

## **YEAR 8 SEMESTER LENGTH COURSES**

Each **semester** students in year 8 are able to select to study one additional course. The course is discrete and does not continue into any other course. All of the courses are designed to teach you skills that will be of benefit to you in your later studies. Your teachers will be explicitly teaching you how to think and how to learn using the context of the course you have chosen.

Your job is to read through the courses that are being offered and to select your top four. Hopefully you will be able to study your number one and two choices, but if that is not possible than your next two preferences will be considered.

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# AERONAUTICAL ENGINEERING

## Fee \$25

In this course the study of aerodynamics and the forces of flight (weight, lift, thrust and drag) will be used to introduce you to the world of aeronautical engineering. You will research, design, construct, test and evaluate a CO<sub>2</sub> powered dragster, a hand propelled glider, and a powered model plane. Experience will also be gained in the application of Computer Aided Design and Computer Aided Manufacturing (CAD/CAM).

### Assessment:

#### Task 1: CO<sub>2</sub> dragster

You will design and construct a CO<sub>2</sub> dragster, which will be evaluated by racing your dragster against those of other students along a 20m drag strip.

#### Task 2: Gliders

With the assistance of a computer software application you will design and construct a hand propelled glider, which will be evaluated according to its performance (the distance it travels and its flight duration).

#### Task 3: Powered Flight

Applying knowledge acquired from the design, construction and evaluation of your CO<sub>2</sub> dragster and glider you will design construct and evaluate the performance of a powered model plane.

All of the above tasks will include the development a Project Design Folio, which will document the design process and procedures applied during the research, design, construction and evaluation of your models.

#### Task 4: Research Task

This task will involve you in producing a timeline that outlines the different materials that have been used for the construction of aircraft from the time of the Wright Brothers to the present day.

## CLAY MURAL: TREE OF LIFE

### Fee \$20

This course involves the creation of a glazed clay mural based upon Non European principles of design. The course will look at the influence of traditional Non European architecture in a modern context, a large ceramic wall mural.

Students will learn both the practical and technical side on how a ceramic mural is designed, constructed and pieced together using the design process. The course will also give students opportunities in learning clay and glaze technologies, moulding in plaster in order to create repetition of forms.

Students will examine the geographical and historical contexts of traditional Non European cultures from around the world, e.g. Islam, Mayan, Aztec, African, etc and the artwork of artist Hundertwasser and the concepts of recycling building facades.

#### **Activities - Students will:**

- investigate the history of the flat board game from different cultures and from this investigation a game will be created using moulded clay markers as play pieces.
- research traditional Non European murals designs and motifs. This research will be applied in the planning and designing of ideas for a glazed ceramic mural. Final designs and motifs will be transformed by the use of scanners and computers.
- through group work devise ways in which a ceramic mural can be constructed and where the completed product can be placed in a pre-determined area of the school.
- document the development of the mural space using digital cameras.

#### **Assessment:**

1. Design, create and evaluate the effectiveness of a board game when played
2. Prepare a portfolio which shows:
  - a) A summary of what you have learned about the production of murals design and motifs through various historical periods and cultures
  - b) Your work in designing your own glazed ceramic mural
  - c) Your work as a member of a team in planning for the construction of a mural as a display piece at school
  - d) Pictorial development of the mural space
  - e) A self-evaluation of what you have learned about the subject matter and process as well as about yourself as a learner and artist

## **DECORATIVE TIMBER BOXES**

### **Fee \$25**

In this course you will research, design, plan and construct decorative timber boxes using recycled or plantation grown timbers. You will develop an understanding of safe working practises, and skills in the use of a range of hand tools, portable power tools and woodworking machines. An environmental study will also be undertaken into the effects of the timber industry on our environment. This course is suited to students who enjoy working with timber and caring for our environment.

### **Assessment:**

#### **Task 1: Decorative Box 1**

This task will introduce you to the skills and techniques employed in the production of decorative timber boxes. You will be assessed on the work practises you display in the workshop and on the construction quality of the box you produce.

