



Subject Selection Information
Year 9, 2019

INTRODUCTION

Dear Parents and Students

Enclosed is information about subjects and areas of study offered at Ipswich Grammar School in Year 9 2019. Each subject has a synopsis describing the course content, units of study, some assessments and general information.

English, Mathematics, Science, Humanities and Health & Physical Education are compulsory subjects. Each student must also choose two (2) elective subjects plus one (1) reserve subject, which they will study for the entire school year. All of the Year 9 subject choices ultimately flow into senior elective subjects. The school will endeavour to accommodate students with their elective subject choices, however, due to staff availability, class sizes and physical resources, it may not always be possible.

Students are encouraged to consider the following when making their choices.

- Choose subjects you enjoy
- Choose subjects in which you show ability
- Choose subjects which may be prerequisites for further study
- Choose subjects which may assist with future careers

For further details about subjects please contact the specific subject Head of Department or Ms Susan Shaw, Dean of Teaching and Learning.

Yours sincerely



Susan Shaw
Dean of Teaching & Learning

Heads of Department	
English/Languages	Mr John Acutt
Mathematics	Ms Ann Marie Turner
Science	Mr Rob Slider
Humanities	Ms Kate Pitty
Technologies	Mr Stephen Butterfield
Physical Education	Mr Stewart Drinkeld
The Arts	Ms Annette Joyce
Careers Counselling	Mr Rob Charles

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English

English is compulsory for all students. The course comprises a variety of tasks and text studies. The units of work include novels set in important historical periods, studies of visual texts as well as a detailed examination of the quest narrative. Most units have a close connection to the students' studies in Humanities. Students will write in a number of written genres including narrative and persuasive texts and also get the opportunity to produce a multimodal task. Preparation for NAPLAN and its various components is also a focus in the early stages of the year.

Course Outline

	Units of Work	Assessment
Semester 1	<u>Unit 1</u> - Lest We Forget- <i>When We Were Two</i>	Comprehension test Persuasive text
	<u>Unit 2</u> - <i>The Arrival</i>	Narrative written response.
Semester 2	<u>Unit 3</u> - When Worlds Collide - <i>The Boy in the Striped Pyjamas</i>	Multi-media presentation Short written response
	<u>Unit 4</u> - The Quest	Oral presentation



Mathematics

The Mathematics program is designed to provide students with a range of skills to aid them in their journey through senior school and to support them during the NAPLAN testing. The course is adapted from the Australian Curriculum and involves topics from the strands of number and algebra, measurement and geometry, and statistics and probability. The proficiency strands of understanding, fluency, problem-solving and reasoning are an integral part of Mathematics content across these three content strands.

In September of Year 9, the Mathematics Head of Department will recommend mathematical pathways for senior studies for each student.

Course Outline

	Units of Work	Assessment
Semester 1	<u>Unit 1</u> Review basics, including fractions Algebra review Financial Mathematics Linear Equations Linear functions and analytical geometry	Mid-term test End-term test
	<u>Unit 2</u> Number systems - rational and irrational Measurement Trigonometry Factorising including binomial factors Deductive Geometry	Linear assignment End term test
Semester 2	<u>Unit 3</u> Congruence and Similarity Ratio and Scale Proportion and Rates Indices Factorising including quadratics and simplifying rational expressions	End term test
	<u>Unit 4</u> Solving quadratic equations Probability Statistics Trigonometry	End term test Quadratics assignment



Science

Science is a compulsory subject for all students. The course is based on the Australian Curriculum and involves studies within each of the sub-topics of Biology, Chemistry, Physics and Earth & Environmental Science. Students build on their scientific skills from previous years including those in scientific investigations and data manipulation activities. By the end of Year 9, students should have a better understanding of each sub-topic in preparation for subject choices in senior years.

