NORTHERN BEACHES SECONDARY COLLEGE

MANLY CAMPUS

STAGE 6

COURSE OUTLINES

Revised for Year 11 2025

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Introduction

This booklet has been prepared to assist students and parents in better understanding the Higher School Certificate (HSC) courses and requirements. It also contains essential information about each subject and course. A successful HSC, and the resulting ATAR, provides a foundation for tertiary education, employment and continued life-long learning. In choosing a pattern of study, students are encouraged to consider their areas of strength, interests, abilities, other commitments and career aspirations. Course prerequisites, exclusions, particular requirements and major projects should also be carefully considered.

NBSC Manly Campus offers a broad range of subjects and courses to meet students' needs, interests and abilities. Although there are many courses on offer, a course will only run if there are sufficient numbers of students interested in studying that course. Students who wish to study a course not offered at the school may be able to study at other campuses within the Northern Beaches Secondary College, NSW School of Languages, Distance Education and TAFE.

Details of the rules for assessment, the school's assessment policy and the assessment schedule for each course will be provided in separate Assessment Booklets for the Year 11 Courses and the Year 12 Higher School Certificate Courses. Senior study requires an independent and mature approach in order to meet the HSC rules and requirements as outlined by the NSW Education Standards Authority (NESA), the expectations of the school and parent expectations. Depending on the chosen pattern of study, students may have a more flexible timetable than in Years 7 to 10, which may include lessons before or after school or travel to cross campus courses. Senior students are expected to use the Library for private study during the school day when they do not have a timetabled class.

HSC success requires consistent application to study along with the completion of mandatory assessment tasks. Time management is, therefore, very important to ensure the necessary attention is given to course work while still finding time for leisure, sport, volunteering and part-time work. Teachers have the expectation that you will strive for your personal best at all times whilst maintaining a balanced lifestyle. Your teachers and the school well-being team are available to support you in achieving academic outcomes at the highest possible level.

We look forward to working with you throughout the Higher School Certificate journey.

Kathy O'Sullivan
Principal

General Information

The Higher School Certificate (HSC) is the highest educational award in New South Wales schools. It is awarded to students who successfully complete Year 11 and 12 in New South Wales. The HSC is an internationally recognised credential that provides a foundation for students entering tertiary study, vocational training or employment.

All courses in Year 11 and HSC (Year 12) have a unit value. Most courses are 2 units. Students must satisfactorily complete the Year 11 course before they are eligible to commence the corresponding HSC course (usually studied during Year 12).

In Year 11, students must select a course of study which totals a minimum of 12 units (2 units of which must be English).

In Year 12, students must present a minimum of 10 units (2 units of which must be English).

To satisfactorily complete a Year 11 or HSC course a student must have:

- followed the course developed by the NSW Education Standards Authority (NESA)
- applied themselves with diligence and sustained effort to set tasks and experiences in the course
- achieved all of the course outcomes.

In most subjects the HSC examination will focus on the HSC content with the Year 11 course content being regarded as 'assumed knowledge'.

HSC extension courses, which run in Year 12, build on the content of the corresponding 2 Unit courses and are available only in English, History, Mathematics, Music, Science and some Languages. Further information is available in a separate section of this booklet. English and Mathematics both have a Year 11 extension course in addition to these HSC extension courses.

NESA allows students to accumulate their HSC over a period of up to five (5) years. It is, however, recommended that students in this school continue to complete their HSC in the usual two-year period, unless there are extenuating circumstances.

There are two types of courses offered by the NESA.

1. Board Developed Courses

These are the large number of courses that are set and externally examined by the NSW Education Standards Authority (NESA) including courses in the areas of English, Mathematics, Science, Technology, Creative and Performing Arts, Personal Development, Health and Physical Education, Human Society and its Environment, Languages (Board Developed Courses Category A) and some Vocational Education and Training (TVET Board Developed Courses Category B) Curriculum Frameworks. These courses contribute to the calculation of an Australian Tertiary Admission Rank (ATAR).

These courses;

- are developed by the NSW Education Standards Authority (NESA)
- are examined externally at the end of the HSC course
- count towards the calculation of the Australian Tertiary Admission Rank (ATAR).

2. Board Endorsed Courses.

Board/Content Endorsed Courses:

- have syllabuses endorsed by the NSW Education Standards Authority (NESA) to cater for areas of special interest, for example Photography, Video and Digital Media.

All Board Endorsed Courses count towards the HSC but cannot be included in your ATAR calculation.

Requirements for the HSC

To be eligible for the award of the Higher School Certificate at least twelve (12) units in the Year 11 course of study and at least ten (10) units in the HSC course of study must be completed.

Both courses of study must include;

- at least six (6) units of Board Developed courses
- at least two (2) units of a Board Developed course in English
- at least three (3) courses of two (2) Unit value or greater
- at least four (4) subjects.

The difference between HSC subjects and courses

A subject is an HSC area of study (e.g. Mathematics). Within that subject there may be a number of courses (for e.g. Mathematics Standard 2, Mathematics Advanced, Mathematics Extension 1, Mathematics Extension 2). If a student studies Mathematics Extension 1, Mathematics Extension 2, English Advanced, English Extension 1, English Extension 2 and Biology they will not meet the four subjects requirement because they have only studied three subjects: Mathematics, English and Biology.

Please find a complete list of all Board Developed Courses and their corresponding subject classification here**:** https://www.uac.edu.au/assets/documents/hsc-courses/2025-hsc-courses.pdf

Limitations:

- At most, seven (7) units of courses in Science can count towards HSC eligibility (6 units plus Science Extension).
- There is only ONE History Extension course. It can be studied with either the Ancient History course OR the Modern History course.
- Projects developed for assessment in one subject (Design & Technology, Drama, History Extension, Society and Culture, Software Design & Development, Visual Arts) are not to be used either in full or in part for assessment in any other subject.

Australian Tertiary Admission Rank (ATAR) Requirements

To be eligible for an ATAR, a student must complete;

- at least ten (10) units of Board Developed Courses
- at least two (2) units of English
- at least three (3) courses of two (2) units or greater
- at least four (4) subjects.

The ATAR will be calculated on an aggregate of scaled marks in ten (10) units of Board Developed courses comprising:

- the best two (2) units of English
- the best eight (8) units from the remaining units with no more than two (2) units of category B courses to be included.

https://www.uac.edu.au/future-applicants/atar

ATAR Eligibility

To check whether your chosen subjects will make you eligible for an ATAR.

Visit:
https://www.uac.edu.au/media-releases/uac-welcomes-change-to-hsc-subject-classification

https://educationstandards.nsw.edu.au/wps/portal/nesa/11-12/hsc/subject-selection

This website can also help students with their subject selection if they are struggling to decide on their courses.

GLOSSARY

Assumed knowledge – study that will be considered to have been completed and as such will not be retaught
Co-requisites - study that must be completed with the intended study e.g. English Extension 1 may not be studied without also studying English Advanced or Music Extension may not be studied without studying Music 2 etc.
Core topics – area of study completed by all students in NSW completing that course
Course – study that is completed as stand-alone study. e.g. Physics and Chemistry can each be studied alone and as such each is identified as a course, conversely, Mathematics Advanced and Mathematics Extension 1 are identified as separate courses but are considered the same subject – see below
Exclusions – courses that cannot be studied at the same time as the course in question
HSC – study completed in Term 4 of the Year 11 calendar year, then Term 1, Term 2 & Term 3 of the Year 12 calendar year
Options – area of study completed at the discretion of the school.
Year 11 – study completed in Term 1, Term 2 & Term 3 of a calendar year in Year 11
Prerequisites – study that MUST have been completed prior to undertaking the course in question
Subject – study that includes co-requisites e.g. Mathematics Advanced and Mathematics Extension 1 are considered as one subject. **A subject is an HSC area of study for example, Mathematics. Within that subject there may be a number of courses, for example, Mathematics Standard 2, Mathematics Advanced, Mathematics Extension 1, Mathematics Extension 2.**

HSC Minimum Standard

What is the HSC minimum standard?

NSW Education Standards Authority (NESA) has implemented the HSC minimum standard to help ensure that students have the key literacy and numeracy skills for life after school. Students in New South Wales need to demonstrate a minimum standard of literacy and numeracy to receive the HSC credential. The HSC minimum standard is set at level 3 of the Australian Core Skills Framework (ACSF). These skills are essential for everyday tasks and learning after school such as writing a letter for a job application or understanding a phone plan. The standard is assessed through online tests across three areas: reading, writing and numeracy. The minimum standard online tests are 45 minutes long and include a multiple choice reading test, a multiple choice numeracy test and a short writing test based on a choice between a visual or written prompt. Examples of the tests are available on the NSW Education Standards Authority (NESA) website. Students who do not meet the HSC minimum standard can still:

- sit the HSC exams
- receive an ATAR for University applications
- receive a ROSA
- receive a HSC minimum standard report.