#### **Task 2: Student Designed Decorative Box**

This task will involve you in researching, designing, planning, and constructing a decorative timber box for an application of your own choice: e.g., a jewellery box, a trinket box, a box to store chess pieces, a 'warhammer' pieces storage box, etc.

Both tasks will include the development a Project Design Folio, which will document the design process and procedures applied during the research, design, planning and construction of your decorative boxes.

#### **Task 3: Environmental Research Task**

For this task working as a member of a small group you will identify the timbers used in your decorative boxes and trace their source of origin. Once their source of origin is identified your group will prepare a report to the class that discusses the environmental and social impacts associated with the use of these timbers. Your research may involve a visit to the 'Woodage' timber yard at Mittagong and hopefully you will be encouraged to become involved in the planting of trees either at school or at home.

## **DISCOVERING OUR CULTURAL HERITAGE**

Fee \$30

### **Course Description**

Explore our cultural heritage through stories, food and textiles.

We begin our journey by learning about the foods that have been available to the Aboriginal culture for thousands of years and how we use these foods today with our multicultural society.

After preparing and tasting the food, you will hear dreamtime stories to inspire you to create your own story on fabric to make a textile product. This colourful fabric (made by screen printing/fabric painting) will then be used to create either a pillow case or stuffed animal.

### **Activities**

- An excursion to an Aboriginal centre (Morton National Park)
- A visit by Aboriginal elders
- Tasting and production of traditional and contemporary native foods
- Production of a textile product depicting a dreamtime story.
- Telling of a dreamtime story – through drama

### **Assessment**

Students will

1. Plan, prepare and produce a contemporary multicultural dish with bush tucker foods from a selection of provided ingredients. Students will need to demonstrate the process of creating their dish through a brief design folio.
2. Research their own heritage to design and produce a textile product utilising the fabric created in class that “tells their story”. Students will be assessed on demonstrated ability to communicate their story through a textile product.

# EARTH TO MOUTH

**Fee \$30**

## **Course Description**

Students “get back to basics” with the origin of their daily food and become reconnected with the land. Discovering where our food comes from is just the beginning. Students will design a herb/vegetable garden, produce a variety of natural food products and discover the benefits of creating natural food products that contribute to their survival. Students will understand the function of food and how making the right food choices affect their lives.

## **Activities**

- Designing a sustainable herb/vegetable garden and produce ingredients for consumption
- Investigate nutrients that come from natural foods and compare them with the nutritive content of convenience foods
- Plan and produce meals from basic fresh natural ingredients
- Design a board game for children focussing on food groups and food choices

## **Assessment**

1. In groups students will plan a suitable herb/vegetable garden for a community. Students will need to research
  - ✓ Seasonal plants
  - ✓ Companion planting
  - ✓ Sustainable gardeningand then apply this research by creating the garden they planned.
2. In pairs students will plan, prepare and produce suitable dishes utilising the herbs and vegetables from their garden
3. Individually students will create a simple guide for healthy eating choices aimed at teenagers demonstrating their knowledge and understanding of the consequences of food choices.

## ELEMENTARY FASHION DESIGN

Fee \$30

### Course Description:

Students learn the basics of:

- The elements and principles of design
- Fashion drawing and designing
- Clothing construction
- Production of a Fashion Show

Assessment includes students presenting their work at a school fashion parade.

### Activities:

- Researching fashion and textiles
- Planning the design of a textile product of their choice
- Producing a fashion textile product with a theme along a line of clothing
- Planning and preparing in a team for a fashion show extravaganza

### Assessment:

1. Students will collaboratively create a line of clothing suitable to showcase at a fashion show. In groups each will:
  - a. analyse current trends in fashion and decide on a clothing line,
  - b. investigate suitable types of materials and designs and
  - c. apply budgetary constraints to possible solutions to design
2. Students will select an individual piece of clothing to produce and will demonstrate the process of design through a personal design folio.
3. Students will work in pairs taking responsibility to make a contribution to a school production involving planning and preparing: music, choreography, modelling, voice-over and promotion.

