Faculty of Science Handbook 2000
circuitation and muscle contribute to the limits of sporting achievement. The excitability, contractility and energetics of the heart and blood vessels are studied, and the regulation of these organs by local (physical and chemical) factors, hormones and the nervous system are discussed, with emphasis on cellular and molecular mechanisms. At the systemic level, the unit of study deals with short term (neural) mechanisms controlling the blood pressure, and how the system behaves during exercise and other stresses. Long term (hormonal) mechanisms regulating blood pressure via the renal control of extracellular fluid volume, and the pathophysiology of atherosclerosis and hypertension are also discussed.

Practical: Lectures are combined with practical laboratory experiments on animals and human subjects.

PHSI3903 Heart and Circulation (Advanced)
12 credit points
Dr J Hoh assisted by Ms J Schneider
Qualifying: PHSI 2102 or 2002 or BMED 2101 and 2102.
Prerequisite: BCHM (2001 or 2101 or 2901) and (2002 or 2102 or 2902) plus 6 or more credit points from any Intermediate units of study in Anatomy and Histology, Biology, Chemistry, Mathematics, Microbiology, Pharmacology, Physics, Physiology, Psychology or Statistics. Offered: February. Classes: 4 lec, 1 tut & 7 hr prac/wk.
Assessment: One 3hr exam, essays, prac reports, seminar presentations.
NB: A minimum of 8 credit points of Intermediate Physiology is recommended. Available to selected students.

The lecture and practical component are the same as for PHSI 3003. Selected students will be set special advanced assignments and attend tutorials on those assignments during the practical sessions.

Physiology Honours
Assoc Prof D Davey
During fourth year, no formal series 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.

A normal three year sequence in Psychology is: PSYC 1001, 1002, 2111, 2112, 2113, 2114, and eight Senior units of study selected from PSYC 3201*, 3202*, 3203, 3204, 3205, 3206, 3207, 3208, 3209, 3210, 3211 and 3212 (*Required for entry to Fourth Year). Mid year entry is possible and involves modification of this sequence.

The units of study available are:
PSYC 1001, 6 credit points
PSYC 1002, 6 credit points
PSYC 2111, 4 credit points
PSYC 2112, 4 credit points
PSYC 2113, 4 credit points
PSYC 2114, 4 credit points
PSYC 3201, 4 credit points
PSYC 3202, 4 credit points
PSYC 3203, 4 credit points
PSYC 3204, 4 credit points
PSYC 3205, 4 credit points
PSYC 3206, 4 credit points
PSYC 3207, 4 credit points
PSYC 3208, 4 credit points
PSYC 3209, 4 credit points
PSYC 3210, 4 credit points
PSYC 3211, 4 credit points
PSYC 3212, 4 credit points

Students who have completed PSYC 3001 and/or 3002 must obtain the permission of the Head of Department of Psychology before enrolling in any of PSYC 3201 to 3212.

Registration and noticeboards
Students in all years must register during the orientation period. Psychology 1001 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 Junior Psychology noticeboard on the 4th floor of the Griffith-Taylor Building.

Information about registration meetings for Intermediate and Senior Psychology 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. 9351 2872). Staff members available to discuss particular courses may be contacted directly or through this office.

Honours
In order to be eligible to enter Psychology 4 Honours, it is necessary (except as provided in the by-laws or resolutions) to gain a year average of Pass with at least Credit average in Intermediate and in Senior Psychology units of study. These Psychology units include Psychology 2111, 2112, 2113, 2114, 3201, 3202, and at least six other Senior Psychology unit from Psychology 3203, 3204, 3205, 3206, 3207, 3208, 3209, 3210, 3211 and 3212. 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 units of study are examined at the end of each semester and include classwork by way of essays, reports or practical/labouratory work. At the beginning of each unit of study students are advised of its the contributions of exam and classwork for assessment purposes.

Textbooks
Check Departmental syllabi before buying prescribed texts.

