LIVERPOOL BOYS HIGH SCHOOL



SENIOR SUBJECT PROSPECTUS 2021 - 2022

Table of Contents

Introduction and HSC Course Information	4-9
The Senior Curriculum at Liverpool Boys High School	10-11
ENGLISH	
English Standard	11
English Advanced	11
English EAL/D	12
English Studies ATAR	12
English Studies COLLEGE PLUS	13
English Extension 1	13
English Extension 2	13
Drama	14
MATHEMATICS	
Mathematics Standard	15
Mathematics Advanced	15
Mathematics Extension 1	15
Mathematics Extension 2	15
SCIENCE	
Biology	16
Chemistry	17
Physics	18
Investigating Science	19
Careers in Science	20
HUMAN SOCIETY AND ITS ENVIRONMENT	
Ancient History	21
Modern History	22
Business Studies	23
Economics	24
Legal Studies	25
Geography	26
CREATIVE AND PERFORMING ARTS	
Music	27
Visual Arts	28-29

PHYSICAL EDUCATION

Personal Development Health and Physical Education	30
TECHNOLOGICAL AND APPLIED STUDIES	
Design and Technology	31
Industrial Technology - Timber	32
Software Design and Development	33
CONTENT ENDORSED COURSES (CEC)	
English Studies (CEC)	34
Mathematics - Standard (CEC)	34
Sport Lifestyle and Recreation (CEC)	35
Computing Applications (CEC)	36
Work Studies (CEC)	37

VOCATIONAL EDUCATION AND TRAINING (VET)

Vocational Education and Training - Introduction	38 - 40
EVET	41
Hospitality - Food and Beverage	42
Information and Digital Technology	43
Retail Services	44

Decision Time Choosing My Pathway & Subjects For 2021 - 2022

Key Focus Areas

When making these important decisions you should consider the following:

- Interests & Passions
- Challenge
- Realism
- Real world Post School Aspirations

College Pathways

ATAR – This is only for students seeking entry into university

Please note that there are other entry pathways into university.

COLLEGE PLUS –

- HSC
- ROSA
- School Based Apprenticeship
- Transition to Employment
- **Big Picture** *Potential Portfolio Entry into University.*

Requirements for the HSC

If you wish to be awarded the HSC:

- you must have satisfactorily completed courses that meet the pattern of study required by the NESA (NSW Education Standards Authority, formally The Board of Studies) for the award of the Higher School Certificate. This includes the completion of the practical, oral or project works required for specific courses and the assessment requirements for each course.
- you must have sat for and made a serious attempt at the Higher School Certificate examinations.
- you must study a minimum of 12 units in the Preliminary course and a minimum of 10 units in the HSC course. Both the Preliminary course and the HSC course must include the following:
- at least 6 units from NESA or Board Developed Courses including at least 2 units of a Board Developed Course in English.
- at least three courses of 2 units value or greater.

you must take at least four subjects.

At most 6 units of courses in Science can contribute to Higher School Certificate eligibility.

• The NESA publication, *Studying for the New South Wales Higher School Certificate - An Information Booklet for Year 10 Students*, contains all the HSC rules and requirements you will need to know.

ATAR

- If you wish to receive the Australian Tertiary Admissions Rank (ATAR), you must study a minimum of 10 NESA Developed units in the HSC Course. The booklet, *University Entry Requirements Year 10 Booklet*, published by UAC will contain important information about entry to university courses, course prerequisites and other information to assist your choice of HSC courses for study in College 1 (Year 11) and College 2 (Year 12) in preparation for university entry.
- The ATAR is a rank that allows the comparison of students who have completed different combinations of HSC courses. The ATAR is calculated solely for use by institutions to rank and select school leavers for admission to tertiary courses. Other selection criteria may be used together with the ATAR.

If you do not wish to receive an ATAR, the rest of your courses may be made up from NESA Endorsed Courses once you have studied six units from NESA Developed Courses. If you wish to be awarded an ATAR a student must satisfactorily complete at least ten units from the NESA developed courses for which there are examinations including at least:

- Eight units from Category A courses
- Two units of English
- Three NESA Developed courses of two units or greater
- Four subjects.

Information about the HSC

General Information

This is your introduction to the HSC and the many options now available. More information is contained in the following Board of Studies publication:

- Studying for the New South Wales Higher School Certificate An Information Booklet for Year 10 Students.
- The Higher School Certificate recognises 13 years of schooling. In the interests of greater career choices and increased opportunities at university and TAFE, it offers you a full range of study areas matching individual abilities, interests and goals.
- Courses will be linked to further education and training.
- Extension courses (including undergraduate university courses) will enable students to undertake more in-depth study in areas of special interest.
- Vocational Education and Training courses will count towards the HSC and will also lead to qualifications recognised across a range of industries.
- The HSC will include life skills courses for students with special education needs.
- The HSC will fairly assess each student's knowledge and skills.

- If you meet the minimum standard expected in a course you will receive a mark of 50. If you have a higher standard of performance you will receive a higher mark.
- For each course you will receive easy-to-understand reports which contain much more information. These reports provide clearer indications of what you have demonstrated you know, understand and can do in each course.

What Types Of Courses Can I Select?

There are different types of courses that you can select in College 1 (Year 11) and College 2 (Year 12).

> NESA Developed Courses

The NESA develops these courses. There is a syllabus for each course which contains:

- the course objectives, structure, content and outcomes
- specific course requirements
- assessment requirements
- sample examination papers and marking guidelines
- the performance scale (except for Vocational Education and Training Courses)

All students entered for the HSC who are studying these courses follow these syllabuses. These courses are examined externally at the end of the HSC course and can count towards the calculation of the ATAR.

Vocational Education Courses are NESA Developed and can count towards the calculation of the ATAR. However, only one Vocational Education Course can count towards the calculation of an ATAR.

Vocational Education and Training (VET) Courses – either NESA Developed or NESA Endorsed:

- Vocational Education and Training (VET) courses are offered as part of the Higher School Certificate. They enable students to study courses which are relevant to industry needs and have clear links to post-school destinations. These courses allow students to gain both Higher School Certificate qualifications and accreditation with industry and the workplace as part of the Australian Qualifications Framework (AQF). The national framework is recognised across Australia and helps students to move easily between the various education and training sectors (including TAFE) and employment. These courses each have a specific workplace component and a minimum number of hours students spend in the workplace or a simulated workplace at school. Students receive special documentation showing the competencies gained. Schools will deliver some of these courses, while others will be delivered by TAFE or other providers.
- Students may apply for Recognition of Prior Learning (RPL) to be exempt from part of a VET course.

Life Skills Courses as part of a Special Program of Study

Stage 6 (College 1 and 2) Life Skills courses are available for students following a Special Program of Study for the Higher School Certificate.

Students accessing a Special Program of Study in Stage 6 will, in general, need to have completed at least four Generic Life Skills courses within a Special Program of Study in Stage 5 (Years 9 and 10). Further, participation in a Special Program of Study will be based upon an individual transition-planning process which will occur for both the Preliminary and HSC years.

Life Skills courses will have NESA Developed status and can be used in place of other Board Developed Courses to meet requirements for the award of the Higher School Certificate. Each Life Skills course comprises a 2 unit Preliminary course and a 2 unit HSC course.

NESA expects that most students would meet the outcomes for a 2 unit Preliminary course and a 2 unit HSC course over approximately 240 indicative hours in total (that is, 120 indicative hours in each course).

What Are Units?

All courses offered for the Higher School Certificate have a unit value. Subjects may have a value of 1 unit or 2 units. Most courses are 2 units.

Each unit involves class time of approximately 2 hours per week (60 hours per year). In the HSC each unit has a value of 50 marks. Hence a 2 unit course has a value of 100 marks.

2 units = 4 hours per week (120 hours per year) = 100 marks

The following is a guideline to help you understand the pattern of courses.

2 UNIT COURSE	\checkmark	This is the basic structure for all courses. It has a value of 100 marks.
EXTENSION COURSE	✓ ✓	Extension study is available in a number of subjects. Extension courses build on the content of the 2 unit course and carry an additional value of 1 unit. Requiring students to work beyond the standard of the 2 unit course, extension courses are available in English, Mathematics, History, Music, some Languages and VET. Undergraduate university courses will be available in some subjects. English and Mathematics Extension Courses are available at Preliminary and HSC levels. Students must study the Preliminary extension course in these subjects before proceeding to the two HSC extension courses (Extension 1 and Extension 2). The Extension 2 course requires students to work beyond the standard of the Extension 1 course. HSC extension courses in subjects other than English and Mathematics are offered and examined in College 2 (Year 12) only.
1 UNIT COURSE	✓ ✓ ✓	 unit equals approximately 2 hours of class time each week or 60 hours per year. Studies of Religion can be undertaken as 1 or 2 unit courses. There are a number of 1 unit Board Endorsed Courses. These courses do not count in the ATAR.