# FEED THE WORLD

**Fee \$30**

## **Course Description**

Food is an exciting and essential part of everyday life. In this unit students will take a trip around the world as they explore the food traditions from a variety of cultures and religions. Students will learn about food equity around the world and they will discover a new appreciation for food. This unique experience will give students the opportunity to prepare foods they may not otherwise taste whilst understanding their cultural context and significance.

## **Activities**

Along this journey students will gain valuable life skills in food preparation and production.

We will investigate various types of ingredients and techniques in food production across a variety of cultures.

Students will, in teams, plan ways to address the food equity issue around the world and present their solutions in a power point presentation.

## **Assessment**

Students are to

- Individually, research and investigate food practices of a culture of their choice. They are to produce a fact sheet outlining the information they have discovered.
- In pairs, plan, prepare and produce a specific cultural food buffet with a menu of item descriptions as selected by the class e.g. Indian, Italian, Asian, Greek etc.
- In groups plan a solution to address a food equity issue to a specific cultural group and present their plan to the class via a power point presentation.

## **LA FRANCOPHONIE DANS LE MONDE**

### **Fee NIL**

This course will be offered in French. The emphasis will be on expanding linguistic skills while preparing an article for the Bowral High School Young Person's Guide to France. There will be a strong focus in the classroom on speaking skills.

### **Activities**

1. Investigate THE BEST things to do in France – from a young person's perspective
2. Think about and list what it is a young person will need to know about French language, geography, society, culture etc to be able to do THE BEST things
3. Investigate the writing that will capture the imagination of the young traveller

### **Assessment**

#### **TASK 1: Oral Presentation**

In groups present to the class a powerpoint presentation showing your top 3 BEST THINGS to do in France. Students will be expected to incorporate music and lots of pictures into their presentation. Bonus marks for inclusion a vodcast!

#### **TASK 2: Publication of the Young Person's Guide to France**

Students will be expected to work both independently and in groups to develop a series of short items for inclusion into the publication. Articles should include French language (with hints on pronunciation!), history, geography, society & culture as required.

***BEWARE!! SOME CLASSES MAY BE HELD ENTIRELY IN FRENCH!!***

## **GRAPHIC & ARCHITECTURAL DESIGN**

### **Fee \$10**

In this course you will be introduced to traditional and computer aided drawing techniques and procedures utilised by graphic designers and architects. You will develop an understanding of the role of graphics in the design process and in industry, the purpose of drawing, the styles and tools of drawing, and Computer Aided Design (CAD). Experience will also be gained in architectural modelling techniques.

### **Assessment:**

You will complete a number of class activities that will introduce you to a variety of drawing styles, processes and techniques. These activities will be assessed according to your level of understanding, and the quality of their presentation.

### **Task 1: Graphic Design**

Graphic design is a form of visual communication used by architects, artists and designers to transform ideas from a thought process to a visual image.

In this task you will prepare a portfolio of drawings that will include a variety of pictorial drawings that show the realistic appearance of a selected object through the use of line, tone and colour. A multiview drawing will also be prepared to help show untrained people what the selected object looks like.

### **Task 2: Architectural Design**

Architects plan, design and supervise the renovation and construction of buildings, from houses to skyscrapers, and the spaces around them that create urban, suburban and rural communities.

In this task you will prepare a portfolio of architectural drawings that presents your ideas to satisfy the requirements of an architectural design brief. Briefs may include, a motel room, a granny flat or teenager retreat, an outdoor entertainment area, or even the ultimate cubby house.

## **HISTORICAL FICTION (*FACTION*)**

### **Fee NIL**

Faction is an emerging genre which blends historical 'facts' with a fictional story. Recent examples include the work of Dan Brown, Matthew Reilly, Kate Grenville, Colleen McCulloch and Geraldine Brooks to name only a few. In many ways this genre is controversial as it gives the impression that the entire story is true through the judicious use of real people and events.

In this unit students will be briefly looking at the features of this genre before planning and producing their own piece of faction like creative writing. To do this students will need to choose a historical person, period or event on which to focus. They will then research this period so that they can use it as the basis of their creative writing.

