



The
University
of Sydney

'09

Pharmacy

handbook 2009



Set a course for Handbooks online: www.usyd.edu.au/handbooks

Acknowledgements



The Arms of the University

Sidere mens eadem mutato

*Though the constellation may change
the spirit remains the same*

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Official course information

Faculty handbooks and their respective online updates along with the *University of Sydney Calendar* form the official legal source of information relating to study at the University of Sydney. Please refer to the following websites:

www.usyd.edu.au/handbooks
www.usyd.edu.au/calendar

Amendments

All authorised amendments to this handbook can be found at www.usyd.edu.au/handbooks/handbooks_admin/updates2009

Disability access

Accessible versions of this document in Microsoft Word are available at www.usyd.edu.au/handbooks/handbooks_disability/index

Resolutions

The Coursework Clause

Resolutions must be read in conjunction with the *University of Sydney (Coursework) Rule 2000 (as amended)*, which sets out the requirements for all undergraduate courses, and the relevant Resolutions of the Senate.

The Research Clause

All postgraduate research courses must be read in conjunction with the relevant rules and Resolutions of the Senate and Academic Board, including but not limited to:

1. The *University of Sydney (Amendment Act) Rule 1999 (as amended)*.
2. The *University of Sydney (Doctor of Philosophy (PhD)) Rule 2004*.
3. The Resolutions of the Academic Board relating to the Examination Procedure for the Degree of Doctor of Philosophy.
4. The relevant Faculty Resolutions.

Disclaimers

1. The material in this handbook may contain references to persons who are deceased.
2. The information in this handbook was as accurate as possible at the time of printing. The University reserves the right to make changes to the information in this handbook, including prerequisites for units of study, as appropriate. Students should check with faculties for current, detailed information regarding units of study.

Price

The price of this handbook can be found on the back cover and is in Australian dollars. The price includes GST.

Handbook purchases

You can purchase handbooks at the Student Centre, or online at www.usyd.edu.au/handbooks

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Digital and Print Media Office
Website: www.usyd.edu.au/digital_print_media

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SOS Print and Media

Handbook enquiries

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Important dates

University semester and vacation dates for 2009

Summer/Winter School lectures	Dates
Summer School – December program	Begins: Monday 8 December
Summer School – main program	Begins: Monday 5 January
Summer School – late January program	Begins: Monday 19 January
Winter School – main program	Monday 29 June to Saturday 25 July
Semester One	Dates
International student orientation (Semester 1) – STABEX	Monday 16 February and Tuesday 17 February
International student orientation (Semester 1) – full degree	Wednesday 18 February and Thursday 19 February
Lectures begin	Monday 2 March
AVCC Common Week/non-teaching Easter period	Friday 10 April to Friday 17 April
International application deadline (Semester 2) *	Thursday 30 April *
Last day of lectures	Friday 5 June
Study vacation	Monday 8 June to Friday 12 June
Examination period	Monday 15 June to Saturday 27 June
Semester ends	Saturday 27 June
AVCC Common Week/non-teaching period	Monday 6 July to Friday 10 July
Semester Two	Dates
International student orientation (Semester Two) – STABEX	Monday 20 July and Tuesday 21 July
International student orientation (Semester Two) – full degree	Wednesday 22 July and Thursday 23 July
Lectures begin	Monday 27 July
AVCC Common Week/non-teaching period	Monday 28 September to Friday 2 October
Last day of lectures	Friday 30 October
International application deadline (for Semester 1, 2010) *	Saturday 31 October *
Study vacation	Monday 2 November to Friday 6 November
Examination period	Monday 9 November to Saturday 21 November
Semester ends	Saturday 21 November

* Except for the faculties of Dentistry, Medicine and the Master of Pharmacy course. See www.acer.edu.au for details.

Last dates for withdrawal or discontinuation for 2009

Semester 1 – units of study	Dates
Last day to add a unit	Friday 13 March
Last day for withdrawal	Tuesday 31 March
Last day to discontinue without failure (DNF)	Friday 24 April
Last to discontinue (Discontinued – Fail)	Friday 5 June
Semester 2 – units of study	Dates
Last day to add a unit	Friday 7 August
Last day for withdrawal	Monday 31 August
Last day to discontinue without a failure (DNF)	Friday 11 September
Last day to discontinue (Discontinued – Fail)	Friday 30 October
Last day to withdraw from a non-standard unit of study	Census date of the unit, which cannot be earlier than 20 per cent of the way through the period of time during which the unit is undertaken.
Public holidays	Dates
Australia Day	Monday 26 January
Good Friday	Friday 10 April
Easter Monday	Monday 13 April
Anzac Day	Monday 27 April
Queen's Birthday	Monday 8 June
Labour Day	Monday 5 October



How to use this handbook

What is a handbook?

The handbook is an official publication and an essential guide for every student who studies at the University of Sydney. It is an important source of enrolment information. It can also help you with more than just planning your course of study.

As a student at the University of Sydney you need to be aware of course structures and content, who your lecturers are, as well as examination procedures.

You should also become familiar with University policies and faculty rules and regulations. The handbook will supply a lot of this information.

It will also point you to places and people around the University who can help with enquiries about library loans, child care, fees, casual employment, places to eat and stay, support groups and much more.

What new students need to know

- terminology used for courses and programs of study
- semester dates and examination periods
- important contact details
- how to plan your study program
- rules and policies on assessment, satisfactory progression, honours, and so on
- what University services are available and where to find them
- how to get around campus.

At the beginning of many of these chapters there will be explanations to help you proceed further.

Where to find information

Course terminology

University terminology, such as 'credit point', 'unit of study', and 'WAM', can be found in the **Abbreviations** and **Glossary** chapters, at the back of this handbook.

Dates

The start and finish dates of semester can be found in the front section of the handbook. Summer and Winter School dates are in the General University section at the back of the handbook.

Contents and index

The comprehensive **Contents** section at the front of the handbook explains the details you'll find within each chapter.

You'll find information like:

- how and where to contact faculty staff
- how to select your units of study and programs
- a list of degrees
- detailed information on all units of study, classified by unit identifiers (a four-alpha, four-digit code and a title)
- electives and streams
- scholarships and prizes
- information specific to faculties.

The **Index** lists units of study only. It allows you to check every reference which refers to your unit of study within the handbook. It is divided into two parts, and lists units of study alphabetically (by course name) and again by course code (alphanumeric).

Colour-coded sections

- Ivory – for undergraduate courses
- Blue – for postgraduate courses

Faculty rules and regulations

Faculty resolutions are the rules and regulations pertaining to a specific faculty. They can generally be found in their own chapter, or next to the relevant units of study.

