

HUNTER RIVER HIGH SCHOOL

Subject Selection Booklet YEAR 9 2023 YEAR 10 2024





FORWARD

This booklet has been prepared to provide information on courses at Hunter River High School. These courses are for Years 9 and 10 and will appear on the student's Record of School Achievement (RoSA).

Subjects are divided into two groups:

- Compulsory
- Elective.

This booklet should be read in conjunction with the NESA 'Years 7 to 10 Syllabus Course Descriptions' booklet which can be found at: http://www.boardofstudies.nsw.edu.au/rosa/

INTRODUCTION TO YEAR 9 COURSES

In Years 9 and 10, all students will study the mandatory CORE subjects and two ELECTIVE subjects.

Core Subjects		
English		
Mathematics		
Science		
History		
Geography		
PDHPE		
Sport		
Elective Subjects		
X Elective		
Y Elective		

ELECTIVE SUBJECTS

All students must participate in two elective subjects. During the selection process, students will have the opportunity to indicate a backup subject as a third option. Students should enter the subject choices in order of preference. In the event a course isn't available, a students' third option will be allocated.

Details of all subjects offered are found in this booklet.

WILL ALL ELECTIVES RUN NEXT YEAR?

All elective subjects listed in this booklet are on offer. However, only those electives chosen by a sufficient number of students will run next year. Students decide via their choices which subjects run.

It is very important that students choose carefully. Once all subject selection sheets are in:

- Selections will be tallied
- Decisions will be made on which subjects will and will not run
- Subjects will be put into lines (X or Y).

THINGS TO CONSIDER WHEN CHOOSING FLECTIVES

When choosing electives, it is essential to consider a student's:

- Career aspirations
- Interests
- Abilities and talents

This is a very personal choice and students are advised to ignore outside pressure (e.g. peer pressure) when selecting subjects. If you have any questions about specific subjects, please consult the Head Teacher.

ELECTIVES

ABORIGINAL	STUDIES -	- 100	hours
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AGRICULTURE TECHNOLOGY – 200 hours

BUILDING AND CONSTRUCTION TECHNOLOGY – 100 hours

CHILD STUDIES – 200 hours

COMMERCE – 100 hours

CREATIVE INDUSTRIES (MUSIC)- 100 hours

DANCE – 200 hours

DESIGN & TECHNOLOGY - 200 hours

DIGITAL PHOTOGRAPHY & MEDIA – 100 hours

DRAMA – 200 hours

CAFÉ / FOOD TECHNOLOGY – 100 hours

FOOD TECHNOLOGY - 200 hours

GRAPHIC TECHNOLOGY – 200 hours

INDUSTRIAL TECHNOLOGY Metal - 100 hours

INDUSTRIAL TECHNOLOGY Timber - 100 hours

INDUSTRIAL TECHNOLOGY Electronics - 200 hours

INDUSTRIAL TECHNOLOGY Metal - 200 hours

INDUSTRIAL TECHNOLOGY Timber - 200 hours

INFORMATION AND SOFTWARE TECHNOLOGY - 200 hours

iSTEM - 200 hours

MARINE AND AQUATECHNOLOGY - 200 hours

MUSIC - 200 hours

PHYSICAL ACTIVITY AND SPORTS STUDIES (PASS) - 200 hours

VISUAL ARTS – 200 hours

VISUAL DESIGN - 100 hours

ABORIGINAL STUDIES – 100 hours

FACULTY: HSIE

HEAD TEACHER: LUCAS WINTER (Rel.)

COURSE DESCRIPTION

Aboriginal Studies provides students with opportunities to develop knowledge and understanding of Aboriginal Peoples, histories, cultures and experiences. It is designed for all students and is of value to both Aboriginal and non-Aboriginal students.

