PERTH MODERN SCHOOL

Exceptional schooling. Exceptional students.

CURRICULUM HANDBOOK

2024 EDITION

SENIOR YEARS
YEARS 10, 11 AND 12

Students and parents are advised to refer to the most recent handbooks or websites from:

School Curriculum and Standards Authority

Tertiary Institutions Services Centre, Western Australia

Department of Training and Workforce Development

PUBLICATION DATE: May 2023

PUBLISHED BY: Perth Modern School
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INTRODUCTION

THE SENIOR YEARS CURRICULUM (YEARS 10–12)

Perth Modern School delivers programs to meet the needs of students who have been identified as having the potential to achieve academic excellence.

The Senior Years at Perth Modern School encompasses Years 10–12 and as such, the courses we offer provide opportunities for successful outcomes for students so they may reach their post-school goals. Perth Modern School has established a learning environment that is unique and advantageous to gifted learners. Our students can be confident they are involved in the highest quality learning and teaching environment with a cohort of like-minded peers. Students have opportunities to develop global understandings through access to innovative guest speakers, a strong and relevant Advocacy Program as well as extensive international tours.

Our Advocacy Program contributes to the wellbeing and well-rounded growth and support of our students through emphasis on social and emotional wellbeing. As part of the Advocacy Program, the school embeds the Institute of Positive Education Schools Program. This program gives tools and activities on how to build resilience, wellness strategies and positive relationships. All students will participate in Advocacy activities as well as presentations and information sessions from guest speakers. Advocacy adds to the curriculum through developing effective organisational skills, interpersonal relationships and an appreciation of the value of community service and 'giving back'. School spirit and connection will be advanced through participation in House activities and whole school events.

Focus Days—Every year group has a Focus Day that is relevant to their educational journey. In the past our Senior Years Focus Days have included a positive relationship program, wellness activities and positive study routines and habits. We tailor make the Focus Day Program to suit the needs of each cohort. The purpose is to embrace the Perth Modern School Thriving Minds wellbeing model through engaging with guest speakers and wellness activities. Thriving Minds is a whole school initiative that embraces the PERMA-H model of wellbeing. Positive Emotions, Engagement, Relationships, Meaning, Accomplishment and Health.

The Focus Day gives students a chance to consider different perspectives and challenge stereotypes on behaviours, expectations, and traditional wellbeing activities. The Focus Day activities are selected to support healthy lifestyle choices to inspire and empower students to take responsibility for their own health and encourage lifelong habits of wellness, enabling them to thrive.

Students selecting courses for Year 11 and 12 choose for two years. All courses at Year 11 level are indicated by the prefix code AE and Year 12 courses by the code AT, for example English at Year 11 level is AEENG and for Year 12 it is ATENG.

Students are encouraged to explore breadth as well as depth with a requirement to balance both List A (arts/languages/social sciences) and List B (mathematics/science/technology) courses, based on Western Australian Certificate of Education (WACE) requirements. Perth Modern School is committed in keeping its rigorous curriculum engaging and relevant to meet the needs of gifted students. Students will have access to a rich curriculum and will be well prepared to achieve the results they require to be competitive in the ATAR course. Teachers support students by differentiating the curriculum and placing greater emphasis on higher order thinking and processing skills. Where appropriate, teachers will adjust the pace of curriculum delivery to ensure students can be extended by working with more complex ideas in greater depth. Students are provided with many more opportunities for enrichment through external programs, competitions and events.

2024 COURSE SELECTION PROCESS AND SSO

Students login using their WA student number, providing access to all course selections for their 2024 year level. Access to the Subject Selection Online (SSO) website is via the link on the school website or in Compass under School Favourites. Students should seek input from subject teachers, counsellors and their family prior to entering selections. Once SSO has closed and school planning is underway there is no guarantee that student course selections can be changed, therefore planning and careful consideration must be taken prior to submitting selections.

For ATAR courses where the minimum recommended Year 10 pre-requisite grade has not been met, the course selection title and box will appear as amber in colour in SSO. You will still be able to select the subject however your selection will need to be reviewed. Students will submit via SSO an override request, which will be assessed and a response provided. There are no pre-requisite grades for General courses in Year 11 or 12.

ATAR Course Selection Recommendations

2024 Year Group	List A or B	Learning Area	Subject/Courses	Recommended Minimum Pre-requisite Year 10 Grades
11	A	Arts	Visual Arts	C
			Design	C
			Drama	C
		English (select at least one)	English	n/a
			Literature	A
		Humanities and Social Sciences	Ancient History	C
			Economics	C
			Geography	C
			Modern History	C
			Philosophy and Ethics	C
			Politics and Law	C
		Languages (requires SCSA online application and approval process)	Chinese	B
			French	B
			Italian	B
			Japanese	B
		Music	Music	Head of Music Pre approval
	B	Humanities and Social Sciences	Accounting and Finance	C
		Health and Physical Education	Physical Education Studies	C
		Mathematics	Mathematics Specialist	B
			Mathematics Methods	C
			Mathematics Applications	C
		Science	Biology	C
			Chemistry	B
			Human Biology	C
			Physics	B
			Psychology	C
		Technologies	Computer Science	C
			Engineering Studies	C

Accelerating students

Acceleration is designed to provide students access to advanced and more challenging content. Students wishing to accelerate by ATAR course will have completed the pre-approval process.

Selection process for Years 10 and 11 students

The selection process for existing students entering Years 10 and 11 is designed to assist them to select appropriate courses and will consist of several stages.

1. Students explore career paths in Advocacy.
2. Student Services and individual teachers will address students about course selection and specific courses.
3. In some cases, the course selection process will need to be reviewed based on results in second semester.

Selection process for Year 12 students

It is assumed students will continue with the same courses they studied in Year 11. If an interview is required, an appointment can be made with Student Services to have the course changes discussed and signed off.

Additional note:

In the majority of cases, students will be able to study their selected SSO courses. There will be times when courses selected occur at the same time, and a choice is needed. If such a timetable clash occurs, the student will be contacted to discuss the options available. In addition, if a student chooses a course that is not viable, they will be contacted regarding a reserve course selection or an alternative.

YEAR 10 STUDENTS COURSE SELECTION REQUIREMENTS

Students will have the opportunity to begin a unique Senior Years academic pathway. The Year 10 program allows students to specialise in areas of interest at a level for which they are ready. Year 10 subjects do not count towards WACE. Endorsed Programs completed during Year 10 will be included on the WASSA and for WACE.

Students will study, as a minimum, two semesters of English and one semester each of Mathematics, Humanities and Social Sciences, Science, and Health-Careers-Physical Education at Year 10 level.

The Thrive Positive Education program is evidence-based, offering a practical approach to wellness, which is critical to shaping a positive future for our students. Research suggest that wellbeing and learning have a reciprocal and interconnected relationship. This program is designed to give our students the tools to increase their own happiness, build more productive habits and discover their purpose so they can thrive at Mod and beyond.

Please note: English can only be selected at Year 10 level—acceleration is not available because of SCSA WACE requirements.

Year 10 sample program

Year 10		28 ppw
	4 ppw Year 10 English – Yearlong	4
or	4 ppw x 4 Yearlong courses 4 ppw x 4 Semester 1 Units and 4 ppw x 4 Semester 2 Units	16
and	2 ppw x Phys Ed (PE), 1 ppw x Health Ed (HE), 1 ppw x Career Ed (CE) in Semester 1 or 2 4 ppw x 1 Semester-long course in Semester 1 or 2 for the semester opposite to HPE	4
or	2 ppw of Directed Study 2 ppw of a Yearlong course (limited to available subjects)	2
	1 ppw Thrive – Positive Education	1
	1 ppw ADVO	1

YEAR 11 STUDENT COURSE SELECTION REQUIREMENTS

- SCSA sets the deadlines for course enrolment and withdrawal. Once these dates have passed the school cannot make course changes. These dates are advertised in the annual SCSA Activities Schedule and the school will set and advertise pre-deadlines for course changes to ensure processing is completed by the SCSA last date.
- Six courses are recommended for a successful balance of academic challenge, social and personal wellbeing—either six ATAR courses or five ATAR and one General course. Students may study a maximum of seven ATAR courses, which will require before and after school periods, and one additional period per week.
- Courses are yearlong, Unit 1 in Semester 1 and Unit 2 in Semester 2.
- Accelerated students complete Year 12 (Units 3 and 4) and sit the external WACE course examination at the end of the year. Marks can be used to calculate the student's ATAR at the end of Year 12 if it is one of their top four marks. It can be used as a pre-requisite for university courses if applicable.
- Accelerated students cannot repeat Year 11 (ATAR Units 1 and 2) if they have completed the course as a Year 10.
- Accelerated students cannot repeat Year 12 (Units 3 and 4) if they complete the WACE course in Year 11.
- To satisfy WACE achievement students need to select from both List A and List B, with a minimum of one from each list:
  List A – Arts, Languages, Social Sciences
  List B – Mathematics, Science and Technology.
- Students must also be aware of unacceptable course combinations.

A summary of course and program information is available on the School Curriculum and Standards Authority website under SCSA Student Information | Curriculum

Year 11 sample program

Year 11		28 ppw
	4 ppw x 1 Year 11 English Language ATAR Course – English, Literature – Yearlong	4
	4 ppw x 5 ATAR Courses, can include English or Literature if not already selected – Yearlong	20
	1 ppw ADVO	1
	3 ppw x Directed Study or Common Assessment Periods (CAPS)	3
Alternate Options:		
or	4 ppw x 1 Year 11 General course – replacing 1 x ATAR course	
or	4 ppw x 1 Year 11 ATAR additional 7th course (may include before and/or after school periods) = 29 ppw	

YEAR 12 STUDENT COURSE SELECTION REQUIREMENTS

- Students generally continue their Year 11 courses into Year 12. Variations to this should only be made after careful consideration, with appropriate recommendations from teaching staff and after discussion with Student Services.
- To satisfy WACE achievement students need to select a minimum of **five** Year 12 courses in Year 12.
- Students may study a maximum of seven ATAR courses.
- Year 12 level Courses are yearlong with Units 3 and 4 studied concurrently.
  Note: There is no grade recorded for WACE if a student withdraws from a Semester One Unit 3 course; these courses are combined for Units 3 and 4 and the end of year grade is allocated to both units.
- To satisfy WACE achievement and university entry requirements students need to select courses from both List A and List B, with a minimum of one from each list:

  List A – Arts, Languages, Humanities and Social Sciences

  List B – Mathematics, Science and Technology.
- Students must also be aware of unacceptable course combinations, please refer to the WACE publications on the SCSA website.

Year 12 sample program

Year 12		28 ppw
	4 ppw x 1 Year 12 English Language ATAR Course: English, Literature – Yearlong	4
	4 ppw x 5 ATAR Courses, can include English or Literature if not already selected – Yearlong	20
	1 ppw ADVO	1
	3 ppw x Directed Study or Common Assessment Periods (CAPS)	3
Alternate Options:		
or	4 ppw x 1 Year 12 General course – replacing 1 x ATAR course	
or	4 ppw x 1 Year 12 ATAR additional 7th course (may include before and/or after school periods) = 29 ppw	

SPHINX FOUNDATION SCHOLARSHIP INFORMATION

Perth Modern School is in the unique position of being able to offer scholarships and bursaries through The Perth Modernian Society (Inc.) Sphinx Scholarship Foundation. These scholarships and bursaries support students in reaching their potential. Further information about scholarships available in 2023 will be disseminated in Semester 2, 2023.

ADDITIONAL CAREER INFORMATION

Student Services can assist with University information and course selection.

Our Student Services team is always available to help students with wellbeing and academic concerns.

WEBSITES

There are a number of websites that have information relevant to making subject/course selections.
A comprehensive list is documented in Appendix II of this handbook.

ACHIEVING EXCELLENCE

All students are encouraged to achieve their personal best and develop a sense of pride in themselves, the school, their environment and their community. We challenge our exceptional students to reach the highest levels of excellence.

ASSESSMENTS

Students are to ensure they are conversant with the Senior Years Assessment policy available on Compass.

COMMON ASSESSMENT PERIODS (CAPS) FOR ATAR YEAR 11 AND 12 COURSES

To achieve a common scale across multiple classes in the same course where the classes occur at different times, and to ensure the security of the assessment tasks, the validity of the assessment marks and, hence, fairness for all students the assessment will occur at the same time, such as before school or after school. The school will advertise a CAPS schedule of dates, start and finish times, and will try to align these CAPS to periods allocated to Private or Directed Study. Not all assessments will occur as CAPS. Commonly accepted practices as described in the WACE Manual will be implemented to monitor student achievement levels in terms of the validity and reliability of assessment practices.

EXAMINATIONS

Semester examinations occur for all ATAR courses, and for Year 12 courses there are additional SCSA WACE examinations from the end of Term 3 into Term 4. Some courses will include a practical and written examination (e.g. Drama, Physical Education Studies, Languages and Music) which can be scheduled during the Term 3 holiday period for Year 12 courses. There are no examinations for General courses, there is a 50 minute External Set Task which will be scheduled during the exam week for Year 12 courses. Year 10 courses are examined at the end of each semester.

HOMEWORK/STUDY COMMITMENTS

Students studying Years 10–12 ATAR courses should aim to do a minimum of three hours study per unit per week, each and every week. Homework does not only consist of the work given to you by the teacher, it includes a self-directed component. This may be organising your notes, revision, research, exam study, practical study or additional tasks or questions. Students should expect homework and study to occur over the school holidays. The full Homework Policy is available on Compass.

ATAR COURSES

ATAR (Australian Tertiary Admission Rank) Courses are offered at Year 11 and Year 12. There is a syllabus for each year. The Year 11 syllabus covers Units 1 and 2, and the Year 12 syllabus covers Units 3 and 4. Students complete Units 3 and 4 as a pair of units. Year 12 ATAR courses are externally examined by SCSA. Achievement of a C grade or higher in an ATAR course contributes to the WACE Achievement Standard, the final ATAR school mark and SCSA examination course mark provides a score for university entry, please refer to section titled Tertiary Entry Aggregate (TEA) for further information.

GENERAL COURSES

General Courses are offered at Year 11 and Year 12. There is a syllabus for each year. The Year 11 syllabus covers Units 1 and 2, and the Year 12 syllabus covers Units 3 and 4. Students complete Units 3 and 4 as a pair of units. Whilst designed for students who are typically aiming to enter vocational training or the workforce directly from school, a small number are available at Perth Modern School to provide an opportunity to study a course without an examination, and some can provide an alternative pathway entry to some university courses. There is a recommended selection maximum of one General Course in Year 11 and one in Year 12. Year 12 General courses require students to complete an External Task (EST) in Term Two set by SCSA and assessed over 50 minutes. Achievement of a C grade or higher in a General course contributes to the WACE Achievement Standard. General courses are offered in Career and Enterprise, Food Science Technology, Materials Design & Technology-Wood, Philosophy and Ethics.

ENDORSED PROGRAMS

Endorsed Programs offer learning through activities not covered by WACE courses. Each endorsed program consists of a series of lessons, classes and/or activities designed to lead to the achievement of a common goal or set of learning outcomes. Endorsed programs can be delivered as part of the school curriculum or as extra-curricular activities from out of school programs. Up to four units from Endorsed Programs can be used for WACE course requirements.

LANGUAGE COURSE REQUIREMENTS

A student who intends to enrol in a WACE Language course can only do so if they have approval from the School Curriculum and Standards Authority. For a student to gain approval to enrol, they must complete an online Application for permission to enrol in a WACE Language course while they are in Year 10* and submit it to the Authority, along with the required supporting documentation, by the deadline published in the Activities Schedule. A student's enrolment status is determined by the Authority on a case-by-case basis.

