## Mackay North State High School



Senior Curriculum

Year 10 Subject Guide

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Mackay North State High School is a Registered Training Organisation:
RTO Number - 30076

# YEAR 10 SUBJECT CHOICES 2024 

## Core Subjects (Studied for the entire year)

ENGLISH - 3 lessons per week<br>MATHEMATICS - 3 lessons per week<br>SCIENCE - 3 lessons per week<br>HEALTH \& PHYSICAL EDUCATION - 2 lessons per week<br>HUMANITIES (History \& Geography) - 3 lessons per week<br>CERTIFICATE II SKILLS FOR WORK AND VOCATIONAL PATHWAYS - 2 lessons per week

The remaining two (2) subjects (each 2 lessons per week) are to be chosen from the available elective options below:

## The Arts

VISUAL ART (ART)
DANCE (DAN)
DRAMA (DRA)
MUSIC (MUS)
CHEER AND DANCE

## Technologies

ECONOMICS \& BUSINESS (ECB)
DIGITAL TECHNOLOGIES (DIG)
FOOD SPECIALISATION (TFD)
TEXTILES
MATERIALS \& TECHNOLOGIES SPECIALISATION (WOODWORK) (TMT)
MATERIALS \& TECHNOLOGIES SPECIALISATION 2 (METALWORK) (TTZ)

## Other

LITERACY \& NUMERACY
MATHS EXTENSION
JAPANESE (JAP)
SCIENCE, TECHNOLOGY, ENGINEERING \& MATHEMATICS (STM)
AGRICULTURE \& SUSTAINABLE LIVING (ASL)
ENRICHMENT - PHYSICAL EDUCATION

Special note (1): While every effort is made to ensure that students make informed choices and are placed in the subjects of their choice, classes can only be formed where student numbers, teacher availability and appropriate resources exist.

There may be some students who are not able to make the selection of their choice, and there may be some students who will be counselled to alter their initial choice.

Special note (2): Senior Secondary Subjects have a fee which is reviewed annually.

> For continuing students:
> To access the subject selection process your student goes to the website: oslp.eq.edu.au; the student is then asked for their school log-in details. They then click on the tab marked, "Careers" and then "Subject Selections" in the following window, and then follow the prompts to make their selections. Students will be shown how to do this at school, so they will be able to show you how to navigate through the process at home.

## Australian Curriculum Subjects

These subjects are mandatory for all junior school students.

## 10 ENGLISH

## What is the subject?

English is part of the Australian Curriculum and is compulsory for all students. This course aligns with the National Curriculum.

The English program offers students challenging and practical language, literacy and literature experiences.

## What is in the subject?

Students will participate in a variety of language activities involving listening, speaking, reading, writing and viewing. They are given opportunities to develop their capacity to use language fluently, appropriately and effectively in a wide range of social contexts.

Students will experience a variety of units designed to develop their understanding of how language works and their appreciation of language and its use. Units of work are developed around literature texts (novels, short stories, plays and poems), mass media (print and electronic) or a theme (Asian perspectives).

Students will use a wide range of literary, non-literary and mass media resources significant to their needs and interests.

## How is the subject assessed?

Students are assessed in a variety of forms, for a variety of audiences, in a variety of conditions over the course of each semester. Students will complete four assessment items over the year. Students will be exposed to elements of the senior curriculum in semester 2 in preparation for their choice of English subject in Year 11 (English, Essential English and Literature).

Notes:

## 10 HEALTH \& PHYSICAL EDUCATION

## What is the subject?

The Health and Physical Education course is an Australian Curriculum subject which will be studied by all students in Years 7, 8, 9 and 10 at Mackay North.

## What is in the subject?

The subject has both a theoretical and a practical aspect.
The theory has four major topics - Drug and Alcohol Education, Improving Movement, Health Fitness and Diet and Relationships Education.

In Years 10, the practical units covered are Games and Sports, Outdoor Challenges and Fitness and Resistance Training.

## How is the subject assessed?

The theory in Physical Education is assessed through the completion of booklets based around a particular topic. Within these booklets students may be asked to complete tables, write short answers or develop longer, more detailed responses. The theory mark assigned to each of these booklets is determined by the neatness, completeness and quality of the answers.

The mark given for each practical unit is determined through three criteria. These are personal and social skills, movement skills and strategies and knowledge of terminology and rules. Through these criteria we hope to not only strive for excellence in performance but also to encourage all students to participate to the best of their ability.