WHAT STUDENTS LEARN

Students learn about the diversity of Aboriginal Peoples' identities, cultures and communities, which are interconnected with Country and spirituality. They learn about the dynamic nature of cultural expression and the maintenance of Aboriginal identities and cultures. Topics of study could include (dependent on student interest):

- Aboriginal Enterprises and Organisations
- Aboriginal Peoples and Oral and Written Expression
- Aboriginal Peoples and the Visual Arts
- Aboriginal Peoples and Technologies
- Aboriginal Peoples and the Performing Arts
- Aboriginal Peoples and Film and Television
- Aboriginal Peoples and the Media
- Aboriginal Peoples and Sport

FEE: Nil* (excursions will be offered which will have an associated cost)

AGRICULTURE TECHNOLOGY – 200 hours

FACULTY: SCIENCE

HEAD TEACHER: MATHEW ROBSON

COURSE DESCRIPTION

The Hunter area of NSW is an important agricultural area. It produces a large variety of products, which include – cattle for meat and milk, poultry for meat and eggs, vegetables, fruit and many other products.

Students of Agricultural Technology in Years 9 and 10 make extensive use of the well-equipped school farm whilst studying the production cycle of most ofthe products mentioned above. By concentrating on the local area's production, the course becomes more relevant to the students whilst enabling teachers to illustrate important agricultural concepts that are synonymous to all agricultural pursuits.

The course has an underlying 'systems theme' that basically means any action done on a part of the farm has important effects on the whole farm. Students need NOT have studied agriculture before and will enjoy the opportunity tolearn new skills in an outdoor environment.

The course does NOT terminate in Year 10. It is also studied in senior years and can lead to a vocation in agriculture.

WHAT STUDENTS LEARN

Studying Agricultural Technology:

- Makes students more aware of the local and Australian farming environment:
- Allows students to learn useful new skills;
- Allows the skills and concepts taught to be used in activities outside farming; and
- Can lead to further studies and possibly a vocation in agriculture.

BUILDING & CONSTRUCTION TECHNOLOGY – 100 hours

FACULTY: TAS

HEAD TEACHER: JOEL WATSON (Rel.)

COURSE DESCRIPTION

The Building and Construction focus area provides opportunities for students to develop knowledge, understanding and skills in relation to the building and associated industries. The Building and Construction module develops knowledge and skills in the use of tools, materials and techniques related to building and construction.

WHAT STUDENTS LEARN

This subject focuses on developing knowledge and skills in the areas of Building and Construction.

This includes:

- The properties and applications of materials used in residential construction
- Use of correct equipment, tools and machines
- Measuring and marking out techniques
- Industry links
- Design
- Workplace and Communication skills

Theoretical aspects of the course are directly related to Practical Projects undertaken.

Students contemplating a career in the Construction Industry will find this subject beneficial. It is a useful subject for those enjoying working outdoors. The skills and knowledge gained through this subject are useful assets for Construction Pathways in Year 11.

CHILD STUDIES – 200 hours

FACULTY: TAS

HEAD TEACHER: JOEL WATSON (Rel.)

COURSE DESCRIPTION

Are you interested in being a childcare worker, a 'super-nanny', pre-school teacher or a well informed and responsible parent when you get older? Child Studies offers you a course where you can learn parenting and childcare skills. All students who have an interest and concern for children will find this course interesting, fun and very informative.

In Year 9 we start with the topic, The Unborn Child. This deals with issues surroundingcontraception, pregnancy and birth. Students wear the 'Pregnancy Vest' and get firsthand experience on what it feel like to be 8 months pregnant (only for 24 hours though!) Caring for children involves looking at the special needs of infants, the toddler, the growing child and the special needs of the preschooler.

In Year 10 students will look at how children learn through play with lots of craft work and interesting activities to help us understand their needs. We will look at issues for nanny's, childcare workers and possible career opportunities. Students also take home the 'Virtual Baby" for 24 hours to test their parenting skills. What sort of parent will yoube?

