Canning College

Year 11 2014

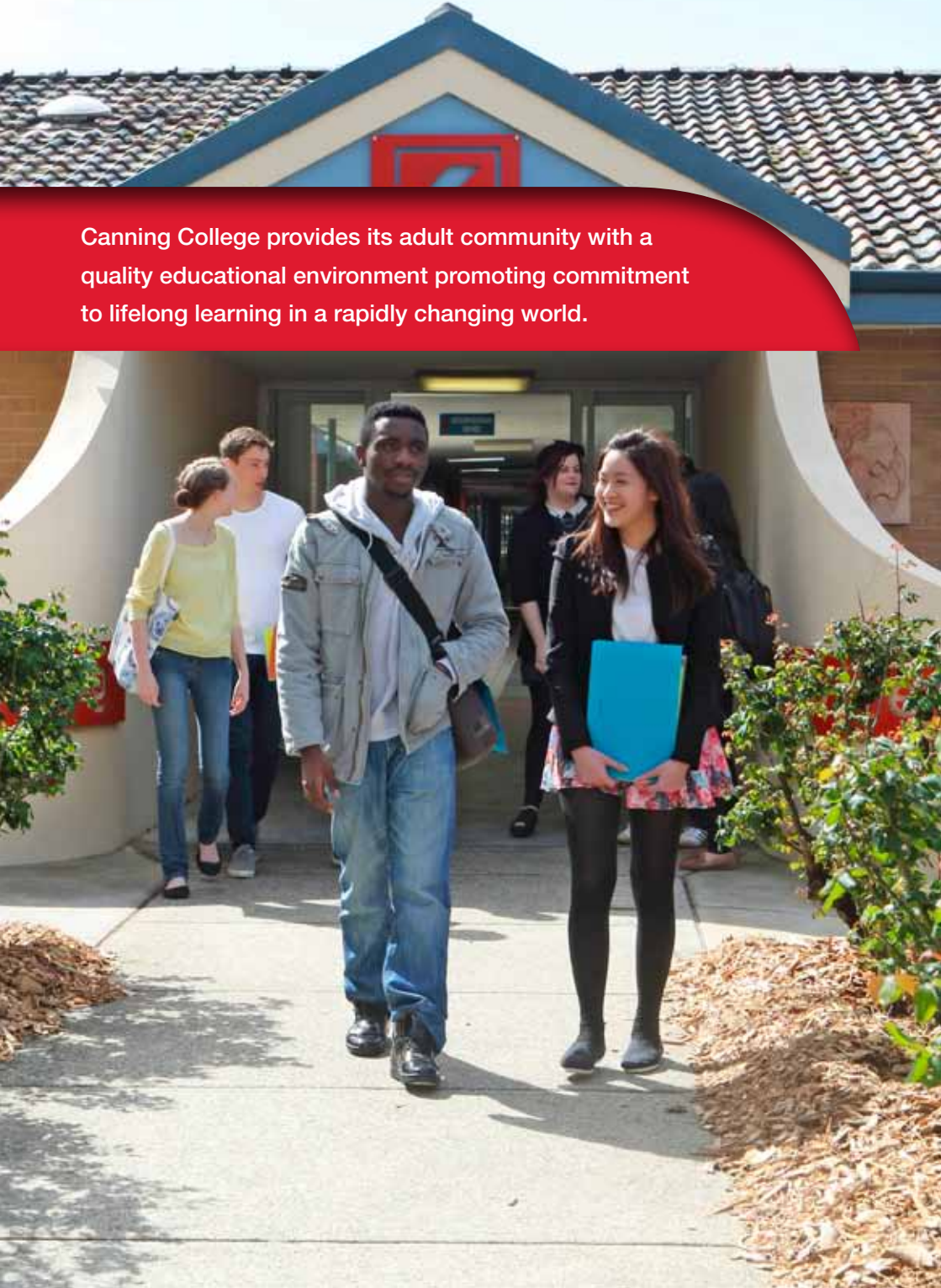
A program to provide the knowledge and skills required to enable success in the Western Australian Universities' Foundation Program, W.A. Certificate of Education or Certificate IV (Commerce).

CANNING COLLEGE

Your quality pathway to University

www.canningcollege.com

Canning College provides its adult community with a quality educational environment promoting commitment to lifelong learning in a rapidly changing world.



Contents

General Information	2
Compulsory Courses	4
Optional Academic Courses	7
Optional Bridging to Stage 3 Courses	16

www.canningcollege.com

More information can be obtained from the International Office.
Full assessment details are provided soon after you commence a course.
The information is correct at the time of printing in November 2013.

