathematics

Assessment

Schools devise assessments in Units 1 and 2 to suit their local context.

In Units 3 and 4 students complete four summative assessment items. The results from each of the assessments are added together to provide a subject score out of 100. Students will also receive an overall subject result (A–E).

Summative assessment

<table>
<tr><th colspan="2">Unit 3</th><th colspan="2">Unit 4</th></tr>
<tr><td>Summative internal assessment 1 (IA1):
• Problem-solving and modelling task</td><td>20%</td><td rowspan="2">Summative internal assessment 3 (IA3):
• Examination</td><td rowspan="2">15%</td></tr>
<tr><td>Summative internal assessment 2 (IA2):
• Examination</td><td>15%</td></tr>
<tr><td colspan="4">Summative external assessment (EA): 50%
• Examination</td></tr>
</table>

HOSPITALITY PRACTICES*

Hospitality Practices develops knowledge, understanding and skills about the hospitality industry and emphasises the food and beverage sector, which includes food and beverage production and service.

Students develop an understanding of hospitality and the structure, scope and operation of related activities in the food and beverage sector and examine and evaluate industry practices from the food and beverage sector.

Students develop skills in food and beverage production and service. They work as individuals and as part of teams to plan and implement events in a hospitality context. Events provide opportunities for students to participate in and produce food and beverage products and perform service for customers in real-world hospitality contexts.

Pathways

A course of study in Hospitality Practices can establish a basis for further education and employment in the hospitality sectors of food and beverage, catering, accommodation and entertainment.

Students could pursue further studies in hospitality, hotel, event and tourism or business management, which allows for specialisation.

Objectives

By the conclusion of the course of study, students should:

- explain concepts and ideas from the food and beverage sector
- describe procedures in hospitality contexts from the food and beverage sector
- examine concepts and ideas and procedures related to industry practices from the food and beverage sector
- apply concepts and ideas and procedures when making decisions to produce products and perform services for customers
- use language conventions and features to communicate ideas and information for specific purposes.
- plan, implement and justify decisions for events in hospitality contexts
- critique plans for, and implementation of, events in hospitality contexts
- evaluate industry practices from the food and beverage sector.

Structure

The Hospitality Practices course is designed around core topics embedded in a minimum of two elective topics.

Core topics	Elective topics
• Navigating the hospitality industry • Working effectively with others • Hospitality in practice	• Kitchen operations • Beverage operations and service • Food and beverage service

Assessment

For Hospitality Practices, assessment from Units 3 and 4 is used to determine the student's exit result, and consists of four instruments, including:

- at least two projects
- at least one investigation or an extended response.

Project	Investigation	Extended response	Examination
A response to a single task, situation and/or scenario.	A response that includes locating and using information beyond students' own knowledge and the data they have been given.	A technique that assesses the interpretation, analysis/examination and/or evaluation of ideas and information in provided stimulus materials.	A response that answers a number of provided questions, scenarios and/or problems.
A project consists of a product and performance component and one other component from the following: • written: 500–900 words • spoken: 2½–3½ minutes • multimodal: 3–6 minutes • product and performance: continuous class time	Presented in one of the following modes: • written: 600–1000 words • spoken: 3–4 minutes • multimodal: 4–7 minutes.	Presented in one of the following modes: • written: 600–1000 words • spoken: • 3–4 minutes • multimodal: 4–7 minutes.	• 60–90 minutes • 50–250 words per item

INDUSTRIAL TECHNOLOGY SKILLS* (ITS)

Industrial Technology Skills focuses on the practices and processes required to manufacture products in a variety of industries.

Students understand industry practices; interpret specifications, including technical information and drawings; demonstrate and apply safe, practical production processes with hand/power tools and machinery; communicate using oral, written and graphical modes; organise, calculate and plan production processes; and evaluate the products they create using predefined specifications.

Students develop transferable skills by engaging in manufacturing tasks that relate to business and industry, and that promote adaptable, competent, self-motivated and safe individuals who can work with colleagues to solve problems and complete practical work.

Pathways

A course of study in Industrial Technology Skills can establish a basis for further education and employment in manufacturing industries. Employment opportunities may be found in the industry areas of aeroskills, automotive, building and construction, engineering, furnishing, industrial graphics and plastics.

Objectives

By the conclusion of the course of study, students should:

- describe industry practices in manufacturing tasks
- demonstrate fundamental production skills
- interpret drawings and technical information
- analyse manufacturing tasks to organise materials and resources
- select and apply production skills and procedures in manufacturing tasks
- use visual representations and language conventions and features to communicate for particular purposes
- plan and adapt production processes
- create products from specifications.
- evaluate industry practices, production processes and products, and make recommendations.

Structure

The Industrial Technology Skills course is designed around:

- core topics, which are integrated throughout the course
- elective topics, organised in industry areas, and manufacturing tasks related to the chosen electives.

Core topics	Industry area	Elective topics
Industry practices Production processes	Aeroskills	Aeroskills mechanical & Aeroskills structures
	Automotive	Automotive mechanical; Automotive body repair; & Automotive electrical
	Building and construction	Bricklaying; Plastering and painting; Concreting; Carpentry; Tiling; & Landscaping
	Engineering	Sheet metal working; Welding and fabrication; & Fitting and machining
	Furnishing	Cabinet-making; Furniture finishing; Furniture-making; Glazing and framing; & Upholstery
	Industrial graphics	Engineering drafting; Building and construction drafting; & Furnishing drafting
	Plastics	Thermoplastics fabrication & Thermosetting fabrication

Assessment

For Industrial Technology Skills, assessment from Units 3 and 4 is used to determine the student's exit result, and this consists of four instruments, including:

- at least two projects
- at least one practical demonstration (separate to the assessable component of a project).