Assessment and Reporting

- The HSC reports will provide you with detailed descriptions of the knowledge, skills and understanding you have attained in each subject.
- Teachers have been provided with a syllabus package for each course. The packages include the syllabus content which teachers use to develop teaching programs, examination specifications, sample examination papers, sample marking guidelines and a performance scale.
- The syllabuses, along with assessment and examination information and a performance scale will be used to describe your level of achievement, give a clear idea of the standards that are expected.
- School-based assessment tasks will contribute to 50% of your HSC mark. Your school assessment mark will be based on your performance in assessment tasks you have undertaken during the course.
- The other 50% will come from the HSC examination.
- Your HSC mark for 2 unit courses will be reported on a scale of 0 to 100. A mark of 50 will
 represent the minimum standard expected. If you achieve the minimum standard expected in a
 course you will receive a mark of 50. There will be five performance bands above 50 that
 correspond to different levels of achievement in knowledge, skills and understanding. The band
 from 90 100 will correspond to the highest level of achievement.
- On satisfactory completion of your HSC subjects you will receive a portfolio containing:
 - **The HSC Testamur** -the official certificate confirming your achievement of all requirements for the award.
 - The Record of Secondary Achievement (ROSA) this document lists the courses you have studied and reports the marks and bands you have achieved.
 - Course Reports for every HSC Board Developed Course you will receive a Course Report showing your marks, the Performance Scale and the band descriptions for that course. A graph showing the state-wide distribution of marks in the course is also shown.

Common Terms and Abbreviations

NESA – NSW Education Standards Authority

NESA Developed – A Board Developed Course is one in which the syllabus has been developed by the Board of Studies.

ATAR – Australian Tertiary Admission Rank

ATAR courses – ATAR courses are NESA Developed Courses for which there are formal examinations conducted by NESA that yield a graded assessment. These are the only courses that can be included in the ATAR calculations. ATAR courses are classified as either Category A courses or Category B courses. **Category A courses** – These courses have the academic rigour and depth of knowledge to provide an adequate background for tertiary studies.

Category B courses – These courses do not have the academic rigour and depth of knowledge to provide an adequate background for tertiary studies in themselves, but their contribution to the ATAR is regarded as adequate if the other courses included in the ATAR are more academically demanding.

NESA Endorsed Courses – These are courses that are of less academic rigor which are endorsed by the Board of Studies and delivered by schools. Although they do not count towards an ATAR they do count towards the number of units of study for the award of the HSC.

In 2021-2022 the Category B courses are:	In 2021-2022 the Content Endorsed Courses are:
 Hospitality Information & Digital Technology Retail Services 	 Applied Maths English Studies Sport Lifestyle and Recreation Photography, Video and Digital Media Work studies Computing Applications

PERCENTILE

A percentile indicates your position in a course against other students. The top percentile is 100 and the bottom percentile is 0. If your percentile in a course is 73, you are placed 27% from the top of the students in that course.

UAC

The Universities Admission Centre (NSW & ACT) Pty Ltd is the central office, which receives and processes applications for admission to most undergraduate courses offered by universities in NSW and the ACT.

ATAR RULES

To be eligible for an ATAR a student must satisfactorily complete at least ten units from the Board Developed courses for which there are examinations including at least:

- Eight units from Category A courses
- Two units of English
- Three NESA Developed courses of two units or greater
- Four subjects.

WHAT COURSES ARE INCLUDED IN THE CALCULATION OF THE ATAR?

The ATAR is based on an aggregate of scaled marks in ten units of ATAR courses comprising:

- The best two units of English
- The best eight units from the remaining units, which can include up to two units of Category B courses.

It is important to choose subjects that you are good at, that you are interested in and that will be useful for your future plans.

It is a myth that choosing particular subjects will maximise your university admission rank. In any event, choosing your subjects without thinking about what you are good at, what you are interested in and what you plan to do after school would be to trivialise your education.

The Senior Curriculum at Liverpool Boys High School

The Structure of the Program

- Students in the senior years will study three subjects at a time and complete the HSC exams in these subjects at the end of College 1 (Year 11) Year 1 of Senior School. They then study another three subjects in a similar manner in their second year, College 2 (Year 12) Year 2 of Senior School, with HSC exams at the end.
- Students commence with introductory (Preliminary) studies as soon as Year 10 is completed. The whole school commences a new academic year at this time, (Term 4 Week 6).
- Preliminary studies are completed by the end of Term 1 with end of Preliminary Examinations.
- Students commence HSC studies in Term 2 with midway HSC examinations in approximately Week 7 of Term 2.
- Trial HSC Examinations take place in mid Term 3.
- HSC Examinations are at the beginning of Term 4. Once HSC Examinations are completed, students commence studying their next range of subjects in Term 4.

Therefore, all Senior Students are enrolled in only three courses (subjects) at the beginning of College 1 (Year 11) and three courses (subjects) in College 2 (Year 12). This gives students double the time to complete each course (i.e. double the number of periods in the traditional model) and so they are able to sit for their HSC courses at the end of each year. By the end of each year, from Term 4 Week 6, students have chosen and started their courses for the following year and have completed their HSC Examinations for their Year 1 courses.

Overview

The Senior School Program at L.B.H.S will:

- Satisfy the requirements of the Board of Studies and the DET
- Give more choices to students and provide a better range of subjects
- Make HSC Examinations more a part of the Learning Program.
- Encourage students to take senior school more seriously because there are real and urgent goals.
- Allow students to get results earlier.
- Permit students to have better opportunities to change direction with their subject choice at the completion of the first year of College (end of Year 11).
- Reduce student stress associated with studying six HSC course concurrently.

Subjects Offered For Study at Liverpool Boys High School

Possible 2021-2022 Subjects

The following subjects are offered as *possible* subjects for study in the Senior School. A final decision on the courses that will actually run will be determined by the number of students selecting a subject in the Subject Selection Interviews. In the subject selection process you may not be granted your first choice in the first year of HSC study.

Board Developed Course subjects are grouped in the following Key Learning Areas: English, Mathematics, Science, Human Society and Its Environment (HSIE), Creative and Performing Arts (CAPA), Physical Education (PE) and Technological and Applied Studies (TAS). These subjects are followed by the Content Endorsed Course subjects and Vocational Education and Training courses.

ATAR & COLLEGE PLUS

ENGLISH

English Standard

In the English Standard Year 11 course, students learn about language and literature by exploring and experimenting with the ways events, experiences, ideas and processes are represented in and through texts. Students study a range of texts which include prose fiction, drama, poetry, nonfiction, film, digital and media, as well as Australian texts. Course content common to English Standard and English Advanced is called *Reading to Write: Transition to Senior English*. Students also undertake two additional modules: *Close Study of Literature*, and *Contemporary Possibilities* in which students explore and examine texts and analyse aspects of meaning.

In the English Standard Year 12 course, students further strengthen their knowledge and understanding of language and literature by reflecting on and demonstrating the effectiveness of texts, including their own, for different audiences and purposes. Students study at least three types of prescribed texts drawn from: prose fiction; poetry or drama; film or media or nonfiction texts. Content common to HSC Standard, Advanced and the English Studies courses consists of one module *Texts and Human Experiences*. Students also undertake three additional modules which emphasise particular aspects of shaping meaning and demonstration of the effectiveness of texts for different audiences and purposes.

English Advanced

In the English Advanced Year 11 course, students explore, examine and analyse a range of texts which include prose fiction, drama, poetry, nonfiction, film, digital and media, as well as Australian texts. They explore the ways events, experiences, ideas, values and processes are represented in and through

texts and analyse the ways texts reflect different attitudes and values. Course content common to English Standard and English Advanced is called *Reading to Write: Transition to Senior English*. Students also undertake two additional modules: *Critical Study of Literature*, and *Narratives that Shape our World* in which students explore, examine and analyse the ways in which texts and contexts shape and are shaped by different attitudes and values.

In the English Advanced Year 12 course, students further strengthen their knowledge and understanding of language and literature by analysing and evaluating texts and the ways they are valued in their contexts. Students study at least four prescribed texts drawn from: Shakespearean drama; prose fiction; poetry or drama; film or media or nonfiction. Content common to HSC Standard, Advanced and the English Studies courses consists of one module *Texts and Human Experiences*. Students also undertake three additional modules which emphasise particular aspects of shaping meaning and representation, questions of textual integrity, ways in which texts are valued and the demonstration of the effectiveness of texts for different audiences and purposes.

English EAL/D

In the English EAL/D Year 11 course, students acquire and develop specific English language skills, knowledge and understanding by exploring a range of texts which include prose fiction, drama, poetry, nonfiction, film, digital and media, as well as Australian texts. Through this close study of text, students develop their understanding of the ways ideas and processes are represented in texts. Students study 3–4 modules to acquire, develop and use specific English language skills in their examination and analysis of particular aspects of shaping meaning. The modules are *Language and Texts in Context, Close Study of Text* and *Texts and Society*.

In the English EAL/D Year 12 course, students reinforce and extend their language skills through the close study of at least three types of prescribed texts drawn from prose fiction, poetry or drama; film or media or nonfiction. Through this close study of texts, students develop and apply skills in synthesis. Students study four modules which emphasise particular aspects of shaping meaning and demonstration of the effectiveness of texts for different audiences and purposes. The fourth module, *Focus on Writing*, is studied concurrently throughout the year to develop students understanding and use of language in developing their own written responses.

Eligibility rules apply. The English EAL/D course is for students who have been educated in English for five years or less, either in Australia or overseas.

English Studies ATAR

In the English Studies ATAR course, students explore the ideas, values, language forms, features and structures of texts in a range of personal, social, cultural and workplace contexts. They respond to and compose texts to extend experience and understanding, access information and assess its reliability, and synthesise the knowledge gained from a range of sources for a variety of purposes.