These should be read along with the University's own *Coursework Rule 2000 (as amended)* which can be found in the **Essential information for students** chapter near the end of this book. Together they outline the agreement between student and faculty, and student and University.

General University information

This is information about the University in general, rather than information specific to the faculty. This information is at the back of the book and includes, among other things:

- University terminology and abbreviations
- campus maps to help you find your way around
- Summer and Winter School information
- international student information
- student services.

Course planner

You might like to plot the course of your degree as you read about your units of study. Use the planner at the back of this handbook.

Timetables

For information about personal timetables, centrally timetabled units of study, and venue bookings, see:

www.usyd.edu.au/studentcentre/timetabling.shtml

For the session calendar, see:

<http://web.timetable.usyd.edu.au/calendar.jsp>

Students with a disability

For accessible (word, pdf and html) versions of this document, see: www.usyd.edu.au/handbooks/handbooks_disability

You can find information on Disability Services in the General University information section of the handbook. The service can provide information regarding assistance with enrolment and course requirement modifications where appropriate.

For details on registering with the service and online resources, see the Disability Services website: www.usyd.edu.au/disability

Handbook updates

The information in this handbook is current at the time of publication. Further information on University policies, such as plagiarism and special consideration, can be found on the University's website, along with official handbook amendments.

www.usyd.edu.au/handbooks/handbooks_admin/updates2009

Feedback regarding this handbook is welcome.

info@publications.usyd.edu.au



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Welcome from the Dean



Welcome to Australia's leading centre for pharmacy education and research.

I welcome you to the Faculty of Pharmacy, a place where students and researchers are among the best in Australia and the world. Aspiring to be the best – and to achieve excellence in their learning, teaching and research – they work hard and contribute to all aspects of the faculty, continually adding new skills and experiences to their personal achievements.

The faculty offers one of the leading pharmacy education programs in Australia with an enviable national and international reputation. The faculty's innovative teaching, clinical and experiential placements and voluntary business skills programs will provide you with a well-rounded, professionally relevant pharmacy degree, putting you in high demand with employers.

Like many other students who care about people's health and wellbeing, I decided to train as a pharmacist to give me an opportunity to help those needing support in times of illness. I am very proud to be a pharmacist, and with a Masters and PhD from this university I feel privileged to lead the Faculty of Pharmacy in my role as Dean.

Life as a student in the Faculty of Pharmacy

As a student here you will be trained and mentored by internationally renowned academics and will have access to brand new teaching laboratories that have been developed using world's best practice standards.

I encourage you to participate fully in academic and other activities within the faculty and University to get the most out of your time here. A great place to start is our student association for both undergraduate and postgraduate students, Sydney University Pharmacy Association (SUPA).

With a student committee elected by you, SUPA provides a range of academic, professional and social activities. SUPA representatives also interact with faculty staff to provide feedback and formal input into the quality assurance processes of the faculty.

Aspire to be the best with our specialist programs

The **Talented Students Program** is offered to undergraduate students of superior academic ability, recognising their exceptional quality and enabling them to realise their full academic potential. Students are given the opportunity to experience a wide range of activities across all disciplines of the pharmacy profession. Each student is assigned an academic staff mentor who facilitates their involvement in their chosen pharmacy-related activities.

The **Business Undergraduate Mentoring Program (BUMP)** links the faculty's best undergraduate students to industry 'mentors'. Students spend alternate weeks at specialist seminars and visiting the mentor's pharmacy business, gaining valuable experience and knowledge of their mentor's business and entrepreneur skills.

The innovative **Blooms Business Skills Program** is offered to students on a voluntary basis, teaching them business management skills in small seminar groups led by pharmacy owners, all highly successful in their field. The program is very popular with students, especially those who are considering owning a pharmacy in the future.

Summer Vacation Placements provide students with experience in research that might not be available elsewhere in their degree. By gaining an insight into the research process, students are given the opportunity to see if they are interested in pursuing further studies or a career in a research environment.

The **Industry Placements** scheme has been developed to provide opportunities for Year 2 and 3 students to experience pharmaceutical practice in industry. Successful applicants undertake work experience for 4 to 8 weeks within local pharmaceutical or veterinary industries in the Sydney area during the summer vacation break.

New Bachelor of Pharmacy curriculum

The faculty recently updated the undergraduate curriculum to create a more integrated framework of pharmacy modules to reflect contemporary pharmacy practice and improve industry relevance. Students can choose to major in industrial, hospital or rural pharmacy in their final year, and also experience clinical placements and other practical aspects of pharmacy.

Postgraduate coursework and research opportunities

The faculty has a graduate entry **Master of Pharmacy** program designed for those who already have a non-pharmacy degree. This two year degree allows you to register as a pharmacist and give you skills and knowledge equivalent to the Bachelor of Pharmacy.

For those who want to pursue studies in herbal medicines, the faculty has a coursework program leading to a **Master of Herbal Medicines** (Graduate Certificate and Diploma qualifications are also available).

The faculty also offers **Doctor of Philosophy in Pharmacy** for students who wish to focus on a research career or gain the ultimate academic qualification.

What can you do with a pharmacy degree?

Pharmacy graduates have a wide variety of career choices and the ability to make a real difference to their community and to improve the quality of medication usage and the quality of life for their patients.

As a pharmacy graduate you will have the opportunity to register as a pharmacist, to work in the pharmaceutical industry and government agencies, to contribute to research and academia, and work in community and hospital pharmacy including remote and rural communities.

Pharmacists are also leaders, helping to develop the pharmacy profession by serving on boards and committees of state and federal governments, advising the government and key health organisations on critical pharmaceutical issues.

The Faculty of Pharmacy wishes all its students, new and continuing, an inspiring and productive 2009.

Iqbal Ramzan

Dean of the Faculty of Pharmacy



An introduction to Pharmacy

About this handbook

There are three main sections in this handbook:

- **General information about the faculty:** Chapter 1
- **Undergraduate course information:** Chapters 2 and 3
- **Postgraduate course information:** Chapters 4 and 5

Course outlines

The course outline tables set out the required units of study to be undertaken by students in each year of their enrolled course.

Units of study

The units of study section follows the course outline tables in alphabetical order by unit code (for example, BIOL1003).

Details of each unit offered in the current academic year are provided, eg course content, credit points, semester offered and assessment.

FAQs

For more information, see the website www.pharm.usyd.edu.au, where you can find answers to frequently asked questions and comprehensive details about the courses on offer.

