THE HEIGHTS SCHOOL

YEAR 10 Subjects for 2018

All Year 10 Students will study the equivalent of 14 semesters.

The following subjects are compulsory for all students:

English	(2 semesters)
Mathematics	(2 semesters)
Science	(2 semesters)
PLP	(1 semester)
History and Geography	(1 semester)
Health and Physical Education	(1 semester)

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Department for Education and Child Development

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IGNITE
SPECIALIST PROGRAM FOR GIFTED AND TALENTED STUDENTS

YEAR 10 COMPULSORY SUBJECTS

English

Recommendation: Satisfactory completion of Year 9 English

Contact Person: Alex Christodoulou

Content
English involves using speaking and listening, reading and viewing, and writing.
Students in Year 10 will study a range of novels, plays, articles and films and continue to develop critical reading and writing skills. The focus remains on developing students' literacy skills and giving them the techniques to produce their own written or multimedia texts.

Assessment
There will be a range of oral and written assessment tasks which can include oral presentations, persuasive and creative writing, reports, and responses to texts such as discussion essays.

Mathematics

Recommendation: Pathway depends on aptitude and achievement in Year 9 Mathematics.

Contact Person: Sharon Robertson

Content
Students select an appropriate pathway based on achievement and future goals.
Common topics are covered in Semester 1 so students can develop their knowledge and build their skills. Topics in Semester 2 will focus on preparation for appropriate SACE options (refer to the Mathematics flow chart).

Maths (Pre-Methods) – students need to be confident users of Algebra, and have a good understanding of all other topics. For students intending to study Mathematical Methods or Specialist Mathematics in Year 11. (Required for Stage 1 Physics)

General Mathematics – students who have a good grasp of fundamental mathematical skills and are intending to study General Maths in Year 11. Students who have difficulty with mathematics will be recommended for Essential Maths in Year 11.

Note: All students must purchase a Scientific Calculator. A graphics calculator is required for Year 12 Mathematics, and it is advantageous for students to be familiar with this technology.

Assessment
Tests, assignments and investigations.

Science

Recommendation: Satisfactory completion of Year 9 Science

Contact Person: Sharon Robertson

Content
Students study a range of topics covering the Science disciplines of Biology, Chemistry, Geology, Physics, and Psychology.
Topics include The Universe, Forensic Science, Motion, DNA & Genetics, Sustainability and Chemical Reactions.

Students are also provided with the opportunity to become involved with the school Observatory.

Assessment
Assessment in Year 10 Science is varied and will include tests, practical skills and reports, assignments, projects, oral presentations, group work, peer assessment etc.

Personal Learning Plan

Course Length: 1 semester

Contact Person: David Osborn

Content
The Personal Learning Plan (PLP) is a compulsory Stage 1 SACE subject. Students must achieve a C grade or better.
The PLP is designed to help students make informed decisions about their personal development, learning, education and future pathway. Students develop knowledge and skills so that they can plan their SACE learning program.
The PLP identifies seven relevant and useful capabilities that students will develop:

- Literacy
- Numeracy
- Information & Communication
- Technology Capability
- Creative Thinking
- Personal & Social Capability
- Intercultural Capability

Students will also take part in a Work Experience placement for one week in Term 2.

Assessment
1. My Capabilities
2. Career Research
3. Learning and Thinking Skills
4. Work Experience Reflection
5. Formal Interview

History and Geography

Course Length: 1 semester

Recommendation: Satisfactory completion of Year 9 Society and Environment.

Contact Person: David Osborn

History Content
The Year 10 History Curriculum provides a study of the history of the modern world and Australia from 1918 to the present, with an emphasis on Australia in its global context.
Possible Topics include:

- Overview of 20th Century History
- World War 2
- Rights and Freedoms
- Popular Culture
- Migration Experiences
- The Environmental Movement

Geography Content
This subject will examine environmental geography of Australia and the world, spatial distributions and case studies linking both of these areas.
Topics include:

- Environmental Sustainability
- Population and Migration
- Spatial Patterns
- Environmental Geography

Assessment
A variety of assessment tasks, including report writing, research assignments, excursion reports, oral presentations, power point presentations, posters, group work and tests.

Health and Physical Education

Course Length: 1 Semester

Contact Person: Katie Hart

Content
Students study a range of different topics in two separate components of the course.

Health
Students will complete a unit of Sexual Health and Relationships. They will critically analyse contextual factors that influence their own and others identities, relationships, decisions and behaviours.

