The University of Sydney

Faculty of Science

Handbook

1996

Editor

Robert K. Norris

The Editor gratefully acknowledges the substantial inputs to the preparation of the Handbook by Ms Christine Hermely and Ms Danielle Heilpern from the Faculty of Science Office. The Editor also thanks all Departmental and School Faculty Handbook Liaison Officers for their assistance.
Physiology Honours
Assoc. Prof. Davey (course supervisor)

During fourth year, no formal course of lectures is provided but students are given a relevant problem to investigate. This problem usually represents a small facet of one of the major current research projects within the Department, and the students work in collaboration with members of the staff. Students write a thesis embodying the results of their work.

Department of Psychology

Psychology is the study of behaviour. As a study it is approached on a scientific basis, with provision for professional training at the postgraduate level. The research activities of the Department cover almost all of the main branches of the subject.

Registration and noticeboards
Students in all years must register during the orientation period. Psychology 1 students register by going to the Carslaw Building during orientation and collecting a personalised computer-generated timetable, which will indicate the lecture times and the tutorial group to which they have been allocated. Further information will be posted at the Enrolment Centre and on the Psychology 1 noticeboard on the 4th Floor of the Griffith-Taylor Building.

Information about registration meetings for Psychology 2 and Psychology 3 students will also be posted at the Enrolment Centre, and on the departmental noticeboards on the 5th floor of the Griffith-Taylor Building.

Enquiries
The main enquiry office of the Department is Room 416, Griffith-Taylor Building (tel. 351 2872) where details may be obtained of the staff members available throughout the year to discuss particular courses.

Honours
In order to be eligible to graduate with honours in Psychology, it is necessary (except as provided in the by-laws or resolutions) to gain a pass with at least credit in Psychology 2 and Psychology 3. Students wishing to graduate with honours in Psychology are urged to discuss their choice of other subjects with a Faculty adviser as soon as practicable...There is currently a quota on entry to Psychology 4.

Examinations
Undergraduate courses are examined at the end of each semester and include classwork by way of essays, reports or practical/laboratory work. At the beginning of each course or section of a course, students are advised of its relative weight and the contributions of exam and classwork for assessment purposes.

Textbooks
Check departmental noticeboards before buying prescribed texts.

Psychology 1
12 units
Classes Yr: (3 lec & one 1hr tut, one 1hr demonstration)/wk
Assessment
Sem 1: one 3hr exam, one 2D0w essay, tut test;
Sem 2: one 3hr exam, one 1500w prac report, tut test Yr:
6hr of experimental participation

Registration with the Department should take place in the orientation period. Psychology 101 students register by going to the Carslaw Building during orientation and collecting a personalised computer-generated timetable, which will indicate the lecture times and the tutorial group to which they have been allocated. Details will be posted on departmental noticeboards.

The course is a general introduction to the main topics and methods of psychology, and is the basis for advanced work as well as being of use to those not proceeding with the subject. The course covers the following areas: subject matter and methods of psychology; basic statistics and measurement; behavioural neuroscience; sensory processes; social psychology; personality theory; human development; human mental abilities; learning, motivation and abnormal psychology; visual perception; cognitive processes.

Textbooks
To be announced
Handbook for Psychology 1 (1996)

Psychology 2
16 units
Qualifying course Psychology 1
Classes Yr: (4 lec & up to 4hr tut/prac)/wk
Assessment two 2hr exam, essays, prac, reports/sem

Psychology 2 deals with material on both basic and complex psychological processes and covers the following topics:

Psychological statistics
Classes Yr: (1 lec & 1 tut)/wk
Assessment one 1hr exam, quiz/sem

Personality
Classes Sem 1: (1 lec & 1 tut)/wk
Assessment one 1hr exam, one 1500w essay

Individual Differences
Classes Sem 1: (1 lec & 1 tut)/wk
Assessment one 1hr exam

Behavioural Neuroscience
Classes Sem 1: (1 lec & 1 prac)/wk for 8 wks
Assessment one 40min exam

Perception
Classes Sem 1: (1 lec & 1 prac)/wk for 5 wks; Sem 2: (1 lec & 1 prac)/wk for 4 wks
Assessment one 20min exam/sem

Learning
Classes Sem 2: (1 lec & 1 prac)/wk for 9 wks
Assessment one 40min exam, prac report

Social Psychology
Classes Sem 2: (1 lec & 1 tut)/wk
Assessment one 1hr exam, one class quiz
Cognitive Processes
Classes Sem 2: (1 lec & 1 prac)/wk
Assessment one 1hr exam, one prac report

Textbooks
To be announced

Psychology 3 24 units
Qualifying course Psychology 2
Classes Yr: (4 lec & up to 6hr of tut/prac)/wk
Assessment (two 3hr exams, essays, prac reports)/sem

Classes
The course consists of four lectures and up to six hours of practical-tutorial work each week. The classwork includes essays and reports of practical or laboratory work done under supervision.