There are no pre-requisites for choosing subjects for stage 5 or stage 6. Students do not need to achieve the minimum standard to choose a subject they will study in stage 5 or 6*

Practice tests are available for students to sit at school to help them become familiar with the online test structure and for schools to help determine student readiness to meet the minimum standard.

Students will have two opportunities per year to sit the minimum standard online tests in each area of Reading, Numeracy and Writing, in Year 10, 11 and 12. Students will also have up to 5 years from the time they start the HSC courses to sit the minimum standard online tests. The tests must be administered by schools via a lockdown browser.

Further Information NSW Education Standards Authority (NESA)
https://educationstandards.nsw.edu.au/wps/portal/nesa/11-12/hsc/hsc-minimum-standard

*NBSC Manly Campus students will be advised on whether they ought to select English Extension 1, Mathematics Extension 1, and/or three Sciences.

English Advanced (mandatory for every student)

2 Units for each of Year 11 and HSC Board Developed Course

Year 11 Course

Common Module

In this module, students undertake the intensive and close reading of quality texts from a variety of modes and media. In doing so, they further develop the skills and knowledge necessary to appreciate, understand, analyse and evaluate how and why texts convey complex ideas, relationships, endeavours and scenarios.

Module A - Narratives That Shape Our World

In this module, students explore a range of narratives from the past and the contemporary era that illuminate and convey ideas, attitudes and values. They consider the powerful role of stories and storytelling as a feature of narrative in past and present societies, as a way of connecting people within and across cultures, communities and historical eras.

Module B - Critical Study of Literature

In this module, students develop analytical and critical knowledge, understanding and appreciation of a literary text. Through increasingly informed personal responses to the text in its entirety, students develop understanding of the distinctive qualities of the text and notions of textual integrity.

Year 12 HSC Common Module - Texts and Human Experiences

In this common module students deepen their understanding of how texts represent individual and collective human experiences. They examine how texts represent human qualities and emotions associated with, or arising from, these experiences. Students appreciate, explore, interpret, analyse and evaluate the ways language is used to shape these representations in a range of texts in a variety of forms, modes and media.

Module A - Textual Conversations

In this module, students explore the ways in which the comparative study of texts can reveal resonances and dissonances between and within texts. Students consider the ways that a reimagining or reframing of an aspect of a text might mirror, align or collide with the details of another text.

Module B - Critical Study of Literature

In this module, students develop detailed analytical and critical knowledge, understanding and appreciation of a substantial literary text. Through increasingly informed and personal responses to the text in its entirety, students understand the distinctive qualities of the text, notions of textual integrity and significance.

Module C - The Craft of Writing

In this module, students strengthen and extend their knowledge, skills and confidence as accomplished writers. Students write for a range of audiences and purposes using language to convey ideas and emotions with power and precision.

Across Stage 6 the selection of texts **must** give students experience of the following:

- texts which are widely regarded as quality literature, including a range of literary texts written about intercultural experiences and the peoples and cultures of Asia
- a range of Australian texts, including texts by Aboriginal and/or Torres Strait Islander authors and those that give insights into diverse experiences of Aboriginal and/or Torres Strait Islander peoples
- texts with a wide range of cultural, social and gender perspectives
- integrated modes of reading, writing, listening, speaking, viewing and representing as appropriate.

Ancient History

2 Units for each of Year 11 and HSC Board Developed Course

Course Description:

Ancient History involves the study of at least two of the following areas: Egypt, Near East, Greece and Rome in both the Year 11 and HSC courses.

The Year 11 course is structured for students to investigate:

- people, groups, events, institutions, societies and historical sites
- archaeological and written sources by applying methods used by historians, archaeologists and other related specialists and scholars.

The course provides a background for students' more specialised HSC studies.

In the HSC course, students use archaeological and written evidence to investigate a core topic, personality, ancient society and historical period.

Main Topics Covered:

Year 11 Course

Part I
Investigating Ancient History - 50% of course time

- The Nature of Ancient History – at least one option.
- Case Studies – at least two.
- ONE case study must be from Egypt, Greece, Rome or Celtic Europe.
- ONE case study must be from the Near East, Asia, the Americas or Australia.

Part II
Features of Ancient Societies

- 33% of course time

Part III
Historical Investigation: The investigation should extend a particular area of individual student or group interest

– 17% of course time

HSC Course

Part I
Core: Cities of Vesuvius – Pompeii and Herculaneum
– students to investigate the range and nature of archaeological and written sources available for the study of the cities of Pompeii
– 25% of course time

Part II
Ancient Societies
– one Ancient Society to be studied from the Ancient Societies options offered in the syllabus
– 25% of course time

Part III
Personalities in Their Times
– one personality to be studied from the Personality options offered in the syllabus
– 25% of course time

Part IV
Historical Periods
– one Historical Period to be studied from the Historical period options offered in the syllabus
– 25% of course time

Particular Course requirements:

No special requirements.

Biology

2 Units for each of Year 11 and HSC Board Developed Course

Course Description:

The study of Biology in Stage 6 enables students to develop an appreciation and understanding of biological concepts that are used to explore the diversity of life, from a molecular to a biological systems level, and the interactions between living things and the environments in which they live. Through applying Working Scientifically skills, processes and the use of biological technologies, the course aims to examine how biological practices are developed and used.

Biology uses Working Scientifically processes to develop scientific investigative skills. It focuses on developing problem-solving and critical thinking skills in order to understand and support the natural environment. Students are provided with opportunities to design and conduct biological investigations both individually and collaboratively. Through the analysis of qualitative and quantitative data, students are encouraged to solve problems and apply knowledge of biological interactions that relate to a variety of fields.

The Biology course builds on the knowledge and skills of the study of living things found in the Science Stage 5 course. The course maintains a practical emphasis in the delivery of the course content and engages with the technologies that assist in investigating current and future biological applications.

Main Topics Covered: Each Module covers 25% of the course

Year 11 Course	**HSC (Year 12) Course**
• Module 1 - Cells as the Basis of Life • Module 2 - Organisation of Living Things • Module 3 - Biological Diversity • Module 4 - Ecosystem Dynamics • A Depth Study	• Module 5 - Heredity • Module 6 - Genetic Change • Module 7 - Infectious Disease • Module 8 - Non-infectious Disease and Disorders • A Depth Study

Particular Course Requirements:

Both the Year 11 and Year 12 Biology courses include:

- practical investigations such as laboratory experiments and a mandatory field study;
- secondary-sourced investigations include locating, accessing, using and reorganising a wide range of secondary data and/or information;
- a Depth Study.

Business Studies

2 Units for each of Year 11 and HSC Board Developed Course

Course Description:

Business activity is a feature of everyone's life. Throughout the world people engage in a web of business activities to design, produce, market, deliver and support a range of goods and services. In addition, investors, consumers and employees depend on the business sector for much of their quality of life.

As a course, Business Studies is distinctive in that it encompasses the theoretical and practical aspects of business in contexts which students will encounter throughout their lives. Conceptually, it offers learning from the planning of a small business to the management of operations, marketing, finance and human resources in large businesses. Through the analysis of contemporary business strategies, the course also provides rigour and depth and lays an excellent foundation for students either in tertiary study or in future employment.

Contemporary business issues and case studies are embedded in the course to provide a stimulating and relevant framework for students to apply to problems encountered in the business environment. Students also investigate business planning and use a range of information to assess and evaluate business performance. The role of incentives, personal motivation and entrepreneurship, especially in small business, is recognised as a powerful influence in business success.

By completing this course students will develop general and specific skills, including research, analysis, problem-solving, decision-making, critical thinking and communication. These skills enhance their confidence and ability to participate effectively, not only as members of the business world, but also as citizens dealing with issues emanating from business activity.

Main Topics Covered:

Year 11 Course

- Nature of Business – 20% of course time
- Business Management – 40% of course time
- Business Planning – 40% of course time

HSC Course

- Operations – 25% of course time
- Marketing – 25% of course time
- Finance – 25% of course time
- Human Resources – 25% of course time

Particular Course Requirements:

No special requirements.

Community and Family Studies

2 Units for each of Preliminary and HSC Board Developed Course

Course Description:

Community and Family Studies is an interdisciplinary course drawing upon selected components of family studies, sociology, developmental psychology and students' general life experiences. This course utilises an ecological framework to investigate the interactions among the individual, family, community and society. Community and Family Studies develops student's knowledge, skills and attitudes relevant to effective decision-making leading to confidence and competence in solving practical problems in the management of everyday living.