Physical Education
Students will participate in a compulsory unit of Tennis, attend a compulsory excursion to Latitude as well as participate in a negotiated physical activity from the following: Archery, Team Handball, Basketball, Table Tennis, Netball, Footy Codes, Volleyball and Golf.

Assessment
Practical 60%
Theory 40%
*Please Note: The Latitude excursion is a compulsory practical component of our course, will occur off-site and will incur an additional cost.

YEAR 10 CHOICE SUBJECTS

ARTS

Creative Arts: Digital Media

Course Length: 1 semester

Recommendations: Year 9 Digital Technologies an advantage but not a prerequisite.

Contact Person: Catherine Bourn

Content
The focus of this course is on digital and emerging media and is divided into two areas of study: Making and Responding.

Area of Study 1: Making

Students have the opportunity to experiment with a variety of media, techniques and processes to *make* digital media works that explore their own world as a source of ideas. They learn to prepare a folio to document the practices of other practitioners while refining and annotating their own ideas and intentions. Finished digital media works could include:

- film / video: documentary, narrative (storytelling), music video clips, local tourism etc.
- graphic novels, comic strips (for print or digital)
- digital music mixing (Sibelius, Mixcraft etc.)
- advertising campaigns (tv, print, web etc.)
- gaming production (3D, 2D, PC, android, iOS etc.)
- animation (digital, stop motion and Claymation)
- websites (for business, personal, virtual art galleries, museums etc.)

Area of Study 2: Responding

Students research the impact and contribution of digital media practitioners from Australia and globally. They will *respond* to digital media works by considering how they are made, what they are about and how they are understood in different ways.

Assessment

Products 70%	Students complete two finished products, including support materials.
Folio 30%	Folio 1 - based on an investigation. Folio 2 - a record of skills development.

Creative Arts: Graphic Design

Course Length: 1 semester

Contact Person: Catherine Bourn
Content
The focus of this course is on digital publishing and print media and is divided into two areas of study: Making and Responding.

Area of Study 1: Making

Students have the opportunity to experiment with a variety of media, techniques and processes to *make* design works that explore their own world as a source of ideas. They learn to prepare a folio to document the practices of other practitioners while refining and annotating their own ideas and intentions. Finished design works could take the form of:

- environmental design projects
- graphic novels
- illustrated children's books
- advertisements and packaging design
- promotional packages: print (logos, letterheads etc.)
- magazines: print and online

Students are particularly encouraged to take responsibility for aspects of the School Yearbook as part of their work.

Area of Study 2: Responding

Students research the impact and contribution of design practitioners from Australia and globally. They will *respond* to design works by considering how they are made, what they are about and how they are understood in different ways.

Assessment

Products 70%	Students complete two finished products, including support materials.
Folio 30%	Folio 1 - based on an investigation. Folio 2 - a record of skills development.

Digital Photography

Course Length: 1 semester

Recommendation: There are no prerequisites for this Year 10 course. Students will be taught all the skills required and be instructed on the use of all equipment and software while gaining confidence in their approach to digital photography.

Contact Person: Catherine Bourn

Content
This unit is designed to introduce students to the fundamentals of photographic imaging and associated topics.

During this course students will have the opportunity to:

- Acquire knowledge and skills in photographic processes, digital cameras and contemporary technology
- Investigate aspects of good photographic techniques such as composition and the rule of thirds
- Develop photographic skills in capturing images through excursions and photographic projects
- Use photographic equipment in a safe and practical manner
- Gain an understanding of current photographic techniques using industry standard software and appropriate hardware facilities
- Use Adobe Photoshop CS4 software to modify graphics for projects such as montages, calendars and green screen effects
- Acquire information pertaining to publishing on different media. Students will be required to know about resolution, screen sizes, file sizes, file management and different file types
- Demonstrate skills approaching industry or community practice in effectively recording and communicating their design ideas

Assessment
The summative assessment consists of:

- A specialised skills task – students are required to apply their skills to particular tasks.
- Produce a viable product from a given design brief.

Drama: Performance

Course Length: 1 or 2 semesters

Recommendation: Successful completion of Year 9 Drama or a recommendation from Drama Staff

Note: Understanding and participation in performances is a requirement.

Contact Person: Sally Putnam / Ian Benjafield

Content
Drama enables students to imagine and participate in the exploration of their world. Students actively use body, gesture, movement, voice and language, work individually and collaboratively, taking on roles to explore and depict real and fictional worlds.