A brief history of the Faculty of Pharmacy

Pharmacy at the University of Sydney has an established tradition of excellence in research and scholarship in pharmacy practice and the pharmaceutical sciences. The University's involvement with the education of pharmacists began in 1899. Among the earlier teachers, Horace Finmore, appointed lecturer in 1927, had a strong research background. However, research in Pharmacy essentially commenced in 1949 with the arrival from the Burroughs Wellcome Laboratories of Roland H Thorp as Professor of Pharmacology and Director of Pharmaceutical Studies, followed by Sydney E Wright in 1950.

From the outset, Wright had the vision to develop active research in the Pharmaceutical Sciences and the programs he initiated were carried on by his associates well into the '80s and '90s. Wright was appointed to the first Chair in Pharmaceutical Chemistry in 1960 upon the introduction of the Bachelor of Pharmacy degree course. This marked the beginning of pharmacy degree programs in Australia.

In the 1990s, the undergraduate program underwent a number of changes, including the introduction of courses in pharmacy practice. In 1996, the department began the transition of the three-year undergraduate degree into a four-year program, with the first graduation of four-year graduates occurring in 2001.

In July 1997, the Herbal Medicines Research and Education Centre (HMREC) was established as part of the Department of Pharmacy to undertake and promote high quality research and education on herbal and complementary medicines. On 1 January 2000, the Faculty of Pharmacy was established, becoming the first such faculty in Australia.

Demand for undergraduate places in the Bachelor of Pharmacy degree has always been high, with over 1000 prospective students listing pharmacy as their first preference for 2008. Demand for the two year MPharm professional degree is also very strong. With approximately 160 postgraduate coursework and research students, the faculty has the largest postgraduate pharmacy program in Australia.

Pharmacy has many collaborative research projects: with other faculties of the University, teaching hospitals, research institutes, the pharmaceutical industry, and with the profession itself.

Research in pharmacy covers a broad spectrum of pharmaceutical and clinical sciences ranging from the design, synthesis, testing and mechanism of action of drugs, through studies on methods of drug delivery and on the fate of drugs in humans and animals, to research on the clinical and sociological aspects of pharmacy.

Sydney University Pharmacy Association (SUPA)

SUPA represents the interests of pharmacy students at the University of Sydney. For over 40 years SUPA has been providing services, organising social events and representing our members on campus, and to the wider profession and community.

What does SUPA do?

- SUPA organises over 12 social events each year, including pub crawls, barbeques, trivia nights, cruises, an annual ski trip, annual ball and more.
- We are often asked to help out at pharmacy events in Sydney, and SUPA coordinates the student participation at such events.
- Similarly, we assist the Faculty of Pharmacy at student information days and open days at the University.
- We sell reference books, textbooks, and dispensing equipment required for the course at substantially reduced prices.
- We organise annual second-hand textbook sales, allowing students to easily buy and sell books from other students.
- We provide student input at the Faculty of Pharmacy's Teaching and Learning Committee.
- Our year representatives present student issues and represent students at staff-student liaison meetings.
- We design and sell merchandise, including the fourth-year jersey and our (in)famous annual t-shirt.
- We coordinate the Pharmacy teams in the interfaculty sporting competitions.
- We are the contact point between pharmacy organisations, such as the Pharmaceutical Society of Australia, and students.
- We can provide you with advice and refer you to the right people for any issues or enquiries you might have as a pharmacy student.
- We publish our newsletter *The Mortar* on a regular basis.
- We receive several leading pharmacy publications such as *Pharmacy News* and offer copies to members for free.
- All SUPA members are automatically members of National Australian Pharmacy Students Association (NAPSA), and receive all NAPSA benefits too.
- All members of NAPSA are also members of the International Pharmaceutical Students' Federation (IPSF). This allows our members to gain a national and international perspective, and the associated membership benefits of these larger organisations.
- In conjunction with the PSA Young Pharmacists Group we co-ordinate an annual careers night to educate students on the career opportunities available to them on the completion of their degree.
- We provide support mechanisms to incoming students ensuring transition to university, with a particular focus on the unique challenges that pharmacy students face.

Sarah Sinclair

SUPA President 2008–09

Email: supa@mail.usyd.edu.au



1. About the faculty

General enquiries

Pharmacy and Bank Building, A15
University of Sydney
NSW 2006 Australia
Phone: +61 2 9351 2320
Fax: +61 2 9351 4391
Email: enquiries@pharm.usyd.edu.au
Website: www.pharm.usyd.edu.au

Information and advice

Student Services Office

Main Office, Pharmacy and Bank Building, A15
Open Monday to Friday, 9am to 5pm
Phone: +61 2 9351 2320 (main line)
Fax: +61 2 9351 4391

Undergraduate enquiries

Phone: +61 2 9036 9293
Email: ug@pharm.usyd.edu.au

Postgraduate enquiries

Phone: +61 2 9036 9552
Email: pg@pharm.usyd.edu.au

Student Services will direct your enquiry to the relevant staff member.

Dean

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Faculty Manager

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Herbal Medicines Research and Education Centre

Room N411
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Pharmacy Practice Foundation

Pharmacy Alumni Association

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Joint appointments – Teacher Practitioners

Jo-Anne Angelides, BPharm
Susan Ashcroft, BPharm *Lond.* MPharm (Clinical), AACPA
Ben J Basger, BPharm MSc DipHPharm, MPS
Melissa Chapman, BPharm
Khaled Eddie, BPharm MSc *UTS*
Leanne Hargraves, BPharm
Jane Ludington, BPharm Dip Hosp Pharm MHPE *UNSW*
Philippa Manley, BPharm (Hons), MPS
Judi Marden, BPharm
Loretta Morris, BPharm
Kylia Patterson, BPharm Nott., AACPA
Michael Peck, BPharm GradDip *Hobart*
Nishtala Prasad, BPharm MPharm *Bangalore*, Dip (Clin Pharm)
Carlene Smith, BPharm, MPS, AACPA

Pharmacy Education Unit

Director

Greg Ryan, MA PhD

Educational Designer

Jim Woulfe, BA *Macq.* MEd *W'gong*

Administrative staff

Administration Manager Operations

Jamie Gabriel BA (Hons)

Communications and Marketing Manager

Holly Bax-Norman, BSc *Birmingham* MSc PhD *Manchester* Dip Marketing

Office Manager (PPF)

Andrea Thompson

Administrative Officers

Narelle Da Costa
Susan Putnam, Dip Mgmt
Sylvia Tropiano, BA DipEd GradDip(AppHist) *UTS*
Weining (Vinnie) Xue, BEng *ECUST*, MSc *UNSW*, MSc Mgmt *UTS*

