



Year 7 Curriculum Overview



SCIENCE

This Semester in Science, we will investigate Science Inquiry Skills, Scientific understanding and Science as a Human Endeavour. Under the Science and Technical innovation umbrella, students will explore their natural world in understanding how scientists work for testing products, designing new materials or working collaboratively to solve a problem.

In semester one students focus on three areas: Being a scientist, chemical sciences and physics. Students are introduced to what science is, learn about safety in the laboratory, how to perform experiments in a safe manner and complete a scientific inquiry. Their major assessment task will be based on developing a safety game, a video or a multimedia interactive. The focus for term one in Science is laboratory safety,

scientific inquiry and writing laboratory reports. Students will exhibit curiosity in how things work at a scientific level, investigating safely, asking the right types of questions to further one's learning and to create opportunities for scientific explanation. Students will develop and employ critical-thinking skills through appropriate research and experimentation.

As Risk-takers, students will embrace challenges and new ideas and learn to use new strategies while being unafraid to find unexpected conclusions.

They strengthen their inquiry and problem solving skills by performing a range of laboratory activities, recording data and interpreting trends between variables.

When learning chemical sciences

in term two, students will focus on mixtures, including solutions, and how they contain a combination of pure substances and, given a range of mixtures, students will determine a suitable technique for separation. We will explore how blood is separated and why.

ENGLISH/HUMANITIES

In Year Seven, our first interdisciplinary unit will be exploring the global context 'Globalisation and Sustainability' inquiring into 'how Global interactions have shaped the development of globalisation'. This will be taught through the subjects English and History. Using the key concepts of 'communities', 'development' and 'global interaction', students will explore ancient civilisations, including Egypt, and discover how global interactions in the past influenced civilisations and culture, leading to development.

Humanities subjects taught throughout the year will be intertwined with English. History, geography, economics and civics and citizenship, will be addressed through global contexts. Throughout term one, students will be building an understanding of history, by analysing perspectives of people in the past and evaluating the roles and achievements of significant civilisations that led to progress.

In English, as we begin to prepare students for NAPLAN, we will be exploring narratives, with a focus on 'theme' and 'audience'. Students will be writing in each English session, two

The Senior School Staff members:

Assistant Principal	Jeanette Finegan
Ryan Ma	Leading Teacher – High Achievers Year 7, 8 & 9 Mathematics
Kirsten Sullivan	Leading Teacher – MYP & Curriculum Year 7 & 8 English & Humanities
Michael Germano	Leading Teacher – Science Year 7 Science
Maryanne Molino	Leading Teacher – Science Year 7, 8 & 9 STEM & Design Technologies
Michael Hick	Acting Leading Teacher – Specialist Year 7, 8 & 9 Wood Tech, Community
Felicity Mayes	Head of Year 7 Year 7 English & Humanities
Stephanie Ficarra	Head of Year 8 & Student Welfare Year 8 English & Humanities
Sarah O'Connor	Head of Year 9 Year 9 English, Humanities, Health & PE
Jeff Dent	Head of Food Tech Year 8 & 9 Food Tech, Health & PE
Kate Tjia	Head of Sport Year 7 & 8 Food Tech, Health & PE, Recreational Sports
Donna McCarthy	Year 7 English & Humanities
James Blay	Year 7 English, Humanities, Health & PE
Lauren Steel	Year 7 English
Zac Doherty	Year 7 Mathematics
Beau Lepp	Year 8 English & Humanities
Katherine Sadler	Year 8 Science & Mathematics
Lucinda Burney	Year 8 & 9 English & Drama
Adam Al Salihi	Year 8 & 9 Mathematics, English & Humanities
Tracey Hubert	Year 7, 8 & 9 Photography, Coding and Digital Technologies
Julian Schaffer	Year 7, 8 & 9 Music
Catherine Crossley	Year 8 & 9 Science
Nisha Rani	Year 7 Science
Sam Nikolsky	Year 7, 8 & 9 VCD & Visual Arts
Alice Osborne	Year 7, 8 & 9 Textiles
Blake Jobson	Year 7, 8 & 9 Wood Tech
Shupu Wang	Year 7, 8 & 9 LOTE
Jaike Ludewig	Café Dare

sessions a week focusing on Narrative, and others using their Writer's Notebook, and responding to texts read at home and in class.

Throughout term one, students will be building an understanding around how they can enhance their writing through the use of audience and theme. All students will use the NAPLAN marking guide as a tool to set Narrative related goals, as well as using the First Steps Writing and Reading Continua, which they are familiar with from Primary School.

Using mentor texts, students will investigate themes, by inferring the author's hidden meaning. Mentor texts will also be used to practise comprehension with students answering a range of questions using SOLO Taxonomy – uni-structural, multi-structural, relational and extended abstract responses.

Homework in English and humanities will consist of flipped classroom work, where students will familiarise and revise different language conventions and knowledge prior to lessons. Students are all asked to read every day for a minimum of thirty minutes, with an expectation that they will be reading a novel every fortnight, however they may choose to use their reading time to read non-fiction texts such as their textbooks and newspaper articles.

MATHEMATICS

During Term One, in the Domain of Number and Algebra, students will build up on their existing understanding of Numbers and place value. They will be introduced to negative numbers and integers, addition and subtraction to solve everyday problems involving negative numbers. In the Domain of Decimal and Percentage, students investigated all four operations involving decimal numbers, converting fractions to decimals (and vice-versa) and rounding decimals. We are going to be exploring this through the global context of 'Personal and Cultural expression'. They utilised their research skills, to represent and analyze their understanding of Decimal and Percentage by producing 'Recipe Task' about their favorite recipe(s). They created comparisons and representations of the information

researched and offered consequences to the continued actions. We are specifically teaching the following ATL skills: Set goals that are challenging and realistic, bring necessary equipment and supplies to class, keep an organized and logical system of information files/notebooks and present information in a variety of formats and platforms.