Community and Family Studies investigates the unique contributions of individuals, groups, families and communities in the development of effective social structures. The dynamic nature of this area of study places particular importance on the skills of inquiry and investigation. Research is an integral component of this subject. Community and Family Studies explores life issues that are important to all young people and of equal relevance to female and male students. The topics investigated and the emphasis on research ensures a course that is attractive to many students, with the capacity to challenge and extend all students' ability levels.

As part of the course, students will have the opportunity to work with specific groups within the community such as People with a Disability, Homeless and the Aged.

Community and Family Studies can have a direct and positive influence on the quality of students' lives both now and in the future.

Main Topics Covered:

Preliminary Course Modules

- ***Resource Management – 20%***
  Basic concepts of resource management
- ***Individuals and Groups – 40%***
  The individual's roles, relationships and tasks within and between groups
- ***Families and Communities – 40%***
  Family structures and functions, and the interaction between family and community

HSC Course Modules

Core Topics – 75%

- ***Research methodology – 25%***
  Research methodology and skills culminating in the production of an Independent Research Project
- ***Groups In Context – 25%***
  The characteristics and needs of specific community groups
- ***Parenting and Caring – 25%***
  Issues facing individuals and groups who adopt roles of parenting and caring in contemporary society

Optional Component - 25%

One of the following options will be studied:

- Family and Societal Interactions
- Social Impact of Technology
- Individuals and Work

Particular Course Requirements: As part of the HSC, students are required to complete an Independent Research Project in the context of the HSC core module — Research Methodology. The IRP forms part of the internal HSC assessment program. The focus of the Independent Research Project should be related to the course content of one or more of the following areas: individuals, groups, families, communities, resource management.

Chemistry

2 Units for each of Year 11 and HSC Board Developed Course

Course Description:

The *Chemistry Stage 6 Syllabus* explores the structure, composition and reactions of and between all elements, compounds and mixtures that exist in the Universe. The discovery and synthesis of new compounds, the monitoring of elements and compounds in the environment, and an understanding of industrial processes and their applications to life processes are central to human progress and our ability to develop future industries and sustainability.

The study of Chemistry in Stage 6 enables students to develop an appreciation and understanding of materials and their properties, structures, interactions and related applications. Through applying Working Scientifically skills processes, the course aims to examine how chemical theories, models and practices are used and developed. It focuses on the exploration of models, understanding of theories and laws, and examination of the interconnectedness between seemingly dissimilar phenomena.

Chemistry involves using differing scales, specialised representations, explanations, predictions and creativity, especially in the development and pursuit of new materials. It requires students to use their imagination to visualise the dynamic, minuscule world of atoms in order to gain a better understanding of how chemicals interact.

The Chemistry course builds on students' knowledge and skills developed in the Science Stage 5 course and increases their understanding of chemistry as a foundation for undertaking investigations in a wide range of Science, Technology, Engineering and Mathematics (STEM) related fields. A knowledge and understanding of chemistry is often the unifying link between interdisciplinary studies.

Main Topics Covered: Each Module covers 25% of the course

Year 11 Course	**HSC Course**
• Module 1 - Properties and Structure of Matter • Module 2 - Introduction to Quantitative Chemistry • Module 3 - Reactive Chemistry • Module 4 - Drivers of Reactions • A Depth Study	• Module 5 - Equilibrium and Acid Reactions • Module 6 - Acid/base Reactions • Module 7 - Organic Chemistry • Module 8 - Applying Chemical Ideas • A Depth Study

Particular Course Requirements:

Both the Year 11 and Year 12 Chemistry courses include:

- practical investigations such as laboratory experiments and field study;
- secondary-sourced investigations include locating, accessing, using and reorganising a wide range of secondary data and/or information;
- a Depth Study.

Dance

2 Units for each of Year 11 and HSC Board Developed Course

Course Description

Students study dance as an art form through the interrelated practices of Performance, Composition and Appreciation.

The Dance Stage 6 Syllabus emphasises dance both as an art form in its own right and as an exciting medium for learning that fosters students' intellectual, social and moral development. The art form of dance has a theoretical base that challenges the mind and the emotions, and its study contributes to the students' artistic, aesthetic and cultural education. The study of dance as an art form acknowledges the interrelationship between the practical and theoretical aspects of dance — the making and performing of the movement and the appreciation of its meaning.

Assessment in dance is conducted against set criteria. Students are assessed according to their own capabilities and limitations, not compared to others. Additionally, in the practices of performance and composition students are given the opportunity to display their theoretical knowledge and understanding through interviews.

Course content

The Stage 6 dance course content focuses on developing skills in the areas of performance, composition and appreciation. Learning in these components is progressive. It begins in the Year 11 course and extends into, and is examined in, the HSC course.

Main topics covered:

Year 11 course:

- Safe dance practice (both theory and practical components) including anatomy and physiology, alignment, prevention and treatment of injuries etc.
- Enhanced dance technique and increasingly complex performance skills
- Composition, with a focus on developing movement that communicates an intent and cultivating a personal style
- Appreciation, including the history of dance in Australia and in-depth study of professional contemporary dance works

HSC course:

- Core performance (students perform a 3-5 minute dance) – 20%
- Core composition (students choreograph a 3-5 minute dance) – 20%
- Core appreciation (students study 2 contemporary dance works) – 20%
- Major study – students select one of the following areas and engage in an in-depth study – 40%
  - Performance (students perform a 4-6 minute dance)
  - Composition (students compose a 4-6 minute dance for 2 dancers)
  - Appreciation (students complete an in-depth study of prescribed choreographers and eras of development in dance)
  - Dance and Technology: Film (students create a 4-6 minute dance film)

Particular Course Requirements:

No special requirements.

Design and Technology

2 Units for each of Year 11 and HSC Board Developed Course

Course Description:

The study of Design and Technology Stage 6 develops conceptual understanding and enables students to creatively apply these to specific technological endeavours through design projects. It also seeks to develop students' appreciation of the historical and cultural influences on design and the interrelationships of design, technology, society and the environment.

Design and Technology has a unique focus on creativity, innovation and the successful implementation of innovative ideas. Students will investigate the importance of evaluation, the role of computer-based technologies, management, communication and collaborative design, as well as exploring current and emerging technologies. Through the completion of quality design projects, students are provided with the opportunity to develop specific production and manufacturing skills.

Design and Technology is inclusive of the needs, interests and aspirations of all students. It provides opportunities for students to develop design projects in areas of individual interest, to discuss equity issues related to design, production and manufacturing in the Australian society and to consider careers in the fields of design and manufacturing.

Students will be given the opportunity to explore and develop technologies and demonstrate insight into the future uses of technology. They will articulate arguments on issues and consequences including environmental and social impacts. They will develop skills that are transferable and which lead to lifelong learning.

Main Topics Covered:

Year 11 Course Indictive hours 120 hours

Designing and Producing

Including the study of:

- design theory and practice
- design processes
- environmental, ethical and social issues
- marketing and market research
- the realisation of ideas through the manipulation of techniques, materials tools and other resources
- project analysis, management and evaluation
- research methods
- manufacturing and production.

HSC Course Indictive hours 120 hours

The study of:

- Innovation and Emerging Technologies
- Designing and Producing
  (and the Major Design Project).

  - Project proposal and project management
  - Project development and realization
  - Project evaluation

Particular Course Requirements: (HSC)

60% of the HSC score comes from the Major Design Project, 40% from a 1.5 hour written exam.

Drama

2 Units for each of Year 11 and HSC Board Developed Course

Course Description:

Students study the practices of Making, Performing and Critically Studying in Drama. Students engage with these components through collaborative and individual experiences.

Year 11 course content comprises an interaction between the components of Improvisation, Playbuilding and Acting, Elements of Production in Performance and Theatrical Traditions and Performance Styles. Learning is experiential with written reflections or responses in these areas.

HSC Course content

Australian Drama and Theatre and Studies in Drama and Theatre involve the theoretical study through practical exploration of themes, issues, styles and movements of traditions of theatre exploring relevant acting techniques, performance styles and spaces.

The Group Performance of between 3 and 6 students involves creating a piece of original theatre (8 to 12 minutes duration). It provides an opportunity for each student to demonstrate his or her performance skills.

For the **Individual Project** students demonstrate their expertise in a particular area. They choose one project from Critical Analysis or Design or Performance or Script-Writing or Video Drama.

Main Topics Covered:

Year 11 Course

- Improvisation, Playbuilding, Acting
- Elements of Production in Performance
- Theatrical Traditions and Performance Styles

HSC Course

- Australian Drama and Theatre (Core content)
- Studies in Drama and Theatre
- Group Performance (Core content)
- Individual Project

Particular Course Requirements:

The Year 11 course informs learning in the HSC course. In the study of theoretical components, students engage in practical workshop activities and performances to assist their understanding, analysis and synthesis of material covered in areas of study. In preparing for the Group performance, a published topic list is used as a starting point. The Individual Project is negotiated between the student and the teacher at the beginning of the HSC course. Students choosing Individual Project Design or Director's Portfolio should base their work on one of the texts listed in the published text list. This list changes every few years. Students must ensure that they do not choose a text or topic they are studying in Drama in the written component of any other HSC course when choosing Individual Projects.