Submission dates of applications for enrolment in ATAR courses in 2023 for 2024

Date	Year 10 students submit an online application*
Wednesday, 26 July 2023	Or earlier where the schools starts the 2024 school year in Term 4, 2023
Friday, 25 August 2023	Or earlier where the schools starts the 2024 school year in Term 1, 2024

*or Year 9 accelerated students

Note: Applications for new enrolments in Year 11 and Year 12 will open in late January 2024.

SCALING

ATAR course results will be scaled to ensure fairness to all students. A scaled score for an ATAR course can only be calculated if a student sits the ATAR course examination for that course. The Average Marks Scaling process is used to scale marks obtained in a course.

EXHIBITIONS AND AWARDS

Exhibitions and awards are granted by the School Curriculum and Standards Authority (the Authority) to senior secondary students studying Western Australian Certificate of Education (WACE) courses and vocational education and training (VET). The awards recognise individual excellence in both Australian Tertiary Admission Rank (ATAR) courses and VET. For further information relating to exhibitions and awards, visit the SCSA website and read the 2023 Policy and guidelines document pdf.

WESTERN AUSTRALIAN CERTIFICATE OF EDUCATION (WACE)

The Western Australian Certificate of Education (WACE) is awarded by the School Curriculum and Standards Authority (The Authority) when students successfully meet the WACE requirements. All the courses that contribute to WACE are governed by the syllabus and assessment structures of the Authority.

The Authority will issue the:

- Western Australian Statement of Student Achievement (WASSA) to all Year 12 students at the completion of their secondary schooling and lists all completed courses and programs.
- Western Australian Certificate of Education (WACE) to all students who successfully meet the WACE requirements.

The School Curriculum and Standards Authority have strict guidelines and requirements regarding enrolment and changes to courses. Please refer to the School Curriculum and Standards Authority website for the current timeline and activities schedule.

WACE REQUIREMENTS FOR YEAR 11 AND 12 STUDENTS

In the context of ATAR courses in the WACE, the term 'complete' requires that a student sits the ATAR course examination or has an approved Sickness/Misadventure Application for not sitting the examination in that course. Students who do not sit the ATAR course examination will not have a course mark or grade recorded on their WASSA, nor will they receive an ATAR course report.

Note: for ATAR courses with practical or portfolio components, students must complete both the written and practical examinations.

Literacy and numeracy standard

Students must demonstrate the WACE literacy standard and WACE numeracy standard.

For the WACE literacy standard, students must demonstrate the minimum standard of literacy by successfully completing the reading and writing components of the Authority's Online Literacy and Numeracy Assessment (OLNA), or by pre-qualifying through achieving Band 8 or higher in the reading and writing tests of the Year 9 National Assessment Program – Literacy and Numeracy (NAPLAN).

For the WACE numeracy standard, students must demonstrate the minimum standard of numeracy by successfully completing the numeracy component of the OLNA, or by pre-qualifying through achieving either Band 8 or higher in the numeracy test of Year 9 NAPLAN.

Students who do not demonstrate the literacy and numeracy standard by the time they exit senior secondary schooling can apply to the Authority to re-sit the OLNA at any age. International and mature-age students are required to sit the OLNA at the first available opportunity. Students who have not pre-qualified through NAPLAN, and who choose not to sit the OLNA, do not qualify for the WACE.

Breadth and depth requirement

Students must:

- complete a minimum of 20 units, which may include unit equivalents attained through VET and/or endorsed programs. To meet this requirement, students must complete at least:
  - a minimum of ten Year 12 units, or the equivalent
  - four units from an English learning area course, post-Year 10, including at least one pair of Year 12 units from an English learning area course
  - one pair of Year 12 units from each of List A (arts/languages/social sciences) and List B (mathematics/science/technology).

Achievement standard

Students must achieve at least 14 C grades or higher (or the equivalent, see below) in Years 11 and 12 units, including at least six C grades (or equivalents) in Year 12 units, to meet the WACE requirements.

Students completing the WACE, must complete:

- at least four Year 12 ATAR courses
- at least five Year 12 courses
- a Certificate II (or higher) VET qualification in combination with ATAR or General.

WACE Examinations

Each ATAR course has an ATAR course examination. Students who are enrolled in Year 12 ATAR courses (Units 3 and 4) must sit the ATAR course examination in that course.

Western Australian Statement of Student Achievement (WASSA)

Year 12 students receive this statement at the completion of their secondary schooling.

The WASSA provides a formal record of what students leaving in Year 12 have achieved, as a result of their school education in Western Australia.

For further detailed information, please refer to WASSA-and-WACE-2021-What-you-need-to-know.PDF (scsa.wa.edu.au) and WACE-Requirements-2023-and-beyond-flyer.PDF (scsa.wa.edu.au)

University Admission

To be considered for university admission as a school leaver applicant, normally you must:

- meet the requirements for the Western Australian Certificate of Education (WACE) prescribed by the School Curriculum and Standards Authority, and
- achieve competence in English as prescribed by the individual universities, and
- obtain a sufficiently high ATAR/Selection Rank for entry to a particular course, and
- satisfy any prerequisites or special requirements for entry to particular courses.

Competence in English

For university admission purposes, usually you demonstrate competence in English by achieving the prescribed standard in one of the Year 12 courses: English ATAR or Literature ATAR.

The University of Western Australia, Curtin University and Edith Cowan University all require a scaled mark of at least 50. Notre Dame and Murdoch's University requirements are best viewed on their website.

Australian Tertiary Admissions Rank (ATAR)

The Australian Tertiary Admission Rank is the basis of admission to most university courses. You are ranked in order of merit based on your ATAR. The ATAR ranges between zero and 99.95. It reports your rank relative to all other WA students of Year 12 school leaving age and considers the number of students with a Tertiary Entrance Aggregate (TEA) as well as the number of people of Year 12 school leaving age in the population of this state. An ATAR of 75.00 indicates that you have an overall rating equal to or better than 75% of the Year 12 school leaving age population in Western Australia. The ATAR is calculated using scaled scores in ATAR courses.

Calculation of the TEA

The ATAR is derived from the Tertiary Entrance Aggregate (TEA). The Australian Tertiary Admissions Rank (ATAR) is derived from school-based assessment and an external examination. To obtain an ATAR, students must sit the Tertiary Entrance examinations at the end of Year 12. Some students may complete courses during Year 11 and can sit the final WACE exam. The result achieved will count towards the final ATAR achieved the following year when other courses are completed.

Note: for ATAR courses with practical components, students must complete both the written and practical examinations.

The TEA is calculated by adding your best four scaled Year 12 AT course scores plus any applicable course-specific bonuses:

For all universities you may accumulate scaled scores which contribute to your ATAR over five consecutive years. No more than two mathematics scaled scores can be used in the calculation of an ATAR. There are unacceptable course combinations whereby scores in both courses cannot both be used (see explanation under Unacceptable Course Combinations below). A LOTE bonus of 10% of a LOTE scaled score is added to the aggregate of the best four scaled scores. If more than one LOTE has been sat, only one (the best) LOTE scaled score can be used as the LOTE bonus. You receive the LOTE bonus irrespective of whether your LOTE course scaled score was counted as one of the best four. A Mathematics bonus of 10% of the scaled score for each of Mathematics Methods ATAR and Mathematics Specialist ATAR is added to the aggregate of the best four scaled scores. You receive the mathematics bonus irrespective of whether these scaled scores are counted in the best four.

In calculating the scaled score, equal weight is given to the final school mark and the final examination mark, except where courses are taken on a non-school basis. Scaled scores from previous study of WACE courses are on the same scale as scaled scores and will be used directly in the calculation of an ATAR, if applicable. The maximum TEA is 430.

Unacceptable course combinations

The Tertiary Institutions Service Centre (TISC) has advised that from the 2023 school year (relevant to university admission from 2024), Mathematics Applications and Mathematics Methods will no longer be an unacceptable subject combination for the purposes of calculating the ATAR. Students will now be able to include the score from both courses in their final ATAR. TISC publications and the TISC website will be progressively updated to reflect this change.

Note: Mathematics Applications and Mathematics Specialist remains an unacceptable combination for the calculation of the ATAR. Students will continue to be able to contribute all three ATAR Mathematics subjects toward their WACE, however only Mathematics Methods and the highest scaled score out of Mathematics Applications and Mathematics Specialist will be considered in ATAR calculations.

Students in Year 11

For detailed information about university admission requirements, students in Year 11 should refer to the University Admissions Brochure. The brochure can be downloaded from TISC.

Students may also make contact directly with the universities for information on courses and admission requirements. University websites have specific sections for prospective/future students.

SCHOOL-BASED AWARDS AND RECOGNITION

Sphinx Society

The Sphinx Society is open to all Year 10, 11 and 12 students and is designed to encourage academic excellence in Senior Years students. Eligibility is by semester and is determined at the completion of each semester report. Membership is for the semester following qualification for the award. The full policy and criteria is available on Compass. Students that achieve this honour for 6 consecutive semesters will have their name included on an honour board.

99 Club

Students who achieve an ATAR score of 99+ will be recognised with membership of the 99 Club and their name included on an honour board.

PRESENTATION CEREMONY AWARDS

School Course Awards

Medallions are awarded to the top student in each WACE (Unit 3 and 4) ATAR course.

Dux of the School

To be eligible for the School Dux Award, the student must have sat the Semester 2 examination for all the courses that are being included in the Dux Award.

The score for the Dux Award is based on the average of five adjusted course scores from ATAR courses, calculated to two decimal places. At least two of the scores must be from each of List A and List B subjects. Where students have accelerated or completed a course, the following rules apply in calculating the Dux award score:

- At least three ATAR course scores must have been obtained in the final year of senior secondary schooling.
- Course or 'examination only' scores achieved as a Non-School Candidate in an ATAR course examination do not count towards the Dux or Principal's Awards score.

The final decision on the granting of each award is made by the School's Awards Committee.

To be eligible for the Year 11 Dux Award, the student must have sat the Semester 2 examination for all the subjects that are being included in the Dux Award calculation as per the Beasley Award criteria.

Students can be eligible for the Year 11 Principal's Award, based on SCSA General Exhibition criteria, with their final mark based on the predicted examination score (Section 5g), entered.

Principal's Award for Academic Excellence

Recognises students who have achieved academic excellence across five courses inclusive of at least two from List A and at least two from List B. This Award reflects the School Curriculum and Standards Authority criteria for a General Exhibition Award.

Sphinx Society Awards

Sphinx Society membership is awarded at the end of each semester from Year 10 onwards. The Award is based on academic achievement, attendance and good standing. Students who have achieved Sphinx Society membership for six semesters are recognised at the Presentation Ceremony.

Commitment to Excellence Award

Awarded to a student who has shown significant contributions to school and community, has shown exceptional interpersonal skills, and has demonstrated commitment to excellence in a field of endeavour. This award come from Department of Education.

The Clare Casey Service Award

The Clare Casey Service Award recognises a student who has shown great service to the school community.

The AMPOL All Rounder Award

Recognises a student who has performed to a very high level in the sporting arena, their chosen subjects and other endeavours.

Subiaco Service Above Self Award

Recognises a student who has made a significant contribution to the School and wider community.

Stan Perron Rotary Award

Presented to a student who shows outstanding characteristics that match the Rotary Four Way Speaking test.

Betty Sagar Sustainability Leadership Award

Recognition of exceptional student leadership in Sustainability.

The recipient of the Sustainability Leadership Award is someone who has made a significant contribution towards helping Perth Modern School become a more sustainable community.

ADF Long Tan Leadership and Teamwork Award

Recognises students who demonstrate leadership and teamwork within both the school and the broader community.

SCHOOL AWARDS

ADF Long Tan Innovations Award
Recognises students who demonstrates innovations and creativity within both the school and the broader community.

Youth Ambassadors Award
Recognises those students who have achieved a minimum of 100 hours community service, committing a minimum of 30 hours to three services or organisations (see Compass for detailed criteria).

Gold House Badge
Awarded to students who have earned over 1,200 House points within different categories, including: Academic, Awards, Community Service, Co-curricular, Competitions and House Activities.

Platinum House Medallion
Awarded to students who have earned over 2,000 House points within different categories, including: Academic, Awards, Community Service, Co-curricular, Competitions and House Activities. This is awarded at the Year 12 Presentation Ceremony.

Diamond House Award
Awarded to a student who has demonstrated an outstanding commitment to their house over their time at Perth Modern School. This award may not be presented.

Gold Duke of Edinburgh Award
Awarded to students who have successfully completed the Gold Duke of Edinburgh award.

Year Book Award
Presented to a student(s) who has made an outstanding contribution to the Yearbook production.

Dettman Music Scholarship
The winner of this scholarship must excel in practical and theoretical music and demonstrate diligence, commitment and a passion for music.

Irene Jolley Memorial Choral Award
The recipient of this award must display a joyous love of and enthusiasm for singing and participate in a school choral ensemble.

Tom Kent Scholarship
This award enables a student to pursue further studies in music performance at a recognised tertiary institution.

W and C Stabb Music Scholarship
This award is presented to a student studying a string instrument who wishes to pursue further studies on their instrument at a recognised tertiary institution.

John Peter Coles Memorial Award
Awarded to the top vocal student.

Sports Person of the Year
Recognises excellence in sporting pursuits, leadership and sportsmanship.

Sports Citizen of the Year
Recognises an outstanding contribution to coaching and mentoring younger students.

Perth Modern School Diploma
Recognises student achievement in competitions and activities beyond their academic studies.

Special Note:

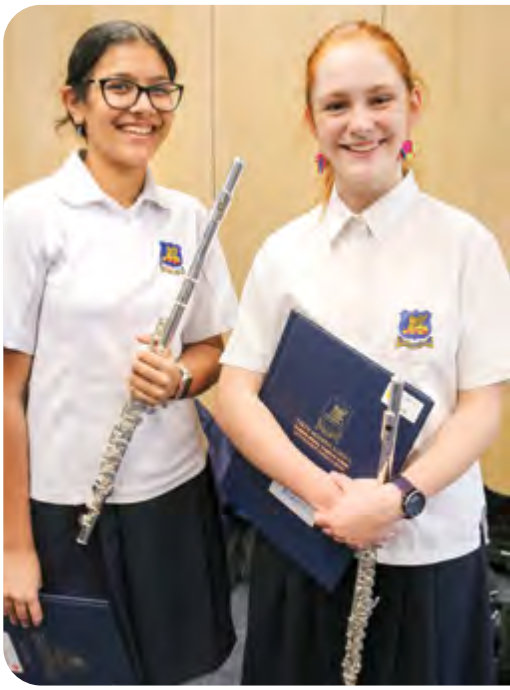
- Year 10 students are eligible to receive School Course Awards.
- Year 11 students are eligible for School Course Awards, Principal Awards and Dux.
- Year 12 students are eligible for all the awards listed in the table above.

UNIVERSITY SCHOLARSHIPS

The selection criteria vary for each scholarship and from university to university.

Students requiring references for Scholarships must follow the References and Scholarships Policy available on Compass.

ARTS LEARNING AREA COURSES



Curriculum Handbook 2024 **Senior Years 10, 11 and 12**

YEAR 10 DANCE

Can be studied for one semester or as a yearlong course.

Unit 1 Exploring the Components of Dance

In this course the elements of dance and processes of choreography are explored and students solve structured choreographic tasks to produce dance works for performance. They will have first-hand experience of dance-making that actively engages them in exploration, improvisation, research, reflection and response. Students will have the opportunity to perform in class groups and smaller groups, with emphasis placed on choreographic elements and stagecraft components such as costuming, stage make-up, lighting and set design. Events such as the ACHPER Dance Festival and Youth on Health Festival will provide opportunities for students to apply these skills.

