



ARCH FACTS 2022

Year 9 Elective Subject Descriptions

Electives by Faculty		
Arts Electives	Humanities Electives	Science Electives
English Electives	Languages Electives	Technology Electives
Health & PE Electives	Performing Arts Electives	Sport Education

2022 Year 9 Elective List

After listening to the information presented by each Faculty and/or reading the subject descriptions in Arch Facts, tick the electives you are interested in.

Arts		Health & Physical Education		Performing Arts		Technology - Home Economics	
	Art: Ceramics & Sculpture		Action in the Outdoors		Drama 1 - Drama Performance		World Foods
	Art: Drawing		Bike Education		Drama 2 - Theatre Performance		Baker's Bounty
	Art: Painting		Get Active		Music Prac		Asian Cookery
	Art: Photography & Digital Imaging		Mind and Body		Music Prac/ Technology	Technology - Metal, Wood & STEM	
	Art: Printmaking		Outdoor Education		Music Performance		Knotty Bits Wood Class
	Ceramics: Pottery		Specialist Sport		VET Cert II Music		Metal
	VCD: Architecture		Year 9 Physical Education	Science			STEM CO2 Dragster
	VCD: Computer Assisted Design and Engineering	Humanities			Exploring With Science		STEM Rocket Wars
	VCD: Graphic Design		Community Services Project		Food Science		STEM: Year 9 Lighting Design
English			International Studies		Forensic Science	Technology - Textiles	
	Creative English		Sustainability	Technology - Digital Technologies			Clothing: Design and Production
	Journalism	Languages			Coding		Interior Design and Production
	Literature		German - Full year		Conquering the Digital World		Soft Toy Design and Production
	Myths & Legends		German - Half year		Programming		Tech Styled Textiles
You need to enter your selections online by:			Japanese - Full year		Strategy Games		
			Japanese - Half year				

Planning your online selections

Year 9 is a time to trial as many subjects and pathways as possible. As such, students are encouraged to choose subjects from a range of curriculum areas.

Students complete 8 elective subjects across Year 9 (2 each term).

It is highly recommended that students choose an elective from Arts (performing or visual) & Technology.

Sport Education is completed by all Year 9 students and is not included as one of the 8 elective subjects.

Top 8 preferences

1.	5.
2.	6.
3.	7.
4.	8.

Reserve preferences

9.	11.
10.	12.

Arts Electives

<p style="text-align: center;">Art: Ceramics and Sculpture</p> <p>Course Outline Students will design and construct 3D artworks using clay and various construction and decoration techniques. Students will build on basic clay modelling techniques, such as pinch and slab construction, but will combine techniques to develop more complex work. Several creative themes will be explored to stimulate ideas for the artworks and students will follow a design process to research, plan, develop and evaluate their ideas.</p> <p>Assessment</p> <p>Production: A folio of completed ceramic sculptures and a visual diary that records the student's research, planning, ideas, sketches and evaluations.</p> <p>Theory: Sculpture artists will be discussed and studied. This will involve looking at and comparing their ideas, influences and their use of materials and techniques.</p>	<p style="text-align: center;">Art: Drawing</p> <p>Course Outline This elective unit focuses on developing skills through observational drawing of various subject matter. Students gain experience and control with a number of traditional drawing materials and techniques while developing their own personal style.</p> <p>Assessment</p> <p>Folio: Students will produce a drawing folio over the duration of the subject, as well as at least one final piece.</p> <p>Theory: Students will research artists as inspiration for their own drawing development.</p>
<p style="text-align: center;">Art: Painting</p> <p>Course outline This subject provides an opportunity to learn the basic skills in relation to painting and drawing, with a focus on contemporary painting. Students will look at artists from the pop art movement, as well as street artists, as inspiration for their own works.</p> <p>Assessment Students will be required to keep a visual diary documenting the exploration into their own ideas. Students will also be assessed on their final works. Students will research a street artist of choice as the subject of a written assignment.</p>	<p style="text-align: center;">Art: Photography & Digital Imaging</p> <p>Course Outline This elective unit will introduce students to a basic understanding of aspects related to the study of photography and digital imaging as an art form. Students will gain experience producing and manipulating images in Photoshop as well as learning the basics of operating a digital SLR camera. Students will also be introduced to some darkroom processes.</p> <p>Assessment Students will be required to maintain a workbook of ideas and processes, design and create finished photographic artworks and present a research assignment.</p>