Because of timetabling difficulties some courses are offered at times other than those listed for Psychology 3 in the timetable for Senior courses. The detailed arrangements for each semester are as follows:

Note: All Psychology options are offered subject to the availability of staff and on the condition that they are chosen by an adequate number of students in each case. The topics include:

Semester 1
Abnormal Psychology
Classes (1 lec & 1 tut)/wk
Assessment one 45 min exam, one 1500w essay, tut paper

Cognitive Processes: Recognition, Search and Memory
Classes (1 lec & 1 tut)/wk
Assessment one 45 min exam, prac reports

History and Philosophy of Psychology
(required of students wishing to proceed to Psychology honours)
Classes Yr: (1 lec & 1 tut)/wk
Assessment one 45 min exam, tut paper

Intelligence
Classes (1 lec & 1 tut)/wk
Assessment one 45 min exam, one prac report, tut paper

Learning and Motivation
Classes (1 lec & up to 2hr of tut or prac)/wk
Assessment one 45 min exam, prac report

Measurement and Psychometrics
(required of students wishing to proceed to Psychology honours)
Classes (1 lec & 1 tut)/wk
Assessment one 45 min exam, prac report

Social Psychology
Classes (1 lec & 1 tut)/wk
Assessment one 45 min exam, prac report

Theoretical Bases of Development
Classes (1 lec & 1 tut)/wk
Assessment one 45 min exam, one 1500w essay

Semester 2
Behavioural Neuroscience
Classes (1 lec & up to 2hr of prac or tut)/wk
Assessment one 45 min exam, prac report

Child Abnormal Psychology
Classes (1 lec & 1 tut)/wk
Assessment one 45 min exam, one 1000w essay, tut paper

Developmental Issues
Classes (1 lec & 1 tut)/wk
Assessment one 45 min exam, assignment

Environmental and Organisational Psychology
Classes (1 lec & 1 tut)/wk
Assessment one 45 min exam, one prac report

History and Philosophy of Psychology
(required of students wishing to proceed to Psychology honours)
Classes (1 lec & 1 tut)/wk
Assessment one 45 min exam, one 2500w essay, tut paper

Human Performance
Classes (1 lec & 1 tut)/wk
Assessment one 45 min exam, prac report

Language and Communication
Classes (1 lec & 1 tut)/wk
Assessment one 45 min exam, assignment

Perceptual Systems
Classes (1 lec & 1 tut)/wk
Assessment one 45 min exam, prac report

Personality
Classes (1 lec & up to 2hr of tut or prac)/wk
Assessment one 45 min exam, prac report

Statistics and Research Design
(required of students wishing to proceed to Psychology honours)
Classes (1 lec & 1 tut)/wk
Assessment one 45 min exam, prac report

The Nature/Nurture Controversy in Psychology
Classes (1 lec & 1 tut)/wk
Assessment one 45 min exam, one 1500w essay, tut paper

Students wishing to proceed to Psychology Honours must complete History and Philosophy of Psychology and the options in Measurement and Psychometrics, and Statistics and Research Design, plus two options in each semester.

Students not wishing to proceed to Psychology honours must complete four options each semester.

Psychology 4 Honours
Prereq credit or better in Psychology 2 and 3; specified options in Psychology 3
Assessment one 2hr & one 3hr exam or equivalent

Due to restricted resources for research supervision, the intake to Psychology honours will be limited to approximately 50 students and will be determined by academic merit.

Students are required to (a) devise, conduct and report upon an empirical research project, (b) write a theoretical thesis, and (c) attend one lecture course, two seminar courses and two method courses. The areas of psychology in which these activities may occur depend on the interests and specialities of staff members.