Unit 2 Dance as Entertainment

Students explore the entertainment potential of dance and choreography. In practical lessons, they improve safe dance practices and their physical competencies while acquiring genre-specific technique. They explore and experiment with the elements of dance and processes of choreography to solve choreographic tasks for performance. Students identify and select technologies and design concepts which enhance the entertainment value of the dance and place it in its social, historical and economic context.

The genre studied in these courses will be Urban Hip Hop/ Contemporary Dance. Students can however select other genre for choreographic tasks to further build upon the interests and understandings that they may have already acquired.

YEAR 10 DESIGN – PHOTOGRAPHY

Can be studied for one semester or as a yearlong course.

Unit 1 Design Fundamentals

The goals of the Design course are to facilitate a deeper understanding of how print media and advertising are created to influence an intended audience. Students will use industry standard equipment and software to ensure their skills can be utilised in Tertiary education, as well as in relevant employment fields. They will be challenged in a technical and creative sense, to produce photographic and design work that is considered commercially acceptable. This course allows students to become excellent print media designers as well as giving them flexibility to complete real world outcomes, enabling students to learn the techniques utilised by the advertising industry and then implement these skills to create their own magazines, promotional posters or a campaign suitable to a client's design brief.

Unit 2 Advanced Design

The yearlong Course has been designed to allow students to work autonomously to develop a sense of ownership over their creative projects, whilst satisfying all components of a design brief. This level of autonomy promotes creative thinkers, which along with the technical skill previously gained, will allow students to extend themselves to a higher level. Tasks include product photography and advertisement design, on-location portraiture using off camera lighting and a tourism brochure showcasing Rottnest Island. These broad tasks cover complex camera and post-production techniques, giving students an excellent platform for the Year 11 Design course, should they choose. Students will capture most of their photographs outside the school environment, which will further improve their independence and image capture skills.

YEAR 11 ATAR DESIGN (AEDES) Unit 1 and 2

Design offers students a unique opportunity to explore their creative side, as well as complete technically challenging photo shoots and graphic design work. This combination is highly rewarding and enables students to complete a range of tasks such as: magazine design, fashion label design, fashion photography, billboards, still life photography, product advertisements, product catalogue, landscape photography, food photography/styling. Students learn that the commercial world is comprised of companies requiring consumer products, services and brands for a particular audience. They create products/services, visuals and/or layouts with an understanding of codes and conventions to enable high order, creative thinking. Each student is encouraged to produce work suitable for inclusion in the annual Photography exhibition. The 5-day South West Photography Camp is a unique experience for the students to visit many spectacular areas, which form the basis for their Year 12 Commercial Design brief.

YEAR 12 ATAR DESIGN (ATDES) Unit 3 and 4

Students are expected to produce creative and technically strong print advertisements that are considered commercially acceptable. This work is submitted to the School Curriculum and Standards Authority at the end of the year, giving students an excellent opportunity to be rewarded for their creativity and technical skill. Students become aware that design has commercial considerations that are influenced by various stakeholders to produce products, services and brands. Whether the need is to find new ways to reach global markets or to redesign a product to take advantage of new materials, these days, successful workers must be adept at generating and testing creative ideas in order to solve a problem with a real set of requirements and constraints. The Design course can prepare students for these real-world challenges.

https://senior-secondary.scsa.wa.edu.au/syllabus-and-support-materials/arts/design

YEAR 10 DRAMA

Can be studied for one semester or as a yearlong course.

Unit 1: Dramatic Storytelling/Script Interpretation

Students engage with the skills, techniques, processes and conventions of dramatic storytelling, both in devised work and through script interpretation. Performance tasks vary from group work to monologues and then finally to a whole class performance. There is opportunity to explore design roles, such as costume, set and lighting, as students consider the role of the entire creative team in making dramatic meaning. The culmination of the students' learning in this course is the public performance of a whole class rehearsed play.

Unit 2: Sounds, Sights, and the Sensation We Call Theatre!

Students delve into a range of presentational forms of theatre. They explore the world of Shakespeare, examining the relevance of those themes and characters in the contemporary era. They examine the genre of audio plays, using digital sound technologies to create and enhance mood and atmosphere in performance. Students draw on a range of theatre experiences to perform a monologue, engaging in character development, improvisation, and script interpretation processes.

YEAR 11 ATAR DRAMA (AEDRA)

Unit 1: Realism and representational drama

The focus for this unit is realism and representational drama. Students explore techniques of characterisation through different approaches to group-based text interpretation, particularly those based on the work of Stanislavski and others. Student's research and collaboratively workshop both scripted and devised drama, creating performances that represent and reflect the world around us. There is also a focus on practically applying design roles in performance. To enhance student learning, opportunities are presented to attend live theatre performances at venues and festivals around the Perth metro area.

Unit 2: Non-realism and presentational drama

The focus for this unit is non-realism and presentational drama. Students explore stylistic techniques from a range of presentational practitioners, with a particular focus on Bertolt Brecht and his Epic Theatre. Students then put these performance techniques and conventions into practice as they work to create a presentational, non-realist drama that challenges and questions perspectives. A highlight of this unit is the whole class production, which is a showcase of their learning throughout the year and provides an opportunity to explore a range of design roles and acting techniques.

YEAR 12 ATAR DRAMA (ATDRA)

Unit 3: Realisation of drama through the application of selected approaches

This course focuses on drama in practice as students integrate their knowledge and skills, engaging in both Australian and World drama practices.

Students will investigate the approach of a selected drama practitioner and apply this in rehearsal, performance, and response tasks. Students will undertake actor, director and selected creative team roles; including costume designer, lighting designer, set designer and/or sound designer. Practitioners include Anne Bogart and Tina Landau; Uta Hagen; Robert Cohen; David Mamet; Maria Knebel and Sharon Marie Carnicke; and Rudolf Laban.

Students will showcase their understanding of the selected practitioner by working together to create a public performance as a theatre company.

Unit 4: Approaches to and interpretation of drama through the application of selected approaches.

During this course students will work independently and collaboratively, learning self-management, showing initiative, and demonstrating leadership and interpersonal skills. Students will engage in both Australian and World drama practices.

Student's will investigate the approach of a selected drama practitioner and apply this in rehearsal, performance and response tasks. Students will undertake actor, director and creative team roles, including costume designer, lighting designer, set designer and/or sound designer. Practitioners include Antonin Artaud; Frantic Assembly; Steven Berkoff; Jacques Lecoq; Jerzy Grotowski; and Complicité.

This course will culminate in students showcasing their knowledge, skills, and personal style to an audience during the Year 12 Drama Performance Evening.

https://senior-secondary.scsa.wa.edu.au/syllabus-and-support-materials/arts/drama

YEAR 10 VISUAL ARTS Unit 1 and 2

Can be studied for one semester or as a yearlong course.

Students advance and explore artistic influences, while expressing greater individualism in their application of concepts and materials, developing their ideas and techniques to resolve artworks, while extending knowledge of art practices and understanding of art styles. Possible mediums include: sculpture, painting, drawing, ceramics, printmaking, photography and multimedia and time-based works. Students develop greater understanding of how contexts of culture, time and place influence art making. An excursion to a local gallery will inform students of the role of arts in society, not only enjoyment but for thought and impact. The course enables students to develop their visual literacy and communication skills and become discriminating in their judgements. Students enjoy discovering their own creative understanding and appreciation of art and culture.

YEAR 11 ATAR VISUAL ARTS (AEVAR) Unit 1 and 2

A student-centred approach of exploration and development, valuing divergence, uniqueness and individuality. Students express themselves using their imagination, develop personal imagery and engage in the making and professional presentation of a resolved artwork of their choice. This course allows students to engage in traditional, modern and contemporary art forms of their personal choice, such as sculpture, painting, drawing, printmaking, ceramics, video art, installations, textiles, performance, photography, multimedia and time-based works. The course engages students in a process that helps them develop skills in: visual literacy, communication, critical and creative problem-solving, analytical thinking, all of which are essential for future work and life in any career path. Students gain understanding of art, in Australian, Indigenous and International contexts, from a range of historical and cultural viewpoints.

YEAR 12 ATAR VISUAL ARTS (ATVAR) Unit 3 and 4

The course aims to contribute to a sense of enjoyment, engagement and fulfilment in their personal self-expression and critical and creative mindset to the world around them. Students have full creative control and direction in the course as young practicing artists. Creating and analysing artworks that hold personal meaning and powerful commentary. Students will have the opportunity to visit galleries and participate in master class workshops. Artworks will be professionally displayed and entered in community art competitions and regularly displayed in formal and informal settings around the school. Through these art experiences, students will come to an understanding of broader questions about the values and attitudes held by individuals and societies and gain an awareness of the role that art plays in reflecting, challenging and shaping societal values.

https://senior-secondary.scsa.wa.edu.au/syllabus-and-support-materials/arts/visual-arts/

YEAR 10 MUSIC Units 1 and 2

Prerequisite: Students must have completed Year 9 Music, or apply for HOLA approval to enrol in Year 10 Music.

There are two pathways available for Year 10 Music:

1. Students who are interested in studying ATAR Music in Year 11 and 12, should enrol in Extension Music.
2. Students who aim to enrol in PIMS in Year 11 and 12, should enrol in Music.

It is a requirement that students who receive a vocal or instrumental lesson through the IMSS programme:

- Enrol in Year 10 Music (minimum requirement: Semester 1 Music or Extension Music).
- Participate in the large ensemble for their instrument for the full year.
- Participate in Chorale for the full year.

Students who learn voice or an instrument privately are also eligible to enrol in Year 10 Music and participate in the ensembles for the full year. Ensemble participation is conditional upon enrolment in Semester 1 Music or Extension Music.

The Music curriculum offers many opportunities for student extension, through aural, theory, composition, and performance opportunities. The implementation of Kodály philosophy throughout the curriculum allows students to learn through involvement in quality music-making experiences.

Year 10 Music courses will engage students in:

- Kodály-based Musicianship experiences
- Literature and Musical Analysis
- Performance Practice
- Instrumental/Vocal tuition
- Large and small ensemble rehearsals and performances.

Unit 1 Extension Music – Semester 1 (ATAR pathway)

Students will experience, reflect on and analyse significant musical works from the Baroque and Classical periods. They will extend their musicianship skills and apply these with increasing complexity through practical in-class activities, compositions and performances.

Unit 1 Music – Semester 1 (PIMS pathway)

Students will experience a range of practical opportunities, including solo and small ensemble experiences. They will extend their musicianship skills and apply these with increasing complexity through practical in-class activities, compositions and performances.

Unit 2 Extension Music – Semester 2 (ATAR pathway)

Students will experience, reflect on and analyse significant musical works from the Romantic period and 20th Century, Students will develop their aural, theory, composition and performance skills in preparation for the Music ATAR course.

Unit 2 Music – Semester 2 (PIMS pathway)

Students have the opportunity to perform chosen musical genres as a soloist and/or within small group ensembles, exploring the practical, historical and theory elements of the work. They continue to develop their aural and theory skills, composition and performance through practical music-making, and have the opportunity to master basic conducting techniques.

Students enrolled in any music course are expected to be members of the co-curricular ensemble, Senior Chorale. In addition, students are expected to be members of the applicable ensemble for their instrument or voice, as directed by the Music Department. Refer to the Music Policies and Guidelines for further information.

YEAR 11 ATAR MUSIC (AEMUS)

Units 1 and 2

Across the two units, students extend and apply their skills, knowledge and understanding of music to create, communicate and evaluate music ideas with increasing depth and complexity. They continue to develop and consolidate aural and music literacy skills, learning how the elements of music can be applied, combined and manipulated when listening, performing, composing and analysing music.

Students explore how social, cultural and historical factors shape music, developing an understanding of music conventions and practices in Concertos and selected genres. They apply critical listening and thinking skills and develop aesthetic understanding through comparing and analysing musical works.

Students are encouraged to reach their creative and expressive potential, developing skills and stylistic awareness to confidently engage in music making as performers and/or composers and audience members, both individually and collaboratively.

Please note: For this examinable subject students will perform a recital program for which an accompanist may be required (dependent on the solo instrument).

Recommended minimum entrance requirements:
Completion of Year 10 Music Semester 1 and 2.

YEAR 12 ATAR MUSIC (ATMUS)

Units 3 and 4

Students continue to extend their understanding and appreciation of a range of music and further develop their music skills and knowledge needed to respond to how social, cultural and historical factors shape the role of music. They integrate the activities of performing, composing, arranging and responding to music genres, and use musical language to communicate their knowledge and understanding of music studied. Students continue to consider how music is structured and how the elements of music are used to influence the specific types of music being studied. They make more extensive connections between music and its context, different areas of musical knowledge, and different aspects of musical activities while applying, with increasing sophistication, their skills in Theory and Aural in their music-making activities.

The Music curriculum offers many opportunities for student extension, particularly through theoretical understanding, composition, and performance opportunities. The implementation of Kodály methodology throughout the curriculum allows students to learn through involvement in quality music-making experiences.

Please note: For this examinable subject students will perform a recital program for which an accompanist is required.

Recommended minimum entrance requirements:
Year 11 ATAR Music AEMUS

https://senior-secondary.scsa.wa.edu.au/syllabus-and-support-materials/arts/music

ENGLISH LEARNING AREA

Curriculum Handbook 2024 **Senior Years 10, 11 and 12**

YEAR 10 ENGLISH (10ENG)

Unit 1 – Meaning

Studied Semester 1

Students will have the opportunity to read, watch, and create a variety of texts. Students explore how meaning is communicated through the relationships between language, genre, purpose, context, and audience. This semester's content will blend the requirements of both English and Literature for students to be able to make an informed choice for Year 11.

Unit 2 – Literary Conventions and Contemporary Trends

Studied Semester 2

Students will study and create a variety of imaginative, interpretive, and persuasive texts. Students develop an understanding of stylistic features and apply skills of analysis and creativity. Students will engage with a wide variety of visual and written texts, responding to them through personal reflection and critical analysis. Through their studied texts, students develop knowledge and understanding of different ways of reading and creating literary texts drawn from a widening range of historical, social, cultural and personal contexts. Students analyse the relationships between language, text, contexts, individual points of view and the reader's response. Through the creation of analytical responses, students frame consistent arguments that are substantiated by relevant evidence.

Please note: The recommended pre-requisite grade for selection of Year 11 ATAR Literature is an A grade to ensure success. Students may select to study both English and Literature in Year 11 and Year 12.

YEAR 11 ATAR ENGLISH (AEENG)

Unit 1 – Meaning

Students explore how meaning is communicated through the relationships between language, text, purpose, context and audience. Students study and create a variety of imaginative, interpretive and persuasive texts. Students develop an understanding of stylistic features and apply skills of analysis and creativity. A broad range of texts will be analysed.

Unit 2 – Language and Structure

Students analyse the representation of ideas, attitudes and voices in texts to consider how texts represent the world and human experience. By responding to and creating texts in different modes and media, students consider the interplay of imaginative, interpretive, persuasive and analytical elements in a range of texts and present their own analyses.

YEAR 12 ATAR ENGLISH (ATENG)

Unit 3 – Themes, Issues, Ideas and Concepts

Analyse and compare the relationships between language, genre and contexts, comparing texts within and/or across different genres and modes. Students recognise and analyse the conventions of genre in texts and consider how those conventions may assist interpretation. Students compare and evaluate the effect of different media, forms and modes on the structure of texts and how audiences respond to them. Understanding of these concepts is demonstrated through the creation of imaginative, interpretive, persuasive and analytical responses.