PSYC 1001 Psychology 1001
6 credit points
Offered: February. Classes: 3 lec, one 2hr demonstration/tut/wk.
Assessment: One 3hr exam, one 1000w essay, one tut test, experimental participation.

Psychology 1001 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. Psychology 1001 covers the following areas: subject matter and methods of psychology; basic statistics and measurement; behavioural neuroscience; sensory processes; social psychology; personality theory.

Textbooks
Psychology 1001 Handbook (1999) and others as advised.

PSYC 1002 Psychology 1002
6 credit points
Offered: July. Classes: 3 lec & 2hr demonstration/tut/wk.
Assessment: One 3hr exam, one 1250w prac report, one tut test, experimental participation.

Psychology 1002 covers the following areas: human development; human mental abilities; learning, motivation and abnormal psychology; visual perception; cognitive processes.

Textbooks
Psychology 1002 Handbook (1999) and others as advised.

PSYC 2111 Perception, Learning and Neuroscience
4 credit points
This unit of study examines a range of phenomena and principles in perception and learning and their relations to neural substrates. The emphasis in perception is on the visual system and the relationship between structure and function, especially with respect to receptive fields and various visual effects. Also covered are depth, form, object and movement perception, the problem of perceptual stability and constancy and perceived orientation, including the relationship between the visual and vestibular systems. The emphasis in learning is on instrumental conditioning and the principle of reinforcement, ranging from applications of this principle to its neural substrates. Also covered are analyses of aversive-based learning, such as punishment and avoidance, and anxiety, together with related neurochemical mechanisms and the effects of various psychopharmacological agents on these processes. A series of practical classes and demonstrations allow students to gain hands-on experience of how some of these principles and phenomena may be studied experimentally.

Textbooks
See Departmental handout

PSYC 2112 Psychological Statistics
4 credit points
Qualifying: PSYC 1001 and 1002 (Note: 16 credit points of Intermediate Psychology is required for Honours entry). Offered: February. Classes: 2 lec & 1 prac/wk, 1 computer tut/fortnight. Assessment: Class tests, Group project, Multiple choice exam. This unit of study aims to introduce students to some of the fundamental concepts in statistics as used in Psychology. These include summary descriptive statistics and an introduction to the principles and practice of experimental design and inferential statistics. Building upon this ground work, the unit of study aims to develop student's expertise in understanding the rationale for, and application of a variety of statistical tests to the sorts of data typically obtained in psychological research.

Textbooks
See Departmental handout

PSYC 2113 Cognitive Processes and Social Psychology
4 credit points
Qualifying: PSYC 1001 and 1002 (Note: 16 credit points of Intermediate Psychology is required for Honours entry). Offered: July. Classes: 2 lec & 1 prac/wk. Assessment: Class quiz and multiple choice exam. The aim of the Cognitive Processes component is to acquaint students with current theoretical and experimental work in cognitive psychology. The aim of the Social Psychology component is to extend some of the end social Psychology topics introduced in Psychology 1001 and to introduce some new topics. Students are expected to gain an understanding of both the main areas of Social Psychology: (1) Group and intergroup relationships and (2) Interpersonal processes, with a focus on altruism and helping behaviour and affiliation and attraction.

Textbooks
See Departmental handout

PSYC 2114 Personality and Individual Differences
4 credit points
Qualifying: PSYC 1001 and 1002 (Note: 16 credit points of Intermediate Psychology is required for Honours entry). Offered: July. Classes: 2 lec & 1 tut & 1 hr self-paced computer/library research/wk. Assessment: Personality: 1hr exam & essay; Individual Differences: 1 hr exam and quiz. PSYC 2114 is made up of two components: Personality and Individual Differences. The aim of the Personality component is to introduce the student to various theories of personality, Eysenck's biological typology and current trait theory. Students will be exposed to conceptual analysis and encouraged to critically evaluate the various theories covered. The aim of the Individual Differences component is to introduce the major issues in individual differences and group differences in human abilities. It is divided into two parts: 5 lectures on individual differences and 8 lectures on group differences. Students are expected to gain an understanding about the major theories of intelligence and of the facts related to the traditional areas of group differences.