Making
Students **perform drama works** developing relationships and status of roles / characters and refining expressive skills in voice and movement for different forms, styles and audiences. Students may also be involved in set design and building, makeup, costume and props.

Responding
Students respond to their own, their peers' and others' drama works. They critically evaluate experiences of creating, performing and responding, and analyse how meaning is created through dramatic action in different forms and styles.

Assessment
Creating / Performance - 75%
Students create and present improvised, devised and scripted drama. They manipulate the elements of drama and expressive skills to interpret and realise convincing, motivated characters and character relationships.

Responding / Journal - 25%
Students explain how meaning is created in drama and describe and discuss the distinguishing features of drama forms and styles from a variety of cultural, contemporary and historical contexts.

Music

Course Length: full year

Recommendation: Successful completion of Year 9 Music or evidence of instrumental skills. It is essential that students study either an instrument or voice at this level.

Contact Person: Algis Laurinaitis / Shirley Robinson

Content
The music program aims to develop awareness in students of the significant part music plays in our lives as individuals and in the wider community. Students will achieve this through:

Making Music: This involves tuition on an instrument or voice with an instrumental teacher; as well as students improvising, composing (song writing), arranging, listening, recording, performing and using available technologies and musicianship skills. Individually, and in groups students create and perform music in traditional, contemporary and hybrid forms.

Responding: This involves students listening, using musicianship skills, analysing and responding to their own and others' works, performances and music practices.

Assessment
Making - 80%
Responding - 20%

Visual Arts: Art

Course Length: 1 or 2 semesters

Contact Person: Catherine Bourn

Content
The Year 10 Visual Arts Course is divided into two areas of study: Making and Responding.

Area of Study 1: Making
Students have the opportunity to experiment with a variety of media, techniques and processes to *make* art works that explore their own world as a source of ideas. They learn to prepare a folio to document the practices of other artists while refining and annotating their own ideas and intentions.

Finished art works could take the form of a painting or drawing but could also include more diverse products such as video, installation, assemblage, digital imaging, mixed media, printmaking, photography, sculpture, ceramics, or textiles.

Area of Study 2: Responding

Students research the impact and contribution of Visual Arts practitioners from Australia and globally. They will *respond* to visual arts works by considering how they are made, what they are about and how they are understood in different ways.

Assessment
Students demonstrate evidence of their learning through the following assessment types:

Making (including art works and a folio) - 70%
Responding - 30%

Visual Arts: Design

Course Length: 1 semester

Contact Person: Catherine Bourn

Content
The Year 10 Design Course is divided into two areas of study: Making and Responding.

Area of Study 1: Making
Students are given the opportunity to experiment with a variety of media, techniques and processes to design and make objects within the various genres of design, for example:

- Product Design: e.g. toy, fashion, furniture and engineering design
- Environmental Design: e.g. sustainable interior and exterior design
- Graphic and visual communication design: e.g. branding, illustration and advertising

They learn to prepare a folio to document the practices of other artists while refining and annotating their own ideas and intentions. They are encouraged to consider ethical responsibilities and the sustainable use of resources in the *making* of their design outcomes.

Area of Study 2: Responding
Students research the impact and contribution of design practitioners from Australia and globally. They will *respond* to design by considering how objects are made, what they are about and how they are understood and used in different ways.

Assessment
Making - 70% Includes art works and a folio
Responding – 30%

DESIGN & TECHNOLOGY

CAD / CAM

Course Length: 1 Semester

Contact Person: Roger Button

Content
The course gives students the opportunity to develop an understanding of Technical Drawing practices that are used in the construction and manufacturing sectors. The techniques and methods used conform to the Australian Standards. Set tasks will require the use of CAD software AutoCAD and Inventor. Students will be exposed to 2 and 3 dimensional drawing systems.

Students will use the design process to develop a solution to a given problem. A work plan and sketch are produced prior to modelling. The final product is evaluated against the given design brief and possible modifications discussed.

Where possible students will be given the opportunity to design and produce a small item using one or more of the following CAD / CAM computer controlled machines: milling machine, laser cutting machine and / or 3D printer.

By the end of Year 10, students will be able to create a design solution based on a student design brief / challenge.

Assessment
Process and Production Skills (70%)
- Major Design Project
- Design Folio: *(Investigating, Planning, Producing, Evaluating)*
- Skills exercises

Knowledge and Understanding (30%)
- Research / Written Assignments: (*Technology - impacts on society, environment)*
- Theory Tests

Note: Although school fees pay for basic project materials, students may be required to pay additional costs if their projects exceed the allocated amount.