General Information

A one-year program of study for international students designed to provide the knowledge and skills required to ensure success with the Western Australian Universities' Foundation Program (WAUFP), WA Certificate of Education (WACE) or Certificate IV (Commerce) in the following year.

The Year 11 program is structured around the compulsory course Year 11 English as a Second Language. This course is studied for nine hours each week for the duration of the program. Students must also study a Mathematics course and Computing.

All students will develop their library and independent learning skills as part of Year 11 ESL. This is an important part of the program, giving an excellent introduction to research skills including use of the internet, online databases and referencing.

Year 11 - Academic Program

All courses will be studied in Semesters 1 and 2 unless otherwise stated. Students will study the compulsory courses:

- Year 11 English as a Second Language (9 hours)
- Mathematics Stage 2 or Mathematics Stage 3 (4.5 hours)
- Computing (4.5 hours)

Students also select at least two courses from the following Year 11 optional academic or special interest electives:

Optional Academic Courses

- Accounting and Finance
- Business Management & Enterprise
- Chemistry
- Earth and Environmental Science
- Economics
- Human Biological Sciences
- Mathematics Specialist
- Physics
- Psychology

All courses are internally assessed. A breakdown of the weightings for assessment tasks for each course is shown on the following pages.

Students will receive a Statement of Progress after eight weeks and College Reports at the end of each semester which indicate their progress and level of achievement in each course.

Course Links from Year 11 to WAUFP or other Year 12 courses

Year 11		WAUFP or WACE
Accounting and Finance	→	Accounting and Finance 3AB
Business Management & Enterprise	→	Business Management & Enterprise 3AB
Chemistry	→	Chemistry 3AB
Computing	→	Computer Science 3AB
Earth & Environmental Science	→	Earth & Environmental Science 3AB
Economics	→	Economics 3AB
ESL Year 11	→	ELACS (English Language & Australian Cultural Studies)
Human Biology	→	Human Biological Science 3AB
Mathematics Stage 2	→	Mathematics 3AB
Mathematics Stage 3	→	Mathematics 3CD
Mathematics Specialist	→	Mathematics Specialist 3CD
Physics	→	Physics 3AB
Psychology	→	Psychology 3AB

Compulsory Courses

English as a Second Language (ESL)

Year 11 ESL is designed for international students to extend their communicative competence in spoken and written English in preparation for studies at Year 12 level.

The course provides students with the opportunity to:

- extend their knowledge and use of standard Australian English in a variety of communicative situations
- learn specific language for academic purposes
- foster an attitude of confidence in the way they use English, both oral and written
- develop skills considered desirable for further studies including library research, computer skills, report and essay writing
- learn about and share in the language and cultural heritage of Australia.

College Assessment Outline

Assessment	Weighting
Semester 1 Examination	10%
Semester 2 Examination	20%
Other Assessment Tasks	70%

Computing

This course will provide students with a set of core computing and organisational skills that will complement other subjects studied at the College.

The topics include how to:

- operate a personal computer
- operate word processing applications
- use, communicate and search securely on the internet
- use digital devices
- operate spreadsheet applications
- operate presentation packages

Students will also develop skills in creating small scale relational databases using Access and simple programs using Visual Basic Express.

Computing will provide students with a solid basis for further study in a wide range of disciplines such as Computing, Education, Commerce, Engineering, Science and Architecture.

College Assessment Outline

Assessment	Weighting
Assessment Tasks	50%
Semester 1 Examination	10%
Semester 2 Examination	40%

Mathematics Stage 2

This 12 month course is designed for students who intend to study Mathematics 3A/3B at Year 12 level.

Module A

The aim of this module is to provide skills in the following areas:

Number and Algebra: linear functions and quadratic functions algebraically and graphically, calculation and interpretation of financial formulas

Space and Measurement: gradients of linear functions and distances between points

Chance and data: calculate and interpret probabilities, analyse and make inferences on datasets represented in various formats

College Assessment Outline

Assessment	**Weighting**
Investigations	25%
Responses (including Tests and Examinations)	75%

Module A is a prerequisite for Module B.

Module B

The aim of this module is to provide skills in the following areas:

Number and Algebra: functions and their graphs (including cubic, exponential and reciprocal functions); patterns, making conjectures and testing them

Space and Measurement: trigonometry for the solution of right and acute triangles

Chance and data: calculate and interpret probabilities for chance events that occur in two and three stages; collect and analyse data from random samples and infer results for populations

Assessment	**Weighting**
Investigations	25%
Responses (including Tests and Examinations)	75%

Mathematics Stage 3

This 12 month course is designed for students who intend to study Mathematics 3C/3D at Year 12 level.