WHAT STUDENTS LEARN

Students will:

- Look at the contraception kit
- Watch videos on pregnancyand birth
- Have a visit from Nursing Mothers
- Learn to bath a baby
- Examine the types of nappiesavailable
- Make up a bottle formula
- Wear the 'Pregnancy Vest'
- Take home the 'Virtual Baby'
- Cook children's meals
- Make play dough & fingerpaint
- Learn how to be a goodbabysitter
- Discuss childcare issues.

COMMERCE – 100 hours

FACULTY: HSIE

HEAD TEACHER: LUCAS WINTER (Rel.)

COURSE DESCRIPTION

This is the subject for students interested in looking at Business Studies and Legal Studies in the Senior School.

Commerce enables young people to develop the knowledge, understanding, skills, values and attitudes that form the foundation on which they can make sound decisions about consumer, financial, economic, business, legal, political and employment issues. It develops in students the ability to research information, apply problem-solving strategies and evaluate options in order to make informed and responsible decisions as individuals and as part of the community.

WHAT STUDENTS LEARN

Student learning in Commerce promotes critical thinking and the opportunity to participate in the community. Students will develop their problem solving and communication skills. Students could learn about (dependent on interest):

- How businesses operate
- The legal system
- Travel

FEE: Nil* (excursions will be offered which will have an associated cost)

CREATIVE INDUSTRIES (MUSIC) – 100 hours

FACULTY: CAPA

HEAD TEACHER: SHANE LLOYD (Rel.)

COURSE DESCRIPTION

The Creative Industries (Music) course gives students the opportunity to develop their skills and understanding in music recording, arranging and compositing. Students will learn how to produce live recordings using a range of available software and hardware. Class and individual projects in this course will include editing music recordings, developing performances, and showcasing students' music and production skills for authentic audiences at school and community events.

This is a subject designed for those who want to learn about what goes on 'behind the scenes' in the modern music world. Creative Industries gives a good basis for the VET Music Industry course that will be offered in Years 11 and 12.

WHAT STUDENTS LEARN

The course delivers hands on experience in live sound and lighting practices. We will be composing music using digital audio software, loop pedals and a variety of other music programs. Contemporary song writing and recording techniques for bands, singer songwriters and small acoustic ensembles will also be covered. Additionally, students will learn how to set up and run live concerts.

DANCE – 200 hours

FACULTY: CAPA

HEAD TEACHER: SHANE LLOYD (Rel.)

COURSE DESCRIPTION

The study of dance as an artform centres on the three practices of performance, composition and appreciation of dance as works of art. Studying dance involves the development of physical skill as well as aesthetic, artistic and cultural understanding. Students express ideas creatively as they make and perform dances, and analyse dance as works of art. They think imaginatively and share ideas, feelings, values and attitudes while physically and intellectually exploring communication of through movement. Safe Dance Practice is embedded through the practices to ensure that students are able to maintain safe, healthy and rewarding dancing careers.

WHAT STUDENTS LEARN

You will learn to:

- EXTEND and REFINE known dance technique, dance vocabulary and knowledge of dance from a social and historical perspective;
- CREATE your own works while developing a personal movement style.
- DEVELOP an awareness of movement skills and the elements of dance.

DESIGN AND TECHNOLOGY - 200 hours

FACULTY: TAS

HEAD TEACHER: JOEL WATSON (Rel.)

COURSE DESCRIPTION

Design and Technology is a mixed materials practical subject where students learn through 'doing'. Students will engage in design projects that are challenging and fun. There is asignificant focus on creativity, innovative thinking and the use of hands on, practical experiences.

Various design projects are completed during the Year 9 and 10 Course which aims to develop skills in designing, problem solving and the use of various materials/mediums and tools. These mediums include; graphics, jewellery & accessories, textiles, architecture & interiors, food styling and upcycling. These projects are guided by the teacher with opportunities forstudents to take charge of their own learning and apply their own 'touch' or preference.