Administrative Assistants

Carmen Barr
Suzanne Da Costa
Cristine Janz, Assoc Dip (General Studies) NAATI (Translator)
Derrick Kwan
Janice Le, BA *UNSW*
Eleanor Luntao, BA *San Carlos*
Justine Maguire
Annette Silva, BA *Macq.*
Julna Storey, BSc *Liaoning* MA *UNSW*

Technical staff

Technical Services Manager

Paul Jones, BScAppSci

Professional Officers

Fred TK Wong, MSc FACBS
Bruce N Tattam

Senior Technical Officers

Bill Rae
Jiamin You, BSc *Shanghai* MPharmSc

Technical Officers

Padmaja Dhanvate, MPharm
Anthony Emmanouel, Dip IT
Christopher J Hick
Robert Koryzma
Maung Maung Soe, BE MSc
Andrew Wood, BSc *UNSW* DipEd *C.Sturt* PhD *W'gong*

Assistant

Jie Li

Attendant

Jay O'Sullivan

Note: Details in this chapter correct at 30 September 2008.

2. Undergraduate degree requirements

Introduction

The information in this chapter is in summary form and is subordinate to the provisions of the degree Resolutions, which can be found in Chapter 3.

Results

For all units of study in the Bachelor of Pharmacy degree, the following mark ranges apply:

Abrev	Grade	Mark
HD	High Distinction	85–100
D	Distinction	75–84
CR	Credit	65–74
P	Pass	50–64
R	Satisfied requirements	
F	Fail	Below 50
AF	Absent Fail	

Honours

The following Honours grades apply from 2008. A grade of Honours is determined by the HWAM and final mark in Advanced units of study.

Grade		HWAM	Minimum average mark in Advanced units
H1M	First class Honours and University Medal	85	90
H1	First class Honours	75	85
H21	Second class Honours, Division 1	70	80
H22	Second class Honours, Division 2	65	75

Bachelor of Pharmacy

Summary of requirements

The degree is a full-time four-year course with progression towards the degree by the accumulation of credit points. The requirements are set out in the Senate Resolutions, which should be read by all intending candidates (see Chapter 3).

The degree may be awarded at the Pass or Honours level.

To satisfy the requirement for the degree, candidates must gain a minimum of 192 credit points by completing the units of study prescribed for the degree.

New curriculum

A new Bachelor of Pharmacy curriculum was introduced into first year in 2008, with second year commencing in 2009.

The new curriculum allows students to undertake the study of a Major in their final year of the program. Majors are offered in Rural Pharmacy, Industrial Pharmacy and International Pharmacy. These majors allow students to participate in a range of activities including extended placements in rural or industrial environments or to participate in an exchange program.

Students who commenced prior to 2008 will continue with the current curriculum. Years 3 and 4 of the new curriculum will be introduced progressively from 2010 onwards. Table 1 refers to the new units of study for Years 1 and 2, however units of study for Years 3 and 4 are listed for students enrolled prior to 2008.

Assumed knowledge

It should be noted that most of the first year units of study will be taught on the assumption that students have reached the standard of assumed knowledge specified in Table 1.

Prerequisites and corequisites

To be eligible to enrol in Second Year, Third Year and Fourth Year units of study, students must have completed the prerequisite unit(s) of study. Any corequisite unit(s) of study not previously completed must be taken concurrently (see Table 1).

Registration requirements for pharmacists

A student who intends to qualify to be registered as a pharmacist under the Pharmacy Act 1964 is first required to qualify for the degree of Bachelor of Pharmacy. In addition he/she is required to serve not less than 2000 hours as an assistant to a registered pharmacist in a pharmacy within the Commonwealth of Australia. This period must be served following the successful completion of the degree.

Further details concerning the requirements for registration can be obtained from the Pharmacy Board of New South Wales:

3rd Floor, 28 Foveaux Street
 Surry Hills
 NSW 2010 Australia
 Phone: +61 2 9281 7736
 Fax: +61 2 9281 2924

Postal Address:
 Locked Bag 2
 Haymarket
 NSW 1240 Australia

Degree resolutions

See Chapter 3.