Module A

The aim of this module is to provide skills in the following areas:

Number and Algebra: explore and analyse the properties of functions and their graphs; develop and use algebraic skills for solving equations; apply recursion in practical situations, including finance

Space and Measurement: use trigonometry for the solutions of triangles

Chance and data: use counting techniques to calculate probabilities and analyse normally distributed data; analyse data from samples and infer results for populations

Assessment	Weighting
Investigations	15%
Responses (including Tests and Examinations)	85%

Module A is a prerequisite for Module B.

Module B

The aim of this module is to provide skills in the following areas:

Number and Algebra: differential and integral calculus of polynomial functions and apply in optimisation problems; algebraic skills for solving equations and apply them in linear programming

Space and Measurement: reason deductively in algebra and geometry

Chance and data: analyse bivariate data and draw conclusions

Assessment	Weighting
Investigations	15%
Responses (including Tests and Examinations)	85%

Optional Academic Courses

These optional courses are delivered in Modules – Module A and Module B. Where Module A is a prerequisite for Module B, it will be indicated.

Accounting and Finance

The Accounting and Finance course is seen as a preparatory course for those wishing to pursue a career in areas such as Accounting, Finance, Commerce, Marketing, Management or Banking.

Module A

The focus is on double entry accounting for small businesses. Students will be asked to apply their understanding of financial principles and systems to a variety of small business scenarios.

On completion of this module, students should be able to:

- record and process financial information using manual double entry accounting
- select financial and non-financial information to evaluate a small business and suggest strategies that will improve business performance
- identify legislation and the financial costs associated with starting and maintaining good business practice

College Assessment Outline

Assessment	**Weighting**
Tests	40%
Assignments	20%
Examination	40%

Module A is a prerequisite for Module B.

Module B

The focus for this module is accrual accounting. Students apply financial systems and principles to the operations of businesses and distinguish between cash and accrual methods of accounting. Students prepare and analyse financial reports. Students learn of the role and functions of professional accounting and financial associations.

On completion of this unit the student should be able to:

- record and report using balance day adjustments, financial data and information of a sole trader
- select and apply accounting concepts
- identify the professional accounting and financial associations and their role within business

College Assessment Outline

Assessment	**Weighting**
Tests	40%
Assignments	20%
Examination	40%

Business Management and Enterprise

The Business Management and Enterprise course gives students the opportunity to understand how vital business is and how it impacts on aspects of our lives.

The course aims to prepare all students for a future where they can identify and create opportunities within a business environment.

Module A

The focus in this module is on Marketing and Human Resource management. This module explores elements of the marketing mix, the employment cycle and management structures within an organisation.

Assessment Outline:

Assessments	**Weighting**
Tests	20%
Assignments	30%
Examination	50%

Module B

The focus in this module is on business success and the internal and external challenges faced by business. This module explores factors which influence consumer and business confidence, Govt. policy and legislation, the purpose and intent of a business plan, employee motivation and key performance indicators.

Assessment Outline:

Assessments	**Weighting**
Tests	20%
Assignments	30%
Examination	50%

Chemistry

Students will study the physical and chemical properties of substances, the nature of matter, and chemical reactions and processes. The course is intended to provide a background in chemistry which will enable students to undertake the Chemistry 3AB unit.

The course covers macroscopic properties of matter, atomic structure and bonding, chemical energy and reactions, acids and bases, oxidation and reduction, organic chemistry and their applications.

Module A

The focus for this module is chemistry in and around the home. Students learn about bonding theory – metallic, ionic, covalent and covalent network, atomic structure and electron configuration, atoms, molecules, ions. Students will understand and apply collision theory and factors affecting rates of reaction. Students will develop an understanding that chemicals used in and around the home will need to be used and disposed of responsibly.

Module A is a prerequisite for Module B.

College Assessment Outline

Assessment	**Weighting**
Practical	15%
Assignments	15%
Tests	20%
Examination	50%

Module B

The focus for this module is chemistry and the environment. Students will learn about acids and bases, oxidation and reduction and organic chemistry through environmental concepts. In calculations students will cover multi-step stoichiometry, limiting reagents, concentration, mass and volume.