Earth and Environmental Science

2 Units for each of Year 11 and HSC Board Developed Course

Course Description:

The *Earth and Environmental Science Stage 6 Syllabus* explores the Earth's renewable and non-renewable resources and also environmental issues. An understanding of the Earth's resources and the ability to live sustainably on the planet is a central purpose of the study of Earth and Environmental Science.

The course uses the Working Scientifically skills to develop knowledge through the application of those skills. Students engage with inquiry questions to explore knowledge of the Earth. They also undertake practical and secondary-sourced investigations to acquire a deeper understanding of the Earth's features and naturally occurring phenomena and cycles. Fieldwork is an integral part of these investigation processes.

Earth and Environmental Science involves the analysis, processing and evaluation of qualitative and quantitative data in order to formulate explanations and solve problems. In conjunction with knowledge and understanding, communication skills are essential in forming evidence-based conclusions or arguments.

The Earth and Environmental Science course builds on the knowledge and skills of Earth and Space gained in the Science Stage 5 course. The course maintains a practical emphasis in the delivery of the course content, and engages with technologies that assist in developing earth and environmental science applications.

The course provides the foundation knowledge and skills required to study earth and environmental science after completing school, and supports participation in careers in a range of related industries. The application of earth and environmental science is essential in addressing current and future environmental issues and challenges. It is also necessary for the use and management of geological resources that are important to Australia's sustainable future.

Main Topics Covered: Each Module covers 25% of the course

Year 11 Course

- Module 1 - Earth's Resources
- Module 2 - Plate Tectonics
- Module 3 - Energy Transformations
- Module 4 - Human Impacts

- Depth Study

HSC (Year 12) Course

- Module 5 - Earth's Processes
- Module 6 - Hazards
- Module 7 - Climate Science
- Module 8 - Resource Management

- Depth Study

Particular Course Requirements:

Scientific investigations include both practical investigations and secondary-sourced investigations. Practical investigations are an essential part of both the Year 11 and Year 12 courses and must occupy a minimum of 35 hours of course time, including time allocated to practical investigations in depth studies as well as field work.

Economics

2 Units for each of Year 11 and HSC Board Developed Course

Course Description:

Economic decisions have a crucial influence on the quality of life experienced by people throughout the world. The study of economics can help individuals, groups and societies make choices that assist them to improve their quality of life.

As a subject, Economics Stage 6 is distinctive because of the range of problems and issues that it investigates and the skills that it develops. A student who has completed the Year 11 and HSC courses should have knowledge and skills enabling them to:

- comprehend the background and implications of contemporary economic issues
- discuss appropriate policies to solve economic problems and issues
- understand what a change in interest rates, share values or the value of the Australian dollar means to individuals and the economy
- identify fluctuations in the global and Australian economies and their likely effects on business, governments and individuals
- understand reasons for changes in employment patterns
- identify, using economic thinking, appropriate strategies to protect the natural environment.

Examination of these economic issues involves extensive discussion of current events in the media and politics. By understanding economics, students can make informed judgments about contemporary issues and policies to address them, allowing students to participate responsibly in decision-making.

Main Topics Covered:

Year 11 Course

- Introduction to Economics - 10% of course time
- Consumers and Business - 10% of course time
- Markets – 20% of course time
- Labour Markets – 20% of course time
- Financial Markets – 20% of course time
- Government in the Economy – 20% of course time

HSC Course

- The Global Economy – 25% of course time
- Australia's Place in the Global Economy – 25% of course time
- Economic Issues – 25% of course time
- Economic Policies and Management – 25% of course time

Particular Course Requirements:

No special requirements.

Engineering Studies

2 Units for each of Year 11 and HSC Board Developed Course

Course Description:

The *Engineering Studies Stage 6 Syllabus* is directed towards the development and application of mathematical, scientific and technological skills and their integration with business and management. It provides students with skills, knowledge and understanding associated with a study of engineering, its practices and associated methodologies. The subject promotes environmental, economic and global awareness, problem-solving ability, engagement with information technology, self-directed learning, communication, management and skills in working as a team.

The *Engineering Studies Stage 6 Syllabus* is unique in that it develops knowledge and understanding of the profession of engineering. It also provides an opportunity to integrate the science and mathematics disciplines with societal development and change. The syllabus is inclusive of the needs, interests and aspirations of all students and provides opportunities and challenges to deal with engineering concepts.

Four modules are covered each year, with students developing a knowledge of the engineering mechanics, engineering materials, and historical and societal influences on engineering for each module. Students will also investigate engineering electricity, the scope of the profession and develop skills in engineering drawing and Computer Aided Design. Particular focus is placed upon the ability to report on the research and technical development of a product through the production of two Engineering report in both the Year 11 and the HSC course.

Main Topics Covered:

Year 11 Course Indictive hours 120 hours

Includes the study of:

- Engineering Fundamentals 30
- Engineered Products 30
- Braking Systems 30
- Biomedical Engineering 30

HSC Course Indictive hours 120 hours

Includes the study of:

- Civil Structures 30
- Personal and Public Transport 30
- Aeronautical Engineering 30
- Telecommunications Engineering 30

Particular Course Requirements:

Two Engineering reports are required to be produced for both Year 11 and the HSC course, of which one must be the result of collaborative work.

Reports constitute 25% of the HSC course mark, the remainder is by internal and external examination.

English Extension 1

1 Unit for each of Year 11 and HSC Board Developed Course

Co-requisites: English (Advanced)

Module Description: Texts, Culture and Value

Students explore the ways in which aspects and concerns of texts from the past have been carried forward, borrowed from and/or appropriated into more recent culture. The module develops students' understanding of how and why cultural values are maintained and changed.

Students examine a key text from the past and its manifestations in other contexts and media. Through close study they:

- consider the relationships between the text and its culture
- explore the language of the text and examine the ways in which language shapes and reflects values
- consider the effects of different ways of responding to the text
- consider the ways and reasons the original and later manifestations of the text or aspects of the text are valued.

Students also explore, analyse and critically evaluate different examples of such texts in a range of contexts and media, including texts of their choosing.

Students develop a range of imaginative, interpretive and analytical compositions, including some which explore the relationships between key texts from the past and texts in more recent culture. These compositions may be realised in various forms and media. Students investigate topics and ideas, engage in independent learning activities, and develop skills in sustained composition.

Related Project

This project provides opportunities for students to develop skills in independent investigation and critical and creative thinking. Students apply their knowledge about texts studied in this module to their own selected texts. They develop an understanding of research methodologies suitable to support a range of interpretive, analytical and imaginative projects.

Students select a key text and examine and evaluate manifestations of their selected text in other contexts and media, while considering how and whether the values embedded in one text parallel, challenge or offer alternatives to the other.

HSC English Extension 1 Course

Common module: Literary Worlds with ONE elective option.

In this module students explore, investigate, experiment with and evaluate the ways texts represent and illuminate the complexity of individual and collective lives in literary worlds. Students evaluate how ideas and ways of thinking are shaped by personal, social, historical and cultural contexts. They extend their understanding of the ways that texts contribute to their awareness of the diversity of ideas, attitudes and perspectives evident in texts.

The study of at least THREE texts must be selected from a prescribed text list for the module study including at least TWO extended print texts

Students are required to study at least TWO related texts.

Internal Assessment in both Year 11 and HSC courses:

Tasks across a range of language modes and 1 related project for the Year 11 course:

- Speaking
- Extended Response
- Imaginative Composition
- Examination

Food Technology

2 Units for each of Year 11 and HSC Board Developed Course

Course Description:

The study of Food Technology enables students to develop knowledge and understanding about food nutrients and diets for optimum nutrition, the functional properties of food, safe preparation, presentation and storage of food, sensory characteristics of food, the influences on food availability and factors affecting food selection. Practical skills in planning, preparing, and presenting food are integrated throughout the content areas.

The HSC course involves the study of: sectors, aspects, policies and legislations of the Australian Food Industry; production, processing, preserving, packaging, storage and distribution of food; factors impacting, reasons, types, steps and marketing of food product development; nutrition incorporating diet and health in Australia and influences on nutritional status. Practical experiences in developing, preparing, experimenting, and presenting food are integrated throughout the course

Food Technology offers opportunities for students to develop skills including the ability to research, analyse and communicate. Students also develop the capability and competence to experiment with and prepare food as well as design, implement and evaluate solutions to a range of food situations.

Assessment is predominantly through written research and investigation type activities. A minimal amount of practical work is included to support theoretical concepts.