Textbooks
See Departmental handout

PSYC 3201 Statistics and Psychometrics
4 credit points
Qualifying: 12 credit points of Intermediate Psychology including PSYC 2112 (or PSYC 2001 and 2002). Offered: July. Classes: 2 lec & 1 prac & 1 hr unsupervised computer practice/wk. Assessment: Class test, assignment, examination. NB: From year 2001 32 credit points of Senior Psychology is required for Honours entry. PSYC 3201 consists of two components, Statistics and Psychometrics. The aim of the Statistics component is to teach students the structure of experiments for which analysis of variance would be an appropriate means of analysis. The unit of study aims to develop students' ability to ask more focused questions than can be answered by omnibus F tests, specifically by the testing of contrasts. The problems of multiple inferences, and the control of the Type I error rate, are an integral aspect of the unit of study.

The objective of the Psychometrics component is to introduce students to measurement as understood in Psychology, to a range of quantitative theories and to the basic concepts of classical psychometrics, item analysis and test construction.

Textbooks
See Departmental handout

PSYC 3202 History and Philosophy of Psychology
4 credit points
Qualifying: 12 credit points of Intermediate Psychology. Offered: February. Classes: 2 lec & 1 prac & 1 hr self-paced library research/wk. Assessment: 1.5hr exam, 1 x 2500 word essay. NB: From year 2001 32 credit points of Senior Psychology is required for Honours entry.

PSYC 3202 consists of two components: History of Psychology and Philosophy of Psychology. The History of Psychology introduces the historical foundations of Western psychology from Descartes through to the cognitive revolution in the 1960's. In covering important individuals, movements and themes, attention is drawn to debate about interpretation of the historical process, and to analysis of the form and structure of the various arguments presented in favour of certain psychological theories. The Philosophy of Psychology introduces traditional and contemporary dienies in the philosophy of science, with focus on the relevance to psychology. Students are expected to become aware that metatheoretical analysis has a central place in psychology alongside empirical methods, that the basic concepts and theories of psychology involve philosophical assumptions which can be articulated and examined.

Textbooks
See Departmental handout

PSYC 3203 Abnormal Psychology
4 credit points
Qualifying: 12 credit points of Intermediate Psychology. Offered: July. Classes: 2 lec & 1 tut/wk. Assessment: 1.5hr exam, essay. NB: From year 2001 32 credit points of Senior Psychology is required for Honours entry. This unit of study examines core issues in Abnormal Psychology. The unit of study will cover aspects of adult abnormality and child abnormality and will include topics such as:
(a) Adult abnormal psychology: Anxiety disorders (specific phobias, panic disorder, agoraphobia, OCD); Addictive disorders (drug, alcohol, gambling); Eating disorders (anorexia nervosa, bulimia nervosa); Mood disorders (dysmymia, major depressive disorder, cycloymia, bipolar disorder); Schizophrenia, Personality disorders.
(b) Child abnormal psychology: Learning disabilities, Mental retardation, Intellectual and educational assessment of children; Pervasive developmental disorders; Attention deficit disorder; Conduct disorder; Anxiety disorders in children and adolescents; Depression.
Textbooks
See Departmental handout

PSYC 3204 Behavioural Neuroscience
4 credit points
Qualifying: 12 credit points of Intermediate Psychology including PSYC 2111 and 2112 (or PSYC 2001 and 2002). Offered: July. Classes: 2 lec & 1 pratwk. Assessment: Class quiz, poster presentation, class participation. NB: From year 2001 32 credit points of Senior Psychology is required for Honours entry.