The main focus of this unit however will be the planning and production of their written piece. Students will be shown how to create a story board and plan for their work and then supported in the writing of their piece. The course will also involve a few opportunities to talk with authors working in this genre.

### **Assessment:**

There will be two assessment tasks for you to do during this course.

#### **Task 1. Planning the story**

This first task will see students presenting their storyboard and background research.

#### **Task 2. The finished story**

The finished story will form the main assessment and the culmination of the unit of work. The stories form and length will be negotiated individually with students as these decisions are integral to the writing process. Needless to say however the length and breath of the work will be indicative of its importance.

## **HISTORY THROUGH ART**

### **Fee \$40 (for Excursion to art gallery)**

This course will encourage students to investigate how past societies and civilizations have used art as a form of expression and how we use this art to understand and study them. Students will be looking at Egyptian art, Greek and Roman Frescos and sculpture, Islamic mosaics, medieval tapestry and art as well as later modern expressions including artistic representations of fascist states, posters, coins and stamps.

The course of study will involve students examining and drawing conclusions about these societies from their artwork. To do this students will first explore the different levels of thinking that underpin their learning and then apply these to a number of examples. Through the use of a range of analytical and synthesis skills students will then explore questions including, 'What does Egyptian art tell us about Ancient Egyptian Society?' In answering such a question students will need to explicitly examine features of the artwork and relate that to the known history.

### **Assessment:**

There will be two assessment tasks for you to do during this course.

#### **Task 1. Self reflection of thinking skills**

History requires students to use evidence to draw conclusions. Often the evidence is sketchy and the possible conclusions varied or even contradictory. To negotiate this complexity students need to learn about thinking skills and then apply them. In this task, through the use of a reflective journal, students will record their learning in relation to these skills.

#### **Task 2. Self directed research assignment on a period of choice**

Working in teams students will apply the principles of this course to a study of their choice. In this students will need to negotiate an area of interest, allocate roles and tasks, and then investigate the art produced in their chosen period. This examination will need to address the representation used, how it relates to the social, cultural, and technological context. From this students will draw conclusions using evidence about the usefulness of the art for our historical understanding. The outcome of this work will then be presented in a medium of the teams choice (multimedia, written etc).

## HISTORY THROUGH SPORT

### Fee NIL

This course will encourage students to investigate how past societies and civilizations have used sport as a form of expression and how these sports and recreational activities have developed into modern games and sports. Students will be looking at medieval games, Ancient Greek games including the origins of the Olympics, the origin of popular sports, the impact of technology on sport and cultural games and sports across the world.

The course of study will involve students researching and performing games and sports through history, identifying common skills, rules and equipment with modern games and sports. Students will participate in cultural games and develop a cultural games lesson. Through the use of a range of research and performance skills students will explore questions including, 'How does technology impact on performance?' 'How has the development of sport bridged the gender gap?' In answering such a question students will examine the combination of history and modernisation of sport.

### Assessment:

#### **Task 1. Development of a Sport for the 21<sup>st</sup> Century**

Students will research, develop and implement a sport to fulfil physical activity requirements of the 21<sup>st</sup> century. In small teams students will develop problem solving and thinking skills to incorporate historical sports skills and skills of modern games to develop a hybrid sport. This sport will then be presented to the class as students explain, demonstrate and coach peers in the performance of the activity.

#### **Task 2. Self directed research assignment on a sport of their choice**

Students will investigate the historical origins of a sport of their choice, or the games and sports of a period of their choice. This investigation will address the sport, skills, rules and development, and how it links society socially, culturally and technologically. Students are to present their completed task to the class, incorporating ICT.

## **JEWELLERY DESIGN**

### **Fee \$25**

In this course you will research and gain practical experience in the basic methods employed by jewellers to shape and join metals to create items of body decoration (rings, earrings, pendants, broaches, bangles, etc.). A variety of 'themes' will be the basis upon which you will research, design, plan, and construct your individual creations.

### **Assessment:**

#### **Task 1: Ring Making**

In this task you will learn the basics of ring making and you will design and make a ring of your own choice.