Project	Practical demonstration	Examination
A response to a single task, situation and/or scenario.	A task that assesses the practical application of a specific set of teacher-identified production skills and procedures.	A response that answers a number of provided questions, scenarios and/or problems.
A project consists of a product component and at least one of the following components: • written: 500–900 words • spoken: 2½–3½ minutes • multimodal • non-presentation: 8 A4 pages max (or equivalent) • presentation: 3–6 minutes • product: continuous class time.	Students demonstrate production skills and procedures in class under teacher supervision.	• 60–90 minutes • 50–250 words per item

INFORMATION & COMMUNICATION TECHNOLOGIES* (ICT)

Information & Communication Technology (ICT) focuses on the knowledge, understanding and skills related to engagement with information and communication technology through a variety of elective contexts derived from work, study and leisure environments of today.

Students are equipped with knowledge of current and emerging hardware and software combinations, an understanding of how to apply them in real-world contexts and the skills to use them to solve technical and/or creative problems. They develop knowledge, understanding and skills across multiple platforms and operating systems, and are ethical and responsible users and advocates of ICT, aware of the social, environmental and legal impacts of their actions.

Students apply their knowledge of ICT to produce solutions to simulated problems referenced to business, industry, government, education and leisure contexts.

Pathways

A course of study in Information and Communication Technology can establish a basis for further education and employment in many fields, especially the fields of ICT operations, help desk, sales support, digital media support, office administration, records and data management, and call centres.

Objectives

By the conclusion of the course of study, students should:

- identify and explain hardware and software requirements related to ICT problems
- identify and explain the use of ICT in society
- analyse ICT problems to identify solutions
- communicate ICT information to audiences using visual representations and language conventions and features
- apply software and hardware concepts, ideas and skills to complete tasks in ICT contexts
- synthesise ICT concepts and ideas to plan solutions to given ICT problems
- produce solutions that address ICT problems
- evaluate problem-solving processes and solutions, and make recommendations.

Structure

The Information & Communication Technology course is designed around:

- core topics integrated into modules of work
- using a problem-solving process
- three or more elective contexts.

Core topics	Elective contexts	
• Hardware • Software • ICT in society	• Animation • Application development • Audio and video production • Data management • Digital imaging and modelling • Document production	• Network fundamentals • Online communication • Website production

Assessment

For Information & Communication Technology, assessment from Units 3 and 4 is used to determine the student's exit result, and consists of four instruments, including:

- at least two projects
- at least one extended response.

Project	Extended response
A response to a single task, situation and/or scenario.	A technique that assesses the interpretation, analysis/examination and/or evaluation of ideas and information in provided stimulus materials.
A project consists of a product component and at least one of the following components: • written: 500–900 words • spoken: 2½–3½ minutes • multimodal: 3–6 minutes • product: continuous class time.	Presented in one of the following modes: • written: 600–1000 words • spoken: 3–4 minutes • multimodal: 4–7 minutes.

MATHEMATICAL METHODS

Mathematical Methods' major domains are Algebra, Functions, relations and their graphs, Calculus and Statistics.

Mathematical Methods enables students to see the connections between mathematics and other areas of the curriculum and apply their mathematical skills to real-world problems, becoming critical thinkers, innovators and problem-solvers.

Students learn topics that are developed systematically, with increasing levels of sophistication, complexity and connection, and build on algebra, functions and their graphs, and probability from the P–10 Australian Curriculum. Calculus is essential for developing an understanding of the physical world. The domain Statistics is used to describe and analyse phenomena involving uncertainty and variation. Both are the basis for developing effective models of the world and solving complex and abstract mathematical problems.

Students develop the ability to translate written, numerical, algebraic, symbolic and graphical information from one representation to another. They make complex use of factual knowledge to successfully formulate, represent and solve mathematical problems.

Pathways

A course of study in Mathematical Methods can establish a basis for further education and employment in the fields of natural and physical sciences (especially physics and chemistry), mathematics and science education, medical and health sciences (including human biology, biomedical science, nanoscience and forensics), engineering (including chemical, civil, electrical and mechanical engineering, avionics, communications and mining), computer science (including electronics and software design), psychology and business.

Objectives

By the conclusion of the course of study, students will:

- select, recall and use facts, rules, definitions and procedures drawn from Algebra, Functions, relations and their graphs, Calculus and Statistics
- comprehend mathematical concepts and techniques drawn from Algebra, Functions, relations and their graphs, Calculus and Statistics
- communicate using mathematical, statistical and everyday language and conventions
- evaluate the reasonableness of solutions
- justify procedures and decisions by explaining mathematical reasoning
- solve problems by applying mathematical concepts and techniques drawn from Algebra, Functions, relations and their graphs, Calculus and Statistics.

Structure

Unit 1	Unit 2	Unit 3	Unit 4
Algebra, statistics and functions • Arithmetic and geometric sequences and series 1 • Functions and graphs • Counting and probability • Exponential functions 1 • Arithmetic and geometric sequences	**Calculus and further functions** • Exponential functions 2 • The logarithmic function 1 • Trigonometric functions 1 • Introduction to differential calculus • Further differentiation and applications 1 • Discrete random variables 1	**Further calculus** • The logarithmic function 2 • Further differentiation and applications 2 • Integrals	**Further functions and statistics** • Further differentiation and applications 3 • Trigonometric functions 2 • Discrete random variables 2 • Continuous random variables and the normal distribution • Interval estimates for proportions

Assessment

Schools devise assessments in Units 1 and 2 to suit their local context.

In Units 3 and 4 students complete four summative assessment items. The results from each of the assessments are added together to provide a subject score out of 100. Students will also receive an overall subject result (A–E).