Electronics

Course Length: 1 Semester

Recommendation: Experience and knowledge of electronics and soldering is an advantage.

Contact Person: Roger Button

Content
- Electrical theory
- Common electronic components
- Schematic symbols and diagrams
- Electronic soldering
- Proto-typing and modifying circuits
- CAD schematics are drawn and used
- Circuit boards are designed and manufactured using CAD / CAM milling technology
- Circuit testing and evaluation

Where possible students may be given the opportunity to integrate the use of one or more of the following CAD / CAM, computer controlled machines into their design: laser cutting machine and / or 3D printer.

By the end of Year 10, students will be able to create a design solution based on a student design brief / challenge.

Assessment
Process and Production Skills (70%)
- Major Design Project
- Design Folio: *(Investigating, Planning, Producing, Evaluating)*
- Skills exercises

Knowledge and Understanding (30%)
- Research / Written Assignments: (*Technology - impacts on society, environment)*
- Theory Tests

Note: Although school fees pay for basic project materials, students may be required to pay additional costs if their projects exceed the allocated amount.

Metal Technology

Course Length: 1 Semester

Contact Person: Roger Button

Content
Students will be given the opportunity to learn skills and gain knowledge in the area of Metal Fabrication and Machining. A series of set projects will require students to use the metal lathes for processes such as drilling, parallel turning, taper turning and facing. Oxy Acetylene welding equipment will be used for Braze and Fusion welding.

There will be an opportunity for students to learn the basics of electric welding using the GMA (MIG) process. Students will also use a variety of hand tools to fit and assemble components of the projects.

Students will use the design process to develop a solution to a given problem. A work plan and drawings are produced prior to manufacture. The final product is evaluated against the given design brief and possible modifications discussed.

By the end of Year 10, students will be able to create a design solution based on a student design brief / challenge.

Assessment
Process and Production Skills (70%)
- Major Design Project
- Design Folio: *(Investigating, Planning, Producing, Evaluating)*
- Skills exercises

Knowledge and Understanding (30%)
- Research / Written Assignments: (*Technology - impacts on society, environment)*
- Theory Tests

Note: Although school fees pay for basic project materials, students may be required to pay additional costs if their projects exceed the allocated amount.

Systems Technology

Course Length: 1 semester

Recommendation: Knowledge of machines, tools, materials and safety.

Contact Person: Roger Button / Craig Holyhrim

Content
This challenging unit of Design and Technology investigates structures + mechanical systems, and involves students in the design and manufacture of a structure and a mechanical system. Students will develop an understanding and practical application of forces, motion and energy. A series of design challenges are given using some of the topics listed above.

By the end of Year 10, students will be able to create a design solution based on a student design brief / challenge.

Content:
- Structures
- Mechanical systems

Content that may be covered in theory:
- Hydraulic systems
- Pneumatics systems
- Robotics

Assessment
Process and Production Skills (70%)
- Skills exercises
- Major Design Project
- Design Folio: *(Investigating, Planning, Producing, Evaluating)*

Knowledge and Understanding (30%)
- Research / Written Assignments: (*Technology - Impacts on individuals, society, environment)*
- Theory Tests

Note: Although school fees pay for basic project materials, students may be required to pay additional costs if their projects exceed the allocated amount.

Wood Technology

Course Length: 1 semester

Contact Person: Roger Button / Craig Holyhrim

Content
Students will learn about wood framing joints related to the production of a table. They will have a research assignment detailing Framing Joints and processes associated with constructing a small table.

Students will practice framing joints prior to designing their own table. They will follow the design process by writing a Design Brief, investigating, sketching possible designs, producing a working drawing (orthographic) and evaluating their final design. They will make a list of the materials they will use and cost them. They will write a procedure list of the steps they propose to use to construct their project. Where possible, students will be given the opportunity to integrate the use of laser etching into their designs.

By the end of Year 10, students will be able to create a design solution based on a student design brief / challenge.

Assessment
Process and Production Skills (70%)
- Skills exercises
- Major Design Project
- Design Folio: *(Investigating, Planning, Producing, Evaluating)*

Knowledge and Understanding (30%)
- Research / Written Assignments: (*Technology - Impacts on individuals, society, environment)*
- Theory Tests

Note: Although school fees pay for basic project materials, students may be required to pay additional costs if their projects exceed the allocated amount.