College Assessment Outline

Assessment	**Weighting**
Practical	10%
Investigation	5%
Assignments / Classwork	15%
Tests	20%
Examination	50%

Earth and Environmental Science

The Earth is unique in the solar system with its water and atmosphere supporting a great diversity of life in a wide range of environments. Our planet is a system made up of the land, water, atmosphere and biosphere. The Earth and Environmental Science modules study these four components, how they interact with each other, what environmental issues arise and how to find solutions to these challenges in order to manage the Earth in a sustainable way. Possible topics for study include: plate tectonics, earthquakes, volcanoes, water cycle, rock cycle, mineral resources and ecosystems.

Module A

The focus for this module is interactive Earth and environments. Students gain an understanding of the dynamic nature of several different environments as they investigate and measure change within those environments. They will investigate the effects of human interaction in environments. In addition, students develop further understandings in relation to the materials and processes within the Earth system. They will understand how resources are formed, located and extracted and how environments interact on local, regional and global scales.

College Assessment Outline

Assessment	**Weighting**
Investigations	20%
Extended Tasks	25%
Tests	25%
Examination	30%

Module B

The focus for this module is sustainable Earth and environments. The intensified and unsustainable demand for land, mineral, water, marine and coastal resources resulting from the expansion of agriculture and urbanisation has led to increased degradation of natural ecosystems and deterioration of the life-supporting systems that uphold human civilisation. Using and conserving natural resources and promoting their sustainable use is an essential response of humans to ensure our and other species survival and wellbeing along with the maintenance of the Earth system.

College Assessment Outline

Assessment	**Weighting**
Investigations	20%
Extended Tasks	25%
Tests	25%
Examination	30%

Economics

Economics provides students with a course which reflects the importance of economics in today's society. The modules are designed to give students an understanding of how markets function and contemporary issues and problems for the economy as a whole. Knowledge of economics is useful in various fields of work such as commerce, business, banking and finance. An understanding of the economy is an advantage in modern society.

Module A

The focus for this module is markets. This module is an introduction to microeconomics and the role that markets play in determining the wellbeing of individuals and society, as well as the limitations of markets. It explores the workings of real world markets with an emphasis on the Australian economy.

College Assessment Outline

Assessment	Weighting
Data Interpretation / Short Responses	50%
Extended Responses	30%
Examination	20%

Module B

The focus for this module is macroeconomics. This module is an introduction to macroeconomics and the government's role in the economy. It explores macroeconomic issues and problems such as economic growth, inflation and unemployment with an emphasis on the Australian economy.

College Assessment Outline

Assessment	Weighting
Data Interpretation / Short Responses	50%
Extended Responses	30%
Examination	20%

Human Biology

Human Biology is the scientific study of humans as individuals and as populations and of their interactions with the environment. This course studies the structure and function of the body, the human life cycle, the biological and cultural evolution of humans, human ecology and modern social issues.

This one-year course considers our relationship with the primates, the coordinated functioning of the musculo-skeletal system, the supply of raw materials needed by cells through gas exchange, nutrient procurement and internal transport, cell structure and functioning, human reproduction and genetics and significant human disease.

By the end of the course, students should have demonstrated competence in:

- the process skills of science associated with designing and performing controlled experiments, collecting, recording, presenting and interpreting data
- the manipulative skills associated with measurement of physical quantities, basic laboratory procedures and microscopy
- literacy skills associated with information retrieval, report writing and effective oral and written communication

College Assessment Outline

Assessment	**Weighting**
Practical/Investigations	20%
Responses (extended)	20%
Tests	15%
Examinations	45%

Specialist Mathematics Stage 3

This 12 month module is designed for students, with a reasonably strong background in mathematics, who intend to study Specialist Mathematics 3C/3D at Year 12 level.

Module A

The aim of this course is to provide students with skills in the following areas:

Vectors: vector terminology, representation and methods based on coordinate geometry and trigonometry

Trigonometry: determine distances and angles (in degrees and radians) in geometric figures in two and three dimensions

Exponentials and logarithms: graphs of exponential and logarithmic functions, index and logarithmic laws and their application to solving simple equations

Functions: basic concepts of functions for the study of calculus, domain, range, composition, inverses, absolute values

Polar Coordinates: specifying a position in a plane by magnitude and direction

Assessment	**Weighting**
Investigations	15%
Responses (including Tests and Examinations)	85%

Module A is a prerequisite for Module B

Module B

The aim of this module is to provide students with skills in the following areas:

Vectors: vector representations of a line, dot product

Trigonometry: periodicity, amplitude and phase in trigonometric graphs

Exponentials and logarithms: limits, number e, the natural exponential and logarithm functions and their derivatives

Functions: continuity, differentiability of functions, piecewise functions, differentiation, concept of the integral

Complex numbers: number *i*, complex solutions of quadratic equations, geometric representation, basic operations

Assessment	Weighting
Investigations	15%
Responses (including Tests and Examinations)	85%

Physics

Physics is an experimental discipline involving the study of the properties of, and the interrelationships between energy and matter. This is done through a contextual approach to help students appreciate the relevance of physics to their everyday experience.