This unit of study carries on the from the Neuroscience component of PSYCH 2111, providing some more specialised coverage in the areas of psychopharmacology, molecular neuroscience, human brain imaging and cognitive neuroscience. Topics to be covered include: Psychopharmacology (basic actions of drugs on the brain, mechanism of action of antidepressant, antipsychotic and anxiolytic drugs, effects of recreational drugs (cannabis, MDMA, alcohol, opiates) on brain, behaviour and cognition); Molecular Neuroscience (effects of drugs on gene expression, the use of knockout mice and antisense techniques); Brain Imaging Technologies (findings in psychiatry and psychology, what we can learn about the fundamentals of brain function from brain imaging) and Cognitive Neuroscience (neural basis of cognitive abnormalities in schizophrenia and other disorders).

In the first few weeks of the unit, tutorials consist of demonstrations covering basic neuroanatomy, histology and neuropharmacology. In the latter part of the course, tutorials involve groups of students giving poster presentations of recent "hot" papers in the neuroscience field.

Textbooks
See Departmental Handout

PSYC 3205 Cognition and Language
4 credit points
Qualifying: 12 credit points of Intermediate Psychology including PSYC 2112 and 2113 (or PSYC 2001 and 2002). Offered: July. Classes: 2 lec & 1 tutwk. Assessment: Class test, laboratory report, multiple choice exam. NB: From year 2001 32 credit points of Senior Psychology is required for Honours entry.

Cognitive Processes and Language & Communication. Cognitive Processes deals with current research in memory, attention and pattern recognition and is approached in a practical way. Students participate in experiments as subjects and experimenters and are encouraged to think and act as experimenters in order to prepare them for their empirical projects in fourth year honours. In tutorial sessions students are set problems in the derivation of hypotheses from theory and the design of experiments to test these hypotheses. Language & Communication focuses on face-to-face communication. Language is considered in terms of its expressive content, and spoken language is discussed as part of a multi-channel communication system.

Textbooks
See Departmental Handout

PSYC 3206 Developmental Psychology
4 credit points

This unit of study examines various theoretical approaches to and selected issues within Developmental Psychology. The major issues/controversies in Developmental Psychology are examined in relation to a number of the more influential theoretical approaches. Students are expected to gain an understanding of current developmental theory and research. In addition the unit introduces students to a range of issues in selected areas of contemporary Developmental Psychology. Students are expected to gain knowledge of these areas, and to develop a critical approach to the analysis of current research and theoretical issues. They are also required to apply their knowledge in practical exercises involving observations of children.

Textbooks
See Departmental handout.

PSYC 3207 Human Performance & Organisational Psychology
4 credit points
Qualifying: 12 credit points of Intermediate Psychology including PSYC 2113 (or PSYC 2001 and 2002). Offered: July. Classes: 2 lec & 1 tutwk. Assessment: 1/hr exam, prac report. NB: From year 2001 32 credit points of Senior Psychology is required for Honours entry.

PSYC 3207 is comprised of two parts; Human Performance and Organisational Psychology. The former is designed to provide a basic understanding of the factors affecting variation in human performance and ways of optimising performance and to provide a demonstration of the application of psychology to work and sport. The unit of study focuses on some environmental, and subjective factors which affect performance as well as introducing students to the relationship between chronobiology and performance. The Organisational Psychology component focuses on performance in the work place and the influence of social factors on such performance.

Textbooks
See Departmental handout.

PSYC 3208 Intelligence
4 credit points
Qualifying: 12 credit points of Intermediate Psychology including PSYC 2112 and 2114 (or PSYC 2001 and 2002). Offered: July. Classes: 2 lec & 1 tutwk. Assessment: 1/hr exam, tutorial quizzes.

NB: From year 2001 32 credit points of Senior Psychology is required for Honours entry.

The aim is to provide an overview and critical platform to evaluate recent studies of individual differences in human cognitive abilities. The unit introduces major contemporary issues in individual differences in human abilities and intelligence. The emphasis of the latter part is on recent work on the topics related to (a) Psychometric research on intelligence; (b) Experimental cognitive correlates approach to intelligence; (c) Biological aspects of intelligence; and (d) the role of metacognitive abilities in intelligence. Some of the work carried out at this University is also discussed.

Textbooks
See Departmental handout.