ROBOTICS

Robotics is a hands-on unit that introduces students to possible futures in STEM (Science, Technology, Engineering and Mathematics) careers. Students become inquirers and problem solvers as they investigate and apply their knowledge of structural and mechanical principles to create innovative design solutions to identified challenges.

Students work towards the achievement of computer-controlled systems in robotics using the Lego robotic systems 'WE DO'. The program focusses on the scientific principles of simple machines and programming concepts. Once the machine is constructed, students trace the transmission of motion and transfer of energy through the machine. They identify the simple machine mechanisms that are operating in the working models, including levers, gears, and pulley systems. Students become familiar with complex motion using a cam, worm gear, and a crown gear. Throughout the unit, students learn that friction can affect the movement of the robotic model in various ways.

TECHNOLOGY

Students program and create a working model. To do this they interpret 2D and 3D illustrations and models, and compare natural systems with mechanical systems. The use of software media to acquire information is an ongoing process within the Robotics program, which is demonstrated through their knowledge and operation of digital tools and technological systems.

F1 in SCHOOLS

F1 in Schools is a STEM (Science, Technology, Engineering and Mathematics) program that introduces students to a "hands on, minds on

approach" in which students, in teams, design, test and evaluate their car model. Under the Global Context of Scientific and Technical Innovation, students undertake the engineering process and are introduced to the basics of aerodynamics. Students become inquirers as they investigate and apply their knowledge of scientific principles, including friction, Bernoulli effect, Newton's Laws, force and motion to create a model F1 car. Students understand the relationship between design and speed.

This program focuses on developing the creativity and innovation of students through a structured engineering design project based on the development of a model Formula One™ racing car. The program is linked with the international F1 in Schools™ challenge which now runs in 34 countries.

The F1 in Schools™ program forms one step in the development of a pathway of sustainable interest, not only inspiring students but also developing in them the key employability skills which will assist in their transition into the workforce.

TEXTILES & DESIGN

During Term 1, students will understand that new skills are needed for the creation of different products through an inquiry into the safe use of relevant tools, equipment and methods for the production of designed solutions. Under the Global Context of Scientific

and Technical Innovation, students are introduced to the fundamentals of textiles and design and learn about various pieces of textile equipment and how to use them safely in practice. Students become inquirers by investigating different techniques on how to create and design textile products. Focusing on the Key Concept of Systems, students will explore several inquiry questions, such as 'what skills do we need to learn in order to create this product?' This will enable students to develop the skills they require to confidently follow instructions on how to create their own textile pieces, and will create a pincushion as the final aspect of gaining their sewing licence.

Students will go on to understand that new products can be influenced by existing designs through an inquiry into creative ways in which we can discover and integrate our personality into unique aesthetics in design. Students will develop the skills to confidently and independently follow instructions on how to create their own textile pieces, which leads to investigating, designing, producing and evaluating their own bag for their iPad or laptop. During the course, students will concentrate on organisation and self management skills throughout their approaches to learning.

WOOD TECHNOLOGY

The Year 7 Wood-Tech program introduces students to the field of materials design and technology, as





they explore the inquiry question of 'What is the nature and purpose of creative expression, viewed through the Global lens of Personal and Cultural expression'.

The Year 7s are beginning with safety within the Wood Technology room. Students will be building their knowledge, safe use and skills with basic hand and power tools. The Design Brief students will be working on will be in two parts, firstly students will produce a chopping board which will demonstrate their learning and secondly students will be designing a small timber toy/project. Students will work through the production stage where they begin to understand and logically sequence major stages of production, and calculate and list materials and quantities needed for production.

Students will develop evaluation criteria from the design brief to inform their judgments during the production process. Students will manage materials, components and processes to produce products, taking full account of the appropriateness of their properties, characteristics or expected outputs in meeting requirements of the design briefs. Make modifications during production, providing an explanation for changes that demonstrates reflection, research, responsiveness to feedback, and use of evaluation criteria.

Students will be able to select appropriate equipment and techniques to safely construct and evaluate the performance of their products, and be able to evaluate and make improvements to the performance, function and appearance of others' products through peer reviews. Students will be able to make modifications to improve their products in light of evaluation of their performance, function and appearance. Students will have a final report to describe and analyse the social and environmental impacts of their own and others' designs.

FOOD TECHNOLOGY

As a Design subject, Food Technology in year 7 is concentrated around developing students' food repertoire and understanding of processes and methods. Through the inquiry process, students investigate how communities develop different perspectives on the choice of foods and the importance of breakfast depending on available resources. Students learning will be focused around the global context of personal and cultural identity, using the material available as resources to aid in their product development and ongoing evaluations to continually improve their ideas. Students will be given the opportunity to begin to generate, develop and test design ideas, plans and processes using appropriate

technical terms and equipment. Being reflective, students will demonstrate their own understanding of how the design could be improved.

Throughout the term the students will use a variety of materials and equipment (resources) to develop an understanding of different skills, methods and techniques in the kitchen to ensure they are able to cook a range of different foods in a safe manner. Students will use their skills to plan, develop, create and evaluate their own healthy breakfast. Through this task they will demonstrate their practical skills as well as responding to a variety of factual, conceptual and debatable questions including what makes a healthy breakfast, how eating breakfast impacts on an individual's health and how the availability of food impacts our choice of breakfast.

ALAMANDA COMMUNITY PROJECTS

The Alamanda Community Engagement Program is for young people to volunteer in their community. It is a partnership that is being developed between Alamanda College and the greater community and service organisations.

Through the program, young people, schools and community organisations develop networks of relationships while achieving shared goals. The program will develop to encourage communities to support and recognise young people's participation and positive role in society.

This program gives young people a chance to do something great in their community, based on their choice. Young people are able to plan projects, meet new people, build skills and make a difference in their community.