Reference lists will be supplied by staff handling the numerous special fields that are available.
Postgraduate study

MSc and PhD in Psychology

See the University's Statutes and Regulations 1994-95 for by-laws and resolutions. Direct enquiries to the Head of Department.

Master of Psychology

Postgraduate training in clinical psychology is controlled by the Faculty of Science. Details of the Master of Psychology degree awarded on successful completion of this training are available in the Statutes and Regulations 1994-95 and Chapter 7 of this handbook.

Soil Science

See under Department of Agricultural Chemistry and Soil Science.

Bachelor of Science (Advanced) degree program

Please refer to Chapter 3 of this book for resolutions and table of courses, and to Chapter 5 for the Bachelor of Science course descriptions.

Bachelor of Science (Environmental) degree program

The Bachelor of Science (Environmental) requires three years of full-time study. An honours program is available and requires a further year of full-time study. Progression in the Bachelor of Science (Environmental) degree program is by accumulation of credit points gained by completing a course. A total of 140 units is required for the degree.

For information on other relevant courses for this degree program, please refer to the Bachelor of Science course descriptions in this chapter.

HSC Aggregate

The minimum TER for admission into the degree of Bachelor of Science (Environmental) is 93.

Transferring into the BSc (Environmental)

After 1996 students will be permitted to transfer from other degrees offered by the Faculty of Science into the BSc (Environmental).

Environmental Earth Science 1 12 units

Coreq Biology 1 or Biology 1 (Advanced), Chemistry 1 or Chemistry 1 (Advanced) or Chemistry 1 (Special Studies Program), Mathematics 1 or Mathematics 1 (Advanced) or Mathematics 1 (Life Sciences)

Classes 78 hr of lec & prac, 26 hr fieldwork

Assessment by examination and lab/field exercises

This course introduces concepts of earth science as a foundation for studies in environmental science. Students will explore processes operating as and within the earth to analyze earth systems. Recent developments in a number of disciplines will form the focus of the course.

Environmental Science 2A 16 units

Qualifying courses Biology 1 or Biology 1 (Advanced), Chemistry 1 or Chemistry 1 (Advanced) or Chemistry 1 (Special Studies Program), Environmental Earth Science 1, Mathematics 1 or Mathematics 1 (Advanced) or Mathematics 1 (Life Sciences). Two of Biology 1, Chemistry 1 or Mathematics 1 must be taken at an Advanced level.

Coreq Environmental Science 2B

Classes Yr: (3 lec, 1 tut, 2 prac)/wk, field excursions in prac time and in vacations

Assessment one 3hr exam, 3 prac assignments per semester

Environmental Science 2A provides the integrated framework for understanding natural environments in terms of their chemical, physical, biological, ecological and earth-scientific components. This is used to identify and understand the impacts of humans on our environments at scales from local rivers to global patterns of climate. Emphasis is on practical measurement and interpretation to provide professional training in use of numerous relevant disciplines.

Environmental Science 2B 16 units

Qualifying courses Environmental Earth Science 1, Biology 1 or Biology 1 (Advanced), Chemistry 1 or Chemistry 1 (Advanced) or Chemistry 1 (Special Studies Program), Mathematics 1 or Mathematics 1 (Advanced) or Mathematics 1 (Life Sciences). Two of Biology 1, Chemistry 1 or Mathematics 1 must be taken at Advanced level.

Coreq Environmental Science 2A and 16 units from a relevant discipline

Module 1: (Introduction to Environmental Physics)

Classes Yr: (3 lec/tut, 3 prac)/wk

Assessment (one 3hr and one 1.5hr exam)/sem, classwork,
(Sem 2: one optional 2hr exam for Distinction grades)

Students will take the Regular Strand of Physics in Semester 1 and the Environmental Life Sciences module in Semester 2. A complete description is available in the Physics entry of the Faculty Handbook.

Module 2: (Design and Analysis of Environmental Sampling)

Classes Sem 2 (weeks 1-6): (2 lec, prac)/wk

Assessment one 1.5hr exam in Sem 2

This course is a modification of a successful module in the Biology 3 (Ecology) course and will run in conjunction with it. The course introduces the logical structure of environmental sampling, including the nature of variables, univariate and multivariate measures, correlation of environmental variables and interpretation of data.

This course introduces the theory of sampling design for measurements at different scales of biological systems, statistical analysis of data and the interpretation of magnitude and scale of