<h2 style="text-align: center;">Art: Printmaking</h2> <p>Course Outline This subject provides an opportunity to learn the basic skills in relation to printmaking. The unit covers various printing techniques, including: relief lino prints, relief collagraphs, mono prints, etc. Students will take part in arranging their work, so it can be presented for an exhibition within the school.</p> <p>Assessment Progressive assessment of finished works and assignments and the maintenance of a workbook.</p>	<h2 style="text-align: center;">Ceramics: Pottery</h2> <p>Course Outline Students will explore ceramic techniques to make functional pottery. Techniques such as Slip casting, Pottery, Wheel throwing and other moulding techniques will be used to create such things as cups, bowls, plates and vases. A major aspect of making functional pottery is the decoration of the surface of the pot. Students will explore and use various glazing techniques to create artistic designs. Students will also look at the pottery work of Ceramic artists for inspiration.</p> <p>Assessment Production: A folio of completed ceramic sculptures and a visual diary that records the student's research, planning, ideas, sketches and evaluations.</p> <p>Theory: Pottery artists will be discussed and studied. This will involve looking at and comparing their ideas, influences and their use of materials and techniques..</p>
<h2 style="text-align: center;">Visual Communication Electives:</h2> <p>There are three possible streams for Visual Communication and Design</p> <ul style="list-style-type: none"> • Graphic Design • Architecture • Engineering Drawing & CAD <p>Students can undertake any combination of these.</p> <p>Each is an independent course which will compliment but not overlap the others. All three courses will prepare students for Visual Communication in years 10, 11 and 12.</p>	<h2 style="text-align: center;">VCD - Architecture</h2> <p>Course Outline This subject will focus on design for the built environment. Students will learn specific skills in perspective drawing and architectural rendering as well as the construction and dimensioning of house plans. They will also develop computer aided design models and renderings of Architectural spaces.</p> <p>Assessment Assessment will be based on a folio of work built around four key projects.</p> <ul style="list-style-type: none"> • Manual illustration techniques • Architectural Design • Architectural plan production • Computer Aided Modelling and Rendering

VCD - Computer Assisted Design & Engineering

Course Outline

Students produce two and three dimensional engineering drawings to Australian Standards specification. Students design and develop simple functional objects in response to a design problem, using both manual drawing and Computer Aided Models. Students will use 3D printing fabrication techniques to test and evaluate their designs.

Assessment

Assessment will be based on a folio of work built around four key projects.

- Manual illustration techniques
- Object Design
- Object plan production
- Computer Aided Design

VCD - Graphic Design

Course Outline

This subject will focus on manual drawing and computer based design skills. Students will complete a range of visual communications that may include posters, logos, package designs, paraline and perspective drawings, and also develop skills in three-dimensional design using computer software.

Assessment

Progressive assessment of finished works and assignments, and maintenance of a folio.

Arts Elective Contact:



Kaitlyn Fry

English Electives

<p style="text-align: center;">Creative English</p> <p>Course Outline In this elective, students have the opportunity to write in a variety of modes and styles. They are encouraged to experiment and expand on their own writing. The following forms of writing may be studied: short stories, descriptive writing, poetry, sensory writing, dialogue, letters and diary writing. Students can also elect to do extra or alternative forms of writing.</p> <p>Assessment The focus is on producing individual collections of writing with consideration given to purpose, audience and appropriate presentation.</p>	<p style="text-align: center;">Journalism</p> <p>Course Outline Journalism covers writing styles and the presentation of news and entertainment through TV, magazines and newspapers. Learn about demographics and how to appeal to specific audiences through advertising. You will work in editorial teams to mock-up magazines, cover local stories, and create your own newsletter. What is third person writing and why can journalists get into trouble if they don't use it? What is libel? Could you get sued for telling the truth!? Can we believe everything we read? Find out how journalistic bias can stretch the truth to make you believe things that are not entirely true.</p> <p>Assessment Written news articles and analysis of opinion columns, generation of magazine covers and articles that reflect demographic interest and working effectively as part of an editorial team to plan and create a newsletter.</p>
<p style="text-align: center;">Literature</p> <p>Course Outline Literature aims to broaden the students' exposure to reading by considering different types of texts, e.g. informative, expository, novels (or parts of novels) plays and poetry. The students will explore the differing structures of texts and how this impacts on the reader.</p> <p>Assessment</p> <ul style="list-style-type: none"> • Reflection, discussion and analysis of texts studied in class. • Written and oral responses addressing issues, themes and topics arising from texts 	<p style="text-align: center;">Myths & Legends</p> <p>Course Outline Myths & legends aims to identify the importance of myths and legends in communicating values and using narrative to explain the world. Students also learn how ancient myths and legends preserve cultures. Students will focus on the work of Carl Jung and Joseph Campbell and examine the oral tradition of storytelling. Key concepts include the hero's journey and archetypes.</p> <p>Assessment</p> <ul style="list-style-type: none"> • Report on archetypes • Epic story presentation • Poster on the Hero's Journey • A brochure on a mythical beast/location