Module A

In this module students gain an insight into temperature measurement, internal energy, conduction and convection and radiation to develop understandings about how energy is transferred by heat through different materials. Students will also examine the thermal properties of substances which includes thermal expansion, specific heat capacity and latent heat. In nuclear physics students learn about atomic structure and sub atomic particles to understand the phenomena that lead to the emission of nuclear radiation and nuclear energy. Students also apply the concept of charge in electrostatics.

College Assessment Outline

Assessment	Weighting
Practical	35%
Tests	20%
Examination	45%

Module B

Students explore motion in one dimension to solve both qualitative and quantitative problems in this module. Examine how motion is a result of all forces acting on a body. The concepts of energy transfer in current electricity and the study of electrical circuits is also covered. Students will learn how to work safely with electricity.

College Assessment Outline

Assessment	Weighting
Practical	30%
Investigation	5%
Tests	20%
Examination	45%

Psychology

Psychology is a preparation course for Stage 3 Psychology. It is offered as two separate semester length units. Students can choose to study both the Semester 1 unit and continue on to the Semester 2 unit, or they can choose to study just the Semester 2 unit.

What is Psychology?

Psychology is the scientific study of how individuals think, feel and act. It aims to answer important questions such as what motivates people to behave the way they do and what factors influence their development.

How will Psychology be useful?

Psychology is useful for students who wish to better understand their own learning, personal development and relationships with others. It will be useful in future studies in fields such as law, human resources, marketing and management, health professions, sports science, education, sales, social work, counselling.

Module A

Self

- Brain and behaviour (midbrain, hindbrain, forebrain, hemispheric specialisation)
- Cognitive processes of sensation, perception and memory
- Influence of heredity and environment on development (twin and adoption studies)
- Personality and the factors affecting the development of personality

Others

- Group influences on behaviour (bystander effect and diffusion of responsibility)
- Social status and peer influence
- Socialisation and agents of socialisation (parents, peers, media)

Society

- Stereotypes, prejudice and racism
- Social values and practice relating to cultural expectations and gender roles

Module B

Students can take this unit without having studied Bridging to Psychology A.

This unit is also suitable for students who are continuing from Bridging to Psychology A.

Self

- Brain and behaviour (role of the lobes of the cerebral cortex in thinking, vision, speech and hearing)
- States of consciousness (attention, hypnosis, sleep)
- Development of self-concept (stages of cognitive development, social and emotional development)
- Behaviour modification and systematic desensitisation (classical and operant conditioning)

Others

- Group influences on behaviour (compliance, conformity, obedience)
- Peers (importance of play for children, cliques, crowds)

Society

- Individualistic and collectivist cultures
- Attitudes formation and impact of stereotypes
- Cultural variations in family roles and parenting styles

Assessment

For each Module:

Assessment	**Weighting**
Investigation	20%
Production	20%
Tests & Article Review	30%
External Response	15%
Examination	15%