Undergraduate units of study

Table 1: Bachelor of Pharmacy pass degree and honours degree

Unit of study	Credit points	A: Assumed knowledge P: Prerequisites C: Corequisites N: Prohibition	Session
First Year			
BIOL1003 Human Biology	6	A HSC 2-unit Biology. Students who have not taken HSC biology are strongly advised to take the Biology Bridging Course in February. N BIOL1903, EDUH1016. <i>It is recommended that BIOL (1001 or 1911) be taken concurrently with this unit of study.</i>	Semester 1 Summer Main
CHEM1611 Chemistry A (Pharmacy)	6	A HSC Chemistry and Mathematics <i>Note: Department permission required for enrolment</i> <i>Students must have special permission from the Faculty of Pharmacy to enrol in this Unit of Study.</i>	Semester 1
PHAR1811 Foundations of Pharmacy	6	A HSC Chemistry	Semester 1
PHAR1812 Basic Pharmaceutical Sciences	6	A HSC Chemistry C PHAR1811, CHEM1611	Semester 1
CHEM1612 Chemistry B (Pharmacy)	6	C CHEM1611 Chemistry A (Pharmacy) <i>Note: Department permission required for enrolment</i> <i>Students must have special permission from the Faculty of Pharmacy to enrol in this Unit of Study.</i>	Semester 2
MBLG1001 Molecular Biology and Genetics (Intro)	6	A 6 credit points of Junior Biology and 6 cp of Junior Chemistry N AGCH2001, BCHM2001, BCHM2101, BCHM2901, MBLG2101, MBLG2901, MBLG2001, MBLG2111, MBLG2771, MBLG2871, MBLG1901	Semester 2
PHAR1821 Social Pharmacy	6	C PHAR1811	Semester 2
PHAR1822 Physical Pharmaceutics	6	A HSC Chemistry and Mathematics C PHAR1812	Semester 2
Second Year			
PHAR2811 Drug Discovery and Design A	6	P CHEM1611, CHEM1612, PHAR1811, PHAR1812, MBLG1001 C PHSI2601	Semester 1
PHAR2812 Microbiology and Infection	6	P BIOL1003, PHAR1811, PHAR1812, MBLG1001	Semester 1
PHAR2813 Therapeutic Principles	6	P CHEM1611, CHEM1612, BIOL1003, MBLG1001, PHAR1812, PHAR1822 C PHSI2601	Semester 1
PHSI2601 Physiology for Pharmacy	6	P CHEM1611 and CHEM1612 and (BIOL1001 or BIOL1101 or BIOL1901 or BIOL1003 or BIOL1903) and MBLG1001	Semester 1
PCOL2605 Pharmacology for Pharmacy	6	P CHEM1611 and CHEM1612 and (BIOL1003 or BIOL1903) and MBLG1001 C PHSI2601	Semester 2
PHAR2821 Drug Discovery and Design B	6	C PHAR2811 and PCOL2605	Semester 2
PHAR2822 Pharmacy Practice	6	P PHAR1811 and PHAR1821 C PHSI2601 and PCOL2605	Semester 2
PHAR2823 Formulating and Dispensing	6	P CHEM1611, CHEM1612, PHAR1812, PHAR1822 C PHAR2812	Semester 2
Third Year			
PCOL3605 Pharmacology 3 (Pharmacy)	6	P All first year units; BCHM2613 or (BCHM2611 & BCHM2612); PSPC2601 or (PCOL2603 and PHSI2604); PSPC2602 or (PCOL2604 and PHSI2605).	Semester 1
PHAR3609 Medicinal Chemistry 3A	6	P A pass in all first year units of study; PHAR2609; PHAR2618 or PHAR2610 or PHAR2620	Semester 1
PHAR3613 Pharmacy Practice 3A	6	P All first year units of study; PSPC2601 or (PCOL2603 and PHSI2604); PSPC2602 or (PCOL2604 and PHSI2605); PHAR2617 or (PHAR2611 and PHAR2612) C PCOL3605 or (PCOL3603 and PCOL3604)	Semester 1
PHAR3630 Pharmacokinetics and Pharmacogenetics	6	P All first year units of study; either PHAR2616 or (PHAR2613 and (PHAR2614 or PHAR2624)); either PSPC2601 or (PCOL2603 and PHSI2604); either PSPC2602 or (PCOL2604 and PHSI2605) C Either PCOL3605 or (PCOL3603 and PCOL3604)	Semester 1
PHAR3602 Dispensing	6	P A pass in all first year units of study; either PHAR2615 or (MICR2605 and (PHAR2607 or PHAR2627)); either PHAR2616 or (PHAR2613 and (PHAR2614 or PHAR2624)); either PHAR2617 or (PHAR2611 and PHAR2612) C PHAR3631	Semester 2
PHAR3610 Medicinal Chemistry 3B	6	P All first year units of study; PHAR2609; PHAR2618 or PHAR2610 or PHAR2620. C PHAR3609	Semester 2
PHAR3615 Pharmacy Practice 3B	6	P All first year units of study. C PHAR3613; PCOL3605 or (PCOL3603 and PCOL3604)	Semester 2
PHAR3631 Physical Pharmaceutics and Formulation B	6	P All first year units of study; either PHAR2615 or (MICR2605 and (PHAR2607 or PHAR2627)); either PHAR2616 or (PHAR2613 and (PHAR2614 or PHAR2624)) C PHAR3630	Semester 2
Fourth Year			
PHAR4618 Integrated Pharmacy Practice	12	P A pass in all second year units of study; PHAR3609 or PHAR3629; PHAR3610; either PHAR3630 or (PHAR3611 and PHAR3612); either PHAR3613 or PHAR3623; PHAR3614 or PHAR3615 or PHAR3624 or PHAR3627; either PCOL3605 or (PCOL3603 and PCOL3604)	Semester 1

Unit of study	Credit points	A: Assumed knowledge P: Prerequisites C: Corequisites N: Prohibition	Session
PHAR4619 Drug Development & New Drug Technologies	6	P A pass in all Second Year units of study; either PHAR3630 or (PHAR3611 and PHAR3612); either PHAR3631 or (PHAR3607, PHAR3608, PHAR2616 or PHAR2613 and (PHAR2614 or PHAR2624)); PHAR3609 or PHAR3629; PHAR3610 or PHAR3620; either PCOL3605 or (PCOL3603 and PCOL3604).	Semester 1
PHAR4620 Integrated Dispensing	6	P A pass in all second year units of study; either PHAR3601 or PHAR3602; either PHAR3613 or PHAR3623; either PHAR3614 or PHAR3615 or PHAR3624 or PHAR3627.	Semester 1
PHAR4616 Pharmacotherapeutics in Practice	6	P A pass in all second year units of study. C PHAR4618	Semester 2
PHAR4621 Clinical Practice	12	P A pass in all second year units of study. C PHAR4618	Semester 2
PHAR4622 Pharmacy Management	6	P A pass in all second year units of study.	Semester 2
Fourth Year Honours			
PHAR4618 Integrated Pharmacy Practice	12	P A pass in all second year units of study; PHAR3609 or PHAR3629; PHAR3610; either PHAR3630 or (PHAR3611 and PHAR3612); either PHAR3613 or PHAR3623; PHAR3614 or PHAR3615 or PHAR3624 or PHAR3627; either PCOL3605 or (PCOL3603 and PCOL3604)	Semester 1
PHAR4620 Integrated Dispensing	6	P A pass in all second year units of study; either PHAR3601 or PHAR3602; either PHAR3613 or PHAR3623; either PHAR3614 or PHAR3615 or PHAR3624 or PHAR3627.	Semester 1
PHAR4616 Pharmacotherapeutics in Practice	6	P A pass in all second year units of study. C PHAR4618	Semester 2
plus one of the following units of study from both Semester 1 and Semester 2			
PCOL4909 Pharmacology Advanced 4A (Pharmacy)	6	Note: Department permission required for enrolment Enrolment is by invitation only.	Semester 1
PHAR4927 Pharmaceutics Advanced 4A	6	Note: Department permission required for enrolment Enrolment is by invitation only.	Semester 1
PHAR4928 Pharmaceutical Chemistry Advanced 4A	6	Note: Department permission required for enrolment Enrolment is by invitation only.	Semester 1
PHAR4929 Pharmacy Practice Advanced 4A	6	Note: Department permission required for enrolment Enrolment is by invitation only.	Semester 1
PCOL4910 Pharmacology Advanced 4B (Pharmacy)	18	P A credit average in first semester marks, including PCOL4909 C PHAR4616 Note: Department permission required for enrolment	Semester 2
PHAR4930 Pharmaceutics Advanced 4B	18	P A credit average in first semester marks, including PHAR4927 C PHAR4616 Note: Department permission required for enrolment	Semester 2
PHAR4931 Pharmaceutical Chemistry Advanced 4B	18	P A credit average in first semester marks, including PHAR4928 C PHAR4616 Note: Department permission required for enrolment	Semester 2
PHAR4932 Pharmacy Practice Advanced 4B	18	P A credit average in first semester marks, including PHAR4929 C PHAR4616 Note: Department permission required for enrolment	Semester 2

Units of study

BIOL1003

Human Biology

Credit points: 6 **Session:** Semester 1, Summer Main **Classes:** Two 1 hour lectures per week (3 lectures in weeks 1 and 11). One 3 hour practical class and 6-9 hours HOnline work every two weeks covering online practical activities, prework and homework. **Prohibitions:** BIOL1903, EDUH1016. **Assumed knowledge:** HSC 2-unit Biology. Students who have not taken HSC biology are strongly advised to take the Biology Bridging Course in February. **Assessment:** One 2.5 hour exam, assignment, poster and quizzes.