In Year 7 students will start their community project journey by being introduced to the Global contexts, Approaches to learning skills, and the different types of service as Action. In Term 1 students will be exposed to a variety of speaker from local community organisations such as Rotary International, the Freemasons

and Amnesty International. From these forums students will be able to see the **connections between community and**

VISUAL ARTS

In year 7, students begin to expand their understanding of artmaking practices, particularly the role of artists within society. Students build on their creative thinking skills with a focus on developing ideas in order to express ideas, concepts and themes in their artworks. The focus of building skills, particularly in drawing, allows each student to become confident in their ability to make effective artworks. Students will also begin to use digital technologies and software to create effective communications in 2D and 3D.

The major project for term 1 is centered around the central idea of Identities and Relationships, as students plan, develop and present a finished self-portrait artwork. Students will use their understandings of visual arts conventions, particularly of proportion, to represent their personal identity.

DIGITAL TECHNOLOGIES

In Year 7 Digital Technologies students begin developing fundamental skills in computational and design thinking and inquire into how 'digital technologies and innovation play a key role in shaping the global interactions of the 21st century'. Students become designers as they develop their skills in 3D modelling in a CAD (computer aided design) environment. Within the context of an IDU exploring ancient civilisations, students will research the defining aesthetic properties of a specific culture with a view to produce their own 3D printed historical 'artefact'. Students become risk-takers as they learn how to become effective creators of technology by designing algorithms and developing programming solutions to produce their own games and social media applications using an iterative development process in the coding platform, Scratch.

Students apply a variety of problem-solving techniques as they design and invent solutions to problems that

are situated in a variety of contexts. Students will relate their learning to the key concepts of global interactions and communication in the global context of scientific and technical innovation.

PHOTOGRAPHY

In Year 7, students are introduced to photography as a powerful storytelling medium. Through an inquiry into the significant role of images in communicating key moments in space and time, students develop their visual literacy by critically analysing images and identifying the choices photographers make when composing a photograph. Students will also consider how images can be manipulated to alter our perception of reality.

Students develop their technical skills by learning how to manually control a dSLR camera and will practice these skills to produce a considered portfolio of works. The students will undertake a process of collaboration and experimentation in order to create aesthetic and meaningful artworks. Throughout the process, the students will develop their visual arts vocabulary to annotate and reflect on their own work, as well as the work of others. Students will relate their learning to the key concepts of perspective and creativity in the global context of orientation in space and time.

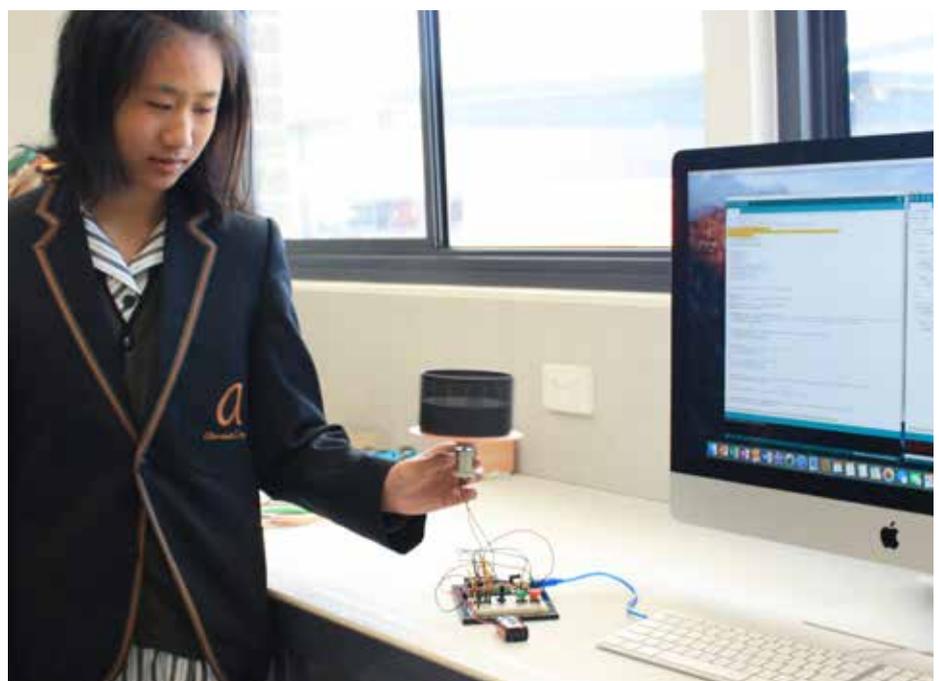
LOTE

The Year 7 LOTE Chinese program will allow students, through the global context of Personal and Cultural Expression, explore their identity in the context of local and global environments. Students will build their basic speaking and writing skills as they start to develop their vocabularies and sentence structures. They will also learn to describe their personal and family life, drawing on Key Concepts of Communications, Connections and Culture, talking about where they came from and significant moments in their life.

They will start practicing the writing of Chinese characters, gain a knowledge of basic radicals and Pinyin. Students will further develop their knowledge of Chinese accent as they practice listening and reading skills. Students will also gain a greater understanding of Chinese culture as they explore Chinese traditional landscape paintings and learn to play Chinese chess.

HEALTH & PHYSICAL EDUCATION

This term in Physical Education, students will explore the global context of fairness



and development as they continue to refine their fundamental movement skills through units on softball, baseball and football.

Students will focus on the key concept of relationships as they work towards building connections between a variety of different skills as well as those around them as they practice, apply and transfer movement concepts and strategies in sport. Students will be able to demonstrate and respond to factual, conceptual and debatable questions about how the elements of effort, space, time, objects and people can enhance and refine performance.

By the end of each unit students will demonstrate being good communicators by using key vocabulary to explain how they can improve their performance and express their ideas in a fair and mature manner. Students will collaborate with peers and strive towards common goals, regardless of difference in their skill level.