#### **Task 2: Broaches/Pendants/Key-rings**

This task involves learning how to use a piercing saw and how to 'sweat solder'. Having learnt these skills you will research, design and produce either a broach, pendant or key-ring.

#### **Task 3: Student Choice Project**

Applying the skills and techniques acquired in Tasks 1 & 2 you will research, design, plan, and produce a free-choice item of jewellery.

All tasks will include the development of a Project Design Folio, which will document the design process and procedures applied during the research, design, planning and construction of your creations.

#### **Task 4: Research Task**

This task will involve you in researching a 'theme' on which to base your design for the broach, pendant or key-ring that you will produce for task 2. Themes may include, sport, music, Egyptian, African symbols, tattoos, etc.

## **LIVING SUSTAINABLY**

### **Fee \$30**

This course will involve you in thinking about and investigating how we can live our lives in the best possible way without damaging our planet. You will be looking at our current ways of life and planning for a sustainable future.

One of the critical tasks you will be undertaking is to find out how much energy and water you currently use and investigate ways that you can limit these.

You will also find out where your food really comes from and work out what is the best way to eat and look after our planet at the same time.

### **Activities:**

- Do an energy audit of the school.
- Design an energy efficient school.
- Design and build a school vegetable garden.
- Taste test – try foods that have been grown or made using different farming methods and compare them.
- Camp and work on a sustainable farm and learn about sustainable farming.

### **Assessment:**

There will be two assessment tasks for you to do during this course.

#### **Task 1. PIP a personal interest project.**

This will be a 'negotiated' task, where you will speak with your teacher to determine precisely what you will be doing. In summary you will find out about an area that really interests you and conduct a sustainability research action plan that will be presented to the class.

#### **Task 2. Sustainable school design.**

This will involve you in work in teams to produce a plan for the school that will result in the school becoming a more environmentally sustainable place.

## **METAL FABRICATION**

### **Fee \$25**

In this course you will research and gain practical skills in the processes used to shape metal sheets, bars, and rods by both hot and cold working fabrication techniques.

### **Assessment:**

#### **Task 1: Sheet Metal Design**

This task will involve you in the design, planning and production of a sheet metal project. Projects may include a dustpan, a toolbox, a doggie doo scoop, etc.

#### **Task 2: Shaping Bars and Rods**

This task will introduce you to a variety of hot and cold fabrication techniques used to shape metal bars and rods. You will be required to design, plan and produce a project that will involve twisting and scrolling metal.

#### **Task 3: Student Choice Project**

Applying the skills and techniques acquired in Tasks 1 & 2 you will research, design, plan, and produce a free-choice metal fabrication project

All tasks will include the development a Project Design Folio, which will document the design process and procedures applied during the research, design, planning and construction of your metal fabrication projects.

#### **Task 4: Research Task**

For this task working as a member of a small group you will trace the source of origin of the metals used in the construction of your projects. Your group will prepare a report to the class that discusses the environmental and social impacts associated with the extraction and refinement of minerals from the earth's crust to produce these metals.

## **SCIENCE OF MEDIAEVAL SIEGE WARFARE**

### **Fee \$30**

This course is designed to engage students in the history of mediaeval warfare by investigating the weapons and strategies used in sieges during the period. In addition, students will evaluate the role of physics and mathematics in siege warfare.

Students will be required to construct a model of a catapult and design an excel worksheet application that calculates the projected distance a ping pong ball will travel.

### **Activities:**

- research the range of weapons used in the period,
- analyse the construction of fortifications in the period,
- design and construct a model of a catapult,
- design an excel worksheet application that calculates the projected distance a ping pong ball will travel if propelled from their catapult model,
- evaluate the forces needed to breach these various types of fortifications,
- evaluate the forces generated by the various weapons researched, and
- applying a simple computer model compute the projectile motion of a catapult shot

### **Assessment:**

Students will be assessed on their research skills, ability to evaluate the link between force, mass and acceleration, ability to calculate projectile motion and ability to communicate historical, scientific and mathematical information in an informative and effective manner.