Course Outline

	Units of Work	Assessment
Semester 1	<u>Unit 1</u> - Body systems	Investigation
	<u>Unit 2</u> - Electricity	Examination
Semester 2	<u>Unit 3</u> - Atomic theory	Investigation
	<u>Unit 4</u> - Environmental Science	Examination



Humanities

Humanities involves the study of human behaviour and interaction in social, cultural, environmental, economic and political contexts. The subject has both a historical and contemporary focus, from personal to global contexts, and considers challenges for the future. Humanities includes a study of History, Geography, Civics and Citizenship; and, Economics and Business. Through studying Humanities, students will develop the ability to question, think critically, solve problems, communicate effectively, make decisions and adapt to change. Thinking about and responding to issues requires an understanding of the key historical, geographical, political, economic and societal factors involved, and how these different factors interrelate. The subject provides a broad understanding of the world in which we live and how people can participate as active and informed citizens with high level skills needed for the 21st century.

Course Outline

	Units of Work	Assessment
Semester 1	<u>Unit 1</u> - Lest We Forget - A Study of World War I	Investigation - Historical Essay Based on Research Examination - Short Responses to Sources
	<u>Unit 2</u> - Coming South - A Local Community Unit	Examination – Combination Response
Semester 2	<u>Unit 3</u> - When Worlds Collide – A Study of World War II	Investigation - Independent Source Investigation Examination - Short Responses to Historical Sources
	<u>Unit 4</u> - The Quest - A Study of Australia's Indigenous Past	Examination – Essay in Response to Historical Sources



Health & Physical Education

In HPE, physical activity serves as both a source of content and data and the medium for learning. Learning is based on engagement in physical activity with students involved closely through integrating written, oral, physical and other learning experiences explored through the study of selected physical activities. HPE focuses on the complex relationship between physiological, biomedical, psychological and sociological factors in physical activity. HPE expands and explores more deeply the understandings that students have acquired in their previous experiences with the learning area. HPE also acknowledges that students' understanding of health needs to be developed from a personal to a wider, more altruistic perspective. This is achieved by sequencing units of study through a holistic approach. As a consequence of studying HPE, students can develop a more sophisticated level of knowledge, attitudes, values and skills to address health issues and play an active role in enhancing their own health and that of their community.

Course Outline

	Units of Work		Assessment
	Health	Practical	
Semester 1	<u>Unit 1</u> - Mental Health	Football	Practical Assessment
	<u>Unit 2</u> - Mental Health	Basketball	Unseen Exam Essay
Semester 2	<u>Unit 3</u> - Indigenous Games		Peer Coaching Session
	<u>Unit 4</u> - Swimming Endurance		Practical Assessment Only



Chinese

Chinese provides the opportunity for students to engage with the linguistic and cultural diversity of the world and its people, to reflect on their understanding of experience in various aspects of social life and on their own participation and ways of being in the world.

Through learning Chinese language, students acquire communication skills, an intercultural capability and an understanding of the role of language and culture in communication and a capability for reflection on language use and language learning.

Course Outline

	Units of Work	Assessment
Semester 1	<u>Unit 1 - Sports & Hobbies</u> <ul style="list-style-type: none"> Talk about sports and hobbies in Chinese Students are able to say a variety of sports and hobbies in Chinese and memorise their Pinyin Students are able to use correct verbs correspondent to the activity types. For example, 打篮球、踢足球 Students are able to talk about different values of sports and hobbies in Chinese and Australian societies 	Reading Listening
	<u>Unit 2 - Travel</u> <ul style="list-style-type: none"> Initiate conversations related to travel options and experiences Justify decisions about travel options for specific audience Students are able to describe features of a famous destination or event Students are able to make travel recommendation for different groups 	Writing Speaking
Semester 2	<u>Unit 3 - Shopping</u> <ul style="list-style-type: none"> Interact with others in shopping situations Students are able to name the items, size, currency, etc. in Chinese Students are able to negotiate needs with clerks. For example, changing colours/sizes and asking for a bargain 	Reading Listening Writing Speaking
	<u>Unit 4 - Socialising and connecting with peers</u> <ul style="list-style-type: none"> Organise social events to interact with peers and community Share cultural understanding in social occasions Learn about tea-making tradition in Chinese communities Plan a weekend event or other social gathering with their peers Make phone calls to invite friends and community members to join the event (in Chinese) 	Reading Listening Writing Speaking



Design

Design is a new academic subject that values creativity and problem solving. It requires students to investigate a problem and then generate, plan and produce a designed solution. Typical problems that students could encounter fit within contexts such as Architecture and Industrial Design. Students will be required to generate solutions using manual sketching techniques and Computer Aided Design (CAD) software. Solutions may also be realised as practical prototypes through the use of 3D printers, laser cutters or manual model building techniques. Design places emphasis on developing a student's ability to effectively generate, communicate, and evaluate design solutions rather than focusing on the physical manufacturing skills themselves. Design is an appropriate subject for students who enjoy drawing and the creative, practical aspects of problem solving.