Summative assessment

<table>
<tr><th colspan="2">Unit 3</th><th colspan="2">Unit 4</th></tr>
<tr><td>Summative internal assessment 1 (IA1):
• Problem-solving and modelling task</td><td>20%</td><td rowspan="2">Summative internal assessment 3 (IA3):
• Examination</td><td rowspan="2">15%</td></tr>
<tr><td>Summative internal assessment 2 (IA2):
• Examination</td><td>15%</td></tr>
<tr><td colspan="4">Summative external assessment (EA): 50%
• Examination</td></tr>
</table>

MODERN HISTORY

Modern History provides opportunities for students to gain historical knowledge and understanding about some of the main forces that have contributed to the development of the Modern World and to think historically and form a historical consciousness in relation to these same forces.

Modern History enables students to empathise with others and make meaningful connections between the past, present and possible futures.

Students learn that the past is contestable and tentative. Through inquiry into ideas, movements, national experiences and international experiences they discover how the past consists of various perspectives and interpretations.

Students gain a range of transferable skills that will help them become empathetic and critically-literate citizens who are equipped to embrace a multicultural, pluralistic, inclusive, democratic, compassionate and sustainable future.

Pathways

A course of study in Modern History can establish a basis for further education and employment in the fields of history, education, psychology, sociology, law, business, economics, politics, journalism, the media, writing, academia and strategic analysis.

Objectives

By the conclusion of the course of study, students will:
- comprehend terms, issues and concepts
- devise historical questions and conduct research
- analyse historical sources and evidence
- synthesise information from historical sources and evidence
- evaluate historical interpretations
- create responses that communicate meaning.

Assessment

Schools devise assessments in Units 1 and 2 to suit their local context.
In Units 3 and 4 students complete four summative assessment items. The results from each of the assessments are added together to provide a subject score out of 100. Students will also receive an overall subject result (A–E).

Summative assessment

Unit 3		Unit 4	
Summative internal assessment 1 (IA1): • Examination — essay in response to historical sources	25%	Summative internal assessment 3 (IA3): • Investigation — historical essay based on research	25%
Summative internal assessment 2 (IA2): • Independent source investigation	25%	Summative external assessment (EA): • Examination — short responses to historical sources	25%

Structure (Please note: ASSG offers this subject using the Alternative Sequence option.)

Unit 1	Unit 2	Unit 3	Unit 4
Ideas in the modern world • Australian Frontier Wars 1788–1930s • Age of Enlightenment 1750s–1789 • Industrial Revolution 1760s–1890s • American Revolution 1763–1783 • French Revolution 1789–1799 • Age of Imperialism 1848–1914 • Meiji Restoration 1868–1912	**Movements in the modern world** • Australian Indigenous rights movement since 1967 • Independence movement in India 1857–1947 • Workers' movement since the 1860s • Women's movement since 1893 • May Fourth Movement in China, 1919 • Independence movement in Algeria 1945–1962	**National experiences in the modern world** • Australia 1914–1949 • England 1707–1837 • France 1799–1815 • New Zealand 1841–1934 • Germany 1914–1945 • United States of America 1917–1945 • Soviet Union 1920s–1945 • Japan 1931–1967 • China 1931–1976 • Indonesia 1942–1975 • India 1947–1974 • Israel 1948–1993	**International experiences in the modern world** • Australian engagement with Asia since 1945 • Search for collective peace and security since 1815 • Trade and commerce between nations since 1833 • Mass migrations since 1848 • Information Age since 1936 • Genocides and ethnic cleansings since 1941 • Nuclear Age since 1945 • Cold War, 1945–1991
• Boxer Rebellion, 1900–1901 • Russian Revolution, 1905–1920s • Xinhai Revolution, 1911–1912 • Iranian Revolution, 1977–1979 • Arab Spring since 2010 • Alternative topic for Unit 1	• Independence movement in Vietnam, 1945–1975 • Anti-apartheid movement in South Africa, 1948–1991 • African-American civil rights movement, 1954–1968 • Environmental movement since the 1960s • LGBTIQ civil rights movement since 1969 • Pro-democracy movement in Myanmar (Burma) since 1988 • Alternative topic for Unit 2	• South Korea 1948–1972	• Struggle for peace in the Middle East since 1948 • Cultural globalisation since 1956 • Space exploration since 1957 • Rights and recognition of First Peoples since 1982 • Terrorism, anti-terrorism and counter-terrorism since 1984

MUSIC

Music fosters creative and expressive communication. It allows students to develop musicianship through making (composition and performance) and responding (musicology).

Through composition, performance and musicology, students use and apply music elements and concepts. They apply their knowledge and understanding to convey meaning and/or emotion to an audience.

Students use essential literacy skills to engage in a multimodal world. They demonstrate practical music skills, and analyse and evaluate music in a variety of contexts, styles and genres.

Pathways

A course of study in Music can establish a basis for further education and employment in the fields of arts administration, communication, education, creative industries, public relations and science and technology.

Objectives

By the conclusion of the course of study, students will:

- demonstrate technical skills
- explain music elements and concepts
- use music elements and concepts
- analyse music
- apply compositional devices
- apply literacy skills
- interpret music elements and concepts
- evaluate music to justify the use of music elements and concepts
- realise music ideas
- resolve music ideas.

Structure

Unit 1	Unit 2	Unit 3	Unit 4
Designs Through inquiry learning, the following is explored: How does the treatment and combination of different music elements enable musicians to design music that communicates meaning through performance and composition?	**Identities** Through inquiry learning, the following is explored: How do musicians use their understanding of music elements, concepts and practices to communicate cultural, political, social and personal identities when performing, composing and responding to music?	**Innovations** Through inquiry learning, the following is explored: How do musicians incorporate innovative music practices to communicate meaning when performing and composing?	**Narratives** Through inquiry learning, the following is explored: How do musicians manipulate music elements to communicate narrative when performing, composing and responding to music?