In Health, students will also be exploring the global context of fairness and development through an inquiry into the four dimensions of health and the impact that these have on our health and wellbeing. Through the key concept of connection, students will start to understand the relationship between our physical, emotional, spiritual and social well being. In this unit, they will identify and evaluate existing health and wellbeing initiatives and develop skills to evaluate health concerns and access appropriate support and resources within the local community.

MUSIC

In Term one, there will be a focus on student-led music activities, nurturing life-long learning and engaging skills, through a program that integrates listening, performing, analysis and problem-solving. A central focus in year 7 will be the global context of Identities and relationships, giving students the opportunity to build confidence as they develop their voices and percussion techniques, as these instruments ground the music student in the fundamentals of their music practice.

The curriculum will focus on 'real world



practices' and students will address the notion that 'music can convey our deepest creative abilities and this can develop our identity as people'. The curriculum will provide opportunities for deep thinking through music theory and music practice problem solving.

Students will also discuss identity through a reflection on audience: concert etiquette for performers and audiences; play: formal and non-formal engagement with music; and narrative: a musician's story, background and approach to music



Year 8 Curriculum Overview

SCIENCE

In term 1, students will begin the Chemistry unit with a focus on developing their science inquiry skills, their understanding of science content and science as a human endeavour. Student learning will be led by the statement of inquiry: "Creativity is essential for the development of solutions to problems that globalisation will create for sustainability in our future" through the global context of Globalisation and Sustainability and key concepts of Development and Creativity.

During the Chemistry unit, students will explore changes in matter at a particle level, as well as physical and chemical change in substances. They will consider how chemistry contributes towards sustainable solutions including in the recycling industry. The students will be making predictions and proposing explanations. They will draw on evidence from different sources to support their views while remaining open-minded about other points of view.

ENGLISH/HUMANITIES

In Year Eight, our first interdisciplinary unit will be exploring the global context of 'Globalisation and Sustainability', inquiring into how 'Global interactions develop relationships between individuals, communities, societies and the world.' Using the key concepts of global interactions and relationships, and utilising skills and knowledge in multiple contexts, students will explore the Silk Road, and discover how global interactions in the past influenced culture, development, communication, cooperation and interdependence between communities.

Students will explore a range of factual, conceptual and debatable questions, eventually leading to their own understandings of how the Silk Road affected the modern world.

Throughout Term One, students will be building an understanding of the history of the Silk Road, by analysing perspectives of people in the past and evaluation the roles and achievements of significant civilisations along the Silk Road, that led to progress.

In English, we will be exploring documentaries, with a focus on exchanging thoughts, messages, and information effectively through a digital interaction summative piece. Students will be writing in each English sessions, with a focus on text types – this term in the form of explanations and documentaries – and others using their writer's notebook and responding to mentor texts.

Throughout the term, students will be building an understanding around how they can enhance their non-fiction writing through the use of language that describes, and the idea of 'Showing, not telling'.

Students will use the First Steps writing and reading continua, to set individual reading and writing goals that they will practise during independent work sessions. These continua will be available online, so that these skills can be transferred between subjects.

Using mentor texts, students will

investigate authors language and styles to enhance their own writer's voice and writing ideas. Mentor texts will also be used to practise comprehension with students answering a range of questions using SOLO Taxonomy – uni-structural, multi-structural, relational and extended abstract responses.

Homework in English and humanities will consist of flipped classroom work, where students will familiarise and revise different language conventions and knowledge prior to lessons. Students are all asked to read every day for a minimum of thirty minutes, with an expectation that they will be reading a novel every fortnight, however they may choose to use their reading time to read non-fiction texts such as their textbooks and newspaper articles.

MATHS

This term, in the Domain of Number and Algebra, students will gain a greater understanding the global context "Personal and Cultural Expression" as they continue to refine their conceptual understanding of the concepts of quantity and simplification as they study number, place value, fractions and decimals.





During the Number and Place value unit, students will investigate squared numbers and square roots, index notation, the four operations with rational numbers and integers. Students will explore how numbers are represented in a variety of ways and used in real-world contexts.

During the fractions and decimals units, students will investigate conversions between fractions and decimals, the multiplications and division of fractions by other fractional values, terminal and recurring decimals and the multiplication and division of decimals by other decimal numbers. Students will link these units to personal and cultural expression by representing and analysing their understanding of Number, Decimal and Percentage by presenting culturally or personally significant recipes as part of their 'Recipe Assessment Task'.

During this term, students will focus on improving their organisation skills by setting challenging and realistic goals and their information literacy skills by collecting, recording and verifying data, accessing information and presenting in a variety of formats and platforms.

CREST



Crest (Creativity in Science and technology) is a CSIRO is a nationally accredited award program engaging students with real-life open-ended science investigative projects. Under the Global Context of Scientific and Technical Innovation, students will experience the exciting world of scientific research through a structured program that supports them in choosing, organising and undertaking their own experimental project which has an application to the everyday world. This is a venture with an unknown outcome which will enable students to gain a full appreciation of the joys and challenges of scientific research. Students initially carry out structured practical investigations to gain an understanding in :

- Planning and conducting an investigation
- Recording ideas
- Processing and analysing experimental data
- Evaluating and reflecting on achievements
- Communicating findings

In the latter part of the program, students become inquirers as they work independently on their own research investigation.

Making Crest available to students encourages awareness of the vital

role scientific research has in our community and encourages students to learn the skills of research.

F1 in SCHOOLS

F1 in Schools is a STEM (Science, Technology, Engineering and Mathematics) program that introduces students to a "hands on , minds on approach" in which students ,in teams ,design, test and evaluate their car model. Under the Global Context of Scientific and Technical Innovation, students undertake the engineering process and are introduced to the basics of aerodynamics. Students become inquirers as they investigate and apply their knowledge of scientific principles, including friction, Bernoulli effect, Newton's Laws, force and motion to create a model F1 car. Students understand the relationship between design and speed.

This program focuses on developing the creativity and innovation of students through a structured engineering design project based on the development of a model Formula One™ racing car. The program is linked with the international F1 in Schools™ challenge which now runs in 34 countries.