Humanities and Social Sciences [HASS]

Philosophy

Course Length: 1 semester

Recommendation: A sound pass in English

Contact Person: Alex Christodoulou / David Osborn

Content
Philosophy shapes what people think, value and accept as the truth; and consider how people engage with others and the world around them.
Understanding how arguments work is essential to being a good reasoner, problem solver and critical thinker.

The course consists of a research assignment on one of the great philosophers and a look at an issue from four branches of philosophy: Aesthetics (*Love and Beauty*), Ethics (*Justice*), Epistemology (*Truth and Lies*) and Metaphysics (*God*). Students will need the ability to express ideas clearly and fluently in written and spoken forms; the ability to engage in logical discussion and debate.

Assessment
Students will be assessed through essays, a feature article, debating, a research poster, and a number of informal discussions (Community of Inquiry).

HEALTH AND PHYSICAL EDUCATION

Master Chef Master Class

Course Length: 1 semester

Recommendation: Successful completion of Year 9 Home Economics.

Contact Person: Sarah Rogers

Aims: To develop and expand students' culinary skills as they work with others and individually to plan, present and serve a wide variety of foods.

Content:
Mystery Box Challenges – Recipe development, product innovation.
Pop Up Cultural Café - Preparation, presentation and serving of culturally diverse foods.
Pasta Making – Students' researching, creating, and presenting their own signature pasta dish.
Investigation of the Media in the Food Industry.

Note: Students may be required to supplement lessons with food from home in summative tasks.

Assessment
Practical - 70%
Theory - 30%

Creating with Textiles

Course Length: 1 semester

Recommendation: Successful completion of Year 9 Home Economics

Contact Person: Katie Hart

Content
Students will continue to develop skills in the areas of sewing and textile technology, working on either individual projects or negotiated group projects.
The course consists of tasks including upcycling used items, research, design and creation of items suitable for sale and donation.

Note: Basic materials will be provided, however students will need to supply their own fabric for major projects. The types of articles produced may be negotiated with the teacher.

Assessment
Practical - 70%
Theory - 30%

Sport Skills

Course Length: 1 semester

Recommendation: Successful completion of Year 9 HPE.

Contact Person: Katie Hart

Content
Topics may include Archery, Badminton, Basketball, European Handball, Golf, Football Codes, Volleyball, Exercise Physiology and Coaching.

Assessment
Practical - 70%
Theory - 30%

Extension Mathematics

Course length: 1 Semester [Semester 2 only]

Recommendation: Placement in class confirmed during Term 2 by Year 10 Maths teacher.

Contact Person: Sharon Robertson

Content:
This course is designed for students who wish to study Stage 1 Math Methods only or in combination with Specialist Maths. It provides additional knowledge and skill development and is designed to meet Stage 1 course expectations. Content could include:

- **Geometry of Circles**: theorems and proofs
- **Advanced Trigonometry**: unit circle and equations
- **Conic sections**: circles, ellipses and hyperbolae
- **Statistics**: normal distributions
- **Vectors**

Assessment:
Skills and Application Tasks including tests.
Folio Tasks including projects and Directed Investigations.

Note: Students will be expected to use a graphics calculator, so it is expected that a SACE approved Graphics Calculator is purchased.
Information about recommended models can be obtained from Mrs S. Robertson.

Science

Cutting Edge Science A

Course length: Semester 1

Contact person: Sharon Robertson

Content
The course is designed for students who have a passion for Science and have the ability to investigate and problem solve.

- **Nanotechnology**: a new and emerging area of Science and Technology that focuses on understanding how the world works at the level of atoms and molecules and the application of this knowledge.
- **Rocketry**: through the knowledge and understanding on motion (physics) and combustion (chemistry) students design, construct and launch rockets.

Assessment
Assessment in this subject will include practical skills and reports, investigations, projects, oral presentations, group work, peer assessment etc.

Cutting Edge Science B

Course length: Semester 2

Contact person: Sharon Robertson

Content
The course is designed for students who enjoy working as part of a team to solve complex problems.

- **Team Challenges**: small teams of students, using specified criteria developed by industry to work together to complete their challenge.

  Project / problem based learning enables students to develop valuable skills such as project management, working as a member of a team and decision making.
- **Biotechnology**: using the knowledge of cellular processes to develop new technologies and products that help improve our lives and the health of the planet.

Assessment
Assessment in this subject will include practical skills and reports, investigations, projects, oral presentations, group work, peer assessment etc.