### **Task 1 Design and Construct Phase**

Students will be required to design and construct a 25:1 size model of a catapult. The choice of design will be based on the research undertaken to identify siege engines used in mediaeval times. Students will be required to include evidence from an excel spreadsheet application that predicts the throwing power of the model. This will be presented to the class with a demonstration of the working model.

### **Task 2 The Physics of Siege Warfare**

Working in teams the students will prepare a PowerPoint presentation and written report on the range of weapons and fortifications employed in the period, diagrammatically represent the forces generated by the various weapons and the forces needed to breach various types of fortifications. The PowerPoint will be the basis of the groups' final presentation to their peers and invited guests.

## **SCHOOL OF ROCK**

### **Fee \$25**

This course will examine and put into practice the skills and knowledge needed for success in the Music Industry – songwriting, promotion and publicity, recording, marketing, and live performance.

You will write your own songs, record your own CD (using original material and covers), market and promote your CD, decide on a band name and create its image and logo, and put on a live performance for an invited audience.

### **Assessment:**

#### **Task 1: Songwriting**

Using GarageBand and PrintMusic software, you will create your own songs, including lyrics, for performance by members of the class.

#### **Task 2: Recording**

Using recording software and recording equipment you will learn how to record, edit, mix, and create master tracks for CD production.

#### **Task 3: Marketing and promotion**

You will design a CD cover and promotional flyer, along with press releases for the launch of your CD and live concert.

#### **Task 4: Live Concert**

You will be part of the crew in a live concert – back stage, road crew, technical crew, front of house, as well as performers in the band.

## **SPORT JOURNALISM AND MEDIA**

### **Fee \$25**

In this course you will fulfil the role of a sports journalist through researching and designing school sport reports and presentations. You will incorporate writing skills with photography and multimedia to develop a sport magazine report. The course of study will involve students examining issues in physical activity and sport including the impact of the media on sport, the gender bias that occurs in the media and the sensationalism of Australia's sporting identity.

Students will explore the impact of positive and negative reporting on individuals in the various media. Students will develop teams and conduct a group task force focusing on a sporting team or an issue in sport. Students will examine media releases, interviews and reports and develop a plan for the implementation of a Bowral High School sport magazine.

### **Assessment:**

#### **Task 1: Reporting**

Students follow a team or sporting event and provide ongoing reports for the school assembly, Excelsior magazine and the school website. Students will compose results, interviews and photographs of sporting activities at Bowral High School.

#### **Task 2: Group Task**

Students working in groups of three participate in ongoing research into a sport or sporting issue of their choice. In this task students negotiate an area of interest, allocate roles and tasks, and produce a report based on their investigations. This report can be presented in a media of the group's choice either multimedia, orally or written.

#### **Task 3: Sport Magazine**

Students will develop a sport magazine. Students establish roles such as editor, reporter, photographer and graphic designer to develop a magazine highlighting the outcome of sporting teams and events and the issues investigated in task 2. The magazine will be produced and presented as an insert into the Excelsior newsletter and on the Bowral High School web page.

## **THEATRESPORTS**

### **Fee \$30.00**

This course introduces students to theatresports, a series of games devised to develop improvisation skills.

Students work in teams of 4 and learn games of 1 minute, 2 minute and 4 minute duration which they play to the class.

One of the components of the course will be the running of a theatresports competition. In addition a visit to Theatresports at the Belvoir Street Theatre in Sydney will be an optional excursion.

### **Assessment :**

#### **Task 1 : Skills**

Students will be cumulatively assessed throughout the term as their skills grow towards a level of mastery.

#### **Task 2 : Performance Review**

Students will write a review of the Theatresports competition at Belvoir Street Theatre in the style of a theatre critic.

#### **Task 3 : Theatresports Booklet**

Using available technology, students will compile and present a theatresports booklet.

#### **Task 4 : Theatresports Competition**

Students will be engaged in planning (managing all the administration and organisation) and running (all the stress and fun of making the event a success!) a theatresports competition at lunch for the whole school. WOW, what a blast!