Main Topics Covered:

Year 11 Course Indictive hours 120 hours

- Food Availability and Selection 30%
- Food Quality 40%
- Nutrition 30%

HSC Course Indictive hours 120 hours

- The Australian Food Industry 25%
- Food Manufacture 25%
- Food Product Development 25%
- Contemporary Nutrition Issues 25%

Particular Course Requirements

Food Technology will require a course fee in both Year 11 & Year 12. Equipment required includes an apron, container and enclosed leather shoes for practical lessons.

It is a mandatory requirement that students undertake practical activities. Such experimental learning activities are specified in the learn to section of each strand.

There is no major project for Food Technology.

The HSC examination for Food Technology is a 3-hour examination.

French Continuers

2 Units for each of Year 11 and HSC Board Developed Course

Exclusions: French Beginners

Prerequisites: 200-300 hours study of the language or equivalent

Course Description:

Languages courses contribute to the overall education of students, particularly in the areas of communication, cross-cultural understanding, literacy and general knowledge. The French Year 11 and HSC courses have a variety of themes and associated topics as their organisational focus. The student's skills in, and knowledge of French will be developed through tasks associated with a range of texts and text types, which reflect the themes and topics.

Main Topics Covered:

Theme: The Individual
Topics

- Personal Identity
- Relationships
- School life and Aspirations
- Leisure and Interests

Theme: The French-speaking communities
Topics

- Daily Life/Lifestyles
- Arts and Entertainment

Theme: The Changing World
Topics

- Travel and Tourism
- The World of Work
- Current Issues
- The Young Person's World

Students' language skills are developed through tasks such as:

- conversation
- responding to an aural stimulus
- responding to a variety of written material
- writing for a variety of purposes
- studying French culture through texts.

Particular Course Requirements:

All themes listed in the syllabus must be studied for the HSC.

Health and Movement Science

2 Units for each of Year 11 and HSC Board Developed Course

Course Description:

The Health and Movement Science course provides students with opportunities to develop and apply their knowledge, understanding and skills of health and movement concepts.

The Year 11 course focuses on 2 major areas. The Health for Individuals and Communities focus area explores the meanings of health, health of young people and how government and non-government organisation can advocate and support the health of young people. The Body and Mind in Motion focus area explores how various body systems influence and respond to movement, the interrelationship between these systems and movement efficiency, and how energy systems, training types and methods, skill acquisition and psychology all impact movement participation and performance.

In the HSC course, students focus on 2 major areas. The first focus area, Health in an Australian and Global Context, explores the health status of Australians within and across population groups, as well as relative to other OECD countries. The nature of major chronic diseases and illnesses are studied and their impact on the health system. Additionally, the changes and challenges faced by the health systems such as an ageing population, emerging technologies and treatments, digital health and big data are also explored in regard to their impact. The second focus area, Training for Improved Performance explores the development of personalised exercise assessment and prescription, and how various training types and methods can positively affect physiological adaptations. Finally, students will also apply their understanding of biomechanics, injury prevention, training methods and technology to analyse how athletes can train for sustained movement and performance, along with the effect of nutrition and supplementation on movement performance.

Main Topics Covered:

Year 11 Course	HSC Course
Focus Area 1 – 40 hours • Health for individuals and communities	**Focus Area 1 – 45 hours** • Health in an Australian and global context
Focus Area 2 – 40 hours • The body and mind in motion	**Focus Area 2 – 45 hours** • Training for improved performance
Collaborative Investigation – 20 hours • Health for individual and communities OR The body and mind in motion	**Depth Studies – 30 hours** • Health in an Australian and global context OR Training for improved performance
Depth Studies – 20 hours • Health for individual and communities and/or The body and mind in motion	**Depth Studies – 20 hours** • Health in an Australian and global context AND/OR Training for improved performance

Particular Course Requirements: Where appropriate, case studies and practical application are to be integrated throughout student learning.

As part of the Year 11 course, students are required to complete a Collaborative Investigation. The focus of the Collaborative Investigation is to allow students to manage their own learning and to become flexible, critical thinkers, problem solvers and decision makers.

In the HSC Course, one depth study must be formally assessed as a school-based assessment.

Japanese Continuers

2 Units for each of Year 11 and HSC Board Developed Course

Exclusions: Japanese Beginners; Japanese in Context; Japanese Background Speakers

Prerequisites: 200-300 hours study of the language or equivalent

Course Description:

The Year 11 and HSC Courses have as their organisation focuses themes, topics and sub-topics. The student's skills in, and knowledge of Japanese will be developed through tasks associated with a range of texts and text types, which reflect the themes and topics. The student will also gain an insight into the culture and language of Japanese-speaking communities through the study of a range of texts.

Main Topics Covered:

The Individual

- Personal world
- Daily Life
- Leisure
- Future Plans

The Japanese-Speaking Communities

- Travelling in Japan
- Living in Japan
- Cultural Life

The Changing World

- The World of Work
- Current Issues

Students' language skills are developed through the four skills:

- speaking
- listening and responding
- reading and responding
- writing in Japanese.

Particular Course Requirements:

All themes listed in the syllabus must be studied in the HSC.

Legal Studies

2 Units for each of Year 11 and HSC Board Developed Course

Course Description:

Our society is regulated by a complex set of rules and regulations which both guide and protect individual and community rights. Being well informed about legal issues, including the rights and responsibilities integral to our society, is part of being an active and informed citizen. Students of Legal Studies Stage 6 will develop an understanding of legal concepts and the way the law functions in our society.

The syllabus focuses on the way in which law is generated, how it is structured and how it operates in Australian and international contexts. Learning about our legal system will allow students to investigate the way our society operates and the influences that shape it.

Students will develop an understanding of the implications that legal decisions can have for Australian society and the ways in which the legal system can affect the lives of Australian citizens. A critical understanding of the processes of reform and change will help students to contribute to making our society more equitable for all.

The Legal Studies Stage 6 course offers excellent preparation for life through a study of the legal system, its principles, structures, institutions and processes. The course fosters respect for cultural diversity. It allows students to question and evaluate legal institutional structures in the domestic and international environments and to undertake a comparative analysis of other political and institutional structures.

Legal Studies enables students to have confidence in approaching and accessing the legal system and provides them with a better appreciation of the relationship between social and legal structures. The course will assist in the development of students' knowledge of their basic legal rights and responsibilities in a broad selection of contexts which appeal to their interests.

Main Topics Covered:

Year 11 Course

- The Legal System – 40% of course time
- The Individual and the Law – 30% of course time
- The Law in Practice – 30% of course time

HSC Course

- Crime – 30% of course time
- Human Rights – 20% of course time
- Additional Option Topics (2) from consumers, global environmental protection, families, indigenous peoples, shelter, workplace and world order. – 50% of course time

Particular Course Requirements:

No special requirements.

Mathematics Advanced

2 Units for each of Year 11 and HSC Board Developed Course

Aim:

The study of Mathematics Advanced in Stage 6 enables students to enhance their knowledge and understanding of what it means to work mathematically, develops their understanding of the relationship between 'real-world' problems and mathematical models and extends their skills of concise and systematic communication.

Prerequisites:

The outcomes and content in the Stage 6 Mathematics Advanced syllabus are written with the assumption that students studying this course will have engaged with all sub-strands of Stage 5.1 and Stage 5.2 and with the following sub-strands of Stage 5.3 - Algebraic techniques, Surds and indices, Equations, Linear relationships, Trigonometry and Pythagoras' theorem and Single variable data analysis.

Course Description:

The Mathematics Advanced course is focused on enabling students to appreciate that mathematics is a unique and powerful way of viewing the world to investigate patterns, order, generality and uncertainty. The course provides students with the opportunity to develop ways of thinking in which problems are explored through observation, reflection and reasoning.

The Mathematics Advanced course provides a basis for further studies in disciplines in which mathematics and the skills that constitute thinking mathematically have an important role. It is designed for those students whose future pathways may involve mathematics and its applications in a range of disciplines at the tertiary level.

Main Topics Covered:

Year 11 Course	**HSC Course**
• Functions	• Functions
• Trigonometric Functions	• Trigonometric Functions
• Calculus	• Calculus
• Exponential and Logarithmic Functions	• Financial Mathematics
• Statistical Analysis	• Statistical Analysis

Mathematics Extension 1

1 Unit in each of Year 11 and HSC Board Developed Course * See below

Aim:

The study of Mathematics Extension 1 in Stage 6 enables students to extend their knowledge and understanding of what it means to work mathematically, develops their skills to reason logically, generalise and make connections, and enhances their understanding of how to communicate in a concise and systematic manner.

Prerequisites:

The outcomes and content in the Stage 6 Mathematics Extension 1 course are written with the assumption that students studying this course will have engaged with all sub-strands of Stage 5.1, Stage 5.2 and Stage 5.3, including the optional sub-strands of Polynomials, Logarithms, Functions and other graphs. Consequently, knowledge of the content in the NSW *Mathematics K–10 Syllabus* up to and including this level is also implicit in this course.

