

PATHWAY TWO – AGRICULTURE

Students in this pathway typically plan to enter the workforce, especially within the Agriculture Industry, or undertake further studies upon completion of Yr 12 such as Certificate IV in Agriculture. Students may also choose to apply for apprenticeships, traineeships and TAFE courses. Students will undertake a full course in Animal and Plant Productions Systems.

➤ Please note that places may be limited to 22 students

SUBJECT	YR 11	YR12
Animal Production Systems	Stage 1A/1B	Stage 1C/1D
Plant Production Systems	Stage 1A/1B	Stage 1C/1D
English	Stage 1A/1B	Stage 1C/1D
Mathematics	Stage 1D/1E* Or Stage 2A/B	Stage 2A/2B Or Stage 2C/D
Agriculture	Complete one or more certificates over 2 years to Certificate II and/or Certificate III level	
Design and Technology	Two courses to be undertaken to Certificate I or Certificate II level over 2 years in Automotives, Building and Construction, Engineering, Furnishing	
Design and Technology or Physical Education Studies	A third course to be undertaken as listed above OR	
	Physical Education Studies Stage 1A/1B	Physical Education Studies Stage 1C/1D

* testing and streaming in Term 1 will determine student remaining in 1D/1E or being enrolled into 2A/B

Animal Production Systems 1A / 1B

In these units which are run concurrently throughout the year, students learn about animal production from basic processes through to the end product according to purpose or markets. The teaching and learning is based around several animal enterprises including sheep, cattle and poultry. Students investigate animal function, available markets, and the effect animal production systems have on the environment and communities. Students will learn about basic nutrition, breeding systems and reproduction, health management and requirements for sustainable production. They will routinely work with animals, recognise hazardous situations and suggest solutions. Practical activities include growing chickens and monitoring College livestock.

Animal Production Systems 1C / 1D

In these units run concurrently throughout the year, students learn about the basic processes involved in animal production and examine how to achieve quality end products. Students investigate how healthy animals function while looking at the different types of animal production systems that exist in WA agriculture. They also learn about available markets and the particular market specifications that livestock must meet. Students examine the differences between animal production systems and natural systems, while also developing an understanding of the impact that agriculture has on the environment.

Plant Production Systems 1A / 1B

In these units students learn the basic principles about plant production from plant physiology to harvest. They investigate the uses of plant produce, their markets and their market demands. The teaching and learning is based around broad acre cropping enterprises. Students investigate how healthy plants function, how this affects production and what impacts they may have on economic return. Students have access to a wide range of plant enterprises, new technology and specific equipment which enables them to best research how they function and affect plant production.

Plant Production Systems 1C / 1D

In these units students extend their knowledge of the basic principles of plant production from plant physiology through to harvest. They routinely work with a variety of plants, recognize hazardous situations and suggest solutions for their problems. Students also investigate plant function, available markets, the effect plant production have on the communities as well as new technologies and practices in broad acre cropping enterprises. Students have access to production system, new technology and specific equipment which enables them to research and discover how the function of essential plant structures affects production.

English 1A / 1B

These units cater for students who are interested in learning a trade or gaining employment when they leave the college. It is based on building reading, writing, speaking and listening skills for the workforce. This includes functional writing skills such as filling in forms and presenting their knowledge in writing; furthering reading skills for both enjoyment and information; and developing skills for presenting information verbally. Topics centre on the interests of the students and are chosen to help students become more engaged in reading and writing.

English 1C / 1D

This course follows on from the 1A, 1B stream taken in year 11. It further develops students' literacy skills and brings in more analysis of contemporary texts. Students examine the way written and visual language can influence an audience, and the way that mass media texts can promote stereotypes. Throughout these units students will develop their writing skills, learning to present a structured argument, and vary their language to suit particular contexts. This course also includes a career studies topic to prepare students for gaining employment.

Mathematics 1D/1E

Students use decimals, fractions, percentages and ratios for practical purposes. They apply mathematics in making financial decisions. They calculate area and perimeter, apply trigonometric ratios and use Pythagoras' theorem for the sides of triangles. They describe the effects of reflecting, rotating and translating shapes in design, and enlarge, reduce and distort figures. They interpret detailed maps or plans to create scale drawings and 2D or 3D models. Students collect measurement data from fair samples, display data in tables and graphs, calculate averages and describe spread of data. They use mental strategies, written methods, calculators and computer technologies for contexts such as home loans, farm shed design, mobile phone plans.

Mathematics 2A/2B

Students apply ratios and direct proportion in practical situations. They calculate profit, loss, discount and commission in financial contexts. They study introductory algebra and linear relationships in numeric, algebraic and graphical forms. They use Pythagoras' theorem for the sides of triangles and analyse the reflection, rotation and translation of shapes in design. Students collect data from fair samples, and represent and interpret the data. They use mental and written methods, online learning and calculator-assisted technology where appropriate.

Mathematics 2C/2D

Students calculate interest and repayments in order to make decisions about savings and loans, and they interpret information on financial statements that are part of everyday living. They study and apply quadratic relationships. They extend their knowledge of coordinate geometry, and represent information in networks and interpret network diagrams. Students calculate and interpret probabilities for events with more than one chance component. They analyse datasets, determine trends in data and use trend lines for prediction. They use mental and written methods, online learning and calculator-assisted technologies where appropriate.

Physical Education Studies 1A / 1B

Physical Education Studies has an emphasis placed on understanding and improving performance in physical activities. The integration of theory and practice is central to the studies of this course. In unit 1A students develop a basic understanding of anatomical, physiological and practical factors associated with performing in physical activities. Unit 1B enables the students to extend their knowledge on the bodies systems and expand their understanding of the effectiveness and efficiency as team members and individuals.

Physical Education Studies 1C / 1D

Physical Education Studies has an emphasis placed on understanding and improving performance in physical activities. The integration of theory and practice is central to the studies of this course. In Unit 1C students are introduced to simple movement, biomechanical, physiological, psychological, functional anatomy and motor learning concepts that provide a basis for assessing and enhancing their own and others' performance. The understanding of the relationship between skill, movement production and fitness will be further enhanced as students develop and improve. The focus of Unit 1D is for students to assess their own and others' movement competency and identifies areas for improvement. They will build on their knowledge of training principles, nutrition and goal setting concepts to enhance their own and others' performance in physical activity.