## Parental Help and Guidance

We encourage parents to take an active role with their student's schooling and to develop a working relationship with their student's teacher. This could take the form of monitoring theory work; ensuring appropriate clothing is worn to practical lessons and encouraging students to fully participate to the best of their ability during these lessons. The H.P.E. staff is available at all times to discuss student progress.

## 10 HISTORY (Semester One)

All students undertake History in Semester One.

## Semester Focus - The Modern World and Australia.

## Key Inquiry Questions:

How did the nature of global conflict change during the 20th Century?
What were the consequences of World War Two?
How did the consequences shape the Modern world?
How has Australian Society affected by other significant global events and changes in this period?

## Two in- depth studies for year 10 include:

1. World War Two.
2. Rights \& Freedoms.

## 10 GEOGRAPHY / HISTORY (Semester 2)

In semester two students can choose to study Geography or History. Students are given details regarding this subject during Term 2 to help make their selection for semester two.

These subjects develop research skills that will be important in helping with Senior Social Science subjects such as Modern History, Ancient History, Geography, Legal Studies and Aboriginal and Torres Strait Islander Studies.

## Homework and assessment for Humanities.

There are three (3) lessons per week. Homework is set each week to review or extend classwork learning. At times, progressing with current assignment work will be the set homework. Each semester, students will be assessed by means of exams and a written assessment task. Most often, assessment tasks are designed to develop students' research skills.

## 10 MATHEMATICS

This subject is part of the Australian Curriculum in the Senior Secondary School and is compulsory for all students.

Mathematics is organised into two sets of strands. Proficiency strands describe the skills or "how", of Mathematics and content strands describe the knowledge and understanding, or "what", of Mathematics.

There are three (3) content strands in the Australian Curriculum, including:
Number and Algebra
Measurement and Geometry
Statistics and Probability
There are four (4) Proficiency Strands including:
Understanding
Fluency
Problem solving
Reasoning

## Number and Algebra strand:

Real numbers
Money and financial mathematics
Patterns and algebra
Linear and non-linear relationships

## Measurement and Geometry strand:

Using units of measurements
Geometric reasoning
Pythagoras and trigonometry

## Statistics and Probability strand:

Chance
Data representation and interpretation
During Year 9, students covered the Australian Curriculum in the three (3) strands mentioned above. Most students are expected to achieve to the national minimum standards, as evidenced by the National Assessment Program in Literacy and Numeracy tests, conducted in May each year. All classes will focus on a set of common topics, although some students (Extension Maths classes) will be given the opportunity to investigate some topics to a greater depth of understanding, whereas other students (Modified Maths classes) will be given a little more time to absorb the basic concepts.

In Year 10, the school will be preparing students for the transition into Year 11. As such, classes will be re-organised at the beginning of Year 10 to reflect the transition into either Essential Mathematics, General Mathematics, Mathematics Methods or Mathematics Specialist. The students will cover various aspects of the Australian Curriculum based on their ability. Students will be advised by their teacher at that time of their recommended placement into one of those classes. Parents and students are welcome to be involved in discussions about future Maths classes in Year 11 at that point. There will be room for negotiation during Semester 1 for students to change classes based on their results.

## 10 SCIENCE

## What is the subject?

Science at Mackay North SHS is compulsory for students as part of the National Curriculum and is studied by all students in Years 7-10.

## What is in the subject?

Students will experience both theoretical and practical components in the subject.
The units align with Australian Curriculum requirements and in Year 10 cover the following units:

| Unit 1: Moving along | Unit 2: Life blueprints and <br> life evolves | Unit 3: Chemical reactions <br> matter | Unit 4: Global systems and <br> Beyond |
| :--- | :--- | :--- | :--- |
| Students will explore the <br> motion of different objects <br> and apply the laws of physics <br> to describe motion. | Students will investigate the <br> importance of DNA and <br> genes in controlling <br> They will explore <br> conservation of energy, <br> energy-force relationships <br> and apply these to everyday <br> situations, including the effect <br> of energy and motion during <br> collisions and the use of <br> safety features to minimize <br> their impact. | They will develop an <br> understanding of the theory <br> of evolution by natural <br> selection, and biodiversity. | Students will explore <br> structure and properties of <br> elements and their <br> organisation in the periodic <br> table. They will examine <br> chemical reactions to predict <br> products, and ways in which <br> rates of reaction can be <br> changed. | | Students will understand that |
| :--- |
| global systems rely on the |
| interactions between the |
| different spheres on earth. |
| They will examine the cause |
| and effect of changes in |
| global systems and recognise |
| the effects of human activity |
| on the environment. Moving |
| out from the Earth, they will |
| explore features of the |
| universe. |

## How is the subject assessed?

Assessment in Year 10 has been designed to help prepare students for the style of assessment in Year 11. Students will be assessed through an experimental report, research investigation and end of semester exams.