In this course, students will consolidate their English literacy skills to enhance their personal, social, educational and vocational lives.

This course is designed to meet the specific needs of students who wish to refine their skills and knowledge in English and consolidate their literacy skills. It is a course for students who are seeking an alternative to the English Standard course and who intend to proceed from school directly into employment or vocational training.

English Studies College Plus

In the English Studies College Plus course, students explore the ideas, values, language forms, features and structures of texts in a range of personal, social, cultural and workplace contexts. They respond to and compose texts to extend experience and understanding, access information and assess its reliability, and synthesise the knowledge gained from a range of sources for a variety of purposes.

In this course, students will consolidate their English literacy skills to enhance their personal, social, educational and vocational lives.

This course is designed to meet the specific needs of students who wish to refine their skills and knowledge in English and consolidate their literacy skills. It is a course for students who are seeking an alternative to the English Standard course and who intend to proceed from school directly into employment or vocational training.

English Extension 1 & 2

In the English Extension Year 11 course, 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. They consider how and why cultural values are maintained and changed. The course has one mandatory module: *Texts, Culture and Value* as well as a related research project.

In the English Extension 1 Year 12 course, students explore, investigate, experiment with and evaluate the ways texts represent and illuminate the complexity of individual and collective lives in literary worlds. English Extension 1 course – The course has one common module, *Literary Worlds*, with five associated electives. Students must complete one elective chosen from one of the five electives offered for study.

In the English Extension 2 Year 12 course, students develop a sustained composition, and document their reflection on this process. English Extension 2 course – The course requires students to undertake a composition process in order to complete a Major Work and Reflection Statement.

In studying these courses, students will develop skills to work independently to experiment with language forms, features and structures and to engage with complex levels of conceptualisation.

Drama

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

Preliminary 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 comes from practical experiences in each of these areas.

While the course builds on the Stages 4 and 5 Drama course, it also caters for students with less experience in Drama.

In the HSC course students will study Australian Drama and Theatre and Studies in Drama and Theatre. It involves the theoretical study through practical exploration of themes, issues, styles and movements of traditions of theatre, exploring relevant acting techniques, performance styles and spaces. Learning comes from practical experiences in each of these areas.

The Group Performance (3-6 students) involves creating a piece of original theatre (8–12 minutes duration). It provides 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.



MATHEMATICS

Mathematics - Standard (1 & 2)

Mathematics - Standard (1 & 2) are a common course in the preliminary phase of stage 6. Both courses focus on the mathematical skills and techniques which have direct application to everyday activity. The content of both courses emphasise not only the development of mathematical skills and techniques but also the application of these skills across a range of familiar and unfamiliar situations. Tasks in both courses may draw from more than one area of study, and encourage transfer of knowledge across the entire course, as well as linking with study in other Stage 6 subjects. Both courses are fully prescribed and designed to support TAFE and other vocational courses as well as students entering the workforce and/or undertaking further community and workplace training. Mathematics – Standard 2 in the HSC phase of stage 6 provides an appropriate mathematical grounding for students who do not wish to pursue the formal study of mathematics at a tertiary level but who require the necessary foundational mathematical and statistical skills required for the university study of business, humanities, nursing and the paramedical sciences.

Mathematics - Advanced

The Mathematics - Advanced course is designed for students who wish to pursue further study in Mathematics as a minor discipline at university or to enter subjects such as the life sciences or commerce. This course includes topics such as further trigonometry and calculus. The more theoretical/abstract approach of this course is best suited to students who have studied Algebra 1 and /or Algebra 2.

Mathematics - Extension 1

The Mathematics - Extension 1 course is designed to give students a thorough understanding of and competence in further aspects of applied mathematics. This course provides the mathematical foundations necessary for the pursuit of Mathematics as a major discipline at university or for those choosing to enter other fields that require high levels of Mathematics as a prerequisite, such as the physical sciences, computer science or engineering. This course is delivered as an adjunct to the Mathematics advanced course. As this is a demanding course, students who should be selecting this course are those who have demonstrated a mastery of skills and techniques in the Mathematics Advanced course

Mathematics - Extension 2

The Mathematics - Extension 2 course is designed for students who possess a special aptitude for Mathematics, with a heightened interest in the subject. It represents a distinctly high level of school Mathematics, involving the development of considerable manipulative skill and a high degree of understanding of the fundamental ideas of Algebra and Calculus. It encapsulates both the Mathematics Advanced and Mathematics Extension 1 courses as well as a deeper and more extensive treatment of certain topics offered in these two courses. The course provides an adequate foundation for further study of Pure and Applied Mathematics at university level.

SCIENCE Biology Preliminary Course

Cells as the	What distinguishes one cell from another?
Basis of Life	How do cells coordinate activities within their internal environment and the external environment?
Organisation	How are cells arranged in a multicellular organism?
of Living	• What is the difference in nutrient and gas requirements between autotrophs and heterotrophs?
Things	How does the composition of the transport medium change as it moves around an organism?
	 How do environmental pressures promote a change in species diversity and abundance?
Biological	 How do adaptations increase the organism's ability to survive?
Diversity	What is the relationship between evolution and biodiversity?
	What is the evidence that supports the Theory of Evolution by Natural Selection?
Factoriations	• What effect can one species have on the other species in a community?
Ecosystem	 How do selection pressures within an ecosystem influence evolutionary change?
Dynamics	How can human activity impact on an ecosystem?

HSC Course

	 How does reproduction ensure the continuity of a species?
	 How important is it for genetic material to be replicated exactly?
Heredity	Why is polypeptide synthesis important?
	 How can the genetic similarities and differences within and between species be compared?
	Can population genetic patterns be predicted with any accuracy?
Genetic	How does mutation introduce new alleles into a population?
	 How do genetic techniques affect Earth's biodiversity?
Change	 Does artificial manipulation of DNA have the potential to change populations forever?
	How are diseases transmitted?
Infectious	How does a plant or animal respond to infection?
Disease	 How does the human immune system respond to exposure to a pathogen?
	How can the spread of infectious diseases be controlled?
Ner	• How is an organism's internal environment maintained in response to a changing external environment?
Non-	Do non-infectious diseases cause more deaths than infectious diseases?
infectious disease and	Why are epidemiological studies used?
disease and	How can non-infectious diseases be prevented?
uisoruers	How can technologies be used to assist people who experience disorders?

DEPTH STUDIES: A

depth study is any type of investigation that a student completes **independently** that allows the further development of one or more concepts found within or inspired by the syllabus.

REQUIREMENTS:

- At least one Depth Study in both Preliminary & HSC courses.
- Minimum of **15 hours** in both Preliminary & HSC courses.
- Address Questioning & Predicting and Communicating outcomes.
- Address two additional Working Scientifically outcomes.
- Address at least one Knowledge & Understanding outcome.

Chemistry

Preliminary Course









Properties	How do the properties of substances help us to classify and separate them?
and	Why are atoms of elements different from one another?
Structure of	Are there patterns in the properties of elements?
Matter	What binds atoms together in elements and compounds?
Introduction	What happens in chemical reactions?
to	How are measurements made in chemistry?
Quantitative	How are chemicals in solutions measured?
Chemistry	How does the Ideal Gas Law relate to all other Gas Laws?
Depative	What are the products of a chemical reaction?
Reactive Chemistry	How is the reactivity of various metals predicted?
	What affects the rate of a chemical reaction?
	What energy changes occur in chemical reactions?
Drivers of	• How much energy does it take to break bonds, and how much is released when bonds are
Reactions	formed?
	How can enthalpy and entropy be used to explain reaction spontaneity?

HSC Course

	What happens when chemical reactions do not go through to completion?
Equilibrium and Acid	What factors affect equilibrium and how?
	How can the position of equilibrium be described and what does the equilibrium constant
Reactions	represent?
	How does solubility relate to chemical equilibrium?
	What is an acid and what is a base?
Acid/Base Reactions	What is the role of water in solutions of acids and bases?
	 How are solutions of acids and bases analysed?
	How do we systematically name organic chemical compounds?
	How can hydrocarbons be classified based on their structure and reactivity?
Organic	• What are the products of reactions of hydrocarbons and how do they react?
Chemistry	 How can alcohols be produced and what are their properties?
	What are the properties of organic acids and bases?
	What are the properties and uses of polymers?
Applying	How are the ions present in the environment identified and measured?
Chemical	• How is information about the reactivity and structure of organic compounds obtained?
Ideas	• What are the implications for society of chemical synthesis and design?

DEPTH STUDIES: A depth study is any

type of investigation

that a student

completes

REQUIREMENTS:

- At least one Depth Study in both Preliminary & HSC courses.
- Minimum of **15 hours** in both Preliminary & HSC courses.
- Address Questioning & Predicting and Communicating outcomes.

independently that

allows the further development of one or more concepts found within or inspired by the syllabus.

• Address two additional Working Scientifically outcomes.

• Address at least one Knowledge & Understanding outcome.