Unit 4 – Purpose and Style

Students examine different interpretations and perspectives to develop further their knowledge and analysis of purpose and style. Through close study of texts, students explore relationships between content and structure, voice and perspectives and the text and context through their own reading and viewing.

https://senior-secondary.scsa.wa.edu.au/syllabus-and-support-materials/english

YEAR 11 ATAR LITERATURE (AELIT)

Unit 1 – Literary Conventions and Storytelling Traditions

Students develop knowledge and understanding of different ways of reading and creating literary texts drawn from a widening range of historical, social, cultural and personal contexts. Students analyse the relationships between language, text, contexts, individual points of view and the reader's response. A range of literary forms is considered: prose fiction, poetry and drama. Through the creation of analytical responses, students frame consistent arguments that are substantiated by relevant evidence. In the creation of imaginative texts, students explore and experiment with aspects of style and form.

Unit 2 – Intertextuality

Drawing on a range of language and literary experiences, students consider the relationships between texts, genres, authors, readers, audiences and contexts through an analysis of the ideas, language used and forms of texts.

YEAR 12 ATAR LITERATURE (ATLIT)

Unit 3 – Relationship: Language, Culture and Identity

Students explore the power of language to represent ideas, events and people, comparing these across a range of texts, contexts, modes and forms. Through critical analysis and evaluation, the values and attitudes represented in and through texts and their impact on the reader are examined.

Unit 4 – Interpretation and Literary Conventions

Students will develop an appreciation of the significance of literary study through close critical analysis of literary texts drawn from a range of forms, genres and styles. Students reflect upon the creative use of language, and the structural and stylistic features that shape meaning and influence response. Analytical responses demonstrate an interpretation of texts with synthesis of a range of perspectives into critical and imaginative responses.

https://senior-secondary.scsa.wa.edu.au/syllabus-and-support-materials/english/literature

HEALTH AND PHYSICAL EDUCATION LEARNING AREA COURSES

Curriculum Handbook 2024 **Senior Years 10, 11 and 12**

HEALTH AND PHYSICAL EDUCATION LEARNING AREA COURSES

In Semester 1 or 2 students must select Physical Education. The program covers Health Education for 1 ppw, Physical Education for 2 ppw and Career Education for 1 ppw. Choosing optional Physical Education courses are in addition to this program.

YEAR 10 HEALTH EDUCATION

The context in which Year 10 Health Education takes place are Road Safety and Sexual Health and Relationships. The course aims to develop students' knowledge, attitudes and skills to enable them to make informed decisions that will lead to a healthier lifestyle. There will also be an emphasis on managing risk and assertive behaviours which will be reinforced across both topics.

In the Road Safety unit, students will develop their knowledge and skills for safer driving and road safety choices. Students will complete a comprehensive pre-driver program which will provide them with the opportunity to sit their Learner's Permit Test at school. Those who pass are granted exemptions for the Learner's Permit application process under the authorisation of the WA Department of Transport.

The Sexual Health unit is designed to support students to make positive choices about their relationships and sexual health. There will be a strong focus on providing students with the skills and knowledge to evaluate the impact of their decisions on themselves and others so they can make informed health decisions.

YEAR 10 PHYSICAL EDUCATION

Integral to Physical Education is the acquisition of movement skills, concepts and strategies to enable students to confidently, competently and creatively participate in a range of physical activities. As a foundation for lifelong physical activity participation and enhanced performance, students develop proficiency in movement skills, physical activities and movement concepts and acquire an understanding of the science behind how the body moves. In doing so, they develop an appreciation of the significance of physical activity. Movement is a powerful medium for learning, through which students can acquire, practice and refine personal, behavioural, social and cognitive skills. The sporting contexts used will be: volleyball and netball.

YEAR 10 CAREER EDUCATION

Students will investigate a variety of career pathways and study options as well as strategies and skills for effective study and examination preparation.

YEAR 10 SPECIALISED SPORTS SCIENCE PROGRAM

In Semester 1 and 2

Unit 1 and 2 Provides students who are planning on studying Physical Education Studies in Senior Years the 'edge' in regard to essential sport science knowledge as well as improving their practical skills required for the WACE exams. Students will have the opportunity to work in a range of sporting contexts while in the program to develop their physical literacy. Specifically, this includes the development of the following aspects of performance: cardio-respiratory endurance, speed (including skill and power aspects), power, strength, agility, flexibility, core stability and physical literacy across several sporting contexts. Students will develop their understanding of anatomy, physiology, and biomechanics.

YEAR 10 AQUATIC RECREATION

In Semester 1 only

Unit 1 Designed for students who want to experience activities that are water-based and easy to access in Perth. Some examples of activities offered are sailing, Recreational Skipper's Ticket, surfing, kayaking, canoeing, stand up paddle boarding and fishing. Students must be able to swim 200m in 7 minutes and complete 15 minutes of treading water. Students will be tested on these requirements at the beginning of the unit.

YEAR 10 SPORTS CHALLENGE

In Semester 2 only

Unit 2 Designed for students who love the cut and thrust of competition. Teams will organise and compete in a number of team and individual competitions at community sporting venues (e.g. Revolution, Loftus, Lords, Rosemount Bowl, Wembley Golf Complex, Pot Black) and school facilities culminating in a final's series. Sports will be chosen from European handball, indoor soccer, volleyball, squash, golf, floorball, ten pin bowling, ice skating, indoor cricket, basketball, lawn bowls and more.

YEAR 10 OUTDOOR EDUCATION

in Semester 1 or 2

Unit 1 or 2 Outdoor Education provides opportunities for individuals to learn about themselves, others, the environment, and their relationship with the environment, through practical experiences in the outdoors. Self-awareness, interpersonal and key life skills including teamwork, leadership, communication, and self-confidence, are developed through various activities. Some examples of activities that maybe offered are rock climbing, orienteering, camp cooking, expedition planning, cycling, fishing and leadership challenges.

YEAR 11 ATAR PHYSICAL EDUCATION STUDIES (AEPES)

Physical Education Studies focuses on the complex interrelationships between motor learning and coaching, psychological, biomechanical, anatomical and physiological factors that influence individual and team performance. It is the study of Sport Science where students analyse the performance of themselves and others, apply theoretical principles and plan programs to enhance performance.

The ATAR course content is divided into theory and practical components:

- the theory component weight is 70%
- the practical (performance) component weight is 30%.

This course includes a practical as well as a theory exam.

YEAR 12 ATAR PHYSICAL EDUCATION STUDIES (ATPES)

Physical Education Studies enables students to understand and analyse the human body, its movements and functions. The study enables the integration of theoretical knowledge with practical application through the study of complex biomechanical, physiological and psychological concepts. There are opportunities for students to apply theoretical concepts and reflect critically on factors that affect all levels of performance. The theory component of the course focuses on five key areas of sports science: functional anatomy, biomechanics, motor learning and coaching, sports psychology and exercise physiology.

The course content is divided into theory and practical components:

- the theory component weight is 70%
- the practical (performance) component weight is 30%.

This course includes a practical as well as a theory exam. Students will participate in netball for the practical component of their school-based practical mark. The current Year 12 external ATAR examinable sports are AFL, badminton, basketball, cricket, hockey, netball, soccer, tennis, touch, and volleyball.

https://senior-secondary.scsa.wa.edu.au/syllabus-and-support-materials/health-and-physical-education/physical-education-studies

HUMANITIES AND SOCIAL SCIENCES LEARNING AREA COURSES

Curriculum Handbook 2024 **Senior Years 10, 11 and 12**

YEAR 10

Humanities and Social Sciences offer six semester-long units. Each student must study a minimum of one unit from Humanities and Social Sciences in either Semester 1 or 2. These units are not a prerequisite for Year 11 and 12.

Note: Unit 2 content is a repeat of Unit 1 and therefore students cannot select the subjects for a yearlong course.

- Ancient History
- Economics
- Geography
- Modern History
- Philosophy and Ethics
- Politics and Law.

YEAR 10 ANCIENT HISTORY Unit 1 or 2

Representations of the Ancient World

Students study legends from the ancient world which continues to capture the imagination of students today and provide a wealth of material for popular culture. Designed to prepare students for studying the Ancient History ATAR course and also for students who are interested in the ancient world. Students will be given an introduction to key disciplines that inform us about the ancient world including archaeology, classics and history. It enables students to explore people, places and events from the past and changing representations and interpretations over time. Students use a range of physical and written evidence from the ancient sources to explore a selection of the following topics: Life in Pompeii, the Persian War, life in Classical Greece, the Trojan War, Alexander the Great and/or New Kingdom Egypt.

YEAR 11 ATAR ANCIENT HISTORY (AEHIA)

Unit 1 Rome – Decline of the Republic (133–63BCE)

This unit allows students to explore Ancient Roman Republic at a pivotal moment in its history. The success of Rome's expansion throughout the Mediterranean creates an empire and brings enormous wealth to Rome, but this wealth is not shared by all and particularly those for whom Rome depends upon to maintain the empire. This unit covers how the institutions and people responded to this crisis from the growing self awareness of the plebian class, attempts by populares to alleviate poor conditions and the varied attempts by the Senate to retain their power and authority. The military reforms of Marius, and their significant impact are also a central theme of this unit, alongside the use of violence in politics.

Unit 2 Rome – Republic to Empire (63BCE–14CE)

This unit explores the last breaths of the Roman Republic through the lenses of the powerful men. Students begin by looking at formation of triumvirates of populist generals with large client armies who aligned to advance their own interests against the Senate. The period is characterised by political violence, civil wars and the assassination of Caesar, prior to the democratic institutions of Rome handing over their power to a single individual, Augustus. Key individuals under examination include Caesar, Pompey, Antony, Octavian/Augustus and Cleopatra.

YEAR 12 ATAR ANCIENT HISTORY (ATHIA)

Unit 3—People, Power and Authority

Students study the development of Athens between 481–440 BCE from a member of the Hellenic League to the leader of a sea-based empire and a democracy. Students examine the nature of power and authority in the society and the ways in which it was demonstrated through political, military, religious, cultural and economic structures and institutions. This study requires a focus on the reasons for continuity and change. The detailed study of an individual who had a significant impact on their times develops students' understanding of the importance of human agency, as demonstrated by the possible motivations and actions of individuals.

Unit 4—Reconstructing the Ancient World

Students study the Peloponnesian War with particular reference to Thucydides' History of the Peloponnesian War. Allowing for greater study of historiography and the challenges associated with the interpretation and evaluation of the evidence. Students will analyse the reliability and usefulness of a wide range of ancient and modern sources to the reconstruction of the historical period. Students will examine key events including the Archidamian War, Peace of Nicias and Sicilian Expedition as well as key individuals such as Pericles, Nicias, Alcibiades and Lysander.

https://senior-secondary.scsa.wa.edu.au/syllabus-and-support-materials/humanities-and-social-sciences/ancient-history

YEAR 12 GENERAL CAREER AND ENTERPRISE (GTCAE)

Unit 3 and 4

Career education involves learning to manage and take responsibility for personal career development. This course provides real world examples and applications. The Career and Enterprise General course involves recognising one's individual skills and talents, and using this understanding to assist in gaining and keeping work. The course develops a range of work skills and an understanding of the nature of work. Key components of the course include: the development of an understanding of different personality types and their link to career choices; entrepreneurial behaviours; learning to learn; and the exploration of social, cultural and environmental issues that affect work, workplaces and careers.

https://senior-secondary.scsa.wa.edu.au/syllabus-and-support-materials/humanities-and-social-sciences/career-and-enterprise

YEAR 10 ECONOMICS Unit 1 or 2

Investigating Economics

Students will investigate the different economic theories that have been developed since the 1700s. They will look at the role of economic philosophers and their impact on shaping the course of economic modelling. They will use data to investigate the Australian economy and analyse the effectiveness of current economic policy. Poverty and living standards are important issues in the modern world. Students will investigate the causes of poverty and the impact this has on economic activity and living standards in Australia. This course allows students to develop their analytical skills and broadens their understanding of global events that can impact their lives.

YEAR 11 ATAR ECONOMICS (AEECO)

Unit 1 – Microeconomics

Explores the role of the market in resource allocation via the price mechanism and how it influences the wellbeing of individuals and society. Students also explore market-based policy measures that address concerns of equity and efficiency.

Unit 2 – Macroeconomics

Explores the macroeconomic fundamentals of economic growth, inflation and unemployment with an emphasis on the Australian economy. Students discover the importance of measuring and monitoring changes in macroeconomic indicators, as changes in the level of economic activity affect the wellbeing of individuals and society.

YEAR 12 ATAR ECONOMICS (ATECO)

Unit 3 – Australia and the global economy

Explores the interdependence of Australia and the rest of the world, highlighting the open nature of Australia's economy and the extent to which it is influenced by changes in the world economy. Concepts of globalisation, trade liberalisation and protection in relation to the Australian economy will be studied. Students will examine Australia's trade, foreign investment, the recording of international transactions and the impact of these transactions on the Australian economy. The effects of changes in Australia's economic transactions with the rest of the world using recent (the last ten years) and contemporary (the last three years) economic data, together with economic models will also be explored.

Unit 4 – Economic policies and management

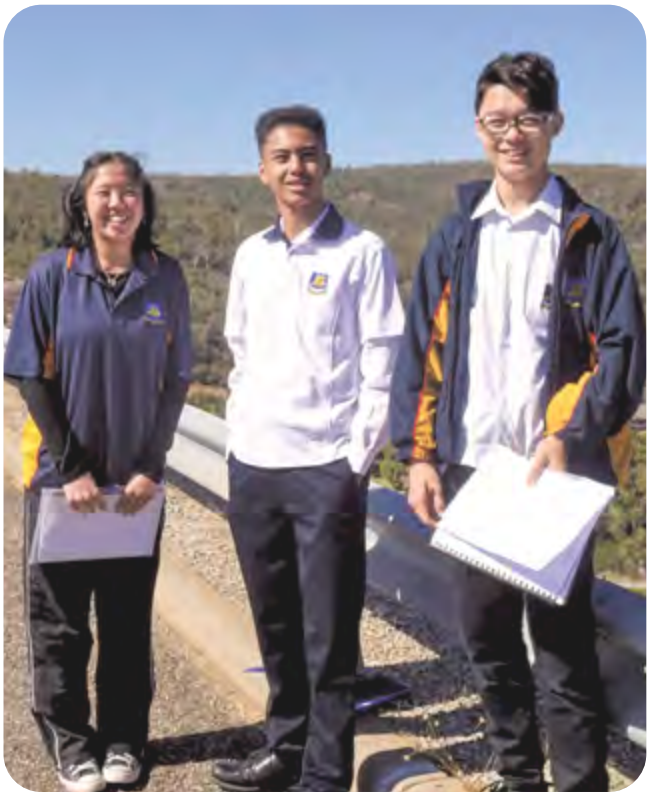
Explores the economic objectives of the Australian Government and actions such as fiscal policy, monetary policy and microeconomic policy, implemented in the pursuit of these economic objectives. Students examine the effects of the operation of policies in Australia using economic models along with recent (the last ten years) and contemporary (the last three years) economic data. Students also apply the language, theories and tools of economics to develop a critical perspective on the role of these policies in the current Australian Government policy mix.

https://senior-secondary.scsa.wa.edu.au/syllabus-and-support-materials/humanities-and-social-sciences/economics

YEAR 10 GEOGRAPHY Unit 1 or 2

Environmental Change and Management

The Year 10 Geography course focuses on investigating many global issues as part of environmental Geography. In the local area, regions and globally, people pose threats to our environments as they attempt to meet their needs. This can place these environments at risk and people's interests and concerns can often be in conflict. Students will inquire into the human-induced environmental changes that challenge sustainability such as climate change, water and atmospheric pollution and land cover change. In doing so, students will examine the environmental worldviews of people and their implications for environmental management. A fieldwork excursion is included as an essential part of the course.