## Beyond Junior Science

Junior science provides students an opportunity to develop an understanding of important scientific concepts and processes, practices used to develop scientific knowledge, of science's contribution to our culture, society and applications in our lives.

For those students wishing to continue their studies into senior, North provides students the opportunity to specialise their studies with a variety of Senior Science subject offerings. Entry into these senior subjects is strongly guided by the demonstrated success of students in their junior science studies.
The recommended pre-requisites for the senior science subjects are listed below:

| Senior Science Subject Options \& Pre-requisites |  |  |  |
| :--- | :--- | :--- | :--- |
| General Subject | Year 10 result recommendation | Applied Subject | Year 10 Recommendation |
| Biology | 'B' or higher in Year 10 Science | Aquatic Practices | Pass in Year 10 Science. <br> An interest in the ocean \& marine life. |
| Chemistry | Pass in Maths \& English |  |  |

It is important for students to have considered future career pathways and to be building a strong foundation in junior science. Strong performance in this subject helps prepare students for the senior science subjects and their career pathway outside of school, be it towards university, apprenticeships or other work opportunities.

# Elective Subjects 

Students are to choose only two (2) subjects from this section

## 10 ART (VISUAL)

## What is Art?

Art is about creating artworks around a theme, solving problems, experimenting with techniques, materials and ideas.

## Who can take Art?

This is for anyone who is keen to learn about different aspects of the subject. The classroom takes on more of a studio environment with guided practice, independent explorations and responses to topics.

## What practical work is done in Art?

Artworks focus around a central idea/concept. Students create works in a variety of media including Drawing, Printmaking, Painting, Mixed Media, Photography and Digital Manipulation, Ceramics and Sculpture.

In Year 10 students look at Art History including Ancient Cultures, Realism, Stylisation, Expressions, and Abstraction (20th Century Art Styles)

## What are our expectations?

Every lesson, bring your Art book, fineliner, 2B pencil, ruler, watercolour pencils (Staedtler or Derwent), eraser, homework diary and device.

Complete regular homework and assessment by the due dates.
Students will use a minimum of 2 X A4 sketchbooks and approximately 5 fine point black pens during the year.

## Assessment

Major Practical Artworks / Folio
Written Assignment - 1 per year
Bookwork - theory, lead up activities and planning, minor practical work

## Who can tell me more?

Ask the Head of Department or any of the Art Teachers.

Notes:

## 10 CHEER AND DANCE

## What benefits do students gain from this subject?

Physical skills are developed including co-ordination, balance, flexibility and strength.
Social skills are highlighted with a focus on teamwork, co-operation, trust, peer support and problem solving.
Emotional wellbeing is often enhanced through increased confidence, personal and school pride and self-awareness.
Personal attributes are celebrated to explore how individual qualities can strengthen performance in a team.
Healthy and safe preparation, rehearsal and performance practices are reinforced.
The course is offered from years 8 to 12 .

## Pre-requisites

This subject is designed to support the extra-curricular commitment made by students involved in the school dance troupe.

To be involved in the dance troupe, there will be an application process followed by an audition.
This subject is not recommended for students who have not had previous dance experience.

## Description

Cheer is a unique team-based subject. This course aims to give explore dance from the perspective of an athlete. This subject will provide students with the opportunity to experience dance and dance productions at a school and community level. It will focus on experiencing and understanding the role of dance in the community and where possible, interacting with industry professionals and choreographers.

Notes:

## 10 CREATIVE WRITING

## What is Creative Writing?

In Creative Writing, students develop critical and creative thinking through listening to, reading, viewing, creating and presenting texts. Through close analysis of texts, students critically analyse the opinions, perspectives and unstated assumptions embedded in texts. Students develop creative thinking skills by considering authors' innovations, and planning, exploring and creating ideas for imaginative texts.

## What benefits do students gain from the subject?

All Senior English subjects (English, Essential English and Literature) require students to write creatively so this elective is of benefit to all students. It will be of particular interest to students who intend on studying Literature in Years 11 and 12.

## Pre-requisites

Students electing Creative Writing should demonstrate:

- a C in Year 9 English
- an enjoyment of creative writing
- a willingness to complete creative writing tasks outside of the classroom.