Physics Preliminary Course





 How is the motion of an object moving in a straight line described and predicted?
• How is the motion of an object that changes its direction of movement on a plane described?
 How are forces produced between objects and what effects do forces produce?
 How can the motion of objects be explained and analysed?
• How is the motion of objects in a simple system dependent on the interaction between the
objects?
 What are the properties of all waves and wave motion?
How do waves behave?
 What evidence suggests that sound is a mechanical wave?
 What properties can be demonstrated when using the ray model of light?
 How are temperature, thermal energy and particle motion related?
How do charged objects interact with other charged objects and with neutral objects?
• How do the processes of the transfer and the transformation of energy occur in electric
circuits?
 How do magnetised and magnetic objects interact?

HSC Course

Advanced Mechanics	 How can models that are used to explain projectile motion be used to analyse and make predictions? Why do objects mayo in circles?
wiechanics	Why do objects move in circles?
	 How does the force of gravity determine the motion of planets and satellites?
	 What happens to stationary and moving charged particles when they interact with an electric or magnetic field?
Electromagnetism	• Under what circumstances is a force produced on a current-carrying conductor in a magnetic field?
	How are electric and magnetic fields related?
	How has knowledge about the Motor Effect been applied to technological advances?
	What is light?
The Nature of Light	• What evidence supports the classical wave model of light and what predictions can be made using this model?
	• What evidence supports the particle model of light and what are the implications of this evidence for the development of the quantum model of light?
	How does the behaviour of light affect concepts of time, space and matter?
	What evidence is there for the origins of the elements?
	• How is it known that atoms are made up of protons, neutrons and electrons?
From the Universe	• How is it known that classical physics cannot explain the properties of the atom?
to the Atom	 How can the energy of the atomic nucleus be harnessed?
	 How is it known that human understanding of matter is still incomplete?
	The strend with that number standing of matter is still incomplete?

DEPTH STUDIES: A depth

study is any type of investigation that a student completes **independently** that allows the further development of one or more concepts found within or inspired by the syllabus.

REQUIREMENTS:

- At least one Depth Study in both Preliminary & HSC courses.
- Minimum of **15 hours** in both Preliminary & HSC courses.
- Address Questioning & Predicting and Communicating outcomes.
- Address two additional Working Scientifically outcomes.
- Address at least one Knowledge & Understanding outcome.





Preliminary Course	The Stage 6 Investigating Science syllabus begins in 2019. This is a NEW course. It is recommended as a companion course to any of the other Stage 6 Science syllabuses.
Cause and Effect - Observing	 How does observation instigate scientific investigation? What are the benefits and drawbacks of qualitative and quantitative observations? How does primary data provide evidence for further investigation? How does the collection and presentation of primary data affect the outcome of a scientific investigation? How do conclusions drawn from the interpretation of primary data promote further scientific investigation?
Cause and Effect – Inferences and Generalisation	 What inferences can be drawn from observations? How is secondary-sourced data used in practical investigations? How does humans' ability to recognise patterns affect the way they interpret data? How can hypotheses and assumptions be tested? What generalisations and assumptions are made from observed data? What role do peers play in scientific investigation?
Scientific Models	 What is a scientific model? What makes scientific models useful? When should a particular model be used? How can a model be constructed to simplify understanding of a scientific concept?
Theories and Laws	 What are the differences and similarities between scientific theories and laws? What leads to a theory being developed? What leads to the acceptance of a scientific law? How are theories and laws used in science?

HSC Course

	 What initiates an investigation?
Scientific	 What type of methodology best suits a scientific investigation?
Investigations	 How is the integrity of a scientific investigation judged?
	 What is the structure of an investigative report?
	 How does technology enhance and/or limit scientific investigation?
Technologies	• How have developments in technology led to advances in scientific theories and laws that, in
	turn, drive the need for further developments in technology?
	How can a claim be tested?
F t	 What factors can affect the way data can be interpreted, analysed and understood?
Fact or Fallacy?	 What type of evidence is needed to draw valid conclusions?
Tanacy:	• How does the reporting of science influence the general public's understanding of the subject?
	 Can the scientific community and process of peer review find 'the truth'?
	 How do science-related events affect society's view of science?
Science and Society	Why is scientific research regulated?
Society	 How do economic, social and political influences affect scientific research?

DEPTH STUDIES: A depth

study is any type of investigation that a student completes **independently** that allows the further development of one or more concepts found within or inspired by the syllabus.

REQUIREMENTS:

- At least one Depth Study in both Preliminary & HSC courses.
- Minimum of **30 hours** in both Preliminary & HSC courses.
- Address Questioning & Predicting and Communicating outcomes.
- Address two additional Working Scientifically outcomes.
- Address at least one Knowledge & Understanding outcome.

Choosing a Science Subject - Careers in Science

- Biology is a natural science concerned with the study of life and living organisms, including their structure, function, growth, evolution, distribution and taxonomy, and the crucial role they have in our everyday existence.
- Chemistry is the study of the composition, structure, properties and change of matter. Studying chemistry provides the necessary foundation to pursue a wide variety of useful, interesting and rewarding careers.
- **Physics** is the natural science that involves the study of matter and its motion through space and time, along with related concepts such as energy and force.
- Investigating Science promotes active inquiry and explores key concepts, models and phenomena. It is designed to complement the study of the science disciplines by providing additional opportunities for students to investigate and develop an understanding of scientific concepts, their current and future uses, and their impacts on science and society.

	Physics and Engineering			
	Architect			
	Automotive Engineer			
	Biochemical Engineer			
	Biofuel or Biodiesel Technology			
	CAD Technician			
	Civil Engineers			
	Commercial & Industrial Designer			
	Electrical & Electronics Engineer			
	Engineering Manager			
	Environmental Engineer			
	Industrial Engineer			
	Landscape Architect			
	Materials Scientist and Engineer			
	Mechanical Engineer			
Chemistry	Biology			
Chemistry Teacher	Biology Teacher			
Analytical Chemistry	Agricultural Inspector			
Atmospheric Chemistry	Agricultural Technician			
Biochemistry	Athletic Trainer			
Chemical Engineering	Biochemist			
Chemical Information Specialist	Biological Technician			
Consumer Products	Biologist			
Environmental Chemistry	Nutritionist			
Environmental Law	Marine Biologist			
Food Chemistry	Microbiologist			
Forensic Science	Plant Scientist			
Medicine	Veterinarian			
Hazardous Waste Management	Veterinary Technologist & Technician			
Inorganic Chemistry	Zoologist and Wildlife Biologist			

NOTE

- Many of these careers will require the study of more than one science subject.
- All science subjects involve a **minimum of 15 hours Depth Studies** in addition to theory.
- It is recommended that students undertaking Biology, Chemistry and/or Physics also undertake Investigating Science.

HUMAN SOCIETY AND ITS ENVIRONMENT (HSIE)

Ancient History

This course provides students with opportunities to develop and apply their understanding of methods and issues involved in the investigation of the ancient past. Through archaeological and written sources, students study of a range of features, people, places, events and developments of the ancient world.

The Preliminary course provides students with opportunities to develop and apply their understanding of methods and issues involved in the investigation of the ancient past. Students have the opportunity to engage in the study of a range of features, people, places, events and developments of the ancient world.

The HSC course provides students with opportunities to apply their understanding of archaeological and written sources and relevant issues in the investigation of the ancient past. Through a core study, students investigate the cities of Pompeii and Herculaneum, and explore issues relating to reconstruction and conservation of the past. They also study the key features and sources of an ancient society, personality and historical period.

Preliminary Course

- Investigating Ancient History
- Features of Ancient Societies
- Historical Investigation

HSC Course

- Core Study: Cities of Vesuvius Pompeii and Herculaneum
- One 'Ancient Societies' topic
- One 'Personalities in their Times' topic
- One 'Historical Periods' topic

Historical concepts and skills are integrated with the studies undertaken in both the Preliminary and HSC course.

Modern History

This course provides students with opportunities to investigate the role of key features, issues, individuals, groups, events and concepts using methods of historical inquiry. Students engage in a critical analysis of primary and secondary sources.

The Preliminary course provides students with opportunities to develop and apply their understanding of methods and issues involved in the investigation of modern history. Students have the opportunity to engage in the study of a range of people, ideas, movements, events and developments that have shaped the modern world.

The HSC course provides students with opportunities to apply their understanding of sources and relevant issues in the investigation of the modern world. Through a core study, students investigate the nature of power and authority 1919–1946. They also study key features in the history of one nation, one study in peace and conflict and one study of change in the modern world.

Preliminary Course

- Investigating Modern History
- Historical Investigation
- The Shaping of the Modern World

HSC Course

- Core Study: Power and Authority in the Modern World 1919–1946
- One 'National Studies' topic
- One 'Peace and Conflict' topic
- One 'Change in the Modern World' topic

Historical concepts and skills are integrated with the studies undertaken in both the Preliminary and HSC course.



Business Studies

This course provides students with opportunities to develop an understanding of how theoretical and practical aspects of business combine. Students study contemporary business issues through case studies and apply their knowledge to problems encountered in the business environment.

Business activity is a feature of everyone's life. The Business Studies syllabus encompasses the theoretical and practical aspects of business in ways students will encounter throughout their lives. It offers learning from the planning of a small business to the management of operations, marketing, finance and human resource in large businesses.

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. Business Studies fosters intellectual, social and moral development by assisting students to think critically about the role of business and its ethical responsibilities to society.

The Preliminary course is based on a study of three compulsory topics and the completion of a Business Research Task. It investigates and analyses the nature, role and functions of business and the impact of the internal and external environment on businesses.