YEAR 11 ATAR GEOGRAPHY (AEGEO)

Unit 1 – Natural and Ecological Hazards

Natural and ecological hazards represent potential sources of harm to human life, health, income and property, and may affect elements of the biophysical, managed and constructed elements of environments.

Focuses on understanding how these hazards and their associated risks are perceived and managed at local, regional and global levels. Risk management, in this context, refers to prevention, mitigation and preparedness. Prevention is concerned with the long-term aspects of hazards and focuses on avoiding the risks associated with their reoccurrence. Mitigation is about reducing or eliminating the impact if the hazard does happen. Preparedness refers to actions carried out prior to the advance notice of a hazard to create and maintain the capacity of communities to respond to, and recover from, natural disasters. Students will examine two depth studies in this field.

Unit 2 – Global Networks and Interconnections

Focuses on the process of international integration (globalisation) and is based on the reality that we live in an increasingly interconnected world. It provides students with an understanding of the economic and cultural transformations taking place in the world today, the spatial outcomes of these processes, and their political and social consequences. This is a world in which advances in transport and telecommunications technologies have not only transformed global patterns of production and consumption but also facilitated the diffusion of ideas and elements of cultures. The unit explains how these advances in transport and communication technology have lessened the friction of distance and have impacted at a range of local, national and global scales. Cultural groups that may have been isolated in the early twentieth century are now linked across an interconnected world in which there is a 'shrinking' of time and space. Fieldwork assessment excursions are included in each unit as an essential part of the course.

YEAR 12 ATAR GEOGRAPHY – 2025 ONLY

Unit 3 – Global Environmental Change

This unit focuses on the changing biophysical cover of the Earth's surface, the creation of anthropogenic biomes and the resulting impacts on either global climate or biodiversity. Land cover transformations have changed both global climate and biodiversity through their interaction with atmospheric and ecological systems. Conversely, climate change and loss of biodiversity are producing further transformations in land cover. Through applying the concept of sustainability, students are given the opportunity to examine and evaluate a program designed to address the negative effect of land cover change. Aspects of physical, environmental and human geography provide students with an integrated and comprehensive understanding of the processes related to land cover change, their local, regional and global environmental consequences, and possible sustainable solutions.

Unit 4 – Planning Sustainable Places

Challenges exist in designing urban places to render them more productive, vibrant and sustainable. How people respond to these challenges, individually and collectively, will influence the sustainability and liveability of places into the future. While all places are subject to changes produced by economic, demographic, social, political and environmental processes, the outcomes of these processes vary depending on local responses, adaptations and planning practices. Urban planning involves a range of stakeholders who contribute to decision-making and the planning process. Students examine how governments, planners, communities and interest groups attempt to address these challenges in order to ensure that places are sustainable. Two depth studies provide for a more focused and detailed way of teaching and learning. The first study focuses on challenges in metropolitan Perth or a regional urban centre in Western Australia. The second study focuses on challenges faced in a megacity (i.e. New York).

Fieldwork assessment excursions are included in each unit as an essential part of the course.

SCSA Geography ATAR curriculum link, Units 1-4:

https://senior-secondary.scsa.wa.edu.au/syllabus-and-support-materials/humanities-and-social-sciences/geography

YEAR 10 MODERN HISTORY Unit 1 or 2

The USA in the 20th Century

In this unit students explore the purpose and development of the nation-state and national identity using the United States of America during the 20th century as a case study. Students begin by examining the boom period of the early 20th century and the role of capitalism and democracy in shaping American identity. Studies focus on the challenges experienced through the tightening of government control, expression of culture and the evolution of subcultures, the influence of religion, the infiltration of capitalism, the impact of global economic connectedness and the fervent patriotism displayed through the violence of war for the pursuit of ideological dominance. The topics covered in the unit include the Jazz Age and the Roaring Twenties, with a focus on prohibition, crime, the KKK and the experiences of women and African Americans.

Students will then examine the Wall Street crash and the impact of the Great Depression, before closely studying the role of the United States as a superpower in the post-WWII period. Using the Korean and Vietnam wars as case studies, and with reference to the persistent threat of nuclear war, students consider the concept of American exceptionalism and analyse the notion of the USA as a 'protector' of democracy. The experience of groups and the broadening of what it means to be an American is also a focus of the unit, with particular attention paid to the civil rights movement and the work of individuals such as Martin Luther Kind Jr and Malcolm X.

Throughout the unit, students will be given the opportunity to explore in-depth an aspect of the USA of their own choosing for their research project, investigating the evolution of the nation-state, its identity, culture, politics, war and ideologies.

The underlying purpose of this unit is to strengthen student's skillset, content knowledge and passion for the subject area in preparation for the ATAR course whilst developing greater understanding of world history to inform their understandings of the world in which we live.

YEAR 11 ATAR MODERN HISTORY (AEHIM)

Unit 1 – French Revolution (1774–1799)

Social upheaval and revolution are very important concepts as they allow students a greater understanding of how humans react in times of discontent. Students will investigate the French Revolution, a very important time as it ushered in a new era based on ideas that challenged fundamental understandings on which society, to that point, had operated. Students examine the narrative of the revolution in order to develop their ability to investigate perspectives on issues and develop judgements about complex human societies. Students also investigate the key ideas of liberty, equality, fraternity and inalienable rights, giving students an appreciation for the origins of the modern world including the growth of nationalism and nation states.

Unit 2 – Nazism in Germany

How does a liberal democracy become a dictatorship in a decade? How does such hatred exist to attempt genocide on a nation of people? This period of history in Europe had immediate but also longer-term impacts throughout the rest of the 20th century, to the point when even today any reference to Nazism garners an immediate and negative response. In this course, students look at the period of Nazism in Germany from the situation in Germany after World War One, to the rise of Hitler, to the Nazi policies implemented in Germany, and World War Two and the Holocaust. Students will develop their understanding of perspective and the impact of significant events in history on the future.

YEAR 12 ATAR MODERN HISTORY (ATHIM)

Unit 3 – Russia and the Soviet Union 1914–1945

It is an easy argument to make that events in Russia in 1917 had a significant impact on the rest of the world in the 20th century. Not only did Russia modernise within a generation, but it also exited World War Two as a global superpower. Learning about this period of history will allow students to better understand events from a number of different perspectives. Students will examine ideas such as autocracy, Marxism and communism, as well as looking at the narrative of the period. Students will also have an opportunity to reflect on the impact of the Bolshevik Revolution on different social groups in society.

Unit 4 – The Struggle for Peace in the Middle East

The Middle East is often misunderstood but a frequently discussed region of the world. Enabling students to have a better understanding of events as well as requiring them to understand those events from different, varied perspectives of cultural groups around the world. The course provides a brief background of events in the region in the first half of the 20th century before moving on to the course itself. Areas covered include the creation of the Israeli state, key conflicts such as the Suez Crisis, 6 Day War and Yom Kippur War, as well as attempts made towards peace such as those in the early 1990s and the Camp David Summit in 2000.

https://senior-secondary.scsa.wa.edu.au/syllabus-and-support-materials/humanities-and-social-sciences/modern-history

YEAR 10 PHILOSOPHY AND ETHICS Unit 1 or 2

Introduction to Philosophy

This course serves as an introduction to Philosophy, a subject all about argument and the meaning of life. In both traditional and social media these days students are having to deal with increasing amounts of misinformation, so in Philosophy we teach students vital critical thinking and analysis skills that will help them deal with these ongoing issues in society.

Students will learn to identify and critically evaluate arguments, as well as the important skill of being able to develop one's own cogent arguments. Once students have learnt how to argue and to analyse other arguments, they will be exploring various philosophical themes and applying these skills. This could be exploration of the concept of eudaimonia (i.e. being and flourishing with tranquillity or 'happiness') where students will look at philosophers such as Aristotle, Nietzsche and Sartre who try to answer our greatest question of all: why do we exist? Many of these topics will be explored through community of inquiry which prompts students to make their thinking visible and structured.

YEAR 11 ATAR PHILOSOPHY AND ETHICS (AEPAE)

Do you have free will or are all your actions determined? Is the mind distinct from the body? Is science the only road to objective truth?

Philosophy attempts to answer the questions that cannot be addressed adequately by appealing to experience and experiment alone. Philosophical thought shapes what people think, what they value, what they consider to be true, and how they engage with others and the world around them. It is a foundation of all academic disciplines.

In studying this course, students will develop analytical thinking skills, the ability to clarify advanced concepts and unravel ethical issues. The problem-solving and deeper thinking skills that they develop will assist them in becoming better communicators, thinkers and problem-solvers. There is no profession or vocation in which these abilities would not be incredibly useful.

Unit 1 – Reasons and persons

The focus for the first unit is reason and persons. Students examine reasoning, inference, doubt and proof: the construction of world views; ideas of mind, body and personhood; ideas of action, intention, motives, free will and determinism; and causation.

Unit 2 – Reasons and culture

The focus for the second unit is reason and culture. Students examine ideas of beauty and aesthetics: the concept and process of interpretation; the idea of culture; intuition and emotion; and personal relationships and friendship.

YEAR 12 ATAR PHILOSOPHY AND ETHICS (ATPAE)

Unit 3 – Reason and Society

What is the contractual relationship between the individual and the state? What are natural rights and values? What are social rights? What is the sovereign power? What are our moral obligations to the environment?

Students examine human nature in terms of natural rights and social contracts. This links to the study of humanism and natural human values, and individualism and social identity. Students also examine the idea of a good society and the relationship between human flourishing and the moral obligation humans have to the environment. The elements of reasoning are further developed in greater complexity.

Unit 4 – Reason and Meaning

What is the meaning of life? Do you have a duty to pursue an authentic life? Can you live in bad faith? Does science have a view on the meaningful life or is that the domain of religion? Can killing be morally justified?

Students examine the tension between secularism and religion on the question of human life and human purpose. Students also examine classic problems in the philosophy of religion, as well as moral questions about the taking of life. The elements of reasoning are further developed in greater complexity.

https://senior-secondary.scsa.wa.edu.au/syllabus-and-support-materials/humanities-and-social-sciences/philosophy-and-ethics

YEAR 12 GENERAL PHILOSOPHY AND ETHICS (GTPAE)

Units 3 and 4

The General course in Philosophy and Ethics (Units 3 and 4) takes a very pragmatic approach to staple philosophical concepts such as the nature of freedom, the question of rights, the role of the social contract, and the centrality of language to identity and thought.

Students take a collaborative and conversational approach to these concepts, beginning with their dramatic portrayal in film, before moving to secondary sources to complement thinking within the community of philosophical inquiry.

This unique offering in the Humanities and Social Sciences is beneficial to any student seeking to broaden their thought in an intellectually rigorous environment, and complements various combinations of courses currently offered.

YEAR 10 POLITICS AND LAW Unit 1 or 2

Power to the People

Students examine the Australian political and legal system, exploring key concepts, ideas and principles that underpin our society including notions of natural justice and the rule of law. Students investigate the legislative process, analysing a chosen piece of legislation to determine whether it upholds the characteristics of an effective law. Students examine a variety of contemporary political and legal issues to evaluate whether the frameworks within Australia's political and legal system uphold or undermine the principles of a liberal democracy. Students will gain an understanding that political and legal systems help to provide order to the social relationships that occur in the world and how the actions and participation of individuals and groups (political parties, pressure groups and the media) can contribute to a civil society.

YEAR 11 ATAR POLITICS AND LAW (AEPAL)

Unit 1 – Democracy and the Rule of Law

Students investigate the origins of Australia's democracy from autocratic colonies to the modern and progressive political and legal system we see today. Students evaluate whether the frameworks of Australia's political and legal system uphold the principles of a liberal democracy. Students will also compare Australia's political and legal system to other nations to determine the strengths and weaknesses of our system.

Unit 2 – Representation and Justice

Students explore the processes within Australia's political and legal system which ensure representative democracy is upheld including our electoral system. Students investigate Australia's legal system and evaluate the extent to which it ensures everyone has access to justice. Students will also have the opportunity in Year 11 to attend excursions to the Law Courts and Parliament House.

YEAR 12 ATAR POLITICS AND LAW (ATPAL)

Unit 3 – Political and Legal Power

Students critically examine the political and legal system established by the Commonwealth Constitution (Australia) and the power exercised by the systems with reference to political and legal developments and issues.

Unit 4 – Accountability and Rights

Students critically examine avenues for, and the effectiveness of, accountability of the three branches of government in Australia. Students also critically examine the ways in which rights are protected, and how democratic principles are upheld and/or undermined in Australia.

https://senior-secondary.scsa.wa.edu.au/syllabus-and-support-materials/humanities-and-social-sciences/politics-and-law

YEAR 11 ATAR ACCOUNTING AND FINANCE (AEACF)

Unit 1 – Double Entry Accounting for Small Businesses

Students will gain a practical understanding of the double entry book keeping system and apply it to small businesses: sole trader, partnership and small propriety firms. They will also gather a knowledge of particular conventions and principles and the consequences of disregarding them. With this knowledge and understanding, students will make rational financial decisions in a variety of small businesses. The application of the principles of the Goods and Services Tax (GST) is also included.

Unit 2 – Accrual Accounting

Students apply financial systems and principles to the operations of businesses and distinguish between cash and accrual methods of accounting. Students prepare and analyse financial reports for a variety of types of business organisations. Students learn of the role and function of the professional accounting and financial associations.

YEAR 12 ATAR ACCOUNTING AND FINANCE (ATACF)

Unit 3 – Internal Management for Business

The focus is Management Accounting and explores the importance of short and long-term planning for business. Students will look at a variety of decision-making processes including: prepare and interpret budgets and performance reports; cost accounting techniques and Cost Volume Profit methods. This financial information will be critically analysed in order to aid forecasting a business's future. The unit distinguishes between internal and external reporting requirements.

Unit 4 – Australian Reporting Entities and how they are regulated by the *Corporations Act 2001*

The focus is Financial Accounting. The Framework and the Accounting Standards are used in the preparation of the financial statements for a reporting entity. The financing options of larger entities are identified and evaluated, particularly in relation to conforming with basic principles, including profitability and stability. The unit addresses corporate social disclosure issues and ethical behaviour within.

https://senior-secondary.scsa.wa.edu.au/syllabus-and-support-materials/humanities-and-social-sciences/accounting-and-finance

LANGUAGES LEARNING AREA COURSES

Curriculum Handbook 2024 **Senior Years 10, 11 and 12**

YEAR 10 Languages available:

- Chinese: Second Language
- Chinese: Background Language
- French: Second Language
- Italian: Second Language
- Japanese: Second Language.

Studying a Language in Senior Years enables students to attain an advanced level of language competence and cognitive sophistication. Strong competencies in languages provide a wide range of employment opportunities and employers will often look favourably at employees who can speak a second language, as this demonstrates additional capabilities.

From Year 10 students may have the opportunity to go on overseas trips or exchange programs, visit film festivals, engage in competitive examinations, apply for language scholarships and have some individual or small group tuition with native speakers. All languages make extensive use of online resources enabling rich and authentic experiences for students.

To enrol in a WACE language course, students are required to submit an online application for permission to enrol to the School Curriculum and Standards Authority. Information about the application process for permission to enrol in a WACE language course is available on the School Curriculum and Standards Authority website.