PSYC 3209 Learning & Motivation
4 credit points

NB: From year 2001 32 credit points of Senior Psychology is required for Honours entry.

PSYC 3209 introduces the fundamental concepts and more important research findings of contemporary learning theory and selected approaches to motivation. It examines the application of such fundamental research to issues such as drug tolerance, food choice, stress, health promotion and risk taking. It is designed to develop skills in reading primary sources in this area; and to provide the opportunity for hands-on experience of planning and carrying out a research project.

Textbooks
See Departmental handout.

PSYC 3210 Perceptual Systems
4 credit points
Qualifying: 12 credit points of Intermediate Psychology including PSYC 2111 and 2112 (or PSYC 2001 and 2002). Offered: February. Classes: 2 hrs lec & 1 hr labwk. Assessment: 1/hr exam, quiz report.

NB: From year 2001 32 credit points of Senior Psychology is required for Honours entry.

This unit covers at an advanced level selected topics in Perception both from the psychophysical and neuroscientific perspectives. Students are expected to gain an understanding of the main theoretical perspectives in current research, to appreciate the sig-

101
nificance and relevance of basic perceptual research for understanding normal perceptual functioning, and to be able to evaluate the conceptual and empirical worth of research contributions.

PSYC 3211 Psychological Assessment
4 credit points
Qualifying: 12 credit points of Intermediate Psychology including PSYC 2112 and 2114 (or PSYC 2001 and 2002). Offered: February.
Classes: 2 lec & 1 tut/wk. Assessment: 1.5hr exam, tutorial evaluation.
NB: From year 2001 32 credit points of Senior Psychology is required for Honours entry.

This unit will cover fundamental issues in the construction, evaluation and administration of psychological tests with particular emphasis on tests of personality. Students will be given 'hands-on' experience with a variety of psychological instruments including those used for personality, aptitude and clinical assessment. A variety of psychometric 'skills' (eg: calculating reliability, rudiments of scale construction) will also be taught. This unit of study will conclude with an introduction of state of the art issues in psychological assessment including demonstrations of adaptive and computerised testing and discussion of item response theory (IRT) and confirmatory factor analysis (CFA).

Textbooks
See Departmental handout

PSYC 3212 Social Psychology
4 credit points
Qualifying: 12 credit points of Intermediate Psychology including PSYC 2113 (or PSYC 2001 and 2002). Offered: February.
Classes: 2 lec & 1 tut/wk. Assessment: 1.5hr exam, classwork quiz.
NB: From year 2001 32 credit points of Senior Psychology is required for Honours entry.

PSYC 3212 continues the coverage of topics in Social Psychology begun in the unit PSYC 2113. The unit is divided into topic areas where the focus is on evolving theories and the relevant evidence. In any one year approximately four topics will be covered from the following list: affiliation and attraction, social motivation (especially aggression), social cognition, social competence, the impact of aspects of the physical environment on social behaviour, interpersonal communication, and social development through the lifespan. Tutorials provide first hand experience of research by involving students in a range of research projects on the topics covered in the lectures. The tutorials also provide an opportunity for discussion of issues associated with the topics covered in lectures.

Psychology Honours
Prerequisite: Average of Credit or better in 16 credit points of Intermediate Psychology, and also in at least 32 credit points of Senior Psychology which must include PSYC 3201 and 3202.
BPsych students should consult resolutions in Chapter B. Department permission required. Assessment: Formal exams in Ethics and Issues in Psychology and Methods; report of empirical research project; theoretical thesis or take-home examination in three Special Fields modules.

Due to restricted resources for research supervision, the intake to Psychology 4 Honours will be limited to approximately 55 students and will be determined by academic merit in Psychology.

Students are required to:
(a) devise, conduct and report upon an empirical research project,
(b) write a theoretical thesis or attend three Special Fields seminars and write three essays;
(c) attend one lecture series in Ethics and Issues in Psychology and two Method lecture series. The areas of psychology in which the empirical research project may be carried out will depend on the interests and specialities of staff members.