The F1 in Schools™ program forms one step in the development of a pathway of sustainable interest, not only inspiring students but also developing in them the key employability skills which will assist in their transition into the workforce.

TEXTILES & DESIGN

During Term 1, students will understand that new skills are needed for the creation of different products through an inquiry into the safe use of relevant tools, equipment and methods for the production of designed solutions. Under the Global Context of Scientific and Technical Innovation, students new to textiles students are introduced to the basics of textiles and design, whereas those who took studied textiles and design in year 7 are improving their understanding and skills in the area. Students continue their learning about various pieces of

textiles equipment and how to use them in practice, expanding on the equipment used in year 7. Students will demonstrate being open-minded as their appreciation for design processes evolve and expand in many directions whilst learning new techniques and expressing contemporary ideas.

Focusing on the Key Concept of Systems, students will further develop their skills to confidently follow instructions on how to create their own textile pieces. They will begin with the creation of a simple calico bag, which they will decorate with their own unique designs using screen printing and applique techniques. Students will explore several inquiry questions, such as 'How can I reflect on my skills to improve them for future work?' during the evaluation process of their products. Students will also concentrate on organisation and self management skills throughout their approaches to learning.

WOOD TECHNOLOGY

The focus of Year 8 Wood-Tech is on Product Design and Innovation, as students investigate how an 'Awareness of Consumption, conservation and the human impact on the environment can influence design decisions'. Students will use their critical and creative thinking skills, aligning their ideas within the global context of Globalisation and Sustainability.

In Term 1 students will be designing a Kindergarten picnic bench for the School Community.

They will investigate current designs and suggest modifications to improve the project, which may include: types of materials used, cost, aesthetics, etc. Towards the end of the term students will enter into the production stage, students will begin to understand and logically sequence major stages of production, make calculations for materials / quantities needed for production. Students will develop evaluation criteria from the design brief to inform their judgments during the design process.

Each group will manage materials, components and processes to produce products, taking full account of the appropriateness of their properties, characteristics or expected outputs in meeting requirements of the design briefs. They will make modifications during production, providing a sound explanation for changes that demonstrates reflection, research, responsiveness to feedback, and use of evaluation criteria that was developed during the Investigation stage of the brief.

They will be able to select appropriate equipment and techniques to safely Construct and evaluate the performance of their products. Students will peer review each other's work and recommend improvements to the performance, function and appearance of others' product, Suggest modifications to improve their products in light of evaluation of their performance, function and appearance. Students will complete their design brief with a report of their evaluations and reflections, describe and analyse the social and environmental impacts of their own and others' designs

FOOD TECHNOLOGY

During Term 1, students will continue to develop their understanding of different skills, methods and techniques required in the kitchen. Through the inquiry process, students will explore personal and cultural identities and

investigate how local and global communities express themselves through food. Students learning will be focussed around the global context of personal and cultural identity as they begin to develop an understanding of foods that are eaten in different communities around the world.

Throughout the term, students will have the opportunity to refine their technical skills as they are introduced to foods from different cultures, which they will then have the opportunity to cook. Learning will be based around the flipped classroom method, where students will be required to watch videos about how to make these dishes before they come into class. Students will use this knowledge, as well as their research and inquiry skills to plan, develop, create and evaluate food from a culture of their choice. Through this task they will demonstrate their practical skills as well as responding to a variety of factual, conceptual and debatable questions including what foods do different cultures eat and how does an individual's cultural background impact on their food choices.

ALAMANDA COMMUNITY PROJECTS

The community project focuses on community and service, encouraging students to explore their right and





responsibility to implement service as action in the community. The community project gives students an opportunity to develop awareness of needs in various communities and address those needs through service learning. As a consolidation of learning, the community project engages in a sustained, in-depth inquiry leading to service as action in the community.

In term 1 Year 8 Students will be working on the investigation stage of their community projects. They will be looking through the global context lens to consider potential community and volunteering projects within the local and national community. Students will be working in groups of up to three students and will by the end of the term have put together a proposal for their projects.

VISUAL ARTS

The Year 8 Art program continues to develop the creative skills of the student artists through collaboration with peers, exploring and responding to contemporary and traditional artworks and creating artworks in response to a central idea.

The focus of year 8 Art is to work towards developing the student's individual

style through experimentation with technique, materials and form. Students will develop their work in their Visual Diary and will present finished artworks to an audience. As the student artists build their visual arts vocabulary they will critique their own works the works of their peers and the works of traditional and contemporary artists.

VISUAL COMMUNICATION DESIGN

The focus of year 8 Visual Communication Design is on Product Design and Innovation, as they investigate how 'People identify problems in order to find opportunities for innovation to improve quality of life.' Student learning will be centred around the global context of globalisation and sustainability, using critical and creative thinking skills to analyse and create within the world of design.

Students will focus on creating real-world solutions. This will be accomplished with students creating detailed design drawings, 3D Computer-aided Design Models, and physical prototype models, created using Computer-aided Manufacturing

technology (3D printing and Laser cutting). Students will test, evaluate and improve their designs in order to produce a successful product.

Students continue to develop and use their design vocabulary when discussing existing products, as well as in reflecting on their process and progress. Students continue to practice their design drawing and visual thinking skills, digital technologies skills and desktop prototyping skills.

DIGITAL TECHNOLOGIES

In Year 8 Digital Technologies, students begin the term with experimentation in 3D modelling in a CAD (computer aided design) environment. They undergo a design thinking process as they create products that solve a real-world problem, testing and refining their designs through rapid-prototyping using a 3D printer.

Students take on the role of Web Developer as they deepen their knowledge of programming concepts, algorithms, and problem-solving. The students will participate in Web.Comp 2017, an online learning platform where they will learn how to write web pages in HTML and CSS while they compete with students from around the world. Students will begin to understand how usability, accessibility, and design play an integral role in the development of successful websites. Learning to code by making real products, students inquire into how technology and innovation can make a significant impact on communities and relationships and improve the lives of others.