Course Outline

	Units of work	Assessment
Semester 1	Introduction to the Design process <u>Unit 1</u> - Computer Aided Design - folio of drawings	Design Folio
	<u>Unit 2</u> - Industrial Design project	Design Folio
Semester 2	<u>Unit 3</u> - Design skills and techniques	Design Folio
	<u>Unit 4</u> - Built environment (architectural project)	Design Folio



Drama

Drama provides students with a diverse range of learning experiences as they devise, shape, present and respond to drama, individually and as an ensemble. In Year 9, the subject focuses on various relevant and engaging play texts for teenage boys and various styles of Drama, such as Improvisation, Radio-Plays, Comedy and Realism. This subject builds on a variety of important 21st century skills such as confidence, negotiation, communication, team-work and self-discipline and fosters a well-balanced education.

Course Outline

	Units of Work	Assessment
Semester 1	<u>Unit 1</u> - The Building Block of Drama <ul style="list-style-type: none"> The Improvisation process Unpacking the elements of drama & acting skills Scriptwriting 	Making - Performance Scriptwriting Task Responding - Written Response
	<u>Unit 2</u> - The Performer's Voice <ul style="list-style-type: none"> Devising and Presenting Radio plays Voice Production; projection, articulation, tone, pace, pitch, pause, power 	Making - Devising & Performance Task Responding - Written Response
Semester 2	<u>Unit 3</u> - Comedy – Make 'em Laugh! <ul style="list-style-type: none"> Devising and Presenting Clowning routines for the IGS Junior School Conventions of Clowning & Parody 	Making - Performance Responding - Written Response
	<u>Unit 4</u> - Skills in Performance <ul style="list-style-type: none"> Realism & Modern Performance Staging, applying realistic acting techniques to text Rehearsal journal 	Making - Performance Responding - Folio & Rehearsal Journal



Economics & Business

As mass global flows of people, resources, finances and information produce social, economic, political and environmental complexities and challenges, Australia needs enterprising individuals who can make informed decisions and actively participate in society and the economy as individuals and more broadly as global citizens. Young Australians will also face a number of social, economic and moral challenges in their lifetimes that will impact on their lives and choices. It is critical that students are equipped with the knowledge, understanding and skills that will empower them in the face of such challenges.

The subject of Economics and Business aims to address the changing commercial world by giving students practical experiences in enterprise. The entire course culminates with the students running a 'Father's Day Stall' that is based on a practical Business Plan and Marketing Plan, as developed based on the theory studied in Term 1, and the plans developed in Terms 2 and 3. The success of this stall is based on the profit-loss margin, and also the effectiveness of their advertising campaign. A practical Accounting exam, based on these experiences is then conducted in Term 4.

Course Outline

	Units of Work	Assessment
Semester 1	<u>Unit 1</u> - The Market System and Government	Short Response Exam
	<u>Unit 2</u> - Business Decisions	Business Plan
Semester 2	<u>Unit 3</u> - Enterprise Unit	Marketing Plan Running of a Stall
	<u>Unit 4</u> - Accounting	Short Response Exam



German

Students will learn to be functional users of German, and will finish the year able to converse successfully in German speaking countries using only German. Learners interact with peers, teachers and other German speakers in immediate and local contexts relating to their social and learning worlds, and with unfamiliar German-speaking communities and cultural resources through a range of physical, virtual and online environments. This is a period of language exploration and vocabulary expansion, and of experimentation with a wider range of modes of communication; for example, digital, collaborative performance and group discussions. Greater control of language structures and systems, and understanding of the variability of language use increase confidence and interest in communicating in a growing range of contexts. Students use German more fluently, with a greater degree of self-correction and reference the accuracy of their target language use against a stronger frame of grammar knowledge.