The ATAR Language course content is divided into theory and practical components:

- the theory component weight is 70%
- the practical (performance) component weight is 30%.

YEAR 11 ATAR CHINESE SECOND LANGUAGE (AECSL)

Unit 1 – Teenagers

Through the three topics: Having fun, student daily life, and technology and leisure, students further develop their communication skills in Chinese and gain a broader insight into the language and culture.

Unit 2 – Travel—let's go!

Through the three topics: tales of travel, Western Australia as a travel destination, and China as a travel destination, students extend their communication skills in Chinese and gain a broader insight into the language and culture.

YEAR 12 ATAR CHINESE SECOND LANGUAGE (ATCSL)

Unit 3 – Here and now

Through the three topics: Relationships, Celebrations and Traditions, and Communicating in a modern world, students extend and refine their communication skills in Chinese and gain a broader and deeper understanding of the language and culture.

Unit 4 – What next?

Through the three topics: Reflecting on my life and planning my future, The Environment, and Current issues, students extend and refine their communication skills in Chinese and gain a broader and deeper understanding of the language and culture.

YEAR 11 ATAR CHINESE BACKGROUND LANGUAGE (AECBL) AND YEAR 12 ATAR CHINESE BACKGROUND LANGUAGE (ATCBL)

The Chinese: Background Language ATAR is adapted from the BOSTES NSW course for Heritage Chinese. This course focuses on building on and further developing a student's language capability through engagement with Chinese-speaking communities, locally and overseas, and through the study of contemporary texts, topics and issues. It enables students to strengthen their personal connections to the Chinese culture and language, and enhances the development of their bilingual competence and bicultural identity.

This course is aimed at students who have typically been brought up in a home where Chinese is used, and they have a connection to that culture. The language to be studied and assessed is the Modern Standard Chinese, also known as Mandarin, and includes formal and informal usage.

This syllabus presents the content and expectations for both Year 11 and Year 12 for this course. While the core content applies to both years, it is expected that the cognitive complexity of the content increases from Year 11 to Year 12.

The course content is organised into four areas:

- Issues, perspectives, contexts and texts
- Linguistic resources
- Intercultural understandings
- Language learning and communication strategies.

These content areas should not be considered in isolation, but rather holistically as content areas that complement one another, and that are interrelated and interdependent. The course focuses on the study of language through themes and contemporary issues, which are studied through a range of texts. For Year 12, texts are prescribed.

Chinese Background Language (ATCBL) is an interstate developed course and is therefore not eligible for inclusion in the calculations for the Beazley Medal and General Exhibition.

YEAR 11 ATAR FRENCH SECOND LANGUAGE (AEFSL)

Unit 1 – That's life!

Through the three topics: My daily routine, French sports and leisure, and leading a healthy lifestyle, students further develop their communication skills in French and gain a broader insight into the language and culture.

Unit 2 – Travel

Through the three topics: My travel tales and plans, Australia as a travel destination, and travel in a modern world, students extend their communication skills in French and gain a broader insight into the language and culture.

YEAR 12 ATAR FRENCH SECOND LANGUAGE (ATFSL)

Unit 3 – The media

Through the three topics: Technology and me, Film and music, and in the media, students extend and refine their communication skills in French and gain a broader and deeper understanding of the language and culture.

Unit 4 – The world around us

Through the three topics: Planning my future, Migrant experiences, and Youth issues, students extend and refine their communication skills in French and gain a broader and deeper understanding of the language and culture.

YEAR 11 ATAR ITALIAN SECOND LANGUAGE (AEISL)

Unit 1 – Relationships

Through the three topics: Rapporti in famiglia, tra gli amici e a scuola (Family, friend and school relationships), Le tradizioni, gli spettacoli e le feste (Traditions, events and celebrations), and Comunicare nel mondo moderno (Communicating in a modern world), students further develop their communication skills in Italian and gain a broader insight into the language and culture.

Unit 2 – Travel—let's go!

Through the four topics: Le vacanze—racconti e progetti (My holiday tales and plans), Destinazione Italia (Destination Italy), Destinazione Australia (Destination Australia), and Viaggiare oggi (Travel in a modern world) students extend their communication skills in Italian and gain a broader insight into the language and culture.

YEAR 12 ATAR ITALIAN SECOND LANGUAGE (ATISL)

Unit 3 – Thank you Italy

Through the three topics: Cose italiane (All things Italian), La vita italiana (Italian lifestyle), and Il Made in Italy nel mondo (Il Made in Italy around the world), students extend and refine their communication skills in Italian and gain a broader and deeper understanding of the language and culture.

Unit 4 – Yesterday, today and tomorrow

Through the three topics: Riflettiamo sulla vita e pensiamo al futuro (Reflecting on my life and planning my future), I problemi dei giovani oggi (Youth issues), and I problemi ambientali (Environmental issues) students extend and refine their communication skills in Italian and gain a broader and deeper understanding of the language and culture.

YEAR 11 ATAR JAPANESE SECOND LANGUAGE (AEJSL)

Unit 1 – Daily life

Through the three topics: My life, Home life and Daily life students further develop their communication skills in Japanese and gain a broader insight into the language and culture.

Unit 2 – Welcome to my country

Through the three topics: Welcoming a guest, Seasonal activities and celebrations, and Healthy lifestyles, students extend their communication skills in Japanese and gain a broader insight into the language and culture.

YEAR 12 JAPANESE: SECOND LANGUAGE (ATJSL)

Unit 3 – Young travellers

Through the two topics: Travel and Part-time jobs and money, students extend and refine their communication skills in Japanese and gain a broader and deeper understanding of the language and culture.

Unit 4 – Reflections and horizons

Through the three topics: This year and beyond, Youth events and pathways and Future plans, students extend and refine their communication skills in Japanese and gain a broader and deeper understanding of the language and culture.

Years 11 and 12 | Languages (scsa.wa.edu.au)

MATHEMATICS LEARNING AREA COURSES

Curriculum Handbook 2024 **Senior Years 10, 11 and 12**

YEAR 10 MATHEMATICS

Selection of Mathematics is compulsory for at least one semester, the full year's course is highly recommended for any student wishing to pursue any ATAR Mathematics course in Year 11 and 12.

Students aiming for Year 11 Mathematics Methods will be well served by taking Unit 2 – Mathematics Methods and Specialist as there is a lot of overlap of content and both courses complement each other perfectly.

Unit 1 Semester 1

Begins with a review of the basic algebraic concepts and techniques required for a successful introduction to the study of functions and calculus. Simple relationships between variable quantities are reviewed, and these are used to introduce the key concepts of a function and its graph. The study of probability and statistics begins in this unit with a review of the fundamentals of probability, and the introduction of the concepts of conditional probability and independence. The study of the trigonometric functions begins with a consideration of the unit circle using degrees and the trigonometry of triangles and its application. Radian measure is introduced, and the graphs of the trigonometric functions are examined and their applications in a wide range of settings are explored.

Unit 2 Semester 2

The algebra section of this unit focuses on exponentials. Their graphs are examined and their applications in a wide range of settings are explored. Arithmetic and geometric sequences are introduced and their applications are studied. These topics complement the content of the Mathematics Methods ATAR course. The proficiency strand of Reasoning, is continued explicitly in the topic Geometry through a discussion of developing mathematical arguments. This topic also provides the opportunity to summarise and extend students' studies in Euclidean Geometry, knowledge which is of great benefit in the later study of topics such as vectors and complex numbers. The topic Vectors in the plane provides new perspectives on working with two-dimensional space and serves as an introduction to techniques which can be extended to three-dimensional space in Unit 3.

In Year 11 the following year, students will repeat these Unit courses but with different texts and extra resources that will extend and enrich their understanding of the foundation units for Methods and Specialist.

Unacceptable course combinations

The Tertiary Institutions Service Centre (TISC) has advised that from the 2023 school year (relevant to university admission from 2024), Mathematics Applications and Mathematics Methods will no longer be an unacceptable subject combination for the purposes of calculating the ATAR. Students will now be able to include the score from both courses in their final ATAR. TISC publications and the TISC website will be progressively updated to reflect this change.

Note: Mathematics Applications and Mathematics Specialist remains an unacceptable combination for the calculation of the ATAR. Students will continue to be able to contribute all three ATAR Mathematics subjects toward their WACE, however only Mathematics Methods and the highest scaled score out of Mathematics Applications and Mathematics Specialist will be considered in ATAR calculations.

YEAR 11 ATAR MATHEMATICS APPLICATIONS (AEMAA)

Units 1 and 2

Applications focuses on enabling students to use mathematics effectively, efficiently and critically to make informed decisions in their daily lives. Mathematics Applications provides students with the mathematical knowledge, skills and understanding to solve problems in real contexts, in a range of workplace, personal, further learning and community settings. This subject offers the opportunity to prepare for post-school options of employment and further training but is not designed to prepare students for university level mathematics. Students will encounter opportunities for problem-solving, such as finding the volume of a solid so that the amount of liquid held in a container can be compared with what is written on the label, or finding the interest on a sum of money to enable comparison between different types of loans.

Recommended minimum entrance requirements:

Completion of Two Semesters of Year 10 Mathematics to a satisfactory standard.

YEAR 12 ATAR MATHEMATICS APPLICATIONS (ATMAA)

Unit 3 – Bivariate data analysis, Growth and decay in sequences, and Graphs and networks

Bivariate data analysis introduces students to some methods for identifying, analysing and describing associations between pairs of variables, including the use of the least-squares method as a tool for modelling and analysing linear associations. Growth and decay in sequences employs recursion to generate sequences that can be used to model and investigate patterns of growth and decay in discrete situations. These sequences find application in a wide range of practical situations, including modelling the growth of a compound interest investment, the growth of a bacterial population, or the decrease in the value of a car over time. Sequences are also essential to understanding the patterns of growth and decay in loans and investments that are studied in detail in Unit 4. Graphs and networks introduces students to the language of graphs and the ways in which graphs, represented as a collection of points and interconnecting lines, can be used to model and analyse everyday situations, such as a rail or social network.

Unit 4 – Time series analysis, Loans, investments and annuities, and Networks and decision mathematics

Time series analysis continues students' study of statistics by introducing them to the concepts and techniques of time series analysis. The content is to be taught within the framework of the statistical investigation process. Loans investments and annuities aims to provide students with sufficient knowledge of financial mathematics to solve practical problems associated with taking out or refinancing a mortgage and making investments.

https://senior-secondary.scsa.wa.edu.au/syllabus-and-support-materials/mathematics/mathematics-applications

YEAR 11 ATAR MATHEMATICS METHODS (AEMAM)

Units 1 and 2

The major themes of Mathematics Methods are calculus and statistics. They include as necessary prerequisites studies of algebra, functions and their graphs, and probability. They are developed systematically, with increasing levels of sophistication and complexity. Calculus is essential for developing an understanding of the physical world because many of the laws of science are relationships involving rates of change. The topics in Unit 1 build on students' mathematical experience. The topics 'Functions and graphs', 'Trigonometric functions' and 'Counting and probability' all follow on from topics in the F–10 curriculum from the strands, Number and Algebra, Measurement and Geometry and Statistics and Probability. In Unit 2 differential calculus is developed to study the derivatives of polynomial functions, with simple application of the derivative to curve sketching, the calculation of slopes and equations of tangents, the determination of instantaneous velocities and the solution of optimisation problems.

YEAR 12 ATAR MATHEMATICS METHODS (ATMAM)

Units 3 and 4

The study of calculus continues with the derivatives of exponential and trigonometric functions and their applications, together with some differentiation techniques and applications to optimisation problems and graph sketching. It concludes with integration, both as a process that reverses differentiation and as a way of calculating areas. The fundamental theorem of calculus as a link between differentiation and integration is emphasised. In statistics, discrete random variables are introduced, together with their uses in modelling random processes involving chance and variation. This supports the development of a framework for statistical inference.

The calculus in Unit 4 deals with derivatives of logarithmic functions. In probability and statistics, continuous random variables and their applications are introduced and the normal distribution is used in a variety of contexts. The study of statistical inference is the culmination of earlier work on probability and random variables. Statistical inference is one of the most important parts of statistics, in which the goal is to estimate an unknown parameter associated with a population using a sample of data drawn from that population. In the Mathematics Methods ATAR course, statistical inference is restricted to estimating proportions in two-outcome populations.

https://senior-secondary.scsa.wa.edu.au/syllabus-and-support-materials/mathematics/mathematics-methods

YEAR 11 ATAR MATHEMATICS SPECIALIST (AEMAS)

Units 1 and 2

Mathematics Specialist provides opportunities, beyond those presented in Mathematics Methods to develop rigorous mathematical arguments and proofs, and to use mathematical and statistical models more extensively. Topics are developed systematically and lay the foundations for future studies in quantitative subjects in a coherent and structured fashion. Students of Specialist will be able to appreciate the true nature of mathematics, its beauty and its functionality.

For all content areas, practice allows students to achieve fluency of skills, such as finding the scalar product of two vectors, or finding the area of a region contained between curves, freeing up working memory for more complex aspects of problem-solving. In Mathematics Specialist, the formal explanation of reasoning through mathematical proof takes on an important role and the ability to present the solution of any problem in a logical and clear manner is of paramount importance. The topics in Unit 1 broaden students' mathematical experience and provide different scenarios for incorporating mathematical arguments and problem-solving. The unit blends algebraic and geometric thinking. In Unit 1 vectors for two-dimensional space are introduced and then in later Units vectors are studied for three-dimensional space.

YEAR 12 ATAR MATHEMATICS SPECIALIST (ATMAS)

Unit 3 – Complex numbers, Functions and sketching graphs and Vectors in three dimensions

Three-dimensional vectors are studied and vector equations and vector calculus are introduced, with the latter extending students' knowledge of calculus from the Mathematics Methods ATAR course. Cartesian and vector equations, together with equations of planes, enables students to solve geometric problems and to solve problems involving motion in three-dimensional space. The Cartesian form of complex numbers was introduced in Unit 2, and the study of complex numbers is now extended to the polar form. The study of functions and techniques of graph sketching, begun in the Mathematics Methods ATAR course is extended and applied in sketching graphs and solving problems involving integration.

Unit 4 – Integration and applications of integration, rates of change and differential equations and statistical inference

The study of differentiation and integration of functions continues, and the calculus techniques developed in this and previous topics are applied to simple differential equations, in particular in biology and kinematics. These topics demonstrate the real-world applications of the mathematics learned throughout the Mathematics Specialist ATAR course. Students' previous experience working with probability and statistics is drawn together in the study of statistical inference for the distribution of sample means and confidence intervals for sample means. Students need to study Methods concurrently with Specialist.

https://senior-secondary.scsa.wa.edu.au/syllabus-and-support-materials/mathematics/mathematics-specialist

SCIENCE LEARNING AREA COURSES

Curriculum Handbook 2024 **Senior Years 10, 11 and 12**

YEAR 10 SCIENCE

Compulsory for at least one semester; the full year's course is highly recommended for any student wishing to pursue an ATAR Science Course.

Unit 1 Semester 1 Science (Biology/Human Biology, Chemistry, Physics) – Walking in the footsteps of the famous scientists

Looking at work conducted by famous Scientists, students discover the importance of the DNA structure and how changes to DNA result in different genetic outcomes. Also, how variation occurs when the cell divides and different gene combinations result in the development of new species. Lastly, changes in populations are caused by various mechanisms. Natural selection, gene flow, genetic drift and mutation are investigated as mechanisms. In Chemistry, students view atomic structure and how different elements are bonded together. They begin analysing different quantities of molecules enabling them to work out the products formed and their amounts. Students build the skill of using correct terminology to describe chemical reaction observations using a data sheet. Finally, students study Newton's Three Laws of Motion and 2D vector quantity problems. Working through contextual examples opportunity is given to apply the equations generated from motion graphs. Students may carry out a range of investigations in order to test the Laws of Motion. This will result in analysis, synthesis and evaluation opportunities.