The HSC course investigates and analyses the business functions and their impact on business success in Australia as well as evaluates the processes and operations in global business.

Preliminary Course

- Nature of business (20%) the role and nature of business
- Business management (40%) the nature and responsibilities of management
- Business planning (40%) establishing and planning a small to medium enterprise

HSC Course

- Operations (25%) strategies for effective operations management
- Marketing (25%) development and implementation of successful marketing strategies
- Finance (25%) financial information in the planning and management of business
- Human resources (25%) human resource management and business performance

Economics

This course provides students with opportunities to learn about the challenges and issues in a contemporary Australian economic context. Students develop their analytical, problem solving and communication skills to make informed judgements about economic issues.

Economics provides understanding for students about many aspects of the economy and its operation that are frequently reported in the media. It investigates issues such as why unemployment or inflation rates change and how these changes will impact on individuals in society. Economics develops students' knowledge and understanding of the operation of the global and Australian economy. It develops the analytical, problem-solving and communication skills of students. There is a strong emphasis on the problems and issues in a contemporary Australian economic context within the course.

The Preliminary course examines the economic behaviour of consumers, businesses and governments with an emphasis on the operation of markets.

The HSC course investigates the impact of the global economy on the Australian economy and the link between economic issues and the management of an economy, with specific reference to the Australian economy, and a case study of one other economy.

Preliminary Course

- Introduction to Economics the nature of economics and the operation of an economy
- Consumers and Business the role of consumers and business in the economy
- Markets the role of markets, demand, supply and competition
- Labour Markets the workforce and role of labour in the economy
- Financial Markets the financial market in Australia including the share market
- Government in the Economy the role of government in the Australian economy.

HSC Course

- The Global Economy Features of the global economy and globalisation
- Australia's Place in the Global Economy Australia's trade and finance
- Economic Issues issues including growth, unemployment, inflation, wealth and management.
- Economic Policies and Management the range of policies to manage the economy.

Legal Studies

This course provides students with opportunities to develop their knowledge and understanding of the nature and functions of law and law-making, the development of Australian and international legal systems, the Australian constitution and law reform. Students investigate the key areas of law, justice and human rights through a variety of focus studies which consider how changes in societies influence law reform.

Legal Studies provides an understanding of the legal system, its principles, structures, institutions and processes. Students enjoy this subject because it gives them the confidence to question and evaluate the legal and democratic structures in which they live. The subject provides a flexible learning structure in lessons by encouraging diverse opinions. It provides an excellent foundation for further education and employment because students acquire skills in analysis, research and the development of coherent arguments.

The Preliminary course develops students' knowledge and understanding of the nature and functions of law and law-making, the development of Australian and international legal systems, the Australian constitution and law reform. It examines an individual's rights and responsibilities, how disputes are resolved and examines a contemporary issue concerning the individual and technology. Students have the opportunity to investigate issues that illustrate how the law operates in practice. This is achieved by investigating, analysing and synthesising legal information and investigating legal issues from a variety of perspectives.

The HSC course investigates the key areas of law, justice and human rights through a variety of focus studies which consider how changes in societies influence law reform.

Preliminary Course

- Part I The Legal System
- Part II The Individual and the Law
- Part III The Law in Practice

HSC Course

- Core Part I: Crime
- Core Part II: Human Rights
- Part III: Two options are chosen from: Consumers, Global Environments and Protection, Family, Indigenous peoples, Shelter, Workplace and World Order.



Supreme Court of New South Wales



Geography

This course provides students with opportunities to investigate contemporary geographical issues to explore why spatial and ecological differences exist, the importance of effective management and actions that can be taken to shape future society. Through fieldwork and a variety of case studies about biophysical and human geography issues, students develop their knowledge and understanding about the spatial and ecological dimensions of geography.

The Preliminary course investigates biophysical and human geography and develops students' knowledge and understanding about the spatial and ecological dimensions of geography. Enquiry methodologies are used to investigate the unique characteristics of our world through fieldwork, geographical skills and the study of contemporary geographical issues.

The HSC course enables students to appreciate geographical perspectives about the contemporary world. There are specific studies about biophysical and human processes, interactions and trends. Fieldwork and a variety of case studies combine with an assessment of the geographers' contribution to understanding our environment and demonstrates the relevance of geographical study.

Preliminary Course

- Biophysical Interactions how biophysical processes contribute to sustainable management.
- Global Challenges geographical study of issues at a global scale.
- Senior Geography Project a geographical study of student's own choosing.

HSC Course

- Ecosystems at Risk the functioning of ecosystems, their management and protection.
- Urban Places study of cities and urban dynamics.
- People and Economic Activity geographic study of economic activity in a local and global context.

Key concepts incorporated across all topics: change, environment, sustainability, spatial and ecological dimensions, interaction, technology, management and cultural integration.

Students complete a senior geography project (SGP) in the Preliminary course and should undertake 12 hours of fieldwork in both the Preliminary and HSC courses.

CREATIVE AND PERFORMING ARTS (CAPA)

Music

2 Unit Board Developed ATAR Course



SUBJECT DESCRIPTION



In the Preliminary course, experiences revolve around Performance, Composition, Musicology and Aural. In the HSC Course these experiences are used and further developed. It is not essential that you can read music, but it is an advantage if you can already sing or play an instrument.

The subject core consists of the knowledge and understanding of musical concepts and skills involved through the study of contexts (style, period and genre). Three topics will be studied in the Preliminary course and a further three subjects in the HSC Course. There is a list of 22 topics to choose from, ranging from medieval music to jazz and rock.



ASSESSMENT REQUIREMENTS

When subject is divided into 4 areas of assessment: Performance, Composition, Aural and Musicology. Each area has equal weighting (25%) in assessment in the Preliminary Course.

In the HSC Course assessment can be tailored to individual requirements. Below is a brief description of these areas.

- Performance: To participate in any form of practical music making. Performance skills should be developed by playing in a number of styles, media and genres.
- Musicology: Refers to the study of musical styles and genres from a number of perspectives. These include historical, sociological, notational and analytical.
- Aural: Refers to the ability to discriminate sounds and to make judgements about their use. It is an integral part of all activities associated with performances, composition and musicology.
- Composition: Refers to the organisation of sounds. We will have a state-of-the-art computer technology workstation that aids in this creative process.

In the HSC Course, students choose 3 electives from performance, musicology, and composition. These can be chosen in any combination (e.g. 2 performance electives and 1 composition elective, 1 musicology elective and 2 composition electives, 3 performance electives etc)



CAREER POSSIBILITIES

Very broad - ranging from Musician, Sound Engineer, Teacher, Composer, Radio Music Programmer, Director, Public Relations and Publicity Officer, Film and Television Editor, Recreation Officer, DJ, Music or Film Critic, Child Care Worker, Music Therapist.



Cost: \$20

Visual Arts

2 Unit – Board Developed ATAR Course (50% Practical, 50% Theory)

Visual Arts Stage 6 is offered as a course for students with a variety of abilities, interests and needs. The course caters for the full range of students through learning opportunities based on a flexible content structure consisting of practice (art making, art criticism and art history), the conceptual framework (artist, artwork, world, audience) and the frames (subjective, cultural, structural and postmodern). These aspects of content can be engaged more broadly and deeply as students develop increasing autonomy in their practical and theoretical understanding, knowledge and skills.

The Preliminary course provides students with a broadly based experience, enabling them to develop an understanding of the Visual Arts. The HSC course allows opportunities for students to build on their understandings through deeper and increasingly more independent investigations in art making and critical and historical studies.

While the course builds on Visual Art in Stages 4 and 5, it also <u>caters for students with more limited</u> <u>experience in Visual Arts.</u>

In the Preliminary course teachers will assist students with their selection of content (e.g. a focus on artists and their works, consideration of the audience and artworks, the cultural values or subjective values of art). This approach provides the foundation for more interpretive ways of approaching content in the HSC course and building greater sophisticating and subtle understanding (e.g. a focus on how each of the frames affects understanding of practice, consideration of the role of the postmodern frame on artists and artworks).

Preliminary Course learning opportunities focus on:

- The nature of practice in art making, art criticism and art history through different investigations
- The role and function of artists, artworks, the world and audiences in the art world
- The different ways the visual arts may be interpreted and how students might develop their own points of view
- How students may develop meaning, focus and interest in their work
- Building understandings over time through various investigations and working in different forms.

HSC Course learning opportunities focus on:

- Students developing their own practice of art making, art criticism, and art history
- Students developing their own informed points of view in increasingly independent ways and using different interpretive frameworks in their investigations
- Students learning about the relationships between artists, artworks, the world and audiences within the art world
- Students further developing meaning and focus in their work.

Each student produces a Body of Work that contributes to 50% of the HSC course. Students complete a 1½ hour exam and a series of case studies (a minimum of FIVE) should be undertaken with students in the HSC course. Case studies should be 4–10 hours in duration which all contribute to 50% of the HSC course.

Students are expected to undertake research, homework and practical tasks out of school hours. Students who study this course will need to develop good research and essay writing skills. Students will complete a range of assessment tasks in this course including practical assessments, research activities, oral presentations and examinations.

Works developed for assessment in PVDI are not to be used either in full or in part for assessment in the Visual Art course.

Cost:

Preliminary \$45.00 which covers the use of materials and VAPD

HSC

\$45.00 which covers the use of some materials and VAPD Students may need to purchase extra materials for their BOW which can be purchased from the school or externally.