Course Outline

	Units of work	Assessment
Semester 1	<u>Unit 1</u> - Willkommen in Tutzing - Places around town <ul style="list-style-type: none"> • Naming places • Directions • Say where things are • Summer/winter activities 	Listening Speaking
	<u>Unit 2</u> - Fahren Wir! <ul style="list-style-type: none"> • Transport/travel • Addresses • Bus/train timetables • Journeys/trips 	Reading Writing
Semester 2	<u>Unit 3</u> - Coole Klamotten <ul style="list-style-type: none"> • Clothes • What you are wearing • Shopping • Costs • Opinions 	Listening Writing
	<u>Unit 4</u> - Wie sehen Sie aus? <ul style="list-style-type: none"> • Appearance • Personal description • Height • Wants/needs • Introduction to complex sentences 	Reading Speaking



Industrial Technology & Design

Industrial Technology & Design (ITD) is a practical subject that engages students in manufacturing skills within a workshop environment. Students will learn to safely manipulate a variety of materials while working with a range of workshop tools and machinery. They will be required to complete workbooks and design folios, where they will gain further understanding of the techniques and processes that they use in their practical projects.

The specific projects will vary; however, throughout the course students will gain manufacturing skills using a variety of materials including timber, metal & plastic. Many projects will have a practical skills focus where students follow step-by-step instructions as they learn a specific process or technique, while other units can involve more open-ended design challenges. These units will encourage and value student creativity. ITD is a subject suitable for students who enjoy working with their hands and learning in a practical environment.

Course Outline

	Units of work	Assessment
Semester 1	<u>Unit 1</u> - Toy Truck Project	Practical project & theory booklet
	<u>Unit 2</u> - CO2 Dragster	Practical project & theory booklet
Semester 2	<u>Unit 3</u> - Junior Hacksaw	Practical project & theory booklet
	<u>Unit 4</u> - Desk Lamp	Practical project & theory booklet



Information Technology

Information Technology (IT) develops an understanding of computers systems and applications. Students will gain an understanding of how digital systems use data, and will utilise problem solving techniques as they engage in computer coding activities leading to the development of simple computer programs and other digital solutions. Students will develop problem solving and programming skills across a variety of context as they engage in activities such as simple game development, web design and robotics.

Course Outline

	Units of work	Assessment
Semester 1	<u>Unit 1</u> - General computer skills/ Computer hardware	Exam
	<u>Unit 2</u> - Programming introduction	Project
Semester 2	<u>Unit 3</u> - Web development	Exam
	<u>Unit 4</u> - Robotics	Project



Japanese

Students will expand on the basics of Japanese language studied in Year 8. They learn how to read, write, speak and listen to Japanese within a variety of contexts and topics, ranging from telling time and making plans, discussing things around the house, school life, seasons, going shopping, and describing the world around them. Students learn how to start using more sophisticated language and expand their vocabulary. They also learn about a range of aspects of Japanese culture within these topics through readings, classroom seminars and discussion, as well as hands-on experiences and role-play activities. The Year 9 Japanese course also aims to prepare students for further Japanese studies.

Course Outline

	Units of Work	Assessment
Semester 1	<u>Unit 1</u> - Telling time and making plans; Moving house	Listening Exam
	<u>Unit 2</u> - Moving house; School	Reading, Writing Exam Conversation Task
Semester 2	<u>Unit 3</u> – Seasons; Shopping	Writing Task
	<u>Unit 4</u> – Shopping; Describing your world	Conversation Task Reading, Writing, Listening Exam



Music

Students will be exposed to a range of musical styles and repertoire from classical music to the present day. Students will be able to demonstrate technical skills on a range of instruments, explain musical concepts through their own listening and research to demonstrate their understanding of these concepts through composing their own work. Music develops important 21st century skills such as creative thinking, communication, collaboration and use of ICT.

Course Outline

The core skills of performing, listening and composing are put into practice as the following topics are explored.