Unit 2 Semester 2 Science (Chemistry, Physics, Biology/Human Biology) – Healthy environments and healthy bodies

Certain actions are required to maintain global sustainability. How can we keep the globe healthy? What processes occur within global systems and how is energy transferred? What does current and future energy consumption look like? Do our current energy usage practices help or hinder our future? Students investigate how energy is used in everyday life. They'll explore fossil fuel formation, hydrocarbons and their uses, discuss whether nuclear energy is a suitable alternative, and consider the role of plants and animals in the fast and slow carbon cycles. As students review human activities such as burning fossil fuels, and our global systems, they will consider related environmental implications. What is the difference between health and disease in humans? We will look at disease causation and how the body defends itself against different types of pathogens.

Please note: Non-programmable calculators are essential for the Science classroom and at home. It is assumed that each student has access to a suitable calculator at all times. Students will require the use of a Scientific calculator in Science, not a Classpad.

YEAR 10 PSYCHOLOGY

As psychologists and profiler trainees we will explore the world of Psychology. It is also a taster for Senior Years Psychology. Psychology is the scientific study of how we think, feel and act. During the course we will examine how perception and cognition result in behaviour and personality. We will explore psychological disorders, and investigate brain functioning. If selected for 4 periods per week in Semester 1 this course cannot be repeated in Semester 2.

YEAR 11 ATAR PSYCHOLOGY (AEPSY)

Unit 1 – Biological and Lifespan Psychology

Psychology as an inquiry-based discipline. Students begin to learn concepts associated with psychological theories, studies and models, which develop and change over time, to explain human emotion, cognition and behaviour. Students learn the basic structure of the central nervous system and some effects of this structure on the way humans think, feel and behave. They are introduced to several methods used to study the brain. An introduction to lifespan psychology with a key focus on adolescent development is given. Opportunity is provided to understand the impact of developmental change on human thoughts, feelings and behaviours. Understanding of developmental processes through learning the role of attachment and identifying stages of development according to specified theorists is extended.

Science inquiry skills developed during Year 7–10 Science are further developed in this unit as students apply these skills to understanding and analysing psychological studies.

Unit 2 – Attitudes, stereotypes and social influences

This unit focuses on the influence of others on human behaviour, cognition and emotion. Students explore the function and effect of attitudes and apply the tripartite model of attitude structure to develop a more complex understanding. Students explore theories of cognitive dissonance, social identity and attribution with reference to relevant psychological studies, and apply these theories to real-world experiences.

The unit introduces social influences. Students learn the role of stereotypes and the relationship between attitudes, prejudice and discrimination in a range of areas. They learn about the relationship between social influence and the development of prosocial and antisocial behaviours.

Students extend their understanding of Science inquiry and the way psychological knowledge develops over time and in response to ongoing research.

https://senior-secondary.scsa.wa.edu.au/syllabus-and-support-materials/science/psychology

YEAR 11 ATAR PHYSICS (AEPHY)

Unit 1 – Thermal, nuclear and electrical physics

Students investigate energy production by considering heating processes, radioactivity and nuclear reactions, and investigate energy transfer and transformation in electrical circuits. Students explore the ways physics is used to describe, explain and predict the energy transfers and transformations that are pivotal to modern industrial societies. They investigate heating processes, apply the nuclear model of the atom to investigate radioactivity, and learn how nuclear reactions convert mass into energy. Electrical ideas are explored using the movement of electrical charge in circuits. Application of these concepts is used to explain and explore global and universal phenomena.

Unit 2 – Linear Motion and Waves

Students describe, explain and predict linear motion, and investigate the application of wave models to light and sound phenomena. Students develop an appreciation of how an understanding of motion and waves can be used to describe, explain and predict a wide range of phenomena. Students describe linear motion in terms of position and time data, and examine the relationships between force, momentum and energy for interactions in one dimension.

YEAR 12 ATAR PHYSICS (ATPHY)

Unit 3 – Gravity and Electromagnetism

Students investigate models of motion in gravitational, electric and magnetic fields to explain how forces act at a distance and use the theory of electromagnetism to explain the production and propagation of electromagnetic waves. Students develop an understanding of motion and its causes by using Newton's Laws of Motion and the gravitational field model to analyse motion on inclined planes, the motion of projectiles, and satellite motion. Investigations and knowledge into electromagnetic are used to understand the operation of direct current (DC) and alternating current (AC) motors and generators, transformers, and AC electricity distribution systems.

Unit 4 – Revolutions in Modern Physics

There are several shortcomings in existing theories that led to the development of the Special Theory of Relativity, the quantum theory of light and matter, and the Standard Model of particle physics; ideas that changed our understanding of how nature operates, leading to a range of new technologies. Students examine observations of relative motion, light and matter use the special theory of relativity and the quantum theory of light and matter to explain these phenomena. Students evaluate quantum theories and examine the Standard Model of particle physics and the Big Bang theory.

A Scientific calculator is required.

https://senior-secondary.scsa.wa.edu.au/syllabus-and-support-materials/science/physics

YEAR 11 ATAR HUMAN BIOLOGY (AEHBY)

Unit 1 – The Functioning Human Body

Looking at how human structure and function supports cellular metabolism and how lifestyle choices affect body functioning. Students study different levels of organisation within the body, from the organelles within the cell and the processes that occur to a range of systems (e.g. the circulatory, digestive and the musculo-skeletal systems). They consider lifestyle choices that could impact the effectiveness of those systems.

Unit 2 – Reproduction and Inheritance

Opportunities are provided to explore the mechanisms of transmission of genetic materials to the next generation, the role of males and females in reproduction, and how interactions between genetics and the environment influence early development. Also, students investigate the application of technological advances and medical knowledge in reproductive technologies, and their potential consequences for individuals.

Requirements:

Minimum of an A grade in Year 10 Biology or Human Biology modules of Science A and Science B courses. Students should only select Biology if they have a good command of English and are good readers.

A Scientific calculator is required.

YEAR 12 ATAR HUMAN BIOLOGY (ATHBY)

Unit 3 – Homeostasis and Disease

Students explore the nervous and endocrine systems and their role in homeostasis, as well as how the body's immune system responds to invading pathogens. The complex interactions between body systems in response to changes in the internal and external environments facilitate the maintenance of optimal conditions for the functioning of cells. Students consider the importance of vaccinations in immunity to infection and apply the scientific method to investigations involving homeostasis.

Unit 4 – Human Variation and Evolution

Students consider variations in humans in their changing environment and evolutionary trends in hominids. They explore how gene pools are affected by evolutionary mechanisms, and consider the evidence for these changes from fossils, comparative anatomy and biochemical studies. Students appreciate that several trends appear in the evolution of hominids and these may be traced using phylogenetic trees.

https://senior-secondary.scsa.wa.edu.au/syllabus-and-support-materials/science/human-biology

YEAR 11 ATAR CHEMISTRY (AECHE)

Unit 1 – Chemical fundamentals: structure, properties and reactions

Models of atomic structure and bonding are used to explain the macroscopic properties of materials and to predict the products, leading to explanations of energy changes associated with chemical reactions. Chemical materials are used for many purposes, including fuels, cosmetics, building materials and pharmaceuticals. With the developments in Chemistry, it has been realised that the properties of a material depend on, understanding the material's structure. Using models at the atomic and molecular scale explanations and predictions of the structure and properties of materials can be made. Students study matter and energy in chemical reactions, as they consider the breaking and reforming of bonds in the formation of new substances. Also, students investigate the relationships between structure and properties.

Unit 2 – Molecular interactions and reactions

Further understanding of bonding models and the relationship between structure, properties and reactions, including consideration of the factors that affect the rate of chemical reactions is investigated. Students learn about physical and chemical properties of materials and explore the characteristic properties of water that make it essential for physical, chemical and biological processes on Earth. They investigate and explain the solubility of substances in water and compare and analyse a range of solutions. Students learn how rates of reaction can be measured and altered. Models of energy transfer and the structure of matter are used to explain and predict changes to rates of reaction, including controlling reactions, using catalysts.

A Scientific calculator is required.

YEAR 12 ATAR CHEMISTRY (ATCHE)

Unit 3 – Equilibrium, acids and bases, and redox reactions

Models of equilibrium in chemical systems are investigated and application of these models in the context of acids and bases and redox reactions. Students learn to explain and predict how a range of factors affect these systems. The idea of reversibility of reaction is vital in a variety of chemical systems at different scales, ranging from processes that release carbon dioxide to the reactions of ions within individual cells of the body. Students appreciate that a range of factors can achieve a state of dynamic equilibrium in reactions. Students investigate acid-base equilibrium systems and their applications. Contemporary models are used to explain the nature, property and uses of acids and bases. Also, principles of oxidation and reduction reactions and the production of electricity from electrochemical cells are investigated.

Unit 4 – Organic chemistry and chemical synthesis

This unit focuses on organic chemistry and the processes of chemical synthesis by which useful substances are produced for the benefit of society. Students investigate the relationship between the structure, properties and chemical reactions of different organic functional groups and the vast diversity of organic compounds. Students also develop their understanding of the process of chemical synthesis to form useful substances and products and the need to consider a range of factors in the design of these processes.

Through the investigation of appropriate contexts, students explore the ways in which models and theories have developed over time and through interactions with social, economic and ethical considerations. They explore the ways in which chemistry contributes to contemporary debate regarding current and future uses of local, regional and international resources, evaluate the risk and action for sustainability, and they recognise the limitations of science in providing definitive answers in different contexts.

Students use science inquiry skills to investigate the principles and application of chemical structure in organic chemistry, and of chemical synthesis processes. They make predictions based on knowledge of types of chemical reactions, and investigate chemical reactions qualitatively and quantitatively.

https://senior-secondary.scsa.wa.edu.au/syllabus-and-support-materials/science/chemistry

YEAR 11 ATAR BIOLOGY (AEBLY)

Unit 1 – Ecosystems and Biodiversity

The biosphere is a dynamic system composed of Earth's diverse, interrelated and interacting ecosystems. Using observations and field survey techniques, students investigate, classify and describe biodiversity, species and several diverse ecosystems. They explore the range of biotic and abiotic components to understand the dynamics and diversity of these systems.

An understanding of the processes involved in the movement of energy and matter in ecosystems results in the ability to relate cause and effect in relation to changes in Earth's biogeochemical cycles. Students are challenged to use critical thinking to understand and solve environmental issues caused by human activities. Conservation strategies are introduced to reduce the impact of habitat destruction, invasive species, unsustainable use of natural resources and climate change.

Unit 2 – From Single cells to multicellular organisms

The cell is the basic unit of life. Despite the diversity between organisms that exists, all cells possess some common features; organelles with structures that result in specialised functions. Students examine the transport of substances between cells and their environment and develop an understanding of the chemical nature of cellular systems. Students investigate the biochemical processes of photosynthesis and respiration, and the role of enzymes in controlling biochemical systems. Multicellular organisms typically consist of several interdependent systems of cells organised into tissues, organs and organ systems. Students study the different levels of organisation in different organisms. Animal and vascular plant systems are studied and compared.

Science skills such as microscope use, dissections and interpretation of scientific models are developed.

A Scientific calculator is required.

YEAR 12 ATAR BIOLOGY (ATBLY)

Unit 3 – Heredity and the continuity of life

Heredity explains why offspring (cells or organisms) resemble their parent cell or organism. Organisms require cellular division and differentiation for growth, development, repair and sexual reproduction. Students investigate the systems and processes involved in the transmission of genetic material to the next generation of cells and to offspring. Different patterns of inheritance are considered, resulting in the possible genotypes and phenotypes of offspring. Observations are linked to explanatory models that describe patterns of inheritance, and the use of predictive models of inheritance are used to further understanding. Students investigate the theory of evolution by natural selection through using and evaluating explanatory and predictive models. They explore causes of genetic variation in gene pools resulting in speciation or extinction and consider future changes to populations.

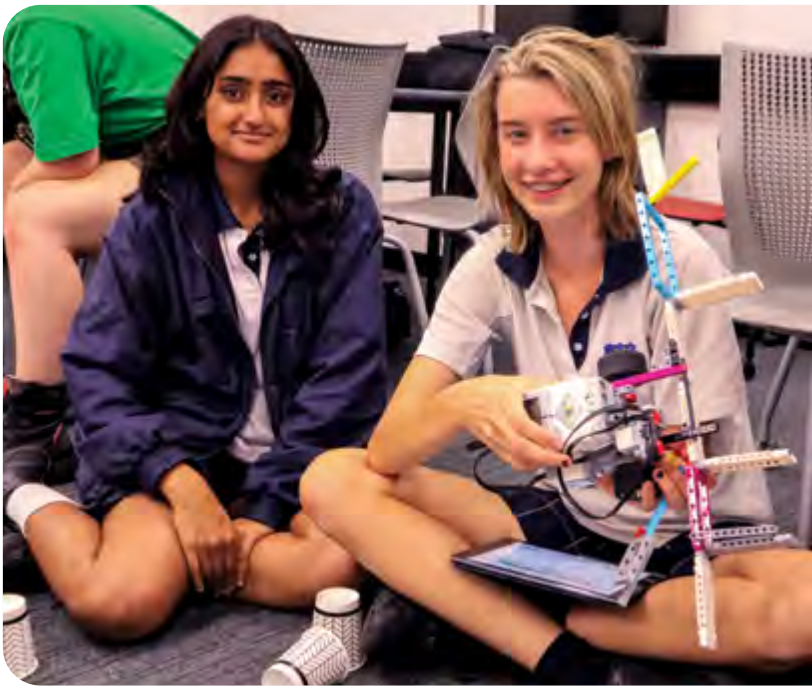
Unit 4 – Homeostasis and Infectious Disease

To survive, organisms must be able to maintain system structure and function when changes in their external and internal environments occur. Changes that are regulated via negative feedback mechanisms include; temperature, water nitrogenous waste and salt. Students investigate the effects of a diverse range of homeostatic response systems. Infectious diseases differ from other types of disease. Students study how the invasion of different types of microscopic pathogens can affect cell, tissue and body functions in plants and animals. Once the modes of pathogen transmission are understood, students can learn, and create models, to stop the spread of disease. Factors that contribute to the rate of spread of infectious disease are considered, including predicting outbreaks and pandemics using computer modelling.

A Scientific calculator is required.

https://senior-secondary.scsa.wa.edu.au/syllabus-and-support-materials/science/biology

TECHNOLOGIES LEARNING AREA COURSES



Curriculum Handbook 2024 **Senior Years 10, 11 and 12**

YEAR 10 COMPUTER SCIENCE

Can be studied for one semester or as a yearlong course.

Semester 1: Programming and networking

Students use algorithms and structured programming to design and implement software solutions for a range of problems. They consider the complex interactions between users, developers, the law, ethics and society when computer systems are used and developed. Students learn about network communications and the transfer of data through a network.

Semester 2: Databases and cyber security solutions

Students learn design concepts and tools used to develop relational database systems (SQL Lite). Students create queries to extract relevant information. Students consider the security of network communications, exploring a range of threats and measures used to keep networks secure. They examine the ethical and legal obligations of the user and developer in the collection and storage of data.

YEAR 11 ATAR COMPUTER SCIENCE (AECSC)

Unit 1 – Systems analysis, computer systems and managing data solutions

Students are introduced to the external analysis, internal, interrelating components of computer-based systems in an industry context. They examine a variety of systems using industry diagrams, build on their spreadsheet and database skills and gain an appreciation of how these concepts and technologies are used in industry.