Our Design & Technology rooms are equipped with resources where students can experiment and refine their practical skill set in a range of focus areas. Students will also have opportunities to attend excursions and workshops to interact with real-world designers, equipment and practices.

WHAT STUDENTS LEARN

Students will:

- explore hand drawing and digital techniques to develop their very own personalised logo which they will use as 'branding' on projects
- experiment with a range of mediums such as polymer clay, resin, metal, wire, textiles & recyclables to use for their project
- use the sewing machines to construct their own 'Hoodie' jumper
- create their own online Designer Website to 'market' their design products.
- analyse the work of architects and interior designers to inform their own practice.
- experiment with creative and professional foodpresentation techniques such as drizzles, smears, piping, garnishing, dusting, etc.

FEE: \$40.00

DIGITAL PHOTOGRAPHY & MEDIA - 100 hours

FACULTY: CAPA

HEAD TEACHER: SHANE LLOYD (Rel.)

COURSE DESCRIPTION

Photographers create the images that define our world and record our time. In this course you will develop your practical skills with hands-on experience working on a wide range of photography projects, learning old and new techniques using digital and darkroom processes.

Throughout this course you will learn to use a digital SLR camera, manipulate your photos in Photoshop and other editing software, create images using historical photographic procedures and learn about the aspects of good photography: depth of field, exposure, viewpoint, composition and so much more.

WHAT STUDENTS LEARN

Students will create:

- Digital photographs
- Photoshop images
- Pinhole cameras
- Cyanotypes
- · Lighting techniques
- Studio photography
- Wet photography
- Claymation

FEE: \$25.00

DRAMA - 200 hours

FACULTY: CAPA

HEAD TEACHER: SHANE LLOYD (Rel.)

COURSE DESCRIPTION

Drama is an excellent opportunity for students to build up confidence in their performance and public speaking skills. In Drama, students interact actively and creatively through improvised, spontaneous and structured responses. Drama is a dynamic learning experience that engages and challenges students to maximise their individual abilities through imaginative, dramatic experiences created in co-operation with others.

In the study of Drama, students will experience: improvisation and play building, mime and movement, scripted drama, performance techniques, aspects of theatre, dramatic style and elements in real life and the place of drama in society, past and present.

WHAT STUDENTS LEARN

Students will learn to:

- make drama that explores a range of imagined and created situations in a collaborative drama and theatre environment;
- performing devised and scripted drama to engage an audience; and
- appreciate how drama and theatre reflects the human experience.

CAFÉ/ FOOD TECHNOLOGY – 100 hours

FACULTY: TAS

HEAD TEACHER: JOEL WATSON (Rel.)

COURSE DESCRIPTION

The Australian Food Industry is growing in importance, providing numerous employment opportunities and increasing the relevance of CAFÉ FUNDAMENTALS for the individual and society. There are increasing community concerns about food issues, including hygiene and safety, nutritional claims and the nutritional quality of food, genetic engineering, functional foods and the environmental impact of food production processes. Students will explore food-related issues through a range of practical experiences, allowing them to make informed and appropriate choices with regards to food.

This elective is focussed on providing students with the best opportunity to gain authentic skills and experience in Food Technology, combined with Café fundamentals, by implementing the stage 5 Food Technology 100 hour course, focussing on the units that are aligned with food product development, food service and catering, food for special occasion and food trends.

By implementing these focus areas, this allows us to incorporate the running the school café in term 2 and term 4. Students will have an opportunity to gain first hand work experience working in the school café. The will get to use a variety of specific equipment used within the café including the coffee machine, making non alcoholic beverages, manage and operate a real café, including cleaning, general maintenance, food costing, ordering, cash handling and customer service. These skills can be utilised to gain employment.

WHAT STUDENTS LEARN

- Food product development
- Food service and catering
- Food for special occasions

FOOD TECHNOLOGY – 200 hours

FACULTY: TAS

HEAD TEACHER: JOEL WATSON (Rel.)