Careers

You would study Visual Arts to become an illustrator, art curator, art teacher, gallery owner, artist, police sketch artist, photographer, graphic designer, web designer, film maker, camera operator, cinematographer, publicist, photo journalist, television editor, production manager, visual communicator, wildlife photographer, advertising executive, software gamer or fashion photographer.



PHYSICAL EDUCATION (PE)

Personal Development Health and Physical Education (PDHPE)

Personal Development, Health and Physical Education (PDHPE) is an integrated area of study that provides for the intellectual, social, emotional, physical and spiritual development of students.

It involves students learning about and practising ways of maintaining active, healthy lifestyles and improving their health status. It is also concerned with social and scientific understandings about movement, which lead to enhanced movement potential and appreciation of movement in their lives.



Young people are growing up in a world of rapid change. Expanding technologies, new social structures, shifting community values and emerging environmental issues are complex interrelated factors that affect the way individuals live their lives. At a time when there is tremendous opportunity for good health there are numerous conflicting influences on lifestyle.

TECHNOLOGICAL AND APPLIED STUDIES (TAS)

Design and Technology

Design and Technology has a unique focus on creativity, innovation and the successful implementation of innovative ideas. Students will investigate the importance of evaluation, 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.

Preliminary Course Structure

The Preliminary course will involve a minimum of two design projects. The projects will develop skills and knowledge to be further developed in the HSC course. Each project will place emphasis on the development of different skills and knowledge in designing and producing. Students should develop their knowledge of the activities within industrial and commercial settings which support design and technology and relate these processes to the processes used in their own designing and producing. They will develop skills in using the following materials:

- Timber
- Metals
- Plastics
- Electronics
- Computer Aided Design software

Design projects must involve the design, production and evaluation of a product, system or environment that includes evidence of design processes recorded in a design folio, which may be in a variety of different forms. Students should be encouraged to communicate their design ideas using a range of appropriate media. Some design projects completed in the past have included iPod docks and desk organisers.

HSC Course Structure

The HSC course includes the development and realisation of the major design project and a case study of an innovation and emerging technologies. The major design project involves students selecting and applying appropriate design, production and evaluation skills to a product, system or environment which satisfies an identified need or opportunity. Students have developed a wide range of skills and knowledge in the Preliminary course and in the HSC course are able to select and use those skills and knowledge appropriate to their selected project. The students relate the techniques and technologies used in industrial and commercial settings to those used in the development of their major design project. Major projects completed by students in the past have included:

- graphic novels
- car stereo systems
- landscaping
- architecture
- furniture and product design

This course attracts a course fee of \$120 for Prelim and HSC.

Course Requirements: Students studying Design and Technology are required to wear enclosed leather/suede footwear.



Industrial Technology – Timber

What is this course about?

Much of Australia's economic, social and cultural development can be related to the capacity of our industries to develop and use technology in the manufacture of goods and services. The effective and responsible application of industrial technologies has a direct bearing upon the quality of our lives. For this reason, the study of industrial technology and its role in industry is relevant and purposeful for many students.

Industrial Technology consists of project work and Industry Study that develop a broad range of skills and knowledge related to a chosen industry focus area and an introduction to industrial processes and practices.

Industrial Technology is offered in the following three areas as separate classes: 1. Timber 2. Multimedia

Please Note: Students may only study ONE of these courses.

What will be studied?

The following sections are taught in relation to the relevant focus area:

- * Industry Study
- * Design and Management
- * Workplace Communication and Production
- * Industry Specific Content

Do students need anything special to do this course?

A subject contribution is required each year. The materials necessary for the Major Project are at the students' own expense.

What do students have to do to get the HSC in this course?

Students must satisfactorily complete all course, assessment and examination requirements. Students must present a completed practical project and design folio for marking by external examiners. The one and a half hours written paper is worth 40 marks; the major project is worth 60 marks.

Who should choose to study this course?

This course has been designed for all students including students who wish to pursue a career in Industry. Studying this course will help develop in students, knowledge, skills and attitudes of value to all employers. Students who enjoy a practical 'hands-on' approach to study will find this course very rewarding.

Where can this course lead?

Career options related to Industrial Technology - Timber include: * any associated trade * building industry * project management This course attracts a course fee of \$100 for Prelim and HSC.

Course Requirement: Students studying IT - Timber are required to wear enclosed leather/suede shoes.



Software Design and Development

2 Unit – Board Developed ATAR Course

Software Design and Development (SDD) focuses on the development of computer based solutions and computer programs that require the design of computer software.

Students interested in the fields of software development and computer science will find this subject of value. The subject is not only for those who seek further study or careers in this field, but also for those who wish to understand the underlying principles of software design and development.

Students develop skills in programming using a number of programming languages. These are ActionScript, Prolog and Java.

During the **Preliminary course** students learn about concepts and issues in the development of



software, social and ethical issues, hardware and software development, (software developments cycle) and work as part of a team to develop a software solution.

During the **HSC course** students work through the same issues and processes as the Preliminary course at a more complex level. Both the Preliminary course and the HSC course culminate in the development of a software package.

The course requires that students complete a major group software design project in year 11 and a major individual project in year 12. Some projects created by students in the past are – games (driving, flying, survival, platformers) and real life simulators.

This course attracts a course fee of \$20 for Prelim and HSC.

Course Requirement: Students studying IT - Multimedia are required to wear enclosed leather/suede shoes



COLLEGE PLUS only

Content Endorsed Courses (CEC)

Content Endorsed Courses have syllabuses endorsed by NESA to cater for areas of special interest not covered in NESA Developed Courses. They are a form of NESA Endorsed Course.

There is no external examination for NESA Endorsed Courses. Assessment is school based.

All NESA Endorsed Courses count towards the Higher School Certificate and appear on the student's Record of Achievement. However, NESA Endorsed Courses do not count in the calculation of the Australian Tertiary Admission Rank (ATAR).

NESA Endorsed Courses may be studied as 1 or 2 units and as Preliminary and/or HSC courses.

English Studies College Plus

2 Unit

In the English Studies College Plus course, students explore the ideas, values, language forms, features and structures of texts in a range of personal, social, cultural and workplace contexts. They respond to and compose texts to extend experience and understanding, access information and assess its reliability, and synthesise the knowledge gained from a range of sources for a variety of purposes.

In this course, students will consolidate their English literacy skills to enhance their personal, social, educational and vocational lives.

This course is designed to meet the specific needs of students who wish to refine their skills and knowledge in English and consolidate their literacy skills. It is a course for students who are seeking an alternative to the English Standard course and who intend to proceed from school directly into employment or vocational training.

Mathematics – Standard 1

2 Unit

This course is designed to review and reinforce basic mathematical skills and techniques in an applied context. It involves students in a more hands on, practical application of mathematics and project based modules. Assessment is largely project based assignments and students do not complete an HSC Examination in this course.

Sport, Lifestyle and Recreation Studies

2 Unit - Content Endorsed Non ATAR Course

Students will learn about the importance of a healthy lifestyle and recognise the need to be active, responsible and informed decision makers.

This course encourages students to continue to develop their knowledge, skills and understanding of the role of sport, a healthy lifestyle and recreation in everyday life.

The course aims to:

- Develop, in students, an awareness of social and community values in the areas of sport, lifestyle and recreation
- promote an understanding of the requirements for healthy living
- develop a deeper understanding of the interaction between society, sport, recreation and fitness
- identify how sport influences and affects various groups and sections of our society
- provide students with a greater understanding of their physical and sporting potential



Computing Applications 2022

2 Unit - Content Endorsed Course

During this course students will develop a wide range of computer technology skills to prepare them for a variety of workplace environments. Throughout the course students will explore the changing nature and impact of technology on themselves, society and how it will affect the world's future.



Students will have the opportunity to apply their learnt skills individual projects such as Gaming, Drone Life, Fitness Apps, Social Media, Ripping Raps and more.

Some of the modules will include Hardware and Software skills, Artificial intelligence, Graphics, Spreadsheets, Multimedia, Databases and Communication.

Software Packages

Students will be explicitly taught how to use and apply the following software packages: Microsoft Office (Word, Excel, PowerPoint, Publisher), Adobe Suite (Illustrator, Animate), Canva and more.

There are no prerequisites for the course.

Key Competencies

- -Collecting, analyzing and organising information
- -Communicating Ideas and Information
- -Using Technology
- -Planning and organising activities
- -Working with others and in a team
- -Using Mathematical Ideas and techniques

-Solving Problems

Who should study this course?

Students who:

- want to gain a wide range of entry level computer skills.
- are not studying Software Design Development (SDD) and Industrial Technology (Multimedia).
- -Students who are following a non-ATAR pathway.

Please note that you cannot study Computing Applications in conjunction with Software Design and Development or Information Technology (VET).

This course will be available in 2022.

Work Studies

What is this course about?

The Work Studies syllabus is designed to assist students in their transition from school to work. The course enhances individual growth in persistence, resilience and their personal best by setting personal goals, career goals and monitoring their commitment to their class, school, peers, community and the workplace.



The course provides a general skill set for many workplace environments

Students will have the opportunity to practise a variety of workshop/trade skills using a variety of hand tools and machinery while working on the major project.

The course also educates our young men about: their rights and responsibilities as an employee: wages; taxation; loans; insurance; working with others; workplace safety; short courses, formal trade qualification and more.