Assessment

Schools devise assessments in Units 1 and 2 to suit their local context.

In Units 3 and 4 students complete four summative assessment items. The results from each of the assessments are added together to provide a subject score out of 100. Students will also receive an overall subject result (A–E).

Summative assessment

<table>
<tr><th colspan="2">Unit 3</th><th colspan="2">Unit 4</th></tr>
<tr><td>Summative internal assessment 1 (IA1):
• Performance</td><td>20%</td><td rowspan="2">Summative internal assessment 3 (IA3):
• Integrated project</td><td rowspan="2">35%</td></tr>
<tr><td>Summative internal assessment 2 (IA2):
• Composition</td><td>20%</td></tr>
<tr><td colspan="4">Summative external assessment (EA): 25%
• Examination</td></tr>
</table>

MUSIC EXTENSION (COMPOSITION)

Music Extension (Composition) is an extension of the Music General senior syllabus. It provides an opportunity for students with specific abilities in music to extend their expertise. Students select one specialisation only, and follow an individual program of study designed to continue the development of refined musicianship skills. Music Extension encourages students to investigate music concepts and ideas relevant to their specialisation.

In the Composition specialisation (making), students create and resolve new music works. They demonstrate use of music concepts and manipulate music concepts to express meaning and/or emotion to an audience through resolved compositions.

Pathways

A course of study in Music Extension can establish a basis for further education and employment in the fields of arts administration, communication, education, creative industries, public relations and science and technology.

Objectives

By the conclusion of the course of study, students will:

- apply literary skills
- evaluate music and ideas about music
- examine music and ideas about music
- express meaning, emotion or ideas about music
- apply compositional devices
- manipulate music elements and concepts
- resolve music ideas.

Structure

Unit 3	Unit 4
• Explore • Key idea 1: Initiate best practice • Key idea 2: Consolidate best practice	• Emerge • Key idea 3: Independent best practice

Assessment

In Units 3 and 4 students complete four summative assessment items. The results from each of the assessments are added together to provide a subject score out of 100. Students will also receive an overall subject result (A–E).

Summative assessment

<table>
<tr><th colspan="2">Unit 3</th><th colspan="2">Unit 4</th></tr>
<tr><td>Summative internal assessment 1 (IA1):
• Composition 1</td><td>20%</td><td rowspan="2">Summative internal assessment 3 (IA3):
• Composition project</td><td rowspan="2">35%</td></tr>
<tr><td>Summative internal assessment 2 (IA2):
• Composition 2</td><td>20%</td></tr>
<tr><td colspan="4">Summative external assessment (EA): 25%
• Examination – extended response</td></tr>
</table>

MUSIC EXTENSION (PERFORMANCE)

Music Extension (Performance) is an extension of the Music General senior syllabus. It provides an opportunity for students with specific abilities in music to extend their expertise. Students select one specialisation only, and follow an individual program of study designed to continue the development of refined musicianship skills. Music Extension encourages students to investigate music concepts and ideas relevant to their specialisation.

In the Performance specialisation (making), students realise music works, demonstrating technical skills and understanding. They make decisions about music, interpret music elements and concepts, and express music ideas to realise their performances.

Pathways

A course of study in Music Extension can establish a basis for further education and employment in the fields of arts administration, communication, education, creative industries, public relations and science and technology.

Objectives

By the conclusion of the course of study, students will:
- apply literary skills
- evaluate music and ideas about music
- examine music and ideas about music
- express meaning, emotion or ideas about music
- apply technical skills
- interpret music elements and concepts
- realise music ideas.

Structure

Unit 3	Unit 4
• Explore • Key idea 1: Initiate best practice • Key idea 2: Consolidate best practice	• Emerge • Key idea 3: Independent best practice

Assessment

In Units 3 and 4 students complete four summative assessment items. The results from each of the assessments are added together to provide a subject score out of 100. Students will also receive an overall subject result (A–E).

Summative assessment

<table>
<tr><th colspan="2">Unit 3</th><th colspan="2">Unit 4</th></tr>
<tr><td>Summative internal assessment 1 (IA1):
• Investigation 1</td><td>20%</td><td rowspan="2">Summative internal assessment 3 (IA3):
• Performance project</td><td rowspan="2">35%</td></tr>
<tr><td>Summative internal assessment 2 (IA2):
• Investigation 2</td><td>20%</td></tr>
<tr><td colspan="4">Summative external assessment (EA): 25%
• Examination — extended response</td></tr>
</table>

PHYSICAL EDUCATION

Physical Education provides students with knowledge, understanding and skills to explore and enhance their own and others' health and physical activity in diverse and changing contexts.

Physical Education provides a philosophical and educative framework to promote deep learning in three dimensions: about, through and in physical activity contexts. Students optimise their engagement and performance in physical activity as they develop an understanding and appreciation of the interconnectedness of these dimensions.

Students learn how body and movement concepts and the scientific bases of biophysical, / sociocultural and psychological concepts and principles are relevant to their engagement and performance in physical activity. They engage in a range of activities to develop movement sequences and movement strategies.

Students learn experientially through three stages of an inquiry approach to make connections between the scientific bases and the physical activity contexts. They recognise and explain concepts and principles about and through movement, and demonstrate and apply body and movement concepts to movement sequences and movement strategies.

Through their purposeful engagement in physical activities, students gather data to analyse, synthesise and devise strategies to optimise engagement and performance. They engage in reflective decision-making as they evaluate and justify strategies to achieve a particular outcome.