## Description

Students study four integrated aspects:

- Inquiring
- Generating
- Analysing
- Reflecting

These strands are embedded in each unit which will be organised around a form of creative writing.

## Assessment

There will be two assessment tasks each semester, one of which will be an oral task (presented live or pre-recorded). These tasks will include the following forms of creative writing: short story, dramatic monologue, poetry, and feature writing.

Notes:

## 10 ECONOMICS \& BUSINESS

## Why study Business?

By doing this subject you will obtain many useful skills which you can apply in the business world and in your own personal life. This subject will improve your financial literacy and give you a greater understanding of business.

## Who can take Business?

Anyone who is interested in the world of business, money, managing personal finances and investing.

What is studied?
Topics studied include:
Competing as a business in the global economy
Practical Accounting - Journals, Ledger and Trial Balance
Consumer decisions and business productivity (Marketing)
Computer Accounting - MYOB
Additional skills taught throughout
Excel (Basic business applications)
Word (Reports, Tables)
Preparing and interpreting business documents, data and graphs

## Are there excursions?

Relevant excursions will be included where possible.

## Assessment

Assignments will be set to develop individual and group research, thinking skills and teamwork. The remaining assessment will be in the form of exams, at the completion of the topic of study.

## How much homework will there be?

Homework generally involves completing practical exercises, revising content and/or assignment work.

## Where does it lead after Year 10?

You should have a basic knowledge for the study of Accounting in Year 11.
Notes:

## 10 ENRICHMENT - PHYSICAL EDUCATION

## What is the subject?

This subject is a Year 10 Elective.
Enrichment Physical Education is designed for students who enjoy and excel in HPE. This subject aims to extend and challenge students and prepare them for the Physical Education subjects offered in senior school.

## What is in the subject?

This subject contains both a theoretical and a practical aspect.
The topics covered over the course of study include - Biomechanics, Energy Systems, Tactical Awareness, Sports Psychology and Exercise Prescription. The theory components of this subject will be taught using QLearn - therefore devices are mandatory.

## How is the subject assessed?

The theory in this subject is assessed through the combination of online work and assignment/project work. These may include activities such as - case studies, short answers, extended responses, data analysis and program design. The theory mark assigned will be determined by completeness and quality of answers.

The mark given for each practical unit is determined through three criteria. These are knowledge of terminology and rules, movement concepts and strategies, and personal and social skills in a sporting environment. Through these we strive for full participation and excellence in performance through the building and extending of sports specific strategies and skills.

Prerequisite : please note that acceptance into this subject is dependant on high participation levels in Year 9 HPE / Extension HPE.

## 10 DANCE

## Description

Cheer is a unique team-based subject. This course aims to explore dance from the perspective of an athlete. This subject will have a cheerleading focus with an emphasis on:

- The development of physical skills including co-ordination, balance, flexibility and strength
- Healthy and safe preparation, rehearsal and performance practices
- High-energy activity (including tumbling, lifts and stunts)
- Participation in competitions where possible

Instruction for this subject will be provided by a registered Cheerleading coach.

## What benefits do students gain from this subject?

Social skills are highlighted with a focus on teamwork, cooperation, trust, peer support and problem solving.
Emotional wellbeing is often enhanced through increased confidence, personal and school pride and self-awareness.
Personal attributes are celebrated to explore how individual qualities can strengthen performance in a team.

## Pre-requisites

The course if offered from years 8 to 12. The subject is designed to support students who have existing dance or athletic sports (i.e. gymnastics) experience.
To be involved, there will be an application process followed by an audition. Beginners may be allowed to trial the subject but continued participation in the course will be subject to the discretion of the Head of Department.

## Assessment

This subject will not be assessed. Students will not receive a report at any reporting
juncture.
This subject will focus heavily on performance and dance production. Students will be expected to participate in competitions. This is dependent on whether the team can safely participate.

Notes:

## 10 DRAMA

## What is Drama?

Drama deals with the study of communication through a variety of dramatic forms. It develops creative expression, an appreciation of and control over the dramatic form and skills in functional communication.

## What benefits do students gain from the subject?

Being able to communicate effectively is a pre-requisite for success at school, in the outside world and in establishing and maintaining relationships. Students contemplating early childhood/primary/secondary teaching, or any position where you need to 'perform' before an 'audience', will find Drama very useful.

## Pre-requisites

Students electing Drama should demonstrate:
an ability to work with others
self-discipline and readiness to perform in front of an audience willingness to take direction.

## Description

The course is offered in Years 9 and 10. Students are then encouraged to study Senior Drama in Years 11 and 12. A sound level of achievement in Year 8 English is advisable for students undertaking this subject.