	Units of Work	Assessment
Semester 1	<u>Unit 1</u> - Score It <ul style="list-style-type: none"> Using music technology and musical instruments, students are encouraged to apply their own creativity by considering the concept of sound and organisation Introduce and define the Musical Elements 	Making - Group Performance Responding - Written Evaluation Music Theory & Aural Assessment
	<u>Unit 2</u> - Music Where It All Started <ul style="list-style-type: none"> Develop instrumental skills Perform and listen to music through a journey of musical styles and genres Manipulate the Musical Elements to communicate meaning 	Making - Composition Responding - Written Evaluation Music Theory & Aural Assessment
Semester 2	<u>Unit 3</u> - Minimalism <ul style="list-style-type: none"> Perform as soloists or groups on any instrument or voice in any style linked to a range of criteria discussed in class Consolidate Music Theory skills through appraisal of innovative musical works and an online AMEB theory course 	Making - Composition Responding - Written Evaluation AMEB Music Theory Course
	<u>Unit 4</u> - Club Mix <ul style="list-style-type: none"> Work in groups to construct a piece of music linked to sampled audio and associated technology Consolidate Music Theory skills through appraisal of innovative musical works and an online AMEB theory course 	Making - Performance Responding - Written Evaluation AMEB Music Theory Course



STEM

As society develops at a rapid rate, we use tools to make difficult tasks easier. These advances would not have been possible without an understanding of the scientific and mathematical principles that are involved. Once we have this knowledge, we can apply engineering and technological techniques to design and make solutions that improve our way of life.

STEM is an academic subject that embraces the principles of Science, Technology, Engineering and Mathematics in an engaging and 'hands on' approach. Students have the opportunity to experience these disciplines working together as they solve problems in a variety of contexts. As students undertake a new unit of study, they engage with the scientific and mathematical concepts relevant to the topic. They will learn to research and present information logically and then participate in 'hands on' practical activities where they can test their new knowledge in a real-world scenario. They will be required to generate solutions to engineering problems, build them, and evaluate their effectiveness. Students will utilise technology such as Computer-Aided Design, 3D printing and laser cutting to realise their solutions. STEM is a subject for students that are interested in examining how Science, Mathematics and Technology work together to make the world a better and more comfortable place to live.

Course Outline

	Units of work	Assessment
Semester 1	<u>Unit 1</u> - Engineering Mechanics & Machines	Project
	<u>Unit 2</u> - Electronics & Microcontrollers (Arduino programming)	Exam
Semester 2	<u>Unit 3</u> - Hydraulics (excavator project)	Project
	<u>Unit 4</u> - Practical Chemistry	Exam



Visual Art

The Visual Art course is divided into two areas, Making and Responding. Students will create pieces that explore 2 and 3-dimensional media and techniques as well as time-based approaches. At the same time, artists and theoretical knowledge will be investigated and links established between the two areas.

Course Outline

	Units of Work	Assessment
Semester 1	<u>Unit 1</u> - Taking Flight <ul style="list-style-type: none"> • Exploration of 2-dimensional media • Documentation and annotation of Visual Diary related to topic • Exploration of Elements and Principles of Art within the design 	Making – 2-dimensional piece and photography Responding – Visual Diary and Assignment
	<u>Unit 2</u> - Taking Flight <ul style="list-style-type: none"> • Exploration of 3-dimensional media • Documentation and annotation of Visual Diary related to topic • Exploration of Elements and Principles of Art within the design 	Making – 3-dimensional piece and Stop motion animation Responding – Visual Diary Exam
Semester 2	<u>Unit 3</u> - Art and Architecture <ul style="list-style-type: none"> • Research into related techniques, history and artists • Analysing and critiquing artworks through multi-modal presentation 	Making – Painting, drawing and photography Responding – Visual Diary and Multi-modal presentation
	<u>Unit 4</u> - Art and Architecture <ul style="list-style-type: none"> • Sculpture Unit • Research into related techniques, history and artists • Introduction to time- based techniques • Analysing and critiquing artworks through exam or multimedia presentation 	Making – clay and mixed media sculpture Responding – Visual Diary Exam