Pathways

A course of study in Physical Education can establish a basis for further education and employment in the fields of exercise science, biomechanics, the allied health professions, psychology, teaching, sport journalism, sport marketing and management, sport promotion, sport development and coaching.

Objectives

By the conclusion of the course of study, students will:

- recognise and explain concepts and principles about movement
- demonstrate specialised movement sequences and movement strategies
- apply concepts to specialised movement sequences and movement strategies
- analyse and synthesise data to devise strategies about movement
- evaluate strategies about and in movement
- justify strategies about and in movement
- make decisions about and use language, conventions and mode-appropriate features for particular purposes and contexts.

Structure

Unit 1	Unit 2	Unit 3	Unit 4
Motor learning, functional anatomy, biomechanics and physical activity • Motor learning integrated with a selected physical activity • Functional anatomy and biomechanics integrated with a selected physical activity	**Sport psychology, equity and physical activity** • Sport psychology integrated with a selected physical activity • Equity — barriers and enablers	**Tactical awareness, ethics and integrity and physical activity** • Tactical awareness integrated with one selected 'Invasion' or 'Net and court' physical activity • Ethics and integrity	**Energy, fitness and training and physical activity** • Energy, fitness and training integrated with one selected 'Invasion', 'Net and court' or 'Performance' physical activity

Assessment

Schools devise assessments in Units 1 and 2 to suit their local context.

In Units 3 and 4 students complete four summative assessment items. The results from each of the assessments are added together to provide a subject score out of 100. Students will also receive an overall subject result (A–E).

Summative assessment

Unit 3		Unit 4	
Summative internal assessment 1 (IA1): • Project — folio	25%	Summative internal assessment 3 (IA3): • Project — folio	30%
Summative internal assessment 2 (IA2): • Investigation — report	20%	Summative external assessment (EA): • Examination — combination response	25%

PHYSICS

Physics provides opportunities for students to engage with classical and modern understandings of the universe.

Students learn about the fundamental concepts of thermodynamics, electricity and nuclear processes; and about the concepts and theories that predict and describe the linear motion of objects. Further, they explore how scientists explain some phenomena using an understanding of waves. They engage with the concept of gravitational and electromagnetic fields, and the relevant forces associated with them. They study modern physics theories and models that, despite being counterintuitive, are fundamental to our understanding of many common observable phenomena.

Students develop appreciation of the contribution physics makes to society: understanding that diverse natural phenomena may be explained, analysed and predicted using concepts, models and theories that provide a reliable basis for action; and that natter and energy interact in physical systems across a range of scales. They understand how models and theories are refined, and new ones developed in physics; investigate phenomena and solve problems; collect and analyse data; and interpret evidence. Students use accurate and precise measurement, valid and reliable evidence, and scepticism and intellectual rigour to evaluate claims; and communicate physics understanding, findings, arguments and conclusions using appropriate representations, modes and genres.

Students learn and apply aspects of the knowledge and skills of the discipline (thinking, experimentation, problem-solving and research skills), understand how it works and how it may impact society.

Pathways

A course of study in Physics can establish a basis for further education and employment in the fields of science, engineering, medicine and technology.

Objectives

By the conclusion of the course of study, students will:

- describe and explain scientific concepts, theories, models and systems and their limitations
- apply understanding of scientific concepts, theories, models and systems within their limitations
- analyse evidence
- interpret evidence
- investigate phenomena
- evaluate processes, claims and conclusions
- communicate understandings, findings, arguments and conclusions.

Structure (Please note: ASSG offers this subject using the Alternative Sequence option.)

Unit 1	Unit 2	Unit 3	Unit 4
Thermal, nuclear and electrical physics • Heating processes • Ionising radiation and nuclear reactions • Electrical circuits	**Linear motion and waves** • Linear motion and force • Waves	**Gravity and electromagnetism** • Gravity and motion • Electromagnetism	**Revolutions in modern physics** • Special relativity • Quantum theory • The Standard Model

Assessment

Schools devise assessments in Units 1 and 2 to suit their local context.

In Units 3 and 4 students complete four summative assessment items. The results from each of the assessments are added together to provide a subject score out of 100. Students will also receive an overall subject result (A–E).

Summative assessment

<table>
<tr><th colspan="2">Unit 3</th><th colspan="2">Unit 4</th></tr>
<tr><td>Summative internal assessment 1 (IA1):
• Data test</td><td>10%</td><td rowspan="2">Summative internal assessment 3 (IA3):
• Research investigation</td><td rowspan="2">20%</td></tr>
<tr><td>Summative internal assessment 2 (IA2):
• Student experiment</td><td>20%</td></tr>
<tr><td colspan="4">Summative external assessment (EA): 50%
• Examination</td></tr>
</table>

SPECIALIST MATHEMATICS

Specialist Mathematics' major domains are Vectors and matrices, Real and complex numbers, Trigonometry, Statistics and Calculus.

Specialist Mathematics is designed for students who develop confidence in their mathematical knowledge and ability, and gain a positive view of themselves as mathematics learners. They will gain an appreciation of the true nature of mathematics, its beauty and its power.

Students learn topics that are developed systematically, with increasing levels of sophistication, complexity and connection, building on functions, calculus, statistics from Mathematical Methods, while vectors, complex numbers and matrices are introduced. Functions and calculus are essential for creating models of the physical world. Statistics are used to describe and analyse phenomena involving probability, uncertainty and variation. Matrices, complex numbers and vectors are essential tools for explaining abstract or complex relationships that occur in scientific and technological endeavours.