The course assists students to prepare for such a future by allowing students to acquire general workrelated knowledge, skills and attitudes, transferable across a number of occupational areas. Work Studies provides opportunities for students to explore several areas of vocational interest.

The course is practical, allowing students to develop a range of skills and attitudes in actual workplace contexts. Students will undertake workplace learning as well as in class activities, to ensure they are fully prepared for the world of work and/or further training options.

Modules include

Career Planning, Job Seeking and Interviews, Workplace Communication and, Interpersonal Skills, Equity Issues and Work, Work and Lifestyle, Workplace Issues, Self-Employment,, Investigating an Enterprise, Social Issues and Work, Occupational Health and Safety and First Aid in the Workplace, Work Project, Work Placement and Volunteering, Resumes.

What do students have to do to get the Higher School Certificate in this course?

Students must satisfactorily complete all course and assessment requirements. Students must complete all assessment tasks and attend school regularly.

Who should choose to study this course?

This course is for students who know that they want to follow a vocational pathway, that is, work towards entering a trade course, TAFE or other college and working full-time after completing school. This 2 Unit course does not count towards an ATAR.

Where can this course lead?

This course provides students with the opportunity to learn more about workplace settings and employment opportunities making them better prepared to choose their career area, apply for jobs and perform well at interviews. During the course students are encourage to complete work experience which often leads to successful full-time employment.

ATAR (One course only) & COLLEGE PLUS Vocational Education and Training (VET)

VET Curriculum Frameworks

Vocational Education courses have been specifically designed to give students skills which will give them an advantage when seeking employment.

At Liverpool Boys High the following Vocational Education courses are offered delivered at this school: Hospitality, Information & Digital Technology and Retail Services.

<u>Note</u>: Vocational Education courses are competency or skills based on <u>Australian</u> Industry standard. Each student has a log book and when the required standard has been reached it is signed by the teacher. The standards are Australian wide, which means the students can use the log books for employment anywhere in Australia.

All students who complete units within the course will receive a Statement of Attainment. Students who complete <u>all</u> required competencies will receive a TAFE Certificate I credential and credit towards a Certificate II.

Introductory Notes Vocational Education and Training (VET) Courses:

- VET courses are designed to enable students to acquire a range of technical, personal and organisational skills valued both within and beyond the work place.
- Students will acquire underpinning skills and knowledge related to functional areas within any industry context that can be used in making informed career choices.
- Students receive a nationally recognised Australian Qualifications Framework (AQF) accreditation on successful completion of a course.
- Students can include one VET course in their ATAR.

Assessment

- Competency Based Assessment
- VET courses are competency based. This requires students to develop the competencies, skills and knowledge described by each unit of competency.
- Students must demonstrate to a qualified assessor that they can effectively carry out the various tasks to the standard required in the appropriate industry, to be assessed as competent.

External Based Assessment

- The Higher School Certificate (HSC) examination for VET courses (240 hours) will involve a written examination made up of multiple-choice items, short answers and extended response items.
- The questions will be drawn from the examinable units of competency identified in the HSC examination specifications in Part A of the NESA syllabus.
- The examination is independent of the competency-based assessment undertaken during the course and has no impact on the eligibility of a student to receive AQF qualifications.
- Students are automatically entered into the HSC Examination but have the option of electing not to sit the examination.

Work Placement

- Students in Industry Curriculum Framework courses must complete work placement of up to 70 hours for a 2 unit x 2 year course (240 hours). Additional hours are required for any extension courses at the rate of 35 hours for 120 hours of HSC credit.
- A student will NOT receive their HSC in a VET subject unless they complete all 70 hours of work placement.

School Based Part-Time Traineeships & Apprenticeships

SBATS are more than part time jobs, they're a great way to organise a career you want while you study for the HSC.

You can do a school based apprenticeship in just about any trade. The course takes two years to complete while you are in college 1 and 2. Once you have met all the training requirements you can continue as a second year apprentice after the HSC.

Both school based apprenticeships and traineeships form part of your HSC. Essentially this involves being out of school two days a week over two years – one day attending TAFE or other registered training provider and the other day working for an employer and getting paid.

Key Benefits:

- You get an early start in your chosen career
- Nationally recognised qualification
- On and Off the Job Training
- Gain skills, Confidence and Experience
- Earn Money

Steps to get an SBAT

- Choose your industry area
- Go and see the Careers Adviser
- Fill in an Expression of Interest (EOI)
- Attend an SBAT Information Session
- Find an Employer

The time to set up an SBAT is in year 10. It's too late to set up in college.

To get the process of getting an SBAT started and for more information see the Careers Adviser for interview.

Vocational Education and Training (VET) Courses

Vocational Education and Training (VET) courses are offered as part of the Higher School Certificate (HSC) or Record of School Achievement (RoSA). VET courses are designed to deliver workplace-specific skills and knowledge and cover a wide range of careers and industries. VET courses for secondary students are developed by the NSW Educational Standards Authority (NESA) and are based on national training packages.

VET courses allow students to gain both HSC or RoSA qualifications and a national qualification or a statement of attainment recognised throughout Australian as part of the Australian Qualification Framework (AQF). These qualifications are widely recognised by industry, employers and tertiary training providers and Universities and will assist students to move to various education and training sectors and employment.

Public Schools NSW, Ultimo is accredited as a Registered Training Organisation (RTO) to deliver and assess VET qualifications to secondary students.

Board Developed VET courses are classified as Category B subjects and ONLY ONE can contribute to the calculation of the Australian Tertiary Admission Rank (ATAR). These courses have an optional HSC examination. Students wishing to include a VET course in the ATAR calculation must sit the HSC examination after they have completed a minimum of 4 Preliminary and/or HSC units.

Board Developed VET courses have specified workplace requirement and include 70 hours of industry specific mandatory work placement or simulated workplace hours as specified by NESA.

Board Endorsed VET Courses do count towards the HSC or RoSA but do not have HSC examinations therefore can't count in the calculations of the ATAR. Board Endorsed VET Courses have mandatory or recommended industry specific work placement.

Assessment in all VET courses is competency based. The student is assessed on what they can do (the skills) and what they know (the knowledge) that will equip them in the workplace. Students who have successfully achieved competency will have the skills and knowledge to complete workplace activities in a range of different situations and environments, to an industry standard of performance expected in the workplace.

Competency-based assessment materials are designed to ensure each learner has achieved all the outcomes (skills and knowledge) to the level of the qualification. Competency-based training is based on performance standards that have been set by industry.

Students will receive documentation showing any competencies achieved for the VET course undertaken.

Due to the specific requirements of a VET course it is recommended students speak to the VET Coordinator or Careers Adviser before choosing the course to ensure they are fully aware of the requirements and that the course is suitable for their individual needs, knowledge and skills.

External Delivered Vocational Education and Training (EVET)

You have an opportunity to study a TAFE course while at school as long as you're capable and willing to do the course and it relates to your future career and study plans.

The opportunity on offer is a Vocational Education and Training (VET) course which can be undertaken in addition to 3 subjects you nominate to do for the HSC in College 1.

Courses run from one to two years and involve one afternoon a week at the local TAFE College. Most classes run from 1:30pm to 5:30pm. If accepted into a VET course the school will give you an early pass out if necessary. Travel by bus or train to the local TAFE College will be at your own expense and you will be expected to attend class every week.

You have to get a Student Identifier (USI) number from the computer and provide the number to TAFE.

- See below a list of possible course offerings in 2021: Animal Studies Automotive Light Vehicle Automotive Panel beating Automotive Painting Aviation Flight Attendant Business Services Community Services Aged Care Community Services Youth Work Computer Aided Design Construction Carpentry Electro-technology Career Start Fashion and Textiles Financial Services
- Floristry Hairdressing Horticulture Landscaping Laboratory Skills Media Imaging and Video Media Sound Metals and Engineering Plumbing Retail Sport Fitness and Recreation Tourism Transport and Logistics

If you're interested in doing any of the above courses you need to discuss your choice with the teacher who conducts your subject selection interview. Once you start a VET course you are expected to complete the course.

As the careers adviser is responsible to lodge your EVET application on the computer and have your paper application returned you will also have to convince him you are committed to complete the course.

EVET courses are limited in number and other school are involved so you can only choose one course. If your application is successful you will be notified through your careers adviser by the end of the year and told when and where to go for your fist class term 1 next year. You will also be told if you are unsuccessful.

If you want to do an EVET course see the careers adviser for interview.

Public Schools NSW, Ultimo Registered Training Organisation 90072 VOCATIONAL EDUCATION and TRAINING



2022 HOSPITALITY FOOD and BEVERAGE COURSE DESCRIPTION

This may change due to Training Package and NSW Education Standards Authority (NESA) updates. Notification of variations will be made in due time.

Course: Hospitality - Food and Beverage Board Developed Course

Education

2 or 4 Preliminary and/or HSC units in total Category B for Australian Tertiary Admission Rank (ATAR)

This course is accredited for the HSC and provides students with the opportunity to obtain nationally recognised vocational training. This is known as dual accreditation.