## Students study three integrated aspects:

forming
presenting
responding
These are organised thematically, with students undertaking activities such as Theatresports, Greek Theatre, Physical Theatre and Melodrama.

## Assessment

The course is 50\% practical and 50\% theoretical. For practical assessment, students perform in groups, but are assessed individually. Assessments are based on creative writing, essay writing and performance. Students are expected to work on assessment tasks in class and at home.

Although it is not compulsory, students of Drama are encouraged to participate in extracurricular activities within the Performing Arts Department.
Notes:

## 10 MUSIC

## What is music?

Music plays an important role in our everyday life and Music aims to introduce students to a wide range of styles, from "caveman" music through to the rock/pop scene. Students have the opportunity to play and sing music, to create their own "masterpieces" and to listen to and begin to understand music from all walks of life.

## What benefits do students gain from the subject?

After Year 10, music can be continued into Years 11 and 12, and then can be included in a student's assessment for tertiary entrance. The study of music can lead to a wide variety of job opportunities and often students contemplating early childhood/primary teaching find music very useful. Music enables students to develop in many ways - students can get to know others and enjoy working with them. Practical aspects provide an artistic outlet and assist with co-ordination.

## Pre-requisites

Anyone with a love of or interest in music could handle music successfully. Being able to play a musical instrument is recommended. Students involved in the school instrumental program or learning voice or an instrument privately are strongly advised to choose classroom music.

## Description

The course covers many different types of music including folk music, pop/rock music, vocal music, jazz, electronic and computer music. Students are involved in:
practical music making - playing and singing in groups
knowing about music - being able to discuss musical ideas and write down music listening to and understanding music - becoming more aware and informed listeners.

## Resources

The music department is equipped with a number of acoustic guitars; a keyboard lab; 15 computers plus numerous tuned and untuned percussion instruments. As well, orchestral instruments are available on loan through the music department.

## Assessment

Each term students complete a performance test plus either a composition or analysis.

Notes:

## 10 FOOD SPECIALISATION

The "Food Major" Home Economics course has been designed to cater for students with a particular interest in food preparation and nutrition. All food and the necessary take-home containers are supplied to students.

## Semester 1

'Nuts about Nutrition'
Students explore the latest information about nutrition and healthy eating.
Students examine some myths and misconceptions surrounding food and diet related diseases.

## 'Techno Food'

Students will be introduced to topics such as sensory evaluations, properties of food, packaging, labelling and branding.
Students produce foods involving a variety of cookery techniques over both terms.

## Semester 2

## 'Make a meal of it'

Students explore the importance of meals - breakfast, lunch and dinner.
Influences on teenage eating habits and food models in relation to healthy eating.

## Pre-requisites

An interest in practical cookery and investigating nutrition issues that impact on teenagers and their families.

## Homework

Using practical skills developed in class at home and completion of work plans for practical cookery lessons. Students will be required to complete unfinished work from class time as well as set weekly review tasks.

## Assessment

Each Semester students will complete at least
Written Exam
Folio / Project - Following a design brief

## Where will this subject lead?

To the senior subjects of Home Economics and Hospitality. Skills developed in this subject may assist in occupations such as dietician, health care workers, nurse, teacher, hospitality worker.

Notes:

## 10 DIGITAL TECHNOLOGIES

## Aim

The aim of the course is to give students the skills to efficiently use technology to assist them in their daily dealings with ICTs during their school years and beyond. Students will inquire, create, communicate and operate ICTs as well as investigate the social and ethical implications of technology use. These skills are immediately applicable in all other subject areas as well as in employment after graduation.

## Assessment

The majority of the course will be project based in that students will work individually and collaboratively using industry standard software to produce items or products for 'clients'. Product examples may include mobile app, interactive websites, animation and games. Students will be enrolled in QLearn which is Education Queensland's secure eLearning environment. Students will join online virtual classrooms that allow 'anytime, anyplace' access to all class tasks, resources and assessment tasks.

## Topics covered

Coding (introducing basic programming concepts)
Robotics (programming robots to test robot performance)
Web design (using HTML5, CSS3 and jQuery scripts)
Integrated project (combining all the skills acquired in this course)

## Year 11-12 Pathways

Pathway:- ICT $\square$ Digital Solutions $\square$ University $\square$ Technology industry
Pathway:- ICT $\square$ Assist in employment in the workforce.

## Other points to note:

Students will discover that Digital Technology is a hands-on subject where active participation is rewarded with success.