Students apply a variety of collaborative problem-solving techniques as they invent solutions to problems that are situated in a variety of contexts. Students will relate their learning to the key concepts of connections and systems in the global context of scientific and technical innovation.

PHOTOGRAPHY

In Year 8, students continue to examine photography as a powerful means of communication and self-expression. Through an inquiry into the significant role of images in expressing ideas, and feelings, students begin to develop their own style through experimentation with composition and light. Students continue to develop their visual literacy by critically analysing images and identifying the choices artists make when composing a photograph.

Students continue to develop their technical skills by investigating the key exposure components of aperture, shutter speed and ISO. Through experimentation with a range of light sources including natural and studio light, they will begin to compose images with a clear artistic intent.

Students will undertake a process of collaboration and experimentation in order to create aesthetic and meaningful artworks. Throughout the process, they will continue to develop their visual arts vocabulary to annotate and reflect on their own work, as well as the work of others. Students will relate their learning to the key concepts of identity and aesthetics in the global context of personal and cultural expression.

LOTE

In the Year 8 LOTE Chinese program, through the global context of globalisation and sustainability, the Year 8 students will continue to explore how language connects people and cultures. Students will inquiry into how, 'language can be used as a vital tool in the age of globalization and sustainability'. Students will consolidate their speaking and writing skills based on topics of countries, nationalities, different languages, etc., drawing on the key concepts of Communication, Connection and Culture. They will continue to practice writing Chinese simplified characters by hands and by using Chinese painting brushes and mats. To enhance their speaking and listening skills, students will practice

with each other and use learning devices to record their pronunciations. They will further develop their knowledge and understanding of Chinese culture as they explore social media in China. Students will also gain a greater understanding of Chinese art practices as they explore Chinese traditional landscape paintings in comparison with Western art.

DRAMA

In term one, students will be inquiring into the Global Context of Fairness and Development, through their dramatic exploration of Armin Greder's powerful picture book The

Island. Focusing on the Key Concept of Perspective, students will undertake a series of dramatic activities over a period of time, working collaboratively to create an imagined world that reflects the context of the book, a method known as Process Drama.

Over the course of the unit, students will consider the central inquiry statement that as a global community, we have a responsibility to challenge inequality and imbalance of power through embracing change. As they develop key drama skills in character development, improvisation, script writing and expressive communication through movement and voice, students will deliberate on what happens to





practice and a weekly class activity, 'Show Tell Perform', a platform for students to review concerts, share stories and rehearse a performance with their peers.

PHYSICAL EDUCATION

During Term 1, students will gain a greater understanding of the Key Context of Communication, through increasing understanding of the throwing techniques in javelin, shot putt and discus, which will be explored through the concept of change. Students will research to become knowledgeable before coaching a peer and identifying areas for their athlete to improve whilst comparing their performance using technology, when put side by side with an elite performer.

a community when outsiders are perceived as a threat because of their differences, and whether empathy is a key to a successfully operating society. In addition to the development of drama skills, students will be assessed over the unit on their ability to collaborate effectively with their peers.

Students will then explore scripted drama, investigating the world of stagecraft to assist the production of a short play to be performed in class. Utilising their growing skills in character development, students will develop an understanding of the rehearsal and production process over the unit. Focusing upon the Key Concept of Communication, students will explore how stagecraft can be used in conjunction with the Dramatic Elements to create meaning for audiences.

These concepts will be investigated through developing a vocabulary to critique the music we hear and finessing listening skills through further developing an understanding of music styles, form and instrumentation.

The curriculum will focus on student-led project work where the class has the opportunity to explore cultural expression in music through creating documentaries, video blogs and podcasts as a medium to further build a relationship with their music. An inquiry led learning environment will support the class to explore the notion: 'in order to contribute to our communities, we need to share ourselves, our beliefs and our musical creations'. The concept of sharing will be realised through a daily music

Both practical and theatrical lessons are taught using a differentiated model to cater to students with different educational needs. The tasks are varied so that students who may need additional assistance are provided with extra support, while students who need more challenging tasks as a form of extension are also given that opportunity. It is important that students are rehearsing the skills learnt during class time in a home setting, to ensure that the skills and knowledge are properly embedded.

MUSIC

In term one, students will continue to focus on student-led music activities and an interdisciplinary approach to music education (music from the perspective of art, language and culture/socio-political contexts). A dominant theme will be the global context of personal and cultural expression and the nature and purpose of creative expression.



Year 9 Curriculum Overviews

SCIENCE

Over the course of term one, our students will be inquiring into their current Statement of Inquiry. They will discuss how science, particularly chemistry, is connected to the SOI: Technological advances can enhance connections and conflict between humankind relative to societal decisions.

As we learn and explore more about chemistry we will be able to associate the concepts to how science is understood in different parts of the world, and how that impacts the advancement of technology. This will be happening in conjunction with the students learning in Humanities and English.

Throughout this unit the students will be further developing their science inquiry skills by undertaking their own research, as well as practical experiments. This includes the students making their own predictions and developing their capacity to discuss observations and come to reasonable and relevant conclusions.

ENGLISH/ HUMANITIES

In 2017, Alamanda College will be applying for candidacy in the International Baccalaureate Middle Years Programme. The Middle Years Programme, or MYP is a framework for the curriculum that focuses on concept driven, inquiry based learning. Units of work will be designed with an interdisciplinary nature, which will allow student to transfer knowledge, understandings and skills between subjects, for a more holistic approach to learning.

Teachers will plan units that fit into each of the Global Contexts, exploring: Globalisation and Sustainability; Identities and Relationships; Scientific and Technological Innovation; Personal

and Cultural Express; Fairness and Development; and Orientation in Space and Time. All learning and assessment will have a focus on students taking action in the local community, building to international action.