Note: It is recommended that BIOL (1001 or 1911) be taken concurrently with this unit of study.

Associated degrees: B A, B A (Adv)(Hons), M B B S, B Agr Ec, B Com, M B, B S, B E, B Hlth Sci, B Hlth Sci, M C V S, B Hlth Sci, M H I, B Hlth Sci, M N, B Hlth Sci, M Rehab Cing, B Med Sc, B N, B N (I A H), B N, B A, B N, B Sc, B O H, B Pharm, B Pharm (Rural), B Res Ec, B Sc.

This Unit of Study has three main components: lectures, practicals and HOnline activities. The unit of study provides an introduction to human evolution and ecology, cell biology, physiology and anatomy, through lectures and practical work. The unit of study includes human nutrition, distribution of essential requirements to and from cells, control of body functions and defence mechanisms. After discussion of reproduction and development, it concludes with modern studies and research prospects in biotechnology and human genetics.

This unit of study, together with BIOL (1001 or 1911 or 1002 or 1902), or MBLG (1001 or 1901), provides entry to Intermediate units of study in Biology, but the contents of BIOL (1002 or 1902) is assumed knowledge for BIOL (2011 or 2012) and PLNT 2003, and students

entering these units with BIOL (1003 or 1903) will need to do some preparatory reading.

Textbooks

Seeley, RR et al. 2005. Essentials of Anatomy and Physiology. 5th ed., McGraw Hill.

Mader, Sylvia. Human Biology 8th edition. McGraw Hill, (Chapters 19, 24, 26)

CHEM1611

Chemistry A (Pharmacy)

Credit points: 6 **Teacher/Coordinator:** See School of Chemistry for list of staff **Session:** Semester 1 **Classes:** Three 1 hour lectures and one 1 hour tutorial per week; one 3 hour practical per week for 10 weeks. **Assumed knowledge:** HSC Chemistry and Mathematics **Assessment:** A theory examination is held at the end of the semester. Students are advised at the beginning of the semester about other factors contributing to assessment in the unit of study.

Note: Department permission required for enrolment. Note: Students must have special permission from the Faculty of Pharmacy to enrol in this Unit of Study.

Associated degrees: B Pharm, B Pharm (Rural), UG Study Abroad Program.

Chemistry provides the basis for understanding molecular structures and processes, essential knowledge for many later year Pharmacy units of study. Lecture topics include some fundamental concepts, atomic theory, states and properties of matter, equations and stoichiometry, introduction to organic chemistry, nomenclature, aliphatic chemistry, aromatic chemistry, heterocyclic compounds, isomerism, stereoisomerism, reaction mechanisms, biomolecules, amino acids and peptides, carbohydrates, general acid-base theory, atomic structure, chemical bonding. Practical work is designed to

2. Undergraduate degree requirements

enhance confidence and develop skills in the handling and manipulation of chemicals and in the observation and processing of experimental results.

Special preparative studies: Students wishing to enrol in CHEM1611 who do not have the assumed chemical knowledge are advised to consult the School of Chemistry for information about a bridging course.

Textbooks

Students should obtain a booklist from the School of Chemistry during the orientation period.

CHEM1612

Chemistry B (Pharmacy)

Credit points: 6 **Teacher/Coordinator:** See School of Chemistry for list of staff **Session:** Semester 2 **Classes:** Three 1 hour lectures and one 1 hour tutorial per week; one 3 hour practical per week for 10 weeks. **Corequisites:** CHEM1611 Chemistry A (Pharmacy) **Assessment:** A theory examination is held at the end of the semester. Students are advised at the beginning of the semester about other factors contributing to assessment in the unit of study.

Note: Department permission required for enrolment. Note: Students must have special permission from the Faculty of Pharmacy to enrol in this Unit of Study.

Associated degrees: B Pharm, B Pharm (Rural), UG Study Abroad Program.

Chemistry provides the basis for understanding molecular structures and processes, essential knowledge for many later year Pharmacy units of study. Lecture topics include redox reactions, electrochemistry, introduction to colloids and surface chemistry, the biological periodic table, radiochemistry, chemical energetics, equilibrium theory, solution theory. Practical work is designed to enhance confidence and develop skills in the handling and manipulation of chemicals and in the observation and processing of experimental results.

Textbooks

Students should obtain a booklist from the School of Chemistry during the orientation period.

MBLG1001

Molecular Biology and Genetics (Intro)

Credit points: 6 **Teacher/Coordinator:** Dr Dale Hancock **Session:** Semester 2 **Classes:** Two 1 hour lectures per week; one 1 hour tutorial and one 4 hour practical per fortnight. **Prohibitions:** AGCH2001, BCHM2001, BCHM2101, BCHM2901, MBLG2101, MBLG2901, MBLG2001, MBLG2111, MBLG2771, MBLG2871, MBLG1901 **Assumed knowledge:** 6 credit points of Junior Biology and 6 cp of Junior Chemistry **Assessment:** One 2.5 hour exam, in-semester skills test and assignments

Associated degrees: B A, B A (Adv)(Hons), M B B S, B App Sc (Ex & Sp Sc), B Sc (Nutr), B Com, M B, B S, B E, B Med Sc, B Pharm, B Sc, B Sc (Bioinformatics), B Sc (Environmental), B Sc (Marine Science), B Sc (Molecular Biology & Genetics), B Sc (Molecular Biotechnology), B Sc (Nutrit).