Virtual Classrooms support student learning and activities, homework, assessment, student research and inquiry by being accessible via the Internet, 24 hours a day, 7 days a week.

Assists in problem-solving skills which students can use in other subjects and in life in general.
Although classes may be conducted in a school computer lab, it would be advisable that students have a laptop, preferably a Windows laptop that is capable of running Adobe Photoshop, Illustrator and Dreamweaver. The laptop's CPU should be an i5 or above so as to properly run the Adobe applications.

Notes:

# 10 MATERIALS \& TECHNOLOGIES SPECIALISATIONS (WOODWORK) 

Materials \& Technologies Specialisations is a subject designed around the building, construction, furnishing and timber industries. In particular it will look at the application of tools, working of materials, designing and planning of projects culminating in manufacturing them. It introduces practically oriented learning experiences, involves practical applications of mathematical and scientific principles and provides grounding for life in a technological age.

## Aims

To emphasise the necessity for safe working habits.
To develop and plan procedures, solve problems and make decisions.
To apply technical literacy relevant to the building and construction industry
To develop technical skills and appreciation of materials, equipment, processes and work methods within the building and construction industries

## Areas of study

Project planning and design
Woodworking and fabrication
Plastics fabrication and moulding
Simple electrical circuits

## Assessment

Class projects
Design booklets
End of semester tests
Students are well advised to have taken Year 9 Design \& Technologies Specialisations as a pre-requisite to Year 10.

## Where will this subject lead?

Materials \& Technologies Specialisations lays the foundations of career opportunities in a host of areas including the building and furnishing industries.

If students are considering traineeships or apprenticeships along these career paths it is advisable to continue into Years 11 and 12 Building \& Construction Skills, Furnishing Skills, Industrial Technology Skills and/or Industrial Graphics. Many local industries have appreciated students having studied these types of practical subjects.

Notes:

# 10 MATERIALS AND TECHNOLOGIES SPECIALISTATIONS 2 (METALWORK) 

Materials and Technologies Specialisations 2 (Metal Work) is a subject designed around the metal and engineering industries. In particular it will look at the application of tools, working of materials, designing and planning of projects culminating in manufacturing them. It introduces practically oriented learning experiences, involves practical applications of mathematical and scientific principles and provides grounding for life in a technological age.

## Aims

To emphasise the necessity for safe working habits
To develop design principles
To apply technical literacy relevant to the engineering industries
To develop a knowledge and appreciation of materials, equipment, processes, work methods and technical skills within the engineering industries

## Areas of study

Project planning and design
Sheet metal working
Metal fabrication and fitting
Metal turning
Metal cutting and joining (simple welding)

## Assessment

Class projects
Design booklets
End of semester tests
Students are well advised to have taken Year 9 Design and Technology - Manufacturing as a pre-requisite to Year 10.

## Where will this subject lead?

Materials and Technologies Specialisations 2 (Metal Work) has laid the foundations of career opportunities in a host of areas including the engineering and fabricating industries.

If students are considering traineeships or apprenticeships along these career paths it is advisable to continue into Years 11 and 12 Engineering Skills, Industrial Technology Skills and/or Industrial Graphics. Many local industries have appreciated students having studied these types of practical subjects.

Notes:

## 10 STEM

## Why study STEM?

STEM refers to science, technology, engineering and mathematics. The importance of STEM disciplines for the future economic and social well-being of Australia cannot be underestimated. International research indicates that 75 per cent of the fastest growing occupations require STEM skills and knowledge.

The main purpose of STEM Excellence is to better engage students in science, technology, engineering and mathematics. It is meant to challenge and excite students with the possibilities of the future. It involves many 21st century learning opportunities and emphasises inquirybased learning where students are encouraged to learn by doing.

## Who can take STEM?

To be successful in this subject you should be achieving at least a 'B' in English, Maths and Science and preferably studied STEM in year 9.

What is studied?
Examples of topics studied in Year 10 include:
The 'Future Anything' entrepreneur Program
Responding to disasters
Submarines in school challenge
Smart solutions to recycling

## Assessment

Research Essay
Project Work
Work Booklet
How much homework will there be?
Homework generally involves completing practical exercises, revising content and/or assignment work.

Notes:

## 10 LITERACY AND NUMERACY SHORT COURSE

## What is the subject?

This Year 10 Elective is a two-unit course of study, one unit of literacy and one unit of numeracy, which will run consecutively through the year.
Students who successfully complete this course will also commence their Senior years of schooling with both the literacy and numeracy tick, components required to obtain the Queensland Certificate of Education (QCE), upon completion of year 11 and 12. They will have also achieved 2 credit points out of the total of 20 points required to obtain their QCE.