MATHEMATICS

In the first term of 2017 in Mathematics, the Year 9 cohort will be exploring the key concepts of connection and relationships through the global context of "Globalisation and Sustainability". The students will be collecting data through various survey techniques while representing the collated data in the form of histograms and back-to-back stem-and-leaf plots through the use of digital technologies. Students will then analyse their data using the measures of centrality (mean, median, mode and range) in order to draw reasoned generalisations regarding their findings.

Students will also be offered a differentiated learning experience through the use of catered and personalised goal-setting strategies from the Victorian Curriculum. Homework will also be provided as a form of extra practice for out of school hours.

STEM

STEM (science, technology, engineering and mathematics) is a program that will allow students to build, program and test models using the lego's NXT mindstorms robotic systems. Students will create a range of robots with the ability to respond to colour, light, motion and sound. Using a challenge brief, building guide and programming guide, they will create a Friendbot, Spacebot, Amazebot, and a Singing Waitorbot.

Students will modify a model's behaviour by changing the mechanical system or by adding sensors to provide feedback. Brainstorm to find creative alternative solutions. Learn to share ideas and work together.

Mathematically they will measure time in seconds and tenths of a second. Estimate and measure the distance in centimeters. Understand the concept of randomness. Compare the diameter and rotational speed. Understand and use numbers to represent the type of sounds played and the amount of time the motor turns on. Understand and use the distance between an object and to activate the motion sensor. Understand how the position of the model is measured by the tilt sensor. Understand and use numbers to measure and score qualitative characteristics.

F1 in SCHOOLS

F1 in Schools is a STEM (Science, Technology, Engineering and Mathematics) program that introduces students to a "hands on , minds on approach" in which students ,in teams ,design, test and evaluate their car model. Under the Global Context of Scientific and Technical Innovation, students undertake the engineering process and are introduced to the basics of aerodynamics. Students become inquirers as they investigate and apply their knowledge of scientific principles, including friction, Bernoulli effect, Newton's Laws, force and motion to create a model F1 car. Students understand the relationship between design and speed.

This program focuses on developing the creativity and innovation of students through a structured engineering design project based on the development of a model Formula One™ racing car. The program is linked with the international F1 in Schools™ challenge which now runs in 34 countries.

The F1 in Schools™ program forms one step in the development of a pathway of sustainable interest, not only inspiring students but also developing in them the key employability skills which will assist in their transition into the workforce.



TEXTILES & DESIGN

During term 1, students will understand that combining different ideas in creative ways can lead to innovative new products through an inquiry into the environmental impact of various methods of dyeing and printing on plain fabrics. Under the Global Context of Globalisation and Sustainability, students will explore issues in sustainability in the textiles and fashion industries, investigating, comparing and contrasting the environmental impact of different methodologies of producing and colouring fabrics. Students will explore several inquiry questions, such as 'What steps can we take to improve sustainability in the textiles industry?' as they progress through their unit of learning.

Students will apply the knowledge and practical skills gained in previous units to address their design brief and will investigate natural and synthetic methods of colouring fabrics. Focusing on the Key Concept of Creativity, they will design new textile items from calico fabric using various techniques. During the course, students will concentrate on organisation and self management skills throughout their approaches to learning. They will be reflective in the evaluation of their learning process and the ideas they communicate through their work. Students will work collaboratively offering encouragement, and formative

feedback to their peers, whilst graciously receiving feedback on their work.

WOOD TECHNOLOGY

The focus of year 9 Wood-Tech is on production development and construction, as students investigate "how individuals have rights and responsibilities in society" through the Global lens of Fairness and Development. Students will apply their critical and creative thinking skills in analysing the relationships between communities, sharing finite resources with other people and with other living things.

In term 1 Wood Technology, students will be in the Investigate and design stage of their Design Brief. The project is centered around construction and design principles of building structures. Students will be designing and erecting small structures using a mixture of new and recycled materials.

Using their design brief students communicate and document projects, including marketing for a range of audiences. They independently and collaboratively apply sequenced production and management plans when producing designed solutions, making adjustments to plans when necessary. They select and use appropriate technologies skilfully and safely to produce quality designed solutions and products.

Year 9 students use design and technologies knowledge and understanding, processes and production skills to produce designed solutions to identified needs or opportunities of relevance to individuals, local, national, regional and global communities. Students undertake problem-solving activities that acknowledge the complexities of contemporary life and make connections to related specialised occupations and further study. They are introduced to a global perspective, with opportunities to understand the complex interdependencies involved in the development of technologies and enterprises. Students specifically focus on preferred futures, taking into account ethics, legal issues, social values, economic, environmental and social sustainability factors, and using strategies such as life cycle thinking. Students use creativity, innovation and enterprise skills with increasing confidence.

FOOD TECHNOLOGY

During term 1, students will understand that combining different ideas in creative ways can lead to innovative new dishes being created through an inquiry focused on designing and creating their own café's breakfast menu's. Under the Global Context of Globalisation and Sustainability, students will explore issues in ensuring food is sustainably sourced and seasonality is encouraged. In the food and hospitality industries, plating is desirable and students will be approaching this through the lens of aesthetics.

Students will apply the knowledge and practical skills gained in previous units to address their design brief and will investigate costing and catering for specific dietary requirements. Focusing on the Key Concept of Creativity, they will design a menu, evaluating each dish that they cook. Students will work collaboratively offering encouragement, and formative feedback to their peers. The final assessment task will see the students cook a sample size of their whole menu

ALAMANDA COMMUNITY PROJECTS

In year 9 the community project focuses on community and service, encouraging students to explore their right and responsibility to implement service as action in the community. The community project gives students an opportunity to develop awareness of needs in various communities and address those needs through service learning. As a consolidation of learning, the community project engages in a sustained, in-depth inquiry leading to service as action in the community.