Unit 2 – Computer systems solutions and communications

Students are introduced to networking concepts as applied to industry. Through the use of algorithms, students develop programming skills. They create solutions exploring the ethical, legal and societal implications of industry-based applications.

YEAR 12 ATAR COMPUTER SCIENCE (ATCSC)

Unit 3 – Design and development of systems and database solutions

Students examine a variety of systems including computer systems components, build on their database skills and gain an appreciation of how these concepts and technologies are used in industry. Students understand the design concepts and tools used to develop relational database systems.

Unit 4 – Design and development of communication systems and software solutions

Students gain the knowledge and skills to create software. They use algorithms and structured programming to design and implement software solutions for a range of problems using the Software Development Cycle. Students consider networks, communication systems, including security and protocols.

https://senior-secondary.scsa.wa.edu.au/syllabus-and-support-materials/technologies/computer-science

YEAR 10 DIGITAL TECHNOLOGIES – MULTIMEDIA

Can be studied for one semester or as a yearlong course.

Students are provided with the opportunity to experience how to develop digital solutions for real situations. The Multimedia course provides a sound theoretical and practical foundation, offering pathways to further studies and a wide range of technology-based careers. This course involves hands-on practical tasks in which students will create a variety of digital products designed to teach them the necessary skills in an engaging, dynamic and challenging way. Students will design and develop high quality images and digital media as well as more creative and sophisticated 3D animation. Students will use various software from the Adobe® Creative Suite CC, 3D Blender and Unity 3D, as well as devices such as graphic tablets, digital cameras and 3D scanner.

YEAR 10 ENGINEERING

Can be studied for one semester or as a yearlong course.

Students will use design thinking and sustainability concepts with a focus on engineering principles to explore the big picture concepts surrounding Sustainability, Leisure and Biomimicry. Through project-based learning students will learn how to design and use the principles of mechanical motion, electrical circuits and microcontrollers to create solutions to real world problems. Students will gain a deep understanding of how to use Fusion 360 3D modelling software to communicate their ideas virtually through digital drawings and Augmented Reality. They will also learn how to create physical working assemblies through LASER cutting, 3D printing and CNC machining processes to test and evaluate their creative solution to the themes of the course.

YEAR 11 ATAR ENGINEERING STUDIES (AEEST)

Unit 1

In the development of an engineering project, students study core engineering theory and the chosen specialist area of mechatronics. Given guidelines and a context, students apply their knowledge of the engineering design process and theory to develop and respond to a design brief. This requires them to investigate existing products, construction materials and components. Design ideas are developed through annotated sketches and concept drawings. The most suitable concept for production is selected as a prototype or working model. Students finalise their chosen design by documenting its specifications in the form of appropriate orthographic drawings, specialist diagrams and lists of materials and components, including costings of the prototype or model. They follow a given timeline to undertake tasks required to produce, test and evaluate the product.

Unit 2

Developing students' understanding of core and specialist area theory to better understand the scientific, mathematical and technical concepts that explain how engineered products function. They study the impact of the different forms of obsolescence in engineering products on society, business and the environment.

Students continue to refine their understanding and skills of the engineering design process, undertaking tasks to produce, test and evaluate the product. Core and Mechatronics specialist area theory continues to be studied to forge greater understanding of the scientific, mathematical and technical concepts that explain how engineered products function.

A Scientific calculator is required.

YEAR 12 ATAR ENGINEERING STUDIES (ATEST)

Unit 3

Students develop their understanding of core and specialist area theory. They also study the impacts of obtaining and using the different forms of renewable and non-renewable energy on society, business and the environment. Using the engineering design process students develop a comprehensive design brief that has a focus on a problem, need or opportunity. They synthesise responses to the brief by engaging in detailed research of similar existing engineered products, by construction materials and components; through sketching, drawing and notating concepts, and by analysing and justifying the choice of the most promising of these for production as a prototype or working model. Understanding and skills of the engineering design process are refined. Then students produce, test and evaluate the product.

Unit 4

Students consider and analyse the stages within the life cycle of engineering products, leading to demonstrating an understanding of the impacts on society, business and the environment that occur during the life cycle of engineered products. Continued refinement of their understanding and skills of the engineering design process are used to produce, test and evaluate the product. Core and specialist area theory continues in order to forge greater understanding of the scientific, mathematical and technical concepts that explain how engineered products function.

A Scientific calculator is required.

https://senior-secondary.scsa.wa.edu.au/syllabus-and-support-materials/technologies/engineering-studies

YEAR 10 MATERIALS, DESIGN AND TECHNOLOGY: METAL

Can be studied for one semester or as a yearlong course.

Through the first five weeks of this course, students will be building on and developing their Technical Graphics skills which will be used in their following projects. Students will be adapting learnt skills required for metalwork through the development of three major practical projects. These projects will be designed and produced with a variety of tables, toolboxes and rod sculptures. These projects will refine the students' ability to apply a variety of skills from welding, brazing, cutting and drilling in order to produce their desired projects. This is also a course about ideas, innovation and creativity. In order to do these well, students research and test the different characteristics of materials, and use strategies to develop innovative and creative ideas. They develop a clear understanding of the elements and fundamentals of design and apply a learned design process to successfully develop a product.

YEAR 10 FOOD SCIENCE AND TECHNOLOGY

Can be studied for one semester or as a yearlong course. This subject is a pre-requisite for Year 11 and 12 Food Science and Technology.

Food Choices in Society

Focuses on the sensory and physical properties of food that affect the consumption of raw and processed foods. Students investigate balanced diets, the function of nutrients in the body and apply nutrition concepts that promote healthy eating. They study health and environmental issues that arise from lifestyle choices and investigate factors which influence the purchase of locally produced commodities. They demonstrate a variety of mise-en-place and precision cutting skills, and processing techniques to ensure that safe food handling practices prevent food contamination. Students recognise the importance of using appropriate equipment, accurate measurement and work individually, and in teams, to generate food products and systems.

Food Properties and Preparation

Focuses on the supply of staple foods and the factors that influence adolescent food choices and ethical considerations. Students recognise factors that affect the sensory and physical properties of foods. They explore food sources and the role of macronutrients and water for health, and nutrition-related health conditions which require specialised diets. Students work with a range of staple foods, adapt basic recipes and apply the technology process to investigate, devise, and produce food products to achieve specific dietary requirements. They evaluate food products and demonstrate a variety of safe workplace procedures, processing techniques and food handling practices.

YEAR 11 GENERAL FOOD SCIENCE AND TECHNOLOGY (GEFST)

The Food Science and Technology General course provides opportunities for students to explore and develop food-related interests and skills.

Food impacts on every aspect of daily life and is essential for maintaining overall health and wellbeing. Students organise, implement and manage production processes in a range of food environments and understand systems that regulate food availability, safety and quality. Knowledge of the sensory, physical, chemical and functional properties of food is applied in practical situations. Students investigate the food supply chain and value-adding techniques applied to food to meet consumer and producer requirements. Principles of dietary planning, adapting recipes, and processing techniques, are considered for specific nutritional needs of demographic groups. Occupational safety and health requirements, safe food handling practices, and a variety of processing techniques, are implemented to produce safe, quality food products.

This course may enhance employability and career opportunities in areas that include nutrition, health, food and beverage manufacturing, food processing, community services, hospitality and retail.

The Year 11 syllabus is divided into two units, each of one semester duration, with students enrolled to student both units as a yearlong course and Year 12 students study Units 3 and 4.

Unit 1 – Food choices and health

This unit focuses on the sensory and physical properties of food that affect the consumption of raw and processed foods. Students investigate balanced diets, the function of nutrients in the body and apply nutrition concepts that promote healthy eating. They study health and environmental issues that arise from lifestyle choices and investigate factors which influence the purchase of locally produced commodities.

Students devise food products, interpret and adapt recipes to prepare healthy meals and snacks that meet individual needs. They demonstrate a variety of mise-en-place and precision cutting skills, and processing techniques to ensure that safe food handling practices prevent food contamination. Students recognise the importance of using appropriate equipment, accurate measurement and work individually, and in teams, to generate food products and systems.

Unit 2 – Developing food opportunities

This unit focuses on the supply of staple foods and the factors that influence adolescent food choices and ethical considerations. Students recognise factors, including processing systems, that affect the sensory and physical properties of staple foods. They explore food sources and the role of macronutrients and water for health, and nutrition-related health conditions, such as coeliac and lactose intolerance, which often require specialised diets. Students consider how food and beverage labelling and packaging requirements protect consumers and ensure the supply of safe, quality foods.

Students work with a range of staple foods, adapt basic recipes and apply the technology process to investigate, devise, and produce food products to achieve specific dietary requirements. They evaluate food products and demonstrate a variety of safe workplace procedures, processing techniques and food handling practices.

YEAR 12 GENERAL FOOD SCIENCE AND TECHNOLOGY (GTFST)

Unit 3 – Food science

This unit explores the societal, lifestyle and economic issues that influence food choices. Students research the effect of under-consumption and over-consumption of nutrients on health and investigate a range of diet-related health conditions that affect individuals and families.

Using scientific methods, students examine the functional properties that determine the performance of food and apply these in the planning and preparation of food products and processing systems.

Students develop their expertise with technology and communication skills to implement strategies to design food products and processing systems. They select resources to meet performance requirements and use evaluation strategies to monitor and maintain optimum standards. Students follow occupational safety and health requirements, implement safe food handling practices and use a variety of foods and processing techniques to produce safe, quality food products.

Unit 4 – The undercover story

This unit focuses on food spoilage and contamination and explores reasons for preserving food. Students investigate food processing techniques and the principles of food preservation. They examine the regulations which determine the way food is packaged, labelled and stored and how the principles of the Hazard Analysis Critical Control Point (HACCP) system are administered and implemented to guide the production and provision of safe food.

Students investigate the food supply chain and value-adding techniques applied to food to meet consumer and producer requirements. Food choices are often determined by location, income, supply and demand and the environmental impact of food provision. Students examine influences on the nutritional wellbeing of individuals that arise from lifestyle and cultural traditions. They implement principles of dietary planning and adapt recipes and processing techniques when considering specific nutritional needs of demographic groups.

YEAR 10 MATERIALS, DESIGN AND TECHNOLOGY: WOOD

Can be studied for one semester or as a yearlong course.

Throughout this course, students will be producing two main projects utilising and refining their skills learnt in previous years. AutoCAD® design work will be a major focus in the beginning of this course, as it is used primarily in designing both practical projects and producing one of the tasks.

Within the two main projects, students will be developing their own Laser cut design, producing a high quality finish and demonstrating their understanding of the AutoCAD® design program. The second project will focus on the workshop use, joinery skills and correct operational use of machinery within the wood production task, developing a sturdy piece of household furniture. This is also a course about ideas, innovation and creativity. In order to do these well, students research and test the different characteristics of materials, and use strategies to develop innovative and creative ideas.

YEAR 11 GENERAL MATERIALS, DESIGN AND TECHNOLOGY: WOOD (GEMDTW)

The Materials Design and Technology General course is a practical course. Students will work in the context of wood, designing and manufacturing wood products. Students will have the opportunity to develop and practise skills that contribute to creating a physical product, while acquiring an appreciation of the application of a design process, and an understanding of the need for materials sustainability. Students will learn and practise manufacturing processes and technologies, including principles of design, planning and management.

The Year 11 syllabus is divided into two units, each of one semester duration, with students enrolled to student both units as a yearlong course and Year 12 students study Units 3 and 4.

Unit 1

Students interact with a variety of items that have been specifically designed to meet certain needs. Students are introduced to the fundamentals of design. They learn to communicate various aspects of the technology process by constructing what they design.

Throughout the process, students learn about the origins, classifications, properties and suitability for purpose of the materials they are using, and are introduced to a range of production equipment and techniques. They develop materials manipulation skills and production management strategies, and are given the opportunity to realise their design ideas through the production of their design project.

Unit 2

Students interact with products designed for a specific market. They use a range of techniques to gather information about existing products and apply the fundamentals of design. Students learn to conceptualise and communicate their ideas and various aspects of the design process within the context of constructing what they design.

Throughout the process, students learn about the origins, classifications, properties and suitability for end use of materials they are working with. Students are introduced to a range of technology skills and are encouraged to generate ideas and realise them through the production of their design projects. They work within a defined environment and learn to use a variety of relevant technologies safely and effectively.

Students, in consultation with teachers, select projects of interest and then design and make products suitable for a specific market.

YEAR 12 GENERAL MATERIALS, DESIGN AND TECHNOLOGY: WOOD (GTMDTW)

Unit 3

Students develop an understanding of the elements and fundamentals of design and consider human factors involved in the design, production and use of their projects. They develop creative thinking strategies and work on design projects within specified constraints. Students learn about the classification and properties of a variety of materials and make appropriate materials selection for design needs.

Students learn about manufacturing and production skills and techniques. They develop the skills and techniques appropriate to the materials being used and gain practice in planning and managing processes through the production of design project. They learn about risk management and ongoing evaluation processes.

Unit 4

Students learn about the nature of designing for a client, target audience or market. Students apply an understanding of the elements and fundamentals of design and consider human factors involved in their design projects. Students learn about the nature, properties and environmental impacts related to a variety of materials and production techniques. They develop creative thinking strategies, work on design projects within specified constraints and consider the environmental impacts of recycling of materials.

Students extend their understanding of safe working practices and contemporary manufacturing techniques and develop the knowledge, understanding and skills required to manage the processes of designing and manufacturing.

APPENDIX I – SCHOOL CONTACT INFORMATION

Heads of Learning Area (HOLA)

Arts Courses	Sally Floyd	sally.floyd@education.wa.edu.au
Music Courses	Philippa Roy	philippa.roy@education.wa.edu.au
English Courses	Danae Brazier	danae.brazier@education.wa.edu.au
Health and Physical Education Courses	Mark Muir	mark.muir@education.wa.edu.au
Humanities and Social Sciences Courses	Louise Secker	louise.secker@education.wa.edu.au
Language Courses	Matthew Todd	matthew.todd@education.wa.edu.au
Mathematics Courses	Mark White	mark.white@education.wa.edu.au
Science Courses	Anthony Meczes	anthony.meczes@education.wa.edu.au
Technologies Courses	Sally Floyd	sally.floyd@education.wa.edu.au

Associate Principals

Student Services	Nikki Reilly	nicola.reilly@education.wa.edu.au
Timetable and SSO	Robyn Verboon	robyn.verboon@education.wa.edu.au
Learning and Teaching, and Acceleration	Fiona Tholet	fiona.tholet@education.wa.edu.au

APPENDIX II – CAREER PLANNING WEBSITES

The information gained from the following list of websites may be helpful to students.

Australia-wide job search	www.jobsearch.gov.au
Australian Defence Force Academy	www.defencejobs.gov.au
Course Finder	www.coursefinder.com.au
Curtin University	www.curtin.edu.au
Edith Cowan University	www.ecu.edu.au
Murdoch University	www.murdoch.edu.au
My Future	www.myfuture.edu.au
Perth Modern School	www.perthmodern.wa.edu.au
School Curriculum and Standards Authority	www.scsa.wa.edu.au
Seek vacancies Australia	www.seek.com.au
Tertiary Institutions Services Centre (TISC)	www.tisc.edu.au
The Good University Guide	www.gooduniversitiesguide.com.au
Training – Department of Training and Workforce Development	www.dtwd.wa.gov.au
University of Notre Dame	www.nd.edu.au
University of Western Australia	www.studyat.uwa.edu.au

www.perthmodern.wa.edu.au