SIT20316 Certificate II in Hospitality		Electives	
Based on SIT Tourism, Travel and Hospitality training package		SITXCOM001	Source and present information
(version 1.2)		SITHFAB005	Prepare and serve espresso coffee
		SITHFAB007	Serve food and beverage
Units of Competency		SITXFSA002	Participate in safe food handling practices
Core		BSBSUS201	Participate in environmentally sustainable work
BSBWOR203	Work effectively with others		practices
SITHIND002	Source and use information on the hospitality	SITHFAB004	Prepare and serve non-alcoholic beverages
	industry	SITXFSA001	Use hygienic practices for food safety
SITHIND003	Use hospitality skills effectively	SITHCCC002	Prepare and present simple dishes
SITXCCS003	Interact with customers	SITHCCC003	Prepare and present sandwiches
SITXCOM002	Show Social and Cultural sensitivity		
SITXWHS001	Participate in safe work practices		
	· · ·		

Students may apply for Recognition of Prior Learning and /or credit transfer provided suitable evidence is submitted.

Recommended Entry Requirements

Students selecting this course should be interested in working in a hospitality environment preparing and serving food and beverages to customers. They should be able to lift and carry equipment, use hand held and larger commercial kitchen equipment. Students may be required to participate in after-hours school events and functions. There will be out of class homework, research activities and assignments.

Examples of occupations in the hospitality industry:

- Café attendant
- Barista
- Kitchen hand
- Food and beverage attendant

Mandatory HSC Course Requirements Students must complete 240 indicative hours of course work and a minimum of 70 hours work placement. Students who do not meet these requirements will be 'N' determined as required by NESA.

External Assessment (optional HSC examination for ATAR purposes)

The Higher School Certificate examination for Hospitality Food and Beverage is only available after completion of 240 indicative hours and will involve a written examination consisting of multiple-choice items, short answers and extended response items. The examination is independent of the competency-based assessment undertaken during the course and has no impact on the eligibility of a student to receive a vocational qualification.

Competency-Based Assessment

Students in this course work to develop the competencies, skills and knowledge described by each unit of competency listed above. To be assessed as competent a student must demonstrate to a qualified assessor the competency requirements for performance and knowledge of the units/s of competency.

Appeals and Complaints

Students may lodge a complaint or an appeal about a decision (including assessment decisions) through the VET teacher.

Course Costs: Resources \$ 30.00	Consumables \$90.00	Other \$0.00	
Refund Arrangements on a pro-rata basis	Please see your VET teacher to	o enquire about financial assistance	
A school-based traineeship and apprenticeship are available in this course, for more information: http://www.sbatinnsw.info/			
Exclusions - VET course exclusions can be checked on the NESA website at http://educationstandards.nsw.edu.au/wps/portal/nesa/11-			

12/stage-6-learning-areas/vet/course-exclusions

Public Schools NSW, Ultimo Registered Training Organisation 90072 VOCATIONAL EDUCATION and TRAINING					
2022 INFORMATION and DIGITAL TECHNOLOGY COURSE DESCRIPTION					
NSW GOVERNMENT	This course will change due to Training Package and NSW Education Standards Authority (NESA) undates				
	Course: Information and Digital Technology 2 or 4 Preliminary and/or HSC units in total Board Developed Course Category B for Australian Tertiary Admission Rank (ATAR)				
	This industry curriculum framework course is accredited for the HSC and provides students with the opportunity to obtain nationally recognised vocational training. This is known as dual accreditation.				
ICT3011 Units of Based o <u>Core</u>	practices Work and communicate effectively in an ICT environment Create user documentation Create a simple mark-up language Install and optimise operating system software	Stream ICTICT20 ICTICT30 ICTWEB3 ICTWEB3 <u>Elective</u> ICTWEB2	08 U aj 303 P 302 B pi 201 U	perate application software packages se advanced features of computer oplications roduce digital images for the web uild simple websites using commercial rograms se social media tools for collaboration and ngagement	
Students may apply for Recognition of Prior Learning and /or Credit Transfer provided suitable evidence is submitted. Information & Digital Technology Specialisation Course 120hours over 1 year - 2 HSC units To receive the full qualification ICT30115 Certificate III in Information, Digital Media and Technology, students must be deemed competent in all units from the Preliminary and HSC course listed above and the units in the specialisation course outlined below. 120hours over 1 year - 2 HSC units Units of Competency ICTICT307 Customise packaged software applications for clients ICTICT304 Implement system software changes ICTICT301 Review and maintain a website ICTICT301 Create User Documentation ICTICT3030 Care for computer hardware					
Recommended Entry Requirements Students selecting this course should be interested in working in the information technology industry. Students should be creative, cooperative and able to work in teams. They should be able to use a personal computer and lift and carry small equipment. Students should be interested in working with operating system software and have an interest in learning the various methods to troubleshoot problems. There will be out of class homework, research activities and assignments.					
Pathways	s to Industry Working in the information technol	ogy industr		N.	
	 Working in the information technology industry involves: designing web pages supporting computer users networking computers communicating with clients finding solutions to software problems 				
Example	s of occupations in the Information Technology industry				
	vice technician • Multimedia develop o desk office • On-line service sup			Technical support officerWeb designer	
Mandatory Course Requirements Students must complete a minimum of 70 hours work placement. Students who do not meet these requirements will be `N` determined as required by NESA. External Assessment (optional HSC examination for ATAR purposes) The Higher School Certificate examination for Information and Digital Technology is only available after completion of 240 indicative hours and will involve a written examination consisting of multiple-choice items, short answers and extended response items. The examination is independent of the competency- based assessment undertaken during the course and has no impact on the eligibility of a student to receive a vocational qualification.					
Competency-Based Assessment Students in this course work to develop the competencies, skills and knowledge described by each unit of competency listed above. To be assessed as competent a student must demonstrate to a qualified assessor they can effectively carry out competency. When a student achieves a unit of competency it is signed off by the assessor. Appeals and Complaints Students may lodge an appeal or a compliant about an assessment decision or other decisions through the VET teacher.					
Course Costs: Resources \$20.00Consumables \$10.00Other \$ 0.00Refund Arrangements on a pro-rata basisPlease see your VET teacher to enquire about financial assistance					
A school-based traineeship is available in this course, for more information: <u>http://www.sbatinnsw.info/</u>					
Exclusions - VET course exclusions can be checked on the NESA website at http://educationstandards.nsw.edu.au/wps/portal/nesa/11-12/stage-6-learning-areas/vet/course-exclusions					

Public Schools NSW, Ultimo Registered Training Organisation 90072					
VOCATIONAL EDUCATION and TRAINING 2021 RETAIL SERVICES COURSE DESCRIPTION					
This may change due to Training Package and NSW Education Standards Authority (NESA) updates. Notification of variations will be made in due time.					
Course: Retail Services	2 or 4 Preliminary and/or HSC units in total				
Board Developed Course	Category B for Australian Tertiary Admission Rank (ATAR)				
This course is accredited for the HSC and provides students with the opportunity to obtain nationally recognised vocational training. This is known as dual accreditation.					
SIR30216 Certificate III in Retail					
Based on SIR Retail Services Training Package Release 3.0	Electives				
Units of CompetencyCoreSIRXCEG001Engage the customerSIRXCEG002Assist with customer difficultiesSIRXCEG003Build customer relationships and loyaltySIRXCOM002Work effectively in a teamSIRXIND001Work effectively in a service environmentSIRXRSK001Identify and respond to security risksSIRXSLS001Sell to retail customerSIRXWHS002Contribute to workplace health and safety	SIRXIND002 Organise and maintain the store environment SIRRINV002 Control stock SIRRMER001 Produce visual merchandise displays SIRXPDK001 Advise on products and services SIRRINV001 Receive and handle retail stock Additional for HSC requirements SIRXSLS002 Follow point of sale procedures				
Students may apply for Recognition of Prior Learning and /or Credi	t Transfer provided suitable evidence is submitted				
Recommended Entry Requirements Students selecting this course should be interested in working in the retail service industry. They should be able to lift and carry stock items, have the ability to work as a member of a team, and have good communication skills. There will be out of class homework, research activities and assignments. Example of occupations in the Retail Industry buyer sales person customer service assistant visual merchandise stock controller merchandise					
Mandatory HSC Course Requirements Students must complete 240 indicative hours of course work and a minimum of 70 hours work placement. Students who do not meet these requirements will be `N` determined as required by NESA. External Assessment (optional HSC examination for ATAR purposes) The Higher School Certificate examination for Retail Services is only available after completion of 240 indicative hours and will involve a written examination consisting of multiple-choice items, short answers and extended response items. The examination is independent of the competency-based assessment undertaken during the course and has no impact on the eligibility of a student to receive a vocational qualification. Competency-Based Assessment Students in this course work to develop the competencies, skills and knowledge described by each unit of competency listed above. To be assessed as competent a student must demonstrate to a qualified assessor the competency requirements for performance and knowledge of the units/s of competency.					
Appeals and Complaints Students may lodge a complaint or an appeal about a decision (including assessment decisions) through the VET teacher.					
Course Costs: Resources \$20.00 Consumables \$10.00 Other \$0.00					
Refund Arrangements on a pro-rata basis Please see your VET teacher to enquire about financial assistance					
A school-based traineeship is available in this course, for more information: http://www.sbatinnsw.info/					
Exclusions - VET course exclusions can be checked on the NESA website at http://educationstandards.nsw.edu.au/wps/portal/nesa/11-12/stage-6-learning-areas/vet/course-exclusions					