Optional Bridging to Stage 3 Courses

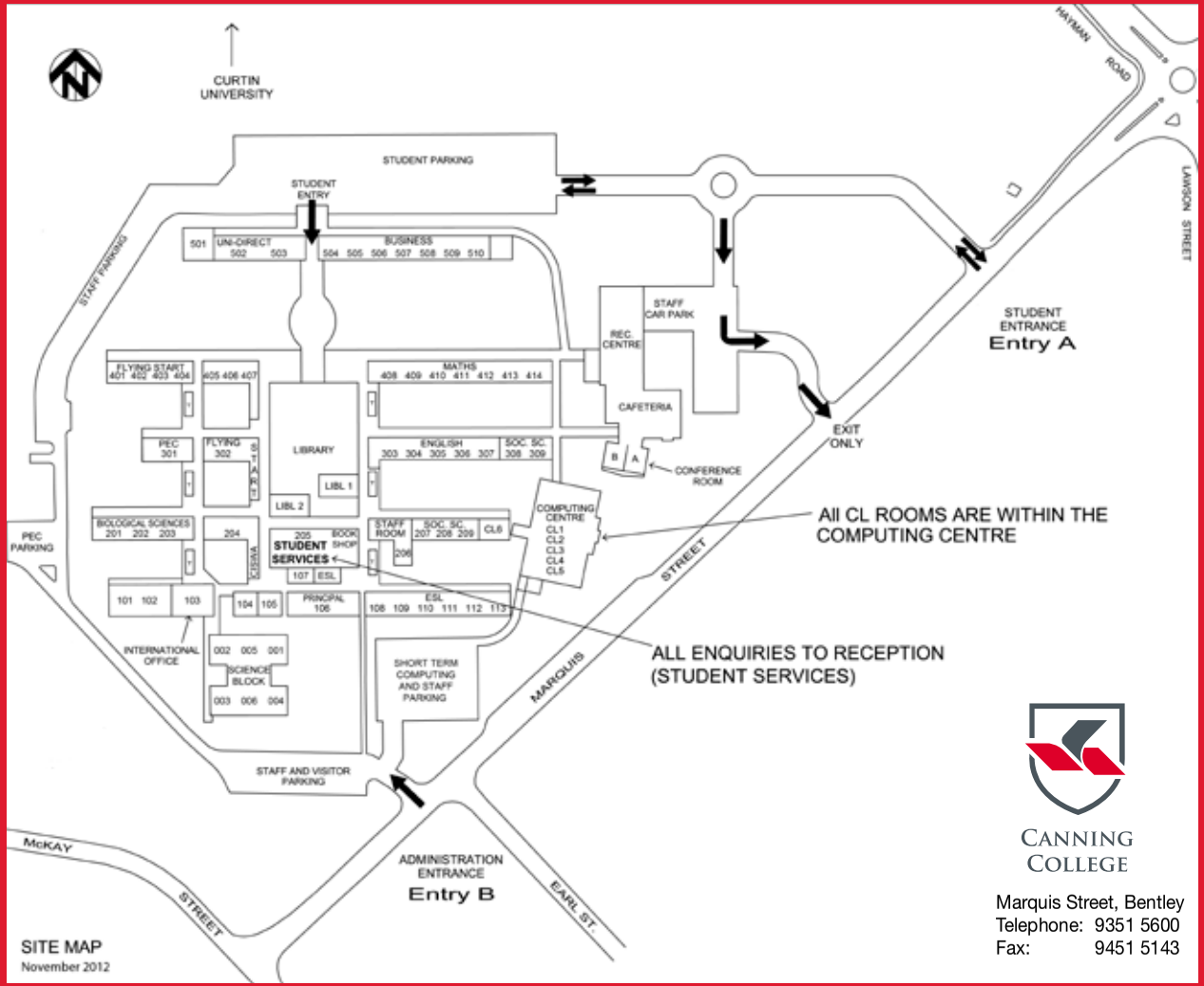
These courses are mainly for the 18 week and 15 week Bridging Programs leading to Stage 3 courses.

Bridging to Mathematics Stage 3 (Semester 2)

This course is intended for students with a reasonably strong background in mathematics and provides the necessary mathematical knowledge for the Mathematics 3A/3B and 3C/3D courses. Topics covered include the properties of functions and their graphs, algebraic skills for solving equations, counting principles to calculate probabilities, analysis of normally-distributed data and analysis of bivariate data. Students will study differential and integral calculus of polynomial functions and use calculus in optimisation problems, develop algebraic skills for solving equations and apply them in linear programming and will reason deductively in algebra and geometry. Students will use mental and written methods and use the CAS calculator. There will be regular class tests, investigations and two term exams.

Bridging to Mathematics Specialist (Semester 2)

This course is intended for students with a reasonably strong background in mathematics and who have not completed the Year 11 Extension Mathematics course. Topics covered are considered essential for a successful study of the Mathematics Specialist 3C/3D course. Topics include trigonometry, two dimensional vectors, exponentials and logarithms, functions, complex numbers and polar coordinates,differentiation, integration and mathematics reasoning. Each topic has been designed to incorporate the use of the CAS calculator. There will be regular class tests, investigations and two term exams.



CANNING COLLEGE

Marquis Street, Bentley
Telephone: 9351 5600
Fax: 9451 5143

Canning College
Marquis Street, Bentley
Western Australia 6102

International Office
Telephone (08) 9351 5665
Facsimile (08) 9356 1119

Email iso@canningcollege.wa.edu.au
Web www.canningcollege.com

Department of **Education**

CPC 00463 B