COURSE DESCRIPTION

Who will become the next Master Chef? The career paths available in the Hospitality Industry, particularly in the Port Stephens area are ever expanding. This subject is a great choice if your interests lie in creating and cooking fabulous and delicious food just for yourself or for your family and friends.

Career paths are plentiful in the food industry with both part time and full time opportunities in many areas of Hospitality. Studying this subject also allows you to develop lifelong skills in food preparation for the benefit of yourself and your family.

Food Technology gives a good basis for the valuable senior Food Technology and Hospitality course in Years 11 and 12.

WHAT STUDENTS LEARN

Some of the activities that are included in this interesting course are:

- taste testing bush tucker;
- an excursion to a restaurant;
- multicultural cookery;
- the 'master chef cook off' challenge;
- creating menus for catering purposes;
- use of digital camera for food photography;
- creating sensational food for specific occasions; and
- celebrity chef analysis.

GRAPHICS TECHNOLOGY – 200 hours

FACULTY: TAS

HEAD TEACHER: JOEL WATSON (Rel.)

COURSE DESCRIPTION

Learning Graphics Technology is like learning an international language. Graphics Technology is an essential tool and skill used by engineers, architects, designers and all trades people to communicate ideas.

The study of this subject will help to lay a good foundation for any student hoping to pursue a career in the areas of:

- Engineering;
- Architecture;
- Designing, for example, graphic, fashion, landscape or interior design; and
- All trades, for example, carpentry, plumbing, electrical, fitter machinist, sheet metal working and boilermaking, just to name a few. (It is essential that all trades people can produce, read and interpret technical drawings.)

In Years 9 & 10 Graphics Technology students will have an opportunity to experience working with technical drawing equipment and computer aide drawing software.

WHAT STUDENTS LEARN

Students will have the opportunity of completing some of the following drawing techniques:

- Drafting Techniques;
- Introduction to CAD;
- Lettering and Symbols;
- Orthogonal projection;
- Intro to Computer Aided Drawing CAD;
- Pictorial: Perspective, Isometric & Oblique;
- Using Creo Parametric;
- 3D Printing;
- Using Adobe Illustrator and laser Cutter;
- Mechanical Engineering Drawing; and
- Architectural Drawing.

FEE: \$20.00

INDUSTRIAL TECHNOLOGY METAL – 100 hours

FACULTY: TAS

HEAD TEACHER: JOEL WATSON (Rel.)

COURSE DESCRIPTION

The aim of the Industrial Technology course with the metal focus area is to provide opportunities for students to develop knowledge, understanding, skills and values related to metal and its associated industries. This is achieved through safe interaction with materials, tools and processes in the planning, development and construction of quality practical projects.

The study of this subject will help to lay a good foundation for any student hoping to pursue a career in any of the metal trades such as:

- Engineering;
- Fitter machinist;
- Sheet metal worker;
- Boilermaker;
- Aeronautical mechanic;
- Panel beater;
- Plumber;
- Roofer; and
- Automotive mechanic.

WHAT STUDENTS LEARN

The course enables students to:

- Broaden their career options;
- Develop an understanding of Work, Health & Safety;
- Build confidence and competence in the correct use of tools and equipment;
 and
- Facilitate self-sufficiency, resourcefulness, mature judgement and the capacity to work co-operatively and responsibly.

INDUSTRIAL TECHNOLOGY TIMBER – 100 hours

FACULTY: TAS

HEAD TEACHER: JOEL WATSON (Rel.)

COURSE DESCRIPTION

The aim of the Industrial Technology course with the timber focus area is to provide opportunities for students to develop knowledge, understanding, skills and values related to timber and its associated industries. This is achieved through safe interaction with materials, tools and processes in the planning, development and construction of quality practical projects

The study of this subject will help to lay a good foundation for any student hoping to pursue a career in any of the timber or building trades including:

- Builder;
- Carpenter/joiner;
- Cabinet maker;
- Wood machinist;
- Formwork Construction Carpenter; and
- Pattern maker.