## Who should consider taking this course?

This subject is suited for students who are performing at a below satisfactory level in English or Mathematics and who may be:

- at risk of not succeeding in Senior English or Mathematics
- disengaged with school.


## What is in the subject?

## Literacy Short Course:

In this course of study, students:

- learn a variety of strategies to develop and monitor their own learning
- select and apply reading and oral strategies to comprehend and make meaning in texts
- demonstrate the relationships between ideas and information in written, oral, visual and multimodal texts
- evaluate and communicate ideas and information in written, oral, visual or digital modes
- learn and use textual features and conventions, including vocabulary and grammatical structures.

There are four interrelated core skills associated with the Literacy course

- reading
- writing
- oral communication
- learning.


## Numeracy Short Course:

In this course of study, students will:

- learn a variety of strategies to develop and monitor their own learning
- identify and communicate mathematical information that is embedded in a range of texts and contexts from everyday life and work
- use mathematical processes and strategies to solve problems in a range of situations
- reflect on outcomes and the appropriateness of mathematical processes used.

The three interrelated core skills associated with the Numeracy course are:

- identifying and communicating mathematical information
- approaching and solving mathematical problems
- learning.

Both Literacy and Numeracy are courses of study that consists of two topics:

- Personal identity and education
- In this topic, students will develop the core skills through expressing personal identity, achieving personal goals, and understanding and interacting with the wider community.
- The work environment
- In this topic, the core skills will be developed through activities that relate to preparing for and seeking employment, operating in an existing workplace, and/or entering a new work environment.


## How is the subject assessed?

The assessment for the Literacy course will include:

- an extended response - written
- a student learning journal
- an extended response - spoken/signed
- a reading comprehension task

The assessment for the Numeracy course consists of:

- an oral presentation, live or virtual
- a short response examination
- a student learning journal

Notes:

## 10 MATHS EXTENSION

## What is Maths Extension?

This subject is a Year 10 Elective, and will be studied in addition to the compulsory Australian Curriculum Year 10 Maths. Maths Extension is designed for students who enjoy and excel in Mathematics. This subject aims to extend and challenge students and prepare them for Mathematical Methods and Specialist Mathematics, two subjects that are offered in senior school.

## Who should consider taking this course?

Any student who is interested in following a university pathway in Engineering, Medicine, Mathematics or Science degrees, or any student who intends to study Mathematical Methods or Specialist Mathematics in senior.

## What is in the subject?

This subject will provide foundation knowledge for a better understanding of Unit 1 and 2 concepts in Mathematical Methods and Specialist Mathematics.
Examples of topics to be studied include:

- Arithmetic and Geometric Sequences
- Matrices
- Vectors
- Circle Geometry
- Complex Numbers
- Permutations and Combinations

How is the subject assessed?
Assessment for this subject will be in the form of end of term exams.
Notes:

## 10 JAPANESE

## What work will be covered?

In Year 10 Japanese students will investigate Japan, its people and their culture through the medium of the Japanese language.

## The following topics will be covered:

Leisure Activities
Where we Live
Japanese Student's School Trips
Part Time Jobs
In 2019, North High conducted its sixth student tour of Japan. It was a great success. The school conducted its sixth tour in June 2019. Students studying Japanese are given priority for selection in the limited number of tour places.

## Why study a language?

Students who do a second language often find links easier to understand in other subjects.
Relations between Australia and Japan have flourished for many years and they are one of our most important trading partners. As such, it is advantageous to have a second language in many areas, including business, banking, education, hospitality, travel and tourism, media, journalism and the arts.

## What kind of assessment?

The four skills (listening, speaking, reading and writing) will each be tested at least once per semester. Each skill is weighted equally. Students will be required to complete both exams and assignment work.

Notes:
Year 9 is a prerequisite for this subject. The " ii TOMO " Activity book 3\&4 that is purchased is used for a 2 year course of study both years 9 and year 10.

## 10 AGRICULTURE \& SUSTAINABLE LIVING

## Why study Agriculture and Sustainable Living?

Agriculture is the growing of plants and animals to provide food, fibre, shelter, medicines and a wide range of other products. Mackay and district is a rich agricultural area that offers a wide range of career pathways and employment opportunities for students.