Student learning experiences range from practising essential mathematical routines to developing procedural fluency, through to investigating scenarios, modelling the real world, solving problems and explaining reasoning.

Pathways

A course of study in Specialist Mathematics can establish a basis for further education and employment in the fields of science, all branches of mathematics and statistics, computer science, medicine, engineering, finance and economics.

Objectives

By the conclusion of the course of study, students will:

- select, recall and use facts, rules, definitions and procedures drawn from Vectors and matrices, Real and complex numbers, Trigonometry, Statistics and Calculus
- comprehend mathematical concepts and techniques drawn from Vectors and matrices, Real and complex numbers, Trigonometry, Statistics and Calculus
- communicate using mathematical, statistical and everyday language and conventions
- evaluate the reasonableness of solutions
- justify procedures and decisions, and prove propositions by explaining mathematical reasoning
- solve problems by applying mathematical concepts and techniques drawn from Vectors and matrices, Real and complex numbers, Trigonometry, Statistics and Calculus.

Structure

Specialist Mathematics is to be undertaken in conjunction with, or on completion of, Mathematical Methods.

Unit 1	Unit 2	Unit 3	Unit 4
Combinatorics, vectors and proof • Combinatorics • Vectors in the plane • Introduction to proof	**Complex numbers, trigonometry, functions and matrices** • Complex numbers 1 • Trigonometry and functions • Matrices	**Mathematical induction, and further vectors, matrices and complex numbers** • Proof by mathematical induction • Vectors and matrices • Complex numbers 2	**Further statistical and calculus inference** • Integration and applications of integration • Rates of change and differential equations • Statistical inference

Assessment

Schools devise assessments in Units 1 and 2 to suit their local context.
In Units 3 and 4 students complete four summative assessment items. The results from each of the assessments are added together to provide a subject score out of 100. Students will also receive an overall subject result (A–E).

Summative assessment

<table>
<tr><th colspan="2">Unit 3</th><th colspan="2">Unit 4</th></tr>
<tr><td>Summative internal assessment 1 (IA1):
• Problem-solving and modelling task</td><td>20%</td><td rowspan="2">Summative internal assessment 3 (IA3):
• Examination</td><td rowspan="2">15%</td></tr>
<tr><td>Summative internal assessment 2 (IA2):
• Examination</td><td>15%</td></tr>
<tr><td colspan="4">Summative external assessment (EA): 50%
• Examination</td></tr>
</table>

SPORTS & RECREATION*

Sport & Recreation provides students with opportunities to learn in, through and about sport and active recreation activities, examining their role in the lives of individuals and communities.

Students examine the relevance of sport and active recreation in Australian culture, employment growth, health and wellbeing. They consider factors that influence participation in sport and recreation, and how physical skills can enhance participation and performance in sport and recreation activities. Students explore how interpersonal skills support effective interaction with others, and the promotion of safety in sport and recreation activities. They examine technology in sport and recreation activities, and how the sport and recreation industry contributes to individual and community outcomes.

Students are involved in acquiring, applying and evaluating information about and in physical activities and performances, planning and organising activities, investigating solutions to individual and community challenges, and using suitable technologies where relevant. They communicate ideas and information in, about and through sport and recreation activities. They examine the effects of sport and recreation on individuals and communities, investigate the role of sport and recreation in maintaining good health, evaluate strategies to promote health and safety, and investigate personal and interpersonal skills to achieve goals.

Pathways

A course of study in Sport & Recreation can establish a basis for further education and employment in the fields of fitness, outdoor recreation and education, sports administration, community health and recreation and sport performance.

Objectives

By the conclusion of the course of study, students should:

- demonstrate physical responses and interpersonal strategies in individual and group situations in sport and recreation activities
- describe concepts and ideas about sport and recreation using terminology and examples
- explain procedures and strategies in, about and through sport and recreation activities for individuals and communities
- apply concepts and adapt procedures, strategies and physical responses in individual and group sport and recreation activities
- manage individual and group sport and recreation activities
- apply strategies in sport and recreation activities to enhance health, wellbeing, and participation for individuals and communities
- use language conventions and textual features to achieve particular purposes
- evaluate individual and group physical responses and interpersonal strategies to improve outcomes in sport and recreation activities
- evaluate the effects of sport and recreation on individuals and communities
- evaluate strategies that seek to enhance health, wellbeing, and participation in sport and recreation activities and provide recommendations
- create communications that convey meaning for particular audiences and purposes.

Structure

The Sport & Recreation* course is designed around core and elective topics.

Core topics	Elective topics
• Sport and recreation in the community • Sport, recreation and healthy living • Health and safety in sport and recreation activities • Personal and interpersonal skills in sport and recreation activities	• Active play and minor games • Challenge and adventure activities • Games and sports • Lifelong physical activities • Rhythmic and expressive movement activities • Sport and recreation physical activities

Assessment

For Sport & Recreation*, assessment from Units 3 and 4 is used to determine the student's exit result, and consists of four instruments, including:

- one project (annotated records of the performance is also required)
- one investigation, extended response or examination.

Project	Investigation	Extended response	Performance	Examination
A response to a single task, situation and/or scenario.	A response that includes locating and using information beyond students' own knowledge and the data they have been given.	A technique that assesses the interpretation, analysis/examination and/or evaluation of ideas and information in provided stimulus materials.	A response involves the application of identified skill/s when responding to a task that involves solving a problem, providing a solution, providing instruction or conveying meaning or intent.	A response that answers a number of provided questions, scenarios and/or problems.
At least two different components from the following: • written: 500–900 words • spoken: 2½–3½ minutes • multimodal: 3–6 minutes • performance: 2–4 minutes.*	Presented in one of the following modes: • written: 600–1000 words • spoken: 3–4 minutes • multimodal: 4–7 minutes.	Presented in one of the following modes: • written: 600–1000 words • spoken: • 3–4 minutes • multimodal: 4–7 minutes.	• 2–4 minutes #	• 60–90 minutes • 50–250 words per item

Evidence must include annotated records that clearly identify the application of standards to performance.