The lectures in this unit of study introduce the "Central Dogma" of molecular biology and genetics -i.e., the molecular basis of life. The course begins with the information macro-molecules in living cells: DNA, RNA and protein, and explores how their structures allow them to fulfill their various biological roles. This is followed by a review of how DNA is organised into genes leading to discussion of replication and gene expression (transcription and translation). The unit concludes with an introduction to the techniques of molecular biology and, in particular, how these techniques have led to an explosion of interest and research in Molecular Biology. The practical component complements the lectures by exposing students to experiments which explore the measurement of enzyme activity, the isolation of DNA and the 'cutting' of DNA using restriction enzymes. However, a key aim of the practicals is to give students higher level generic skills in computing, communication, criticism, data analysis/evaluation and experimental design.

Textbooks

Clarke, D. Molecular Biology. Elsevier 2005.

PCOL2605

Pharmacology for Pharmacy

Credit points: 6 **Teacher/Coordinator:** Dr Kellie Charles **Session:** Semester 2 **Classes:** 4 lect/wk, 13 hours prac/workshop/tutorial **Prerequisites:** CHEM1611 and CHEM1612 and (BIOL1003 or BIOL1903) and MBLG1001 **Corequisites:** PHSI2601 **Assessment:** 1x2hr exam (70%), continuous assessment (lab reports or assignments) (30%)

Associated degrees: B Pharm, UG Study Abroad Program.

This unit of study provides a basic understanding of drug actions related to physiological and pathological functions. It covers areas of drug-receptor interactions, pharmacodynamics and drug treatment of various physiological systems (e.g. autonomic nervous system, cardiovascular, respiratory and endocrine), management of pain and complementary drug therapy.

Textbooks

Rang HP, et al, Pharmacology (6th Ed) Churchill Livingstone, 2007

PCOL3605

Pharmacology 3 (Pharmacy)

Credit points: 6 **Teacher/Coordinator:** Dr H Lloyd **Session:** Semester 1 **Classes:** Four 1 hour lectures per week for 7 weeks; Three 1 hour lectures per week for 6 weeks, and 18 hours of practicals/tutorials per semester. **Prerequisites:** All first year units; BCHM2613 or (BCHM2611 & BCHM2612); PSPC2601 or (PCOL2603 and PHSI2604); PSPC2602 or (PCOL2604 and PHSI2605). **Assessment:** One 2 hr exam (70 per cent), one 1 hr mid-semester test (20 per cent), continuous assessment (10 per cent).

Associated degrees: B Pharm, B Pharm (Rural), UG Study Abroad Program.

This unit of study builds upon the understanding of drug actions related to physiological and pathological functions gained in PSPC2601 and PSPC2602, as well as the therapeutic applications of drugs based on their underlying pharmacology. It covers analgesics and anti-inflammatory agents, respiratory and gastro-intestinal drugs, drugs affecting nutritional and metabolic function, chemotherapy for infectious diseases and cancer, immunosuppressants, drugs of abuse, drugs affecting blood, anaesthetics, hypnotics, sedatives, anticonvulsants, anxiolytics, antidepressants, antipsychotics, drugs used to treat motor disturbances and dementias, and clinical toxicology (adverse drug reactions and drug interactions, drug overdose and poisoning, and development and introduction of new drugs).

Textbooks

Rang HP et al. Pharmacology (5th ed). Churchill Livingstone, 2003.

Study aids

Neal MJ. Medical Pharmacology at a Glance (4th ed). Blackwell Science, 2002.

Reference books

Cooper JR et al. The Biochemical Basis of Neuropharmacology (8th ed). Oxford, 2003.

Hardman JG et al (eds). Goodman and Gilman's The Pharmacological Basis of Therapeutics (10th ed). McGraw-Hill, 2001.

PCOL4909

Pharmacology Advanced 4A (Pharmacy)

Credit points: 6 **Teacher/Coordinator:** Dr J Henderson **Session:** Semester 1 **Classes:** Seminar, tutorial/workshop/practical class, project work per week. **Assessment:** Assignments, oral presentations, written reports, exam.

Note: Department permission required for enrolment. Note: Enrolment is by invitation only.

Associated degrees: B Pharm.

The aim of this unit of study is to develop students' awareness and understanding of the pivotal role of experimental pharmacology in the development of drugs, and to develop their ability to conduct experimental investigations in accordance with established standards of scientific methodology and critical analysis. The experimental pharmacological aspects of the development of selected drug classes is studied by means of enquiry-based learning approaches utilising seminars, workshops, library research and written assignments. Experience in a range of pharmacological experimental techniques is gained in supervised laboratory practical classes by completing a series of experimental pharmacological investigations into the actions of selected classes of drugs whose activity is well established; experience in the practical aspects of experiment design, analysis, interpretation and reporting of pharmacological investigations is also gained. Students will also commence a pharmacology research project to be completed in PCOL4910 Pharmacology Advanced 4B (Pharmacy), by undertaking preliminary laboratory work and preparing a literature review and research proposal for both oral and written presentation.

PCOL4910**Pharmacology Advanced 4B (Pharmacy)**

Credit points: 18 **Teacher/Coordinator:** Dr J Henderson **Session:** Semester 2 **Classes:** Seminar, project per week. **Prerequisites:** A credit average in first semester marks, including PCOL4909 **Corequisites:** PHAR4616 **Assessment:** Oral presentation, written dissertation, laboratory placement work.

Note: Department permission required for enrolment.

Associated degrees: B Pharm.

The aim of this unit of study is to develop students' research skills and understanding of how experimental pharmacology influences drug development. Students will conduct experimental investigations in accordance with established standards of scientific methodology and develop their critical analytical thinking and writing. In this unit of study, each student will gain experience in some advanced experimental pharmacological research techniques, through the undertaking of an individual research project under the direct supervision of academic and research staff in the Department, and the preparation of an oral presentation and a written dissertation on the experimental project work. The experimental project work is largely undertaken in Semester 2, during placement in Department research laboratories, following initial preparation in the Semester 1 unit of study, PCOL4909 Pharmacology Advanced 4A (Pharmacy), in which preliminary literature reviews and research proposals were completed.

PHAR1811**Foundations of Pharmacy**

Credit points: 6 **Teacher/Coordinator:** E Sainsbury **Session:** Semester 1 **Classes:** 3 x lectures/wk, 1 x 2hr workshop/wk, 1 x 2hr workshop/fortnight **Assumed knowledge:** HSC Chemistry **Assessment:** Individual assignments (20%), group reports (30%) and final exam (50%) **Practical field work:** One class will be held in the dispensing laboratory and 4 hours of fieldwork in a community pharmacy are required

Associated degrees: B Pharm, UG Study Abroad Program.