WHAT STUDENTS LEARN

The course enables students to:

- Broaden their career options;
- Develop an understanding of Work, Health & Safety;
- Build confidence and competence in the correct use of tools and equipment;
 and
- Facilitate self-sufficiency, resourcefulness, mature judgement and the capacity to work co-operatively and responsibly.

INDUSTRIAL TECHNOLOGY ELECTRONICS - 200 hours

FACULTY: TAS

HEAD TEACHER: JOEL WATSON (Rel.)

COURSE DESCRIPTION

This course offers an opportunity for students to gain an understanding of the technology that affects all our lives: the circuits and components that control our computers, TVs, Home automation systems and the family car. Electronics is taught in a specially equipped workshop by an experienced teacher.

The Electronics course has been designed to make learning fun. Students learn electronic principles and gain practical skills through building interesting and functional projects. The components used and methods of construction employed, are those used in today's electronics industry. Students use state-of-the-art equipment and techniques to manufacture and test their projects.

The study of this subject will help to lay a good foundation for any student hoping to pursue a career in any electrical/electronic trades such as:

- Electrical Fitter
- Electrical Engineering technician
- Electrotechnology & Telecommunication Trade Worker
- Electrical Instrument Tradesperson
- Electrical Engineer

WHAT STUDENTS LEARN

Students will study digital circuits, audio circuits, control circuits and gaming devices through the completion of 10 to 15 projects. Students will learn how to design and create electronic circuit boards and learn basic trade skills in soldering and circuit board construction.

This course is a great lead into the P-Tech program in Stage 6 if you're interested in an Electrical/ Mechanical Engineering/aero skills career pathway.

INDUSTRIAL TECHNOLOGY METAL – 200 hours

FACULTY: TAS

HEAD TEACHER: JOEL WATSON (Rel.)

COURSE DESCRIPTION

The aim of the Industrial Technology course with the metal focus area is to provide opportunities for students to develop knowledge, understanding, skills and values related to metal and its associated industries. This is achieved through safe interaction with materials, tools and processes in the planning, development and construction of quality practical projects.

The study of this subject will help to lay a good foundation for any student hoping to pursue a career in any of the metal trades such as:

- Engineering;
- Fitter machinist;
- Sheet metal worker;
- Boilermaker;
- Aeronautical mechanic;
- Panel beater;
- Plumber;
- Roofer; and
- Automotive mechanic.

WHAT STUDENTS LEARN

The course enables students to:

- Broaden their career options;
- Develop an understanding of Work, Health & Safety;
- Build confidence and competence in the correct use of tools and equipment;
 and
- Facilitate self-sufficiency, resourcefulness, mature judgement and the capacity to work co-operatively and responsibly.

INDUSTRIAL TECHNOLOGY TIMBER – 200 hours

FACULTY: TAS

HEAD TEACHER: JOEL WATSON (Rel.)

COURSE DESCRIPTION

The aim of the Industrial Technology course with the timber focus area is to provide opportunities for students to develop knowledge, understanding, skills and values related to timber and its associated industries. This is achieved through safe interaction with materials, tools and processes in the planning, development and construction of quality practical projects

The study of this subject will help to lay a good foundation for any student hoping to pursue a career in any of the timber or building trades including:

- Builder;
- Carpenter/joiner;
- Cabinet maker;
- Wood machinist;
- Formwork Construction Carpenter; and
- Pattern maker.

WHAT STUDENTS LEARN

The course enables students to:

- Broaden their career options;
- Develop an understanding of Work, Health & Safety;
- Build confidence and competence in the correct use of tools and equipment;
 and
- Facilitate self-sufficiency, resourcefulness, mature judgement and the capacity to work co-operatively and responsibly.