Course Description:

Mathematics Extension 1 is focused on enabling students to develop a thorough understanding of and competence in further aspects of mathematics. The course provides opportunities to develop rigorous mathematical arguments and proofs, and to use mathematical models more extensively. Students of Mathematics Extension 1 will be able to develop an appreciation of the interconnected nature of mathematics, its beauty and its functionality.

Mathematics Extension 1 provides a basis for progression to further study in mathematics or related disciplines in which mathematics has a vital role at a tertiary level. An understanding and exploration of Mathematics Extension 1 is also advantageous for further studies in such areas as science, engineering, finance and economics.

Main Topics Covered:

The course content includes the entire Mathematics Advanced (2 Unit) course and, in addition, contains:

Year 11 Course

- Functions
- Trigonometric Functions
- Calculus
- Combinatorics

HSC Course

- Proof
- Vectors
- Trigonometric Functions
- Calculus
- Statistical Analysis

MATHEMATICS EXTENSION 1 WILL COUNT FOR 2 UNITS WHEN STUDIED IN CONJUNCTION WITH MATHEMATICS EXTENSION 2 IN YEAR 12.

Mathematics Standard

2 Units for each of Year 11 Standard and HSC Board Developed Course (Standard 2)

Aim:

The study of Mathematics Standard in Stage 6 enables students to develop their knowledge and understanding of what it means to work mathematically, improve their skills to solve problems relating to their present and future needs and aspirations, and improve their understanding of how to communicate in a concise and systematic manner.

Prerequisites:

The outcomes and content in the Stage 6 Mathematics Standard syllabus are written with the assumption that students studying this course will have engaged with all sub-strands of Stage 5.1 and with the following sub-strands of Stage 5.2 - Financial mathematics, Linear relationships, Non-linear relationships, Right-angled triangles (Trigonometry), Single variable data analysis and Probability.

Exclusions:

Students may not study any other Stage 6 Year 11 Mathematics course in conjunction with the Year 11 Mathematics Standard course, or any other Stage 6 HSC Mathematics course in conjunction with the HSC Mathematics Standard 2 course.

Course Description:

The Mathematics Standard courses are focused on enabling students to use mathematics effectively, efficiently and critically to make informed decisions in their daily lives. They provide students with the opportunities to develop an understanding of, and competence in, further aspects of mathematics through a large variety of real-world applications for a range of concurrent HSC subjects.

Mathematics Standard 2 (HSC) is designed for those students who want to extend their mathematical skills beyond Stage 5 but are not seeking the in-depth knowledge of higher mathematics that the study of calculus would provide. This course offers students the opportunity to prepare for a wide range of educational and employment aspirations, including continuing their studies at a tertiary level.

HSC Examination:

The examination will be mainly based on the HSC course, however, the Year 11 course is assumed knowledge and may be examined.

Year 11 Course (Mathematics Standard)

- Algebra
- Measurement
- Financial Mathematics
- Statistical Analysis

HSC Course (Mathematics Standard 2)

- Algebra
- Measurement
- Financial Mathematics
- Statistical Analysis
- Networks

Modern History

2 Units for each of Year 11 and HSC Board Developed Course

Course Description:

The Year 11 course is designed to provide students with opportunities to investigate individuals, groups, events, institutions, societies and ideas in a range of historical contexts as a background for their more specialised HSC studies.

The HSC Course is designed for students to investigate national and international forces for change and continuity in the twentieth century through 4 major studies.

Main Topics Covered:

Year 11 Course

- Part I: Investigating Modern History – 50% of course time
- Part II: Historical Investigation
  - 20% of course time
- Part III: Shaping of the Modern World
  - 30% of course time

HSC Course

- Part I: Core Study – 25% of course time
  - Power and Authority in the Modern World
- Part II: National Study – 25% of course time
  - Students will study **ONE** from the following:
  - USA – 1919 – 1941, Japan – 1904 – 1937
  - Russia/Soviet Union – 1917 – 1941, Iran 1945-1989
- Part III: Change in the Modern World – 25% of course time
  Students will study **ONE** of the following:
  - Civil Rights in the USA 1945-1968
  - Apartheid in South Africa 1960-1994
- Part IV: Peace and Conflict – 25% of course time
  Students will study **ONE** of the following:
  - Conflict in Europe 1935 - 1945
  - The Arab-Israeli Conflict 1948 – 1996

Particular Course Requirements:

No special requirements.

Music 2

2 Units for each of Year 11 and HSC Board Developed Course

Prerequisites:

Music Additional Study Course (or equivalent)

Exclusions:

Music 1

Course Description:

In the Year 11 and HSC Courses, students will study:

The concepts of music through learning experiences in performance, composition, musicology and aural within the context of a range of styles, periods and genres.

Main Topics Covered:

Students study one Mandatory topic covering a range of content and one Additional Topic in each year of the course. In the Year 11 course, students will choose a class additional topic and in the HSC course, students have freedom to pick their own additional topic.

Year 11 Course

- The Mandatory Topic is Music 1600 – 1900
- Additional topic is the Renaissance Period

HSC Course

- The Mandatory Topic is Music of the Last 25 Years (Australian focus)
- Additional topic is the students' own choice

Particular Course Requirements:

In addition to core studies in performance, composition, musicology and aural, students nominate ONE elective study in Performance, Composition or Musicology within the HSC course. Students selecting Composition or Musicology electives will be required to compile a portfolio of work as part of the process of preparing a submitted work. The portfolio may be requested by the Board of Studies to validate authorship of the submitted work.

All students will be required to develop a composition portfolio for the core composition.

Physics

2 Units for each Year 11 and HSC Board Developed Course

Course Description:

The *Physics Stage 6 Syllabus* involves the study of matter and its motion through space and time, along with related concepts that include energy and force. Physics deals with the study of phenomena on scales of space and time – from nuclear particles and their interactions up to the size and age of the Universe. This allows students to better understand the physical world and how it works, appreciate the uniqueness of the Universe, and participate in navigating and influencing the future.

The problem-solving nature of physics further develops students' Working Scientifically skills by focusing on the exploration of models and the analysis of theories and laws, which promotes an understanding of the connectedness of seemingly dissimilar phenomena.

Students who study physics are encouraged to use observations to develop quantitative models of real world problems and derive relationships between variables. They are required to engage in solving equations based on these models, make predictions, and analyse the interconnectedness of physical entities.

The Physics course builds on students' knowledge and skills developed in the Science Stage 5 course and help them develop a greater understanding of physics as a foundation for undertaking post-school studies in a wide range of Science, Technology, Engineering and Mathematics (STEM) fields. A knowledge and understanding of physics often provides the unifying link between interdisciplinary studies.

The study of physics provides the foundation knowledge and skills required to support participation in a range of careers. It is a discipline that utilises innovative and creative thinking to address new challenges, such as sustainability, energy efficiency and the creation of new materials.

Main Topics Covered: Each Module covers 25% of the course

Year 11 Course	**HSC Course**
• Module 1 - Kinematics • Module 2 - Dynamics • Module 3 - Waves and Thermodynamics • Module 4 - Electricity and Magnetism • A Depth Study	• Module 5 - Advanced Mechanics • Module 6 - Electromagnetism • Module 7 - The Nature of Light • Module 8 - From the Universe to the Atom • A Depth Study

Particular Course Requirements:

Both the Year 11 and Year 12 Physics courses include:

- practical investigations such as laboratory experiments and field study;
- secondary-sourced investigations include locating, accessing, using and reorganising a wide range of secondary data and/or information;
- a Depth Study.

Society and Culture

2 Units for each of Year 11 and HSC Board Developed Course

Course Description:

The central concern of Society and Culture is the interaction of persons, societies, cultures, environments and time. It draws on aspects of anthropology, communication, cultural studies, media studies, philosophy, psychology and sociology and is a good introduction to these tertiary and vocational studies.

Society and Culture promotes an awareness of the nature of power, gender, technologies and facilitates intercultural understanding. The course develops communication, data collection, collation, assessment and presentation skills, and encourages an appreciation of social responsibility, ethical behaviour and respect for differing viewpoints.

Main Topics Covered:

Year 11 Course

- The Social and Cultural World – the nature of social and cultural research – 30% of course time
- Personal and Social Identity – growing up and coming of age – 40% of course time
- Intercultural Communication – how people in different social, cultural and environmental settings can better understand each other and their world – 30% of course time

HSC Course

Core Topics

- Personal Interest Project – 30% of course time
  Externally assessed and worth 40% of total examination mark. Students are introduced to the social methodologies commonly used in tertiary institutions
- Social and Cultural Continuity and Change – 30% of course time

Depth Studies

TWO to be chosen from the following

- Popular Culture – 20% of course time
- Belief Systems & Ideologies – 20% of course time
- Social Inclusion & Exclusion – 20% of course time
- Social Conformity & Nonconformity – 20% of course time

Particular Course Requirements:

For the HSC course, a Personal Interest Project (PIP) of the students' choice of topic must be submitted and is worth 40% of the final HSC examination.