Furthermore world communities are become increasing concerned about the source and quality of the food they eat, and the security of their food production for the future.
Agriculture and Sustainable Living aims to offer students the opportunity to acquire skills in basic agricultural practices such as horticulture, hydroponics and poultry. Sustainable and environmentally responsible practices will be firmly integrated into the course.

The subject will have approximately equal theoretical and practical components.

## Who can take Agriculture and Sustainable Living?

Any student with a keen desire to learn about food production and would like the opportunity to work in an "outdoor" classroom.

## What will be studied?

Horticulture (Growing of vegetables and fruits)
Poultry (egg production)
Hydroponics
Recycling/Composting
Agribusiness

## Assessment

Practical Assessment (50\%)
Theoretical Assessment (exams, reports - 50\%)
Homework - as applicable to the current unit of work

Notes:

## 10 TEXTILES \& DESIGN

The Textiles Design course has been designed to cater for students interest in the design area. This subject focuses on students designing, making, displaying and appraising textile images and objects. Students learn to apply knowledge of design elements and principles to construct textile objects, that can be worn, displayed, used to carry items or used to decorate.

## Year 10 - Semester 1 "Youth Cultures"

- Students investigate a variety of past \& present cultures then produce textile items inspired by these cultures.

> Year 10 - Semester 2
> "Textile Marketing"

- Students investigate a variety of techniques to design and produce textile items suitable for sale at a charity auction or for public use.


## Assessment:

Each Semester students will complete

- class test
- written research assignment
- two practical items

Notes:


## Nationally Recognised

Training

## FSK20113

Certificate II in Skills for work and vocational pathways

STATUS: Vocational Education and Training Subject<br>Potential QCE credit points: 4<br>Entry requirements: Nil<br>Duration of study: 6 months

Grade 10 students are given the opportunity to elect to do this course instead of Humanities in Semester Two.
The following information is sourced from https://training.gov.au/Training/Details/FSK20113
QUALIFICATION DESCRIPTION - This qualification is designed for individuals who require further foundation skills development to prepare for workforce entry or vocational training pathways.

It is suitable for individuals who require:

- a pathway to employment or vocational training
- reading, writing, numeracy, oral communication and learning skills at Australian Core Skills Framework (ACSF) Level 3
- entry level digital literacy and employability skills
- a vocational training and employment plan.

Foundation Skills Training Package qualifications may not be listed as an entry requirement for vocational qualifications.

## Qualification Packaging Rules

Total number of units $=14$
8 core units plus
6 elective units

## Core Units

FSKDIG03 Use digital technology for routine workplace tasks
FSKLRG09 Use strategies to respond to routine workplace problems
FSKLRG11 Use routine strategies for work-related learning
FSKNUM14 Calculate with whole numbers and familiar fractions, decimals and percentages for work
FSKNUM15 Estimate, measure and calculate routine metric measurements for work
FSKOCM07 Interact effectively with others at work
FSKRDG10 Read and respond to routine workplace information
FSKWTG09 Write routine workplace texts

## Elective units

FSKLRG05 Use strategies to plan simple workplace tasks
FSKLRG10 Use routine strategies for career planning
FSKRDG07 Read and respond to simple workplace information
FSKWTG01 Write Personal details on basic workplace forms

+ 2 others from a different training package (prob a WHS and a inclusion/cultural diversity style one)
Units come from Learning, Reading, Writing, Oral Communication, Numeracy and Digital technology contexts.
Note: this course will include the latest current version of these units.


## How are students Assessed?

Students in this course work to develop competencies, skills and knowledge described by each unit of competency. To be assessed as competent a student must demonstrate that they can effectively carry out tasks to industry standard. Students will be progressively assessed as 'competent' or 'not yet competent' in individual units of competency.
Students are assessed using various forms of competency based assessment including:

- Practical tasks
- Written assessment
- Observations
- Self and peer assessments
- Reports from workplace supervisors
- Simulation tasks
- Quizzes
- Contribution to class discussions
- One on one verbal questioning
- Oral presentations

Note: as Certificate courses are assessed using a competency based approach students will not be given a level of achievement for this subject - report cards will use the following language
WTC- Working towards competency
CA - Competency Achieved
CNA - Competency not achieved
WITH - Withdrawn
Upon successful completion of the course students will receive a qualification and record of result.
Students will receive a Statement of Attainment if they do not achieve the full qualification. (must be successful in at least one unit of competency)

## What costs are associated with this Certificate?

As per the school fees structure. This course does not incur an additional fee.

More information about this Certificate can be found At: https://training.gov.au/Training/Details/FSK20113

The information above is correct at time of publication however it is subject to change.