INFORMATION & SOFTWARE TECHNOLOGY – 200 hours

FACULTY: MATHEMATICS

HEAD TEACHER: REBECCA THOMAS

COURSE DESCRIPTION

People can expect to work and live in environments requiring highly developed levels of computing and technological literacy. Current technologies are becoming obsolete at a rapid rate and new generations will need to be flexible accommodate changes as they emerge. It is important that students learn about, choose and use appropriate information and software technology and develop an informed awareness of its capacities, scope, limitations and implications. Technological competence in the rapidly evolving area of information and software technology will require lifelong learning.

The study of Information and Software Technology assists students to develop the knowledge, understanding and skills to solve problems in real life contexts. Through experiential and collaborative tasks, students engage in processes of analysing, designing, producing, testing, documenting, implementing and evaluating information and software technology-based solutions. Creative, critical and meta-cognitive thinking skills are developed through students' practical involvement in projects.

WHAT STUDENTS LEARN

The core consists of learning about specialised knowledge of past, current and emerging technologies, data, hardware, software and people involved in information and software technology, legal, ethical, social and industrial issues.

This course appeals to students through practical activities and their enjoyment of learning about and using computers. Diverse aspects of a students' prior knowledge and skills can be brought together in group and individual projects in options such as:

- Artificial intelligence;
- Simulation and modeling;
- Authoring and multimedia;
- Database design;
- Robotics and automatedsystems; and
- Software development and programming.

iSTEM - 200 hours

FACULTY: SCIENCE

HEAD TEACHER: MATHEW ROBSON

COURSE DESCRIPTION

Integrated SCIENCE, TECHNOLOGY, ENGINEERING and MATH education is an innovative approach to learning knowledge and skills in each of these related disciplines. Post-school success for these students is enhanced as these fields are deeply intertwined in the real world. Students are required to participate in learning activities that model current best practice in industry. STEM careers are highly lucrative and rewarding.

Aspire to drive a truck in the Pilbara and earn big money? This and many other jobs are becoming extinct due to the rapid growth of technology. For example, Rio Tinto already has driverless trucks that are controlled from Perth and self-driving cars for personal use will be available for purchase in the near future.

Are you interested in studying Physics, Chemistry, Biology, Mathematics, Metal and Engineering, Software Design and Development or other STEM related subjects for your HSC? Then iSTEM is the course for you.

WHAT STUDENTS LEARN

Areas of study may include:

- Engineering fundamentals;
- Mechatronics / Robotics;
- 3D CAD/CAM;
- Motion;
- Aerodynamics; and
- Personal interest STEM Project.

iSTEM offers great opportunities to work with our Industry Partners; Jetstar, BAE Systems, AmpControl and Varley are most evident in this subject. In addition, iSTEM at HRHS is supported by Regional Development Australia – Hunter and the ME Program. It is through this support our school participates in many STEM related competitions like the Bottle Rocket Challenge and RoboCup. The iSTEM class often has the first option to participate in such events.

FEE: \$15.00

MARINE & AQUACULTURE TECHNOLOGY – 200 hours

FACULTY: SCIENCE

HEAD TEACHER: MATHEW ROBSON

COURSE DESCRIPTION

This elective allows students to study marine and freshwater environments. Theliving things from the sea and lakes form a wide range of fascinating and exciting research. We will see how many people make a living from the sea in a sustainable way and others who are trying to save endangered creatures such as the whales. Basic water safety and first aid are included in this interesting course.

WHAT STUDENTS LEARN

The major emphasis of the Marine and Aquaculture Technology syllabus is on practical experiences. Students learn about Work Health and Safety issues and apply principles of water safety and first aid in marine situations. They also learn to responsibly select, use and maintain materials and equipment and to use appropriate techniques in the context of the modules selected for study.

Students will learn to research, experiment and communicate in relation to aquaculture, maritime and marine activities and to apply ethical and sustainable practices in the use and management of the marine environment.