VISUAL ART

Visual Art provides students with opportunities to understand and appreciate the role of visual art in past and present traditions and cultures, as well as the contributions of contemporary visual artists and their aesthetic, historical and cultural influences. Students interact with artists, artworks, institutions and communities to enrich their experiences and understandings of their own and others' art practices.

Students have opportunities to construct knowledge and communicate personal interpretations by working as both artist and audience. They use their imagination and creativity to innovatively solve problems and experiment with visual language and expression.

Through an inquiry learning model, students develop critical and creative thinking skills. They create individualised responses and meaning by applying diverse materials, techniques, technologies and art processes.

In responding to artworks, students employ essential literacy skills to investigate artistic expression and critically analyse artworks in diverse contexts. They consider meaning, purposes and theoretical approaches when ascribing aesthetic value and challenging ideas.

Pathways

A course of study in Visual Art can establish a basis for further education and employment in the fields of arts practice, design, craft, and information technologies; broader areas in creative industries and cultural institutions; and diverse fields that use skills inherent in the subject, including advertising, arts administration and management, communication, design, education, galleries and museums, film and television, public relations, and science and technology.

Objectives

By the conclusion of the course of study, students will:

- implement ideas and representations
- apply literacy skills
- analyse and interpret visual language, expression and meaning in artworks and practices
- evaluate art practices, traditions, cultures and theories
- justify viewpoints
- experiment in response to stimulus
- create meaning through the knowledge and understanding of materials, techniques, technologies and art processes
- realise responses to communicate meaning.

Structure

Unit 1	Unit 2	Unit 3	Unit 4
Art as lens Through inquiry learning, the following are explored: • Concept: lenses to explore the material world • Contexts: personal and contemporary • Focus: People, place, objects • Media: 2D, 3D, and time-based	**Art as code** Through inquiry learning, the following are explored: • Concept: art as a coded visual language • Contexts: formal and cultural • Focus: Codes, symbols, signs and art conventions • Media: 2D, 3D, and time-based	**Art as knowledge** Through inquiry learning, the following are explored: • Concept: constructing knowledge as artist and audience • Contexts: contemporary, personal, cultural and/or formal • Focus: student-directed • Media: student-directed	**Art as alternate** Through inquiry learning, the following are explored: • Concept: evolving alternate representations and meaning • Contexts: contemporary and personal, cultural and/or formal • Focus: continued exploration of Unit 3 student-directed focus • Media: student-directed

Assessment

Schools devise assessments in Units 1 and 2 to suit their local context.

In Units 3 and 4 students complete four summative assessment items. The results from each of the assessments are added together to provide a subject score out of 100. Students will also receive an overall subject result (A–E).

Summative assessment

<table>
<tr><th colspan="2">Unit 3</th><th colspan="2">Unit 4</th></tr>
<tr><td>Summative internal assessment 1 (IA1):
• Investigation — inquiry phase 1</td><td>15%</td><td rowspan="2">Summative internal assessment 3 (IA3):
• Project — inquiry phase 3</td><td rowspan="2">35%</td></tr>
<tr><td>Summative internal assessment 2 (IA2):
• Project — inquiry phase 2</td><td>25%</td></tr>
<tr><td colspan="4">Summative external assessment (EA): 25%
• Examination</td></tr>
</table>

VISUAL ARTS IN PRACTICE*

Visual Arts in Practice* focuses on students engaging in art-making processes and making virtual or physical visual artworks. Visual artworks are created for a purpose and in response to individual, group or community needs.

Students explore and apply the materials, technologies and techniques used in art-making. They use information about design elements and principles to influence their own aesthetic and guide how they view others' works. They also investigate information about artists, art movements and theories, and use the lens of a context to examine influences on art-making.

Students reflect on both their own and others' art-making processes. They integrate skills to create artworks and evaluate aesthetic choices. Students decide on the best way to convey meaning through communications and artworks. They learn and apply safe visual art practices.

Pathways

A course of study in Visual Arts in Practice* can establish a basis for further education and employment in a range of fields, including design, styling, decorating, illustrating, drafting, visual merchandising, make-up artistry, advertising, game design, photography, animation or ceramics.

Objectives

By the conclusion of the course of study, students should:

- recall terminology and explain art-making processes
- interpret information about concepts and ideas for a purpose
- demonstrate art-making processes required for visual artworks
- apply art-making processes, concepts and ideas
- analyse visual art-making processes for particular purposes
- use language conventions and features to achieve particular purposes
- generate plans and ideas and make decisions
- create communications that convey meaning to audiences
- evaluate art-making processes, concepts and ideas.

Structure

The Visual Arts in Practice* course is designed around core and elective topics.

Core	Electives
• Visual mediums, technologies, techniques • Visual literacies and contexts • Artwork realisation	• 2D • 3D • Digital and 4D • Design • Craft

Assessment

For Visual Arts in Practice*, assessment from Units 3 and 4 is used to determine the student's exit result, and consists of four instruments, including:

- at least two projects, with at least one project arising from community connections
- at least one product (composition), separate to an assessable component of a project.

Project	Product	Extended response	Investigation
A response to a single task, situation and/or scenario.	A technique that assesses the application of idenified skills to the production of artworks.	A technique that assesses the interpretation, analysis/examination and/or evaluation of ideas and information in provided stimulus materials.	A response that includes locating and using information beyond students' own knowledge and the data they have been given.