Software Engineering

2 Units for each of Year 11 and HSC Board Developed Course

Course Description:

The study of Software Engineering 11–12 enables students to develop an understanding of software engineering as a facet of computer science. Students have the opportunity to develop knowledge and understanding of software engineering, hardware and software integration, and the development, implementation and evaluation of computer programs. They focus on a systematic approach to problem-solving when designing and developing creative software solutions.

Software Engineering promotes a deeper understanding of fundamental concepts, programming languages and innovative technologies, leading to greater flexibility when developing software solutions. Students perform project work and apply their knowledge and skills in: programming fundamentals, the object-oriented paradigm, programming mechatronics, secure software architecture, programming for the web and software automation, and use the acquired knowledge and skills to develop a software engineering project. Project work enables students to collaborate on problems and develop team and communication skills that are highly valued in the industry.

Software Engineering encourages students to explore the impact of innovations in computing technology on society and the environment. They engage with technologies that improve access to, and participation in, a range of industries.

The Software Engineering 11–12 Syllabus provides students with the opportunity to develop their computing skills across 4 domains: technical skills, social awareness, project management and thinking skills. Students are encouraged to transfer knowledge to new situations and projects, building on technical skills and past learning. They enhance their understanding of project management through collaboration, communicating ideas, engaging in processes and designing solutions.

Main Topics Covered:

Year 11 Indictive hours 120 hours	
Programming Fundamentals	40
The Object-Oriented Paradigm	40
Programming Mechatronics	40

Year 12 Indictive hours 120 hours	
Secure Software Architecture	30
Programming for the Web	30
Software Automation	30
Software Engineering Project	30

Particular Course Requirements:

Year 11 course structure and requirements
The Year 11 course provides students with opportunities to develop and apply an understanding of the fundamental elements involved in creating software.

Year 12 course structure and requirements
The Year 12 course provides students with opportunities to extend their knowledge, understanding and skills in the development of software. A major software engineering project provides students with the opportunity to further develop project management skills.

Textiles and Design

2 Units for each of Year 11 and HSC Board Developed Course

Course Description:

The Year 11 course involves the study of design, communication methods, construction techniques, innovations, fibres, yarns, fabrics and the textile industry. Practical work is focused on developing skills in fabric manipulation and embellishment, fashion drawing and folio work. Textiles students are usually creative and passionate about working with fabrics and other textile items. The Preliminary Course involves the study of design, fashion drawing, construction techniques, fibres, yarns, fabrics and the textile industry. Practical experiences are integrated throughout the content areas and include experimental and project work.

The HSC course builds upon the Year 11 course and involves the study of the history and culture of design, contemporary designers, emerging technologies, sustainable technologies, consumer issues and the marketplace. This course culminates in the development of a Major Textiles Project which is specific to a selected focus area and which includes supporting documentation and textile item/s.

Main Topics Covered:

Year 11 Course Indictive hours 120 hours

- Design - 40%
- Properties and Performance of Textiles - 50%
- The Australian Textiles, Clothing, Footwear and Allied Industries (TCFAI) - 10%

HSC Course Indictive hours 120 hours

- Design - 20%
- Properties and Performance of Textiles - 20%
- The Australian Textiles, Clothing, Footwear and Allied Industries - 10%
- Major Textiles Project - 50%

Particular Course Requirements

In the Year 11 course, students will undertake TWO preliminary textile projects drawn from the areas of study of Design and Properties and Performance of Textiles as either experimental work and/or project work. In the HSC course, the Major Textile Project allows students to develop a textile project that reflects either a cultural, historical or contemporary aspect of design. Students are expected to draw upon the knowledge and understanding of design, properties and performance and the Textiles and the Australian Textile, Clothing, Footwear and Allied Industries developed in the Year 11 course.

Textiles involves an HSC Major Project which makes up 50% of the HSC.

Students will be required to obtain an A3 folder for project work, an A4 sketchbook, a plastic sleeve book and necessary sewing equipment. This course will require a course fee for year 11 & 12 and the purchasing of fabric as required.

The HSC examination for Textiles and Design is a 1.5-hour examination.

Visual Arts

2 Units for each of Year 11 and HSC Board Developed Course

Exclusions:

Projects developed for assessment in one subject are not to be used either in full or in part for assessment in any other subject.

Course Description:

Visual Arts involves students in the practices of artmaking, art criticism and art history. Students develop their own artworks culminating in a "Body of Work" in the HSC course that reflects students' knowledge and demonstrates their ability to resolve a conceptually strong work. Students critically investigate artists' practices and works from a range of cultures, traditions and times.

The Year 11 course is broad, while the HSC course provides for deeper, increasingly more independent investigations. This course provides for students who have considerable understanding of the Visual Arts as a result of studying the Elective courses in Stage 5 in Visual Arts, Visual Design and Photography and Digital Media and for others who have a more limited experience of the subject, as there are no pre-requisites.

Main Topics Covered:

Year 11 Course

Artmaking

Exploration of a range of materials, techniques and styles that include:

- The Figure – Exploration of portrait and figurative drawing and painting.
- Conceptual Art – Production of a film using digital SLR photography,-stop motion animation and video.
- Slices of Life – Development of a body of work using a selected media area.

Art History/Criticism

- Case Studies - What is Art?, Figurative art, Conceptual Art and Classicism

HSC Course

Artmaking

- Planning HSC body of work using a Visual Arts Diary and experimenting with a range of materials, techniques and styles.
- Development of a body of work using one of 12 possible expressive forms: painting, drawing, photomedia, sculpture, collection of works, time-based forms (film), sculpture, graphic design, printmaking, ceramics, textiles and documented forms.

Art History/Criticism

- Case Studies – Modernism, Contemporary Art, Australian Art, Indigenous Art and The Design World

Particular Course Requirements:

Year 11 Course

- Artworks in at least 2 forms and use of a process diary.
- A broad investigation of ideas in art criticism and art history.
- Comprises two components: 50% artmaking and 50% art history and art criticism.

HSC Course

- Development of a body of work and use of a Visual Arts process diary.
- 5 Case Studies (4-10 hours each).
- Deeper and more complex investigations of ideas in art criticism and art history.
- Comprises two components: 50% artmaking and 50% art history and art criticism.

Board Endorsed Course

Students in Year 11 have the opportunity to study a 1-unit Board Endorsed Course. The Board Endorsed Course offered at Manly Campus is:

- Photography, Video and Digital Imaging

The course is offered in Year 11 only and is listed on the Record of Achievement.

Photography, Video and Digital Imaging

1 Unit Year 11 HSC Board Endorsed Course

Exclusions: Projects developed for assessment in one subject are not to be used either in full or in part for assessment in any other subject.

Course Description:

Photography, Video and Digital Imaging offers students the opportunity to explore contemporary artistic practices that make use of photography, video and digital imaging. The course offers opportunities for investigation of one or more of these fields and develops students' understanding and skills.

The course is designed to enable students to gain an increasing accomplishment and independence in their ideas and skills in photography by learning how to effectively use a digital SLR camera. Students will learn principles of digital media and how to manipulate and edit photographs using Adobe Photoshop and Lightroom. In addition, they will also have the opportunity to plan, film and edit a video using digital resources and programs such as Adobe Premiere. Students will work on an individual project, based on a media area of their choice: Digital photography, Video or Digital Media.

While the course builds on Visual Arts/Design and Photography courses in Stage 5, it also caters for students that have more limited experience in Visual Arts as there are no pre-requisites for this course. In addition, students selecting this course could use the knowledge to enhance their skills for a number of 2 unit Board Developed courses, including Visual Arts, English Extension 2 and Design and Technology that have major projects. This course could be used to extend students' personal interests and ongoing life experiences and utilised at post school study at university or in the context of the workplace.

Main Topics Covered:

Term 1

- **The Decisive Moment**
  - Introduction to conventions and traditions of photographic practice
  - The fundamentals of digital SLR photography.
  - Series of works based on the elements of design and the environment

Term 2

- **Manipulated Portraits**
  - Exploration of portrait digital SLR photography; lighting, and Adobe Photoshop
  - Series of works produced using digital photography in the studio or in the environment
  - Examination of current photographers works

Term 3

- **Individual Project**
  - Series of works based on a selected concept and media area; photography, digital media or video.

Particular Course Requirements:

Year 11 Course

- Examination of at least 2 Modules - Digital Photography, Video, Individual Project
- Use of a journal.
- A broad investigation of ideas in critical and historical study.
- Comprises two components: 70% making and 30% historical and critical studies.