Foundations of Pharmacy is a broad introduction to the discipline of pharmacy and the roles that pharmacists play in health care as well as the ideas, issues, skills and knowledge base required of a professional pharmacist. A number of topics are introduced but not covered in depth; they will be further developed in subsequent units of study and later years of the degree. Specific skills in research, critical thinking, writing and presenting are developed in the context of activities designed to orient students to their future profession. The intent is that students begin to think and behave as future members of the profession of pharmacy, and reflect upon the attitudes and beliefs that will shape their practice.

PHAR1812**Basic Pharmaceutical Sciences**

Credit points: 6 **Teacher/Coordinator:** Dr L Munoz **Session:** Semester 1 **Classes:** 4 x lectures/wk, 1 x 2hr tutorial/wk **Corequisites:** PHAR1811, CHEM1611 **Assumed knowledge:** HSC Chemistry **Assessment:** Written exam (50%), group assignments (20%), quizzes (30%) and tutorial assessments

Associated degrees: B Pharm, UG Study Abroad Program.

Basic Pharmaceutical Sciences provides an introduction to principles which will be expanded and applied in later years. Topics covered include: drugs from plants, dosage forms, intermolecular forces in liquids and solids, dissolution and solubility, partitioning and drugs as acids and bases. This unit also includes a mathematical component which is required for other units of study. Small group work in workshop sessions will complement and support the learning of material introduced in lectures.

Textbooks

Basic Pharmaceutical Science Resource Book

PHAR1821**Social Pharmacy**

Credit points: 6 **Teacher/Coordinator:** Dr L Smith **Session:** Semester 2 **Classes:** 3 x 1hr lectures/wk, 1 x 2hr workshop/wk **Corequisites:** PHAR1811 **Assessment:** Exam (40%), reports (50%), presentation and participation (10%) **Practical field work:** Teamwork project and interview

Associated degrees: B Pharm, UG Study Abroad Program.

This unit of study consists of 2 major streams, social pharmacy and interprofessional practice. Social pharmacy is designed to provide a broad perspective of patient health and illness, and encourage a view of the patient as a whole person. Topics include self-regulation, pain, chronic illness and support networks. The emphasis will be on the psychosocial processes that underpin patient behaviour. Interprofessional practice provides an introduction to teamwork and the working relationships that pharmacists have with other healthcare professionals.

Textbooks

Smith, L. (preparer) (2008) PHAR1821 Social Pharmacy

PHAR1822**Physical Pharmaceutics**

Credit points: 6 **Teacher/Coordinator:** Dr P Young **Session:** Semester 2 **Classes:** 3 x lectures/wk, 8 x maths lectures, 5 x 1hr maths tutorials, classes will be arranged as needed **Corequisites:** PHAR1812 **Assumed knowledge:** HSC Chemistry and Mathematics **Assessment:** Exam (70%), minor exam (15%), prac/labs (15%) **Practical field work:** 6 x laboratory sessions

Associated degrees: B Pharm, UG Study Abroad Program.

This unit of study aims to facilitate an understanding of the physicochemical principles, design, formulation, manufacture and evaluation of pharmaceutical dose forms. The unit starts with an introduction to different dose forms and the importance of route of administration. The formulation of liquid dose forms including parenteral, nasal, ophthalmic and aural products is discussed. Related topics such as diffusion and dissolution of drugs, drug solubilisation, surface and interfacial tension, surface active materials, micelle formation, pharmaceutical complexes and drug-packaging interactions will be covered. Fundamentals of the stability of pharmaceuticals are also presented in this unit. This unit of study also includes mathematical tools required for other units of study.

Textbooks

H.C. Ansel Pharmaceutical Dose Forms and Drug Delivery Systems 8th edition, Williams & Wilkins, 2005 A.T. Florence & D Attwood Physicochemical Principles of Pharmacy MacMillan 1988

PHAR2811**Drug Discovery and Design A**

Credit points: 6 **Teacher/Coordinator:** Dr W. Bret Church **Session:** Semester 1 **Classes:** 3 x lectures/wk and tutorials scheduled as required **Prerequisites:** CHEM1611, CHEM1612, PHAR1811, PHAR1812, MBLG1001 **Corequisites:** PHSI2601 **Assessment:** 2.5 hr exam (54%), laboratories and workshops (36%), major quiz (10%) **Practical field work:** 3hr workshop/wk as required

Associated degrees: B Pharm, UG Study Abroad Program.

This unit of study aims to provide the background to the study of drugs and the important interactions of drugs and their targets. Learning about the molecular bases of such interactions requires discussions of the fundamental macromolecules of life: DNA, RNA and proteins and process as replication, transcription and translation. The course therefore also covers the fundamental mechanisms of the regulation of targets, as well as fundamental molecular interactions important for both detection and diagnostic applications for drugs and metabolites. Metabolism and storage is considered, including metabolic adaptation and disorders of metabolism. Students get experience with a variety of practical techniques to assist learning in the course.

Textbooks

Patrick, GL. An Introduction to Medicinal Chemistry (3rd ed) Oxford University Press, 2005 Nelson, DL. and Cox, MM. Lehninger: Principles of Biochemistry (5th ed), W.H. Freeman, 2008

PHAR2812**Microbiology and Infection**

Credit points: 6 **Teacher/Coordinator:** Dr R Rohanizadeh **Session:** Semester 1 **Classes:** 2 x lectures/wk, workshop classes will be arranged as needed **Prerequisites:** BIOL1003, PHAR1811, PHAR1812, MBLG1001 **Assessment:** Exam & quiz (70%), practicals including workshop (30%) **Practical field work:** Laboratory work

Associated degrees: B Pharm, UG Study Abroad Program.

This unit of study provides information on the biology of micro-organisms with particular reference to the importance of micro-organisms in pharmacy and the pharmaceutical sciences and

the application of basic microbiological principles to the production of clean and sterile pharmaceutical products in both community and hospital pharmacy and in industrial manufacture. Topics include the comparison of the structure, function and importance of the major groups of micro-organisms; pathogenicity and epidemiology of infectious diseases (e.g. HIV); infection control measures and principles underlying treatment of infectious disease; mechanisms of action, characteristics, and types of antibiotics and synthetic antimicrobial agents; antibiotic resistance; principles and methods of sterilisation, aspects of disinfection and preservation; concepts of good manufacturing practice and aseptic techniques. The practical component is illustrative of the lectures and focuses on techniques of handling microbial culture and identifying micro-organisms; factors affecting the microbial growth; transmission of disease and host defence mechanisms; basic aseptic microbiological technique applicable to pharmaceutical sciences; and evaluation of different antimicrobial agents.

Textbooks

Essential: Denyer SP, Hodges NA & Gorman SP. Hugo & Russell's Pharmaceutical Microbiology. 