MUSIC – 200 hours

FACULTY: CAPA

HEAD TEACHER: SHANE LLOYD (Rel.)

COURSE DESCRIPTION

The aim of the Stage 5 Music course is to provide students with the opportunity to acquire the knowledge, understanding and skills necessary for active engagement and enjoyment in performing, composing and listening. Students should envisage that their skills in all these areas will develop gradually over the 200-hour course.

WHAT STUDENTS LEARN

Students will learn about and experience Music through three components.

1. Performance

This is the main component in the Stage 5 course - encouraging students to perform as a soloist and in an ensemble situation.

2. Aural / Musicology

Aural / Musicology is about the appreciation, experience and analysis of all musical genres further developing and deepening a students' understanding of Musical Concepts.

3. Composition

Composition looks at incorporating skills in performance and technology. Students can investigate and experiment with instrumental sounds — conventional and non-conventional. This may be done through various compositional techniques that will be studied and experienced. Students will also utilise recording and editing devices available, accompanied by specialist musical software.

"The evidence of neuroscience overwhelmingly demonstrates that children studying music have a considerable educational advantage over those who don't." Richard Gill OAM, The Sydney Morning Herald

PHYSICAL ACTIVITY & SPORTS STUDIES – 200 hours

FACULTY: PDHPE

HEAD TEACHER: TRUDY DIXON (Rel.)

COURSE DESCRIPTION

Physical Activity and Sports Studies represents a broad view of physical activity and the many possible contexts in which individuals can build activity into their lifestyle. It incorporates a wide range of lifelong physical activities, including recreational and leisure pursuits, competitive and non-competitive games, individual and group fitness activities, and the use of physical activity for therapy and remediation.

WHAT STUDENTS LEARN

Area of study 1 - Foundations of Physical Activity

In this area students explore and develop the foundations for participation and performance in physical activity and sport. Students establish a base of knowledge and skills that will encourage and enhance current, future and lifelong physical activity patterns. Students develop a capacity to evaluate factors that contribute to efficient and rewarding participation and to plan strategies that further enhance participation and performance.

Area of study 2 – Physical Activity and Sport in Society

In this area of study students explore physical activity and sport form national, community and individual perspectives. Students develop a broad understanding of the roles and effects of physical activity and sport, and the benefits and opportunities they can provide.

Area of study 3 – Enhancing Participation and Performance

In this area students are provided with opportunities to enhance their participation and performance in physical activity and sport. Students explore strategies to promote active lifestyles and also develop skills in specific movement contexts.

VISUAL ARTS – 200 hours

FACULTY: CAPA

HEAD TEACHER: SHANE LLOYD (Rel.)

COURSE DESCRIPTION

The Visual Arts course aims to enable students to develop and enjoy art making, art history and art criticism. Students are exposed to a wide variety of art making approaches, while also studying various artworks and artists' practices in art history and art criticism. Visual Arts is a project based subject where you will explore a variety of topics and create artworks that focus on building your artistic style and technical skills.

WHAT STUDENTS LEARN

Students will create:

- Paintings
- Ceramic art
- Lino prints
- Drawings
- Textile art
- · Digital drawings
- Photographs
- Sculptures

FEE: \$25.00

VISUAL DESIGN – 100 hours

FACULTY: CAPA

HEAD TEACHER: SHANE LLOYD (Rel.)

COURSE DESCRIPTION

Visual Design is primarily a practical subject in which students design and create objects and environments. The course provides students with opportunities to explore the links between art and design by making products with aesthetic qualities. Students learn to make visual design artworks using a range of materials and techniques. You will learn to represent your ideas and interests with reference to contemporary trends and how designers make artworks.

WHAT STUDENTS LEARN

Students will create:

- · Tattoo flash sheets
- Clothing decals
- Phone cases
- Print media
- Digital graphics
- Architectural designs

FEE: \$25.00