During term 1 students are working on the investigation part of the project, exploring the ways in which they can be involved with a volunteering within the global community. Students will be working autonomously checking in with mentor teachers periodically. They will be investigating potential projects and making connection to the global context, Approaches to learning and the they variety of different types of service that they could use as their Action.

VISUAL ARTS

The year 9 Art program will allow students, through the global context of Personal and Cultural Expression, to continue to develop their understanding of the role of visual art in society through applying their knowledge and skills in the artmaking process. Students engage with artworks from different cultural, historical and social contexts in order to compile inspiration in the development of their own style.

Students will experience artworks in a variety of contexts when visiting public art galleries, as well as viewing and analysing the impact of unauthorised art in urban settings. Students will continue to build and use their visual arts vocabulary both in collaborative discussions and annotations in their visual diary. Students will develop and demonstrate their own personal artmaking style in their planning drawings, as well as in the creation of a finished artwork.

DIGITAL TECHNOLOGIES

In Year 9 Digital Technologies, students begin the term with experimentation in 3D modelling in a CAD (computer aided design) environment. They undergo a design thinking process as they create products that solve a real-world problem, testing and refining their designs through rapid-prototyping using a 3D printer.

Students take on the role of Web Developer as they deepen their knowledge of programming concepts, algorithms, and problem-solving. The students will participate in Web.Comp 2017, an online learning platform where they will learn how to write web pages in HTML and CSS while they compete with students from around the world. Students will begin to understand how usability, accessibility, and design play an integral role in the development of successful websites. Learning to code by making real products, students inquire into how technology and innovation can make a significant impact on communities and relationships and improve the lives of others.

Students apply a variety of collaborative problem-solving techniques as they invent solutions to problems that are situated in a variety of contexts. Students will relate their learning to the key concepts of connections and systems in the global context of scientific and technical innovation.

PHOTOGRAPHY

In Year 9, students extend their knowledge photography as a powerful means of communication and self-expression. Through an inquiry into the impact of technical and scientific innovation on how we record the world around us, students continue to develop their own style through experimentation with composition and light and through practice in a variety of situations both within and outside of the school. Students continue to develop their visual literacy by critically analysing images by significant artists from a range of photographic genres.

Students continue to develop their

technical skills by consolidating their knowledge of the key exposure components of aperture, shutter speed and ISO. Through experimentation with traditional techniques such a black and white pinhole photography, they will deepen their understanding of the process of 'photo-graphy' or drawing with light.

Students will undertake a process of collaboration and experimentation in order to create, edit, and display aesthetic and meaningful artworks. Throughout the process, they will continue to develop their visual arts vocabulary to annotate and reflect on their own work, as well as the work of others. Students will relate their learning to the key concepts of identity and aesthetics in the global context of personal and cultural expression.

LOTE

In LOTE during term 3, through the global context of identities and relationships, the Year 9 students will continues to explore how language expresses personal and collective ideas through the Statement of Inquiry: language can be used to explore beliefs and ideas of ourselves and our communities. Students will consolidate their speaking and writing skills based on topics of activities, feelings, events, etc., drawing on the key concepts of Communication and Culture. They will keep building their skills and knowledge in Chinese characters, learn to recognise and draw more complex combinations. They will further develop their knowledge and understanding of Chinese culture as they select a movie text to study. Students will also gained a greater understanding of contemporary Chinese history as they investigate events such as the Nanjing Massacre during World War 2.

MUSIC

In term one, students will extend technical and expressive skills that have been established in year 7 & 8. Drawing on a range of cultures and genres, students will contribute to class investigations that examine the global context of: orientation in space and time. Students will explore personal



musical histories and the relationships between individuals and culture, from a local and global perspective.

Advancements in music technology and the creative process will be explored through integrated projects that consider social, artistic, equality, environmental and community aspects.

The important concepts of pushing boundaries, in the creation and performance of music, for personal growth, exploring structure in music through composition and learning to present music through informal classroom performances, will be explored. Further, students will develop a peer teaching skill set, through regular classroom engagement. Learning to teach others, will contribute to nurturing independence and self-directed

learning, as pathways are built towards an arts practice.

DRAMA

In term one, students will be inquiring into the Global Context of Orientation in Space and Time, through their dramatic exploration of Shaun Tan's visual representation of migrant and refugee journeys in *The Arrival*. Through the Key Concept of Identity, and the Related Concepts of Presentation and Role, students will explore the idea that our journey as a nation has, in part, been shaped by those who have crossed boundaries and faced challenges to find a new home in Australia.

Approaching the text through a series of dramatic activities, students will work together to create the imagined

world of Tan's book, an explorative method known as Process Drama. Whilst developing key skills in character development, improvisation, script writing and expressive communication through movement and voice, students will grapple with the conceptual and debatable questions presented through the text, such as why people around the world leave their homes to search for a new life, and whether migration has positively affected Australia.

The culmination of their exploration into migrant and refugee stories will result in a script-writing task, in which the students develop a character for whom they will write and perform a monologue. Assessment over the unit will include the ability to collaborate effectively with peers, communicate in various modes and means, and contribute to class discussion.

PHYSICAL EDUCATION

Year 9 sport for Term 1 will consist of a 6 week unit on cricket, developing the skills and techniques of fielding and striking. We will have two active sport sessions per week, one targeting a skill/technique and the second will be the application of the technique/skill. Following on from this we will be moving into a unit on athletics where the students will perform and refine their skills in a range of track and field events.

Year 9 health for the first 6 weeks will be an inquiry into respectful relationships, a program designed by VIC government to enhance and create awareness towards the types of interactions that can occur and how to build the core elements of a healthy relationship with peers, teachers, families and friends. There will be one health class per week, please check with your sport teacher to confirm which day this is. The remainder of the term, the students will be looking at analysis and evaluation of their athletic ability and form, using digital and non-digital technologies.

We will be encouraging full participation from all students. If you or your child have reasons for withdrawal, please communicate these with either Mr Dent or Miss O'Connor to avoid any confusions.