UNIVERSITY PREPARATION PROGRAM
2013 COURSE COMPONENT DETAILS

The Learning Centre • The University of New South Wales • Sydney NSW 2052 • Ph: +61 (2) 9385 2060

CORE COMPONENT - SEMESTER 1, 2013 (FOR ALL STREAMS)

REGZ9000 - UNIVERSITY ORIENTATION AND STUDY SKILLS 1

Staff Contact: Dr D Fitzsimmons
Units of credit: 6
Hours per week: 3
Offered by: The Learning Centre
Available: Semester 1 (exclusively to UPP students)
Prior Knowledge: None required but must be proficient in written and spoken English.

The UOSS 1 course provides a practical engagement with the academic skills needed for success at university: for example, academic reading, critical thinking and academic writing. UOSS 1 has a particular focus on the understanding of, and the preparation required, to produce an academic essay. The writing process involves content knowledge, research and critical reading, note making, academic writing, referencing, time management and an introduction to online learning. Topics covered include

- orientation to the academic system
- time management
- critical/analytical skills
- preparing seminar presentations
Assessment is continuous and comprises class participation, a seminar presentation, two essays and a final examination. Attendance is compulsory from Week 1 onwards.

STREAM COMPONENT - SEMESTER 1, 2013 (FOR SCIENCE AND ENGINEERING)

REGZ9070 - UPP MATHEMATICS SKILLS 1

Staff Contact: Ms Catheryn Grey
Units of credit: 6
Hours Per Week: 6
Offered by: The Learning Centre
Available: Semester 1 (exclusively to UPP students)
Prior Knowledge: Year 10 Advanced Level Mathematics is assumed (see below for further details).

UPP Mathematics Skills 1 is for students who have not achieved an appropriate level of mathematics at high school or equivalent and wish to apply to UNSW degree programs with assumed knowledge in mathematics. UPP Mathematics Skills 1 includes the following:

Fundamentals
- Basic Numeracy and Measurement
- Algebra and Surds
- Equations
- Coordinate Geometry
- Functions and Graphs
- Sets and Probability/Sequences and Series
- Trigonometry

Year 10 Advanced Level Mathematics is assumed. You should be confident with algebra (eg. simplification of expressions, solving equations & inequations, factorisation including quadratic equations and using a scientific calculator including the fraction, power and exponential keys).

CORE COMPONENT - SEMESTER 2, 2013 (FOR HUMANITIES AND SCIENCE STREAMS)

REGZ9255 - UNIVERSITY ORIENTATION AND STUDY SKILLS 2

Staff Contact: Dr D Fitzsimmons
Units of credit: 6
Hours Per Week: 3
Offered by: The Learning Centre
Available: Semester 2 (exclusively to UPP students)

University Orientation & Study Skills 2 builds on the fundamental academic skills studied in first semester. UOSS 2 focuses on developing skills in writing, presenting critical reviews and reports, and completing a small research project. UOSS 2 will be taught in lecture and tutorial format (2 hours per week), and one hour online.

Timetable: Students will attend ONE of the following sessions:

- Monday 6pm to 8pm
- Tuesday 6pm to 8pm
- Friday 12pm to 2pm

Pre-requisites: Successful completion of UOSS 1 (REGZ9000)
STREAM COMPONENT - SEMESTER 2, 2013 (FOR SCIENCE AND ENGINEERING)

REGZ9072 - UPP MATHEMATICS SKILLS 2

Staff Contact: Ms Catheryn Grey
Units of credit: 6
Offered by: The Learning Centre
Available: Semester 2 (exclusively to UPP students)
Pre-requisites: Successful completion of REGZ9070

PURPOSE: UPP Mathematics Skills 2 is for students who have not achieved an appropriate level of mathematics at high school or equivalent and wish to apply to UNSW degree programs with assumed knowledge in mathematics.

NOTE: Science stream students who attain a Distinction result or higher in REGZ9070 in Semester 1 MAY, after consultation with the UPP Maths Coordinator, be permitted to take a Science Gateway course in place of REGZ9072. Engineering stream students who attain a Distinction result or higher in REGZ9070 MAY, after consultation with the UPP Maths Coordinator, be permitted to take MATH1011 Fundamentals of Mathematics B in place of REGZ9072.

CORE COMPONENT - SEMESTER 2, 2013 (FOR ENGINEERING STREAM)

ENG0360 - COMMUNICATING IN ENGINEERING

Staff Contact: Dr I M Skinner
Units of credit: 6
Offered by: The Learning Centre
Available: Semester 2
Pre-requisites: Successful completion of REGZ9000 and REGZ9070

The expectations and conventions applying to spoken and written communications within engineering and science. Different textual genres. Aspects of rhetoric. Ethical use of material. Formal language structure; grammar and syntax. Students will improve their ability to collect and build ideas into coherent arguments, learn how to construct texts that demonstrate critical thinking, and develop their communication skills (speaking, listening, writing, & reading), in preparation for subsequent study in a professional context.

STREAM COMPONENT - SEMESTER 1, 2014* (FOR ENGINEERING)

MATH1011 - FUNDAMENTALS OF MATHEMATICS B

Staff Contact: Mathematics & Statistics School Office
Units of credit: 6
Timetable: TBA in 2014

FUNCTIONS (AND THEIR INVERSES), LIMITS, ASYMPTOTES, CONTINUITY; DIFFERENTIATION AND APPLICATIONS; INTEGRATION, THE DEFINITE INTEGRAL AND APPLICATIONS; INVERSE TRIGONOMETRIC FUNCTIONS; THE LOGARITHMIC AND EXPONENTIAL FUNCTIONS AND APPLICATIONS; SEQUENCES AND SERIES; MATHEMATICAL INDUCTION; THE BINOOMIAL THEOREM AND APPLICATIONS; INTRODUCTION TO PROBABILITY THEORY; INTRODUCTION TO 3-DIMENSIONAL GEOMETRY; INTRODUCTION TO LINEAR ALGEBRA.

*or Semester 2, 2013 for students who attained a Distinction level or higher in REGZ9070.

STREAM COMPONENT - SEMESTER 1, 2014 (FOR ENGINEERING)

PHYS1111 - FUNDAMENTALS OF PHYSICS

Staff Contact: Physics School Office
Units of credit: 6
Timetable: TBA in 2014

This is an introductory level course in physics for students from all disciplines. The course will cover the methods of Physics, including the following topics: the description of motion; forces and momentum; the dynamics of particles; kinetic and potential energy; the conservation of energy; temperature and thermal equilibrium; specific and latent heat; thermal energy; fluids and fluid flow; oscillations and simple harmonic motion; waves, wave reflection, refraction and interference; the wave nature of light; electric fields and charge; electric potential and energy; electric currents; magnetism; electromagnetic induction and Faraday's law; early quantum theory and models of the atom; nuclear physics and radioactivity; nuclear energy.

Making changes to your UPP stream

To change your UPP stream, please contact The Learning Centre for approval: Any changes to your UPP stream can only be made before or on the final Friday before classes commence:

Email: upp@unsw.edu.au Final date for changes: Friday 1 March 2013 (before 4.00pm)

Stream Components

Semester 2 Timetable will be available in April 2013. Please refer to the UNSW handbook for details. Please note that most non-core courses will be held during the day. The number of evening classes for non-core courses is very limited.

Please Note: While the information in this brochure was correct at the time of publication, information may be subject to change without notice. Stream component courses will be confirmed in April 2013.