A project consists of:
• a product component: variable conditions
• at least one different component from the following
  ○ written: 500–900 words
  ○ spoken: 2½–3½ minutes
  ○ multimodal
  ○ non-presentation: 8 A4 pages max (or equivalent)
  ○ presentation: 3–6 minutes.
	• variable conditions	Presented in one of the following modes:
		• written: 600–1000 words
		• spoken: 3–4 minutes
		• multimodal
		  ○ non-presentation: 10 A4 pages max (or equivalent)
		  ○ presentation: 4–7 minutes.
			Presented in one of the following modes:
			• written: 600–1000 words
			• spoken: 3–4 minutes
			• multimodal
			  ○ non-presentation: 10 A4 pages max (or equivalent)
			  ○ presentation: 4–7 minutes.

DALRYMPLE TRADE TRAINING CENTRE (DTTC)

Industry standard, nationally accredited certificate level courses completed in an industry standard facility with strong local business support.

INTRODUCTION
In 2008, representatives of four of the Charters Towers' secondary schools & colleges (All Souls St Gabriels School, Charters Towers State High School, Charters Towers School of Distance Education and Columba Catholic College) began the process of applying for Federal Funding under the Trade Training Program. The cluster was successful and received a total of $6 million to put toward the construction and initial establishment of the Dalrymple Trade Training Centre (DTTC).
The centre was initially set-up with industry accredited working / learning areas for Hospitality, Construction & Engineering. The complex also includes general learning areas with IT capabilities, a catering / function room, offices and general amenities.
It is the plan of the Board of the DTTC to continue to allow Registered Training Organisations the opportunity to use (hire) the facilities. At the time of printing this handbook, the Charters Towers branch of the Barrier Reef Institute of TAFE, Jenegar, Mining & Minerals Australia, Queensland Agricultural Training Colleges and other RTOs were using the premises offering a range of courses.

COURSES OFFERED DURING SCHOOL HOURS FOR SCHOOL AGE STUDENTS
At the time of publishing this handbook, the courses for next year were being confirmed by the DTTC Board. In previous years, the following courses have been offered under the banner of DTTC – Cert III Agriculture (online + practical); Cert III Business (online + practical); Cert II Engineering Pathways (onsite); Cert II Hospitality – Kitchen Operations (onsite + functions); Cert II Information, Digital Media and Technology (online + practical); and Cert II Visual Arts (online + practical).

COURSE COSTS FOR SCHOOL-AGE STUDENTS
At the time of publishing this handbook, it was the understanding of School staff that school age students were able to access ONLY one Certificate level I or II course with full government funding of course costs (VETis – Vocational Education in Schools Funding).
The full course cost of any subsequent course accessed will need to be covered by student / family.

SCHOOL ADMINISTRATIVE AND TRANSPORT COSTS FOR SCHOOL AGE STUDENTS
In previous years, the four schools involved with the DTTC agreed to charge a flat fee for the year per course for material, administration and transport costs. In the past this has been $250.
At the time of publishing this handbook, the cost structure for next year had not been finalised. However, it is envisaged that if the schools in the partnership decide to continue with this agreement, the amount would be very similar. Once a decision has been made, families of students in DTTC courses will be notified of the outcome.

CLOTHING AND PERSONAL SAFETY EQUIPMENT
There is an expectation that students will provide some of the necessary clothing to undertake the course safely. Some of this clothing may be provided under sponsorship arrangements. There may be small general hiring / cleaning fee attached to the use of hired clothing.
It is envisaged that all necessary safety equipment (except for shoes) will be provided.

IMPORTANT OCCUPATIONAL HEALTH AND SAFETY INFORMATION
It is an Occupational Health and Safety (OHS) requirement that students in certain courses wear the correct clothing during practical lessons. This includes the correct OHS approved shoes.
Students selecting these courses do so agreeing to:

- have the correct OHS approved clothing & equipment purchased by the end of the fourth week of the course, and
- wear the correct OHS approved clothing & equipment to each practical lesson throughout the year.

SCHOOL-BASED APPRENTICESHIPS / TRAINEESHIPS

The senior curriculum at All Souls St Gabriels School allows for students wishing to undertake a School-Based Apprenticeship / Traineeship in ANY INDUSTRY.

This entails the student (or student's family) finding an appropriate employer willing to employ the student under the School-Based Apprenticeship / Traineeship Scheme. This scheme enables the student to continue to attend All Souls St Gabriels School during their senior years and complete studies accredited toward a Senior Statement (and possible QCE & / or ATAR score) while training and being paid to work in the first year of an apprenticeship.

The School is willing to accommodate students to their best ability to achieve the best mix of school studies and school release time to attend 'on' and 'off' the job training provided by the employer.

The School has also been able to engage apprentices in the agricultural, engineering, hospitality, plumbing, electrical, clerical, retail and construction industries. However, the School wishes to stress that these are not the only industries for which students can use this scheme. ANY EMPLOYER IN ANY INDUSTRY CAN BE ACCOMMODATED BY THE SCHOOL. There would only need to be negotiations between the employer and the School as to the best delivery method for the practical and theoretical components of the apprenticeship / traineeship.

The School cannot (by law) actively look for apprenticeships / traineeships. However, if the School is contacted by a prospective employer we would do all in our power to inform interested students of the opportunity offered.

FOR FURTHER DETAILS REGARDING ANY PART OF A
SCHOOL-BASED APPRENTICESHIP / TRAINEESHIP
PLEASE CONTACT THE SCHOOL
AND ASK TO SPEAK TO THE
VOCATIONAL EDUCATION AND TRAINING
(VET) CO-ORDINATOR OR THE ACADEMIC DEAN

NOTES