English Elective Contact:



Patrick Stewart

Health & Physical Education Electives

Action in the Outdoors

Action in the Outdoor aims to introduce students to a variety of recreational activities to develop their skill set when planning for and participating in the outdoors.

Topics covered include:

- Bike education
- High ropes
- Orienteering
- Nutrition for expeditions
- Environmental studies

Assessment:

- Practical participation
- Classwork
- Projects

Bike Education

Bike Education aims to introduce student to all aspects of bike riding. Everything from changing a tyre tube to navigating berms. Before heading out for a half-day ride along the Skipton Rail Trail, students will learn about bike safety and road rules.

Topics covered include:

- Knowing my bike
- Cornering
- Berms
- Skipton Rail ride
- Road rules/safety

Assessment:

- Written task
- Rider analysis
- Reflection on ride

Bike Maintenance Levy: \$10.00

Get Active

Year 9 Get Active is a practical and theoretical analysis of participation in physical activity. Students will participate in a range of sport and recreation activities to develop their understanding of the benefits of physical activities in relation to the topics covered.

Theoretical topics covered:

- Injury prevention and first aid
- The National Physical Activity Guidelines
- Benefits of physical activity

Assessment:

- Practical participation
- Common Assessment Tasks

Mind and Body

In Mind and Body students will focus on a range of health topics. In each topic students will develop a comprehensive understanding of harm minimisation strategies and community services.

Topics covered include:

- Mental health- Focusing on coping, anxiety and depression
- Drugs- Focusing on prescription drugs, illegal drugs and drugs in sport
- Relationships- Focusing on gender differences and stereotypes in the media

Assessment:

- Assignments
- Investigations
- Workbook

Outdoor Education

Outdoor Education introduces students to the studies of the outdoor environment. The subject introduces students to a range of outdoor environments and highlights their importance to contemporary study.

Topics covered:

- Bush walking
- Bike education
- Camp cooking
- Natural disasters
- National parks
- Rock climbing

Assessment:

- Practical participation
- Classwork
- Projects

Bike Maintenance Levy: \$5.00

Year 9 Physical Education

Year 9 Physical Education is a practical and theoretical study of sport. Students will participate in practical activities that range from sport specific activities to fitness training.

Theoretical topics covered:

- Skeletal system
- Muscular system
- Cardiovascular system

Assessment:

- Practical participation
- Test
- Assignment

Specialist Sport

Course Outline

This is a practical subject where students will train in their specialised sport for two periods a week. Sports include Netball, Football, Athletics, Strength and Conditioning, Basketball, Badminton and Tennis.

Students will also train for another two periods to develop their practical and theoretical knowledge of fitness components, strength and conditioning.

Only students selected can take this subject. Applications are available from Mrs. Scholten. Please see the application form for more information.

Assessment:

- Skill development
- Fitness assessment and
- Knowledge of the sport

Health & Physical Education Contact:



Faith Scholten

Humanities Electives

Community Services Project

Course Outline

Ballarat High has developed a partnership with the Ballarat Special School. This elective allows the students to act as a classroom assistant, working with the Special School teachers and their students. Regular attendance is essential and the building of relationships between our students and the Special School students is a key factor.

The involvement of BHS students can be credited as volunteering their time to a community service, for which they will receive a letter of acknowledgement from the school. This could be added to their resume.

Contact: Peter Tunbridge

International Studies

Course Outline

This elective explores what culture is and the impact culture has on decision making around the world. Students will also have the opportunity to explore peacekeeping bodies, such as the United Nations and their role and relevance in present and past issues.

Finally, students will be able to research a particular instance of global cooperation or conflict and the impact this has had on relationships around the world.

Assessment

Culture portfolio, case studies and research tasks.

Sustainability

Course Outline

There are many environmental changes that have been caused by humans such as pollution, land degradation and impacts on aquatic environments. Understanding how people and their environments interconnect is vital for explaining environmental change and helps in planning effective management for a sustainable future.

This elective explores what sustainability is as well as what it entails. Students examine how sustainability can be achieved both locally and in wider applications through the use of research and the application of practical activities.

Assessment

Assignment work, excursions and practical activities (group and individual)

Humanities Elective Contact:



Nathan Thomas

Languages Electives

German

Prerequisite: Have achieved at or above expected level in Year 8 German

Course Description

At this level, students bring to their learning existing knowledge of German language and culture and a range of learning strategies and experiences. They are increasingly aware of the world beyond their own and are engaging with youth-related and social and environmental issues. They require continued guidance and mentoring but work increasingly independently to analyse, reflect on and monitor their language learning and intercultural experiences. They are considering future pathways and options, including how German could be part of these.

Assessment

This year the focus is on social communications: *speaking and listening* (introducing oneself and others, exchanging personal information, thanking and congratulating people, asking for assistance, and responding to simple instructions); and *reading and writing* (comprehension and production of short texts concerning a range of social situations, and following simple instructions).



Contact: Danijela Bjelanovic

Japanese

Prerequisite: Have achieved at or above expected level in Year 8 Japanese

Course Description

At this level, students bring to their learning existing knowledge of Japanese language and culture and a range of learning strategies. They are increasingly aware of the world beyond their own and are engaging with youth-related and social and environmental issues. They require continued guidance and mentoring but work increasingly independently to analyse, reflect on and monitor their language learning and intercultural experiences. They are considering future pathways and options, including the possible role of Japanese in these.

Assessment

This year the focus is on social communications: *speaking and listening* (introducing oneself and others, exchanging personal information, thanking and congratulating people, asking for assistance, and responding to simple instructions); and *reading and writing* (comprehension and production of short texts concerning a range of social situations, and following simple instructions).



Contact: Simon Coles

German and Japanese may also be undertaken as a single semester unit of study.

If you are interested in this as an alternative to the full-year course, you must discuss this option with your year 8 LOTE teacher. As this is an accelerated course covering two semesters' worth of work in half the time, you will be asked to provide a recommendation from your LOTE teacher and/or team leader stating your suitability for the program.

Contact: Simon Coles

Performing Arts Electives

Drama 1 - Drama Performance

Course Outline

Year 9 Drama is a practical performance based subject. Students develop approaches to making and responding to drama independently and in small groups. Students will be provided with thematic stimulus material that they will interpret and analyse as well as research further to bring ideas to life onstage. They continue to explore drama as an art form through improvisation, character development, rehearsal and performance.

Assessment

- Practical work
- Performances
- Written workbook

Contact: Jessica Quick

Drama 2 - Theatre Performance

Course Outline

Year 9 Drama 2 (Theatre Performance) sees the students interpret existing scripts as well as develop self devised work for performance. The students work in different areas of stagecraft and design such as costume, set, make-up, hair, set, sound and lighting design as well as acting and direction. The class is designed as an introduction of the elements of Theatre Studies.

Assessment

- Practical work and performance
- Design task
- Written workbook

Contact: Elley Jones

Music Prac

Course Outline

Music Prac is a subject that explores a variety of music styles. Students will be expected to perform in a group setting on a weekly basis. This will involve singing and playing of instruments. We will be focusing on learning to play guitar and keyboard chords, fundamental bass lines and essential drum grooves along with singing. We will also be listening and talking about music, along with looking at some important artists in pop and rock music. Students of all skill levels, including beginners, are welcome.

Assessment

75% Ongoing assessment of rehearsal and performance
25% Class work and set assignments

Music Prac/Technology

Course Outline

Music Technology incorporates the prac class whilst looking at some fundamentals of music technology. This involves in depth use of music creation software & small radio show studio recording. Improving personal skills on an instrument/vocals in the prac room setting is a key component of this course, with an emphasis on regular performances. Students with an interest in music prac & music technology are welcome.

Assessment

50% Ongoing assessment of rehearsal and performance
50% Successful use of music technology

Music Performance

Course Outline

Music Performance takes a more in depth look at playing. Music performance is a predominantly practical based subject that utilises the prac room but also smaller ensembles if available. Students are encouraged to personalise their learning outside of music by practising regularly. Leadership and group work skills in a music setting are developed throughout the term. Music performance has a high emphasis on performing. We will also be listening and talking about music, along with looking at some important artists in pop and rock music. Dedicated music students are encouraged to enrol, along with students who wish to take the next step with music.

Assessment

75% Ongoing assessment of rehearsal and performance
25% Class work and set assignments

VET Certificate II in Music

Description

This course will provide students with practical skills and knowledge to enhance their current musical

skills for performance purposes. Performance electives will focus on song writing and performances within ensembles. This subject will run on Mondays from 1:30 till 5:00. Performing in a school ensemble such as Bob, Whiz-bang or Concert Band will now come with credit towards this subject. However, you do not have to be a member of a school ensemble to be part of VET.

Career Opportunities

This certificate is a nationally recognised certificate and leads on to Certificate III and Certificate IV all of which can be completed (cert IV partially) at Ballarat High School. With the Certificate II in Music and additional training and experience, future employment outcomes may include professional musician, sound or studio engineer, writer or arranger, sales and merchandising personnel.

Note: There will be an extra cost to do this subject. This covers recording studio time and guest artists.

Music Electives Contact:



Damien Woods

Science Electives

Exploring With Science

Course Outline

This subject gives you the chance to find the answers to all the questions you have had in science but never got to look at. Once you have learnt the procedure you can be just like the Mythbusters. You will be presented with a number of questions, you will decide on variables, determine methods of measuring and recording data, set up your trials and find your answers to each question. Your team will have the chance to present your findings to the rest of the class, through a choice of mediums.

Topics covered will include:

- Investigating scientific procedure
- Safety
- Group Negotiated Investigation

Assessment

May include tests, research investigations, assignments, practical investigations, presenting a visual summary of findings and oral reports.

Food Science

Course Outline

What's in our food?
 Why does food look and taste the way it does?
 Why are some foods more appealing than others?
 How does manufacturing alter the nutrient value of our food?
 Food Science draws from many disciplines such as biology, chemical engineering, and biochemistry in an attempt to better understand food processes and ultimately improve food products for the general public. Food scientists study the aspects of food that make it appealing - the physical, microbiological, and chemical makeup of food. By applying their findings, they are responsible for developing the safe, nutritious foods and innovative packaging that we see everyday in the supermarket.

Topics covered will include:

- What makes up food?
- Reactions in cooking
- Food analysis

Assessment

May include tests, research investigations, assignments, practical investigations, presenting a visual summary of findings and oral reports.

Forensic Science

Course Outline

Forensic science is the application of science to criminal and civil law. Forensic scientists collect, preserve, and analyze scientific evidence during the course of an investigation. While some forensic scientists travel to the scene to collect the evidence themselves, others occupy a laboratory role, performing analysis on objects brought to them. In this science elective you will become the scientist and learn techniques and procedures that are used to provide evidence to police to help solve crimes. Criminal investigation has become more advanced as technologies are developed.

Topics covered will include fingerprinting, DNA analysis, blood sampling and crime scene analysis.

Assessment

May include tests, research investigations, assignments, practical investigations, presenting a visual summary of findings and oral reports.

Science Electives Contact:



Elizabeth Kent

Technology Electives

Digital Technologies Electives

<p style="text-align: center;">Coding</p> <p>Course Outline This course will engage and introduce students in a variety of coding activities using both block and console features of contemporary applications. Students will explore the different possible coding environments to solve process and computational problems using graphical tools. At the completion of the course students will be able to use common design patterns to implement the common constructs such as sequences, iterations and selections. Finally, students will be expected to demonstrate their coding skills by implementing a sequence of instructions to control a remotely controlled device.</p> <p>Assessment</p> <ul style="list-style-type: none"> • Design Tool Folio • Coding Project Folio • Demonstration of code-controlled device 	<p style="text-align: center;">Conquering the Digital World</p> <p>Course Outline In Digital Technologies, students are actively engaged in the processes of analysing problems and opportunities, designing, developing and evaluating digital solutions, and creating and sharing information that meets a range of current and future needs.</p> <p>Students learn to safely and ethically exploit the capacity of information systems to create digital solutions. The aim of this course is to provide students with opportunities to acquire deep knowledge of the nature of data and their representation, and computational skills for interpreting data. Students will be introduced to the use of database, spreadsheet and web development applications. As part of the learning process students will have opportunities to manage and collaboratively create interactive solutions for sharing ideas and information online, taking into account social contexts and legal responsibilities.</p> <p>Assessment</p> <ul style="list-style-type: none"> • Website - Security & Privacy • Data Exploration - Using Google Forms (Google Forms) • Online Collaboration - Team Website (IT issue)
<p style="text-align: center;">Programming</p> <p>Course Outline In Digital Technologies, students are actively engaged in the processes of analysing problems and opportunities, designing, developing and evaluating digital solutions, and creating and sharing information that meets a range of current and future needs.</p> <p>Specifically students will develop skills visualising possible problem solutions and representing these solutions using a variety of standard thinking routines. Students will also have the opportunity to write programming solutions using a variety of programming applications and other devices such as programmatically controlled robots.</p> <p>Assessment</p> <ul style="list-style-type: none"> • Algorithmics Folio • Coding Test Folio • Problem Solving Tasks 	<p style="text-align: center;">Strategy Games</p> <p>Course Outline This course will engage students in a structured exploration of games and game strategies. Students will be encouraged to explore a range of games/puzzles and how to use visual tools to represent the possible strategies that could be used to select possible paths to the final solution. The course will use manual recording and high level coding language (Edgy) to aid in the visual representation of the possible solution paths.</p> <p>Assessment</p> <ul style="list-style-type: none"> • Folio of games & puzzles • Edgy project folio

Digital Technologies Elective Contact: David Harradine

Technology - Home Economics

Home Economics – World Foods

Course Outline

Enjoy the cuisine of EUROPE without having to leave home! Every week we will cook food from different European countries, so if you like the sound of Dorset apple cake, Italian spaghetti, Spanish pizza then this is the unit for you.

Assessment

Work requirements follow the design plan process and include satisfactory participation in classes and completion of all bookwork. Student's will be assessed on a practical design task completed throughout the term.

Home Economics – Bakers Bounty

Course Outline

In this unit you will learn all the tricks needed to produce good quality and great tasting yeast & pastry products, homemade pasta and baked goods. Items produced include muffins, apricot turnovers, cinnamon scrolls, brownies and Fettuccine Napolitana.

Assessment

Work requirements include satisfactory participation in classes and satisfactory completion of all bookwork. Students will be assessed on a practical design task completed through the term.

Home Economics – Asian Cookery

Course Outline

Do you enjoy stir fries, curries and the occasional oriental sweet treat? Then ASIAN cooking is for you. Every week we will cook food from different Asian countries. Learn how to cook Thai green chicken curry, Malaysian spring rolls, Asian inspired crepes and desserts.

Assessment

Work requirements follow the design plan process and include satisfactory participation in classes and satisfactory completion of all bookwork. Students will be assessed on weekly practical exercises as well as a practical design task completed throughout the term.

Home Economics Elective Contact:



Fiona Finnegan

Technology - Wood, Metal & STEM

<p style="text-align: center;">Knotty Bits Wood Class</p> <p>Course Outline The purpose of this course is to allow students to be imaginative and creative with the development and production of a given design concept which could include projects similar to a treasure chest or jewellery box. Students participate in the construction of one major production piece and extension work on completion of the major product which could include further development of the major product or a second product as decided on by both student and teacher relative to time, material and ability.</p> <p>Assessment This course involves students participating in the Design Cycle Tasks delivered using Google Classroom for task descriptions and submission of work. Assessment Tasks include Investigation, Generate Designs, Plan and Management of project, Creation and Final Evaluation.</p>	<p style="text-align: center;">Metal</p> <p>Course Outline This subject covers a variety of general metal working techniques, including wrought iron work, sheet metal construction and metal fabrication.</p> <p>Assessment</p> <ul style="list-style-type: none"> • Workbook – which includes all design, theory and evaluation work • Production pieces
<p style="text-align: center;">STEM CO2 Dragster</p> <p>Course Outline: In STEM, students have the opportunity to identify real world problems and develop solutions by engaging in the design thinking process and establishing the importance of entwining the subjects of Science, Technology, Engineering and Maths. Students will engage in thinking processes, develop ideas, research, design solutions, test and improve prototypes and work collaboratively to manage projects. STEM gives students the opportunity to determine the direction of the main project and establish the skills needed to achieve the final goal.</p> <p>Assessment:</p> <p>Students will need to produce a workbook to demonstrate how they have developed their thinking processes. They will need to complete a project identifying the parts, purpose and complexities of an object or system. For the final project students will be expected to develop a Design Folio explaining their ideas and solutions and the process of developing a prototype.</p>	<p style="text-align: center;">STEM Rocket Wars</p> <p>Course Outline: In this unit, students will learn how to design, build and launch their own solid fuel rocket. They will create a folio scaffolded by the STEM design cycle of Brainstorm, Define, Research, Design and Create. Altimeters are used to track height, acceleration, speed and trajectory. This data is directly blue toothed to the student's iPad giving evidence for reflection and modification of chosen design solutions.</p> <p>The learning intention of this unit is to build student capacity to think deeply in a multidisciplinary context and apply their knowledge to this new and exciting context.</p> <p>Assessment:</p> <p>Students will need to produce a workbook to demonstrate how they have developed their thinking processes. They will need to complete a project identifying the parts, purpose and complexities of an object or system. For the final project students will be expected to develop a Design Folio explaining their ideas and solutions and the process of developing a prototype.</p>

STEM Year 9 Lighting Design

Course Outline:

In this unit students are challenged to think critically and creatively. They will create a folio scaffolded by the STEM design cycle to Brainstorm, Define, Research, Design and Create a design for an innovative lamp which they will build for use in their home.

The learning intention of this unit is to build student capacity to think deeply in a multidisciplinary context and apply their knowledge to this new and exciting context.

Assessment:

Students will need to produce a workbook to demonstrate how they have developed their thinking processes. They will need to complete a project identifying the parts, purpose and complexities of an object or system. For the final project students will be expected to develop a Design Folio explaining their ideas and solutions and the process of developing a prototype.

STEM Elective Contact:



Steve White

Technology Elective Contact:



Peter Every

Technology - Textiles

<p style="text-align: center;">Clothing: design and production</p> <p>Course Outline "Hoodies, Vests and Windcheaters". This unit focuses on the basic skills required in clothing production. Students will use commercial patterns to produce simple garments of their own choice. Skills covered are pattern adjustment, layout and cut out, shaping, piecing and closure processes.</p> <p>Assessment Students will develop a design folio to support their production activities.</p>	<p style="text-align: center;">Interior design and production</p> <p>Course Outline "My Space – My Style" Design, decorate and produce cushions, doona covers, curtains, blinds, bean bags, artworks or soft storage to suit your own personal "space and style."</p> <p>Assessment Students will develop a design folio to support their production activities.</p>
<p style="text-align: center;">Soft toy design and production</p> <p>Course Outline "Voodoo dolls, Monsters, Mascots and Ugly dolls" Design, decorate and produce your own unique range of quirky collectables, mascots and ugly dolls.</p> <p>Assessment Students will develop a design folio to support their production activities.</p>	<p style="text-align: center;">Tech Styled Textiles</p> <p>Course Outline Design and create your own unique fashion pieces using the latest in technology such as laser cutting and etching of fabric, digitised embroidery machines and using CAD software to bring ideas to life.</p> <p>Assessment Students will develop a design folio to support their production activities.</p>

Textiles Elective Contact:



Fran Deutscher

YEAR 9 SPORT EDUCATION

Year 9 Sport Education is a practical study of a range of sports and the responsibilities involved in conducting these sports, including coaching, umpiring and scoring. Students will develop their knowledge of tactics and strategies required for specific sports and the ability to transfer skills between games and similar physical activities.

Structure of Sport Education

Students will participate in a range of sports for 2 periods per week under the topics Kicking, Striking, Throwing, Minor Games, Net Sports and Fitness and Leisure. Each unit of sport will run for four weeks.

It is a requirement that students are changed into their Ballarat High School Physical Education uniform for all lessons. If they are unable to participate, a signed note from a parent or guardian must be supplied.

Sports students may participate in include:

- **Kicking:** AFL, Soccer, Gaelic Football, Speed Ball
- **Striking:** Cricket, Softball, Hockey, Down Ball
- **Throwing:** Basketball, Netball, Korfbal, Handball, Lacrosse, Tchoukball
- **Minor Games:** Relating to the Fundamental Motor Skills of throwing, kicking, striking, invasion games
- **Net Sports:** Volleyball, Tennis, Badminton, Bat Tennis
- **Fitness and Leisure:** Walking, Weights, Bocce, Running, Circuits, Boxing