Further Extension Courses for Year 12

If the progress of a student is considered suitable by the Head Teacher of the relevant faculty, for example the student has demonstrated the necessary application and study techniques, students may choose to advance their studies further in one or more of the following extension courses **available in Year 12 only**.

The courses are extremely demanding and should be contemplated only if they are considered useful or necessary in the post school wishes of the student.

English Extension 2

1 Unit for HSC Board Developed Course

Prerequisites: Year 11 English Advanced, Year 11 English Extension 1

Co-requisites: HSC English Advanced, HSC English Extension 1

Course Description:

Students develop a Major Work that is a sustained composition, and a statement of reflection.

Investigating Stage

Students will investigate literature that stems from an area of personal interest and passion to develop a research base for the Major Work. The investigation will extend the skills, knowledge and understanding being developed in the Stage 6 courses. Students will develop an inquiry question to refine the scope of the investigation. This question will evolve as the work develops focus and intent.

Drafting Stage

Students further investigate a wide range of texts that are examples of how their chosen form and concept have been represented in different contexts. They experiment with language conventions of their chosen form to draft and re-draft their composition in response to ongoing research and critical feedback. Students research and evaluate critical readings to develop theoretical understandings and explore ways of reading texts to inform the composition's concept and process. They establish a learning community by collaborating with peers and teachers to reflect on their own and others' work and reinterpret and reimagine the emerging composition during this critical drafting process.

The Revising Stage

Students will evaluate the effectiveness of their composition through the processes of peer and teacher conferencing and critical feedback. They refine knowledge, understanding and skills of concept, language and form through increasingly focused research of relevant literature and texts. Students develop a reference list for the works cited and examined in the Reflection Statement.

Editing for Publication

Students will develop skills in editing language and structure to ensure conceptual and stylistic coherence. They edit the Major Work with a focus on audience, purpose and context of publication.

The Major Work Journal

The Major Work Journal documents all stages of the composition process. The recording of research and analysis, as well as critical, imaginative and speculative reflections, will assist students in achieving course objectives and outcomes and in preparing for internal and external assessment requirements.

History Extension

1 Unit for HSC Board Developed Course

Prerequisites: Year 11 Modern or Ancient History

Co-requisites: HSC Modern or Ancient History

Course Description:

HSC History Extension involves the study and evaluation of the ideas and processes used by historians to construct history. In Part I of the course, students investigate the question 'What is history?' through a selection of readings and through one case study. In Part II, students design, undertake and communicate their own personal historical inquiry.

Main Topics Covered:

Part I: Constructing History 60% of course time

Key questions:

- Who are the historians?
- What are the aims and purposes of history?
- How has history been constructed and recorded over time?
- Why have the approaches to history changed over time?

Case Studies:
Students will investigate **one** case study from a selection of ancient, medieval and early modern, modern and Australian options.

Part II: History Project 40% of course time

An original piece of historical investigation by the student which includes a Proposal, Essay, Bibliography and Process Log.

Particular Course Requirements:

No special requirements.

Japanese Extension

1 Unit for HSC Board Developed Course

Prerequisites: Year 11 Japanese Continuers

Co-requisites: HSC Japanese Continuers

Course Description:

The Extension course has a prescribed theme and related issues as its organisational focus. Students' knowledge and understanding of Japanese language and culture will be enhanced through accessing a variety of texts (some of which are prescribed) related to the theme and issues. Students will extend their ability to use and appreciate Japanese as a medium for communication and creative thought and expression.

Main Topics Covered:

Themes: The individual and contemporary society

Prescribed Issues:

- Connectedness
- Journeys
- Diversity of Values

Students' knowledge and understanding of the issues are developed through tasks such as:

- discussing issues in prescribed and related texts
- presenting points of view on issues
- analysing written texts.

Prescribed text 2020-2024

- Soshite chichi ni naru (Like Father, Like Son)

Particular Course Requirements:

No special requirements.

Mathematics Extension 2

2 Units for HSC Board Developed Course

Aim:

The study of Mathematics Extension 2 in Stage 6 enables students to extend their knowledge and understanding of working mathematically, enhancing their skills to tackle difficult, unstructured problems, generalise, make connections and become fluent at communicating in a concise and systematic manner.

Exclusions:

Mathematics Standard

Prerequisites:

Year 11 Mathematics Advanced, Year 11 Mathematics Extension 1

Co-requisites:

HSC Mathematics Extension 1 (2 unit); HSC Mathematics Advanced * (* Students continuing in the Mathematics Extension 2 course will not sit the HSC Mathematics Advanced External Examination).

Course Description:

Mathematics Extension 2 provides students with the opportunity to develop strong mathematical manipulative skills and a deep understanding of the fundamental ideas of algebra and calculus, as well as an appreciation of mathematics as an activity with its own intrinsic value, involving invention, intuition and exploration. Mathematics Extension 2 extends students conceptual knowledge and understanding through exploration of new areas of mathematics not previously seen.

Mathematics Extension 2 provides a basis for a wide range of useful applications of mathematics as well as a strong foundation for further study of the subject.

Main Topics Covered:

- Proof
- Vectors
- Complex numbers
- Calculus
- Mechanics

Particular Course Requirements:

The course is designed for students with a special interest in mathematics who have shown that they possess special aptitude for the subject. It is particularly suitable for students who are achieving high grades in the Mathematics Extension 1 course.

Mathematics Extension 2 will count for 2 units when studied in conjunction with Mathematics Extension 1 in Year 12.

Music Extension

1 Unit for HSC Board Developed Course
Exclusions: Music 1
Prerequisites: Year 11 Music 2 **Co-requisites:** HSC Music 2
Course Description: The HSC Music Extension course builds on Music 2 and assumes a high level of music literacy and aural ability as well as advanced performance or composition or musicology skills. Students will specialise in an elective of performance or composition or musicology and will follow an individual program of study which will be negotiated between the teacher and student.
Main Topics Covered: Topics will depend on which of three electives is chosen by the student.
Particular Course Requirements: Students selecting Composition or Musicology as their area of specialisation will be required to compile a portfolio of work as part of the process of preparing a submitted work. The portfolio may be requested by the Board of Studies to validate authorship of the submitted work.

Science Extension

1 Unit for HSC Board Developed Course.

Course Description:

Science Extension is only offered to Year 12 students. The study of Science Extension Stage 6 enables students with a passion for science to explore the development of the scientific process over time, undertake high-level authentic scientific research, communicate findings and propose further research. Science Extension is designed for students with an interest in scientific research.

The *Science Extension Stage 6 Syllabus* focuses on the nature, development and processes of science. The course requires students to engage with complex concepts and theories and to critically evaluate new ideas, discoveries and contemporary scientific research. Students are challenged to examine a scientific research question influenced by their study of one or more of the scientific disciplines. In doing this, students extend their knowledge of the discipline(s), conduct further analysis and authentic scientific investigations, and uniquely for this course, produce a detailed scientific research report that reflects the standards generally required for publication in a scientific journal.

Through designing and conducting their own scientific research, initially using small datasets, students deepen and build upon their understanding of analysing and interpreting data. They are provided with opportunities to refine and extend their skills of Working Scientifically by applying these interrelated processes to contemporary authentic scientific research reflecting the skills used by practising research scientists. Students gather, examine, model and critically assess evidence that is informed by analysis of primary and secondary-sourced data and examining this data in relation to relevant publicly available data sets.

Students interrogate and refine their ideas of and about science through analysing historic and cultural observations and significant scientific research within the relevant ethical frameworks and philosophical arguments of the time.

Main Topics Covered:

Module 1: The Foundations of Scientific Thinking

Module 2: The Scientific Research Proposal

Module 3: The Data, Evidence and Decisions

Module 4: The Scientific Research Report

Students must propose and develop a research question, formulate a hypothesis and develop evidence-based responses in the form of a Scientific Research Report, which is supported by a Scientific Research Portfolio.

The Scientific Research Report is a result of the student's own work and must adhere to the principles and practices of good scholarship, as identified in the *HSC: All My Own Work* course. While students may collaborate with and draw upon the expertise, knowledge and data held by others in developing their Scientific Research Report and Portfolio, this assistance must be referenced using accepted protocols. All scientific research must be sensitive to community expectations in relation to the question being interrogated. Students must adhere to ethical practices in the collection and analysis of data and the communication of results.

Prerequisite Courses for entry into Science Extension Year 12 are one of, or a combination (up to 6 units of study) of, Biology, Chemistry, Earth and Environmental Science, Investigating Science or Physics in Year 11.

Co-requisite Courses for Science Extension Year 12 are one of, or a combination (up to 7 units of study) of, Biology, Chemistry, Earth and Environmental Science, Investigating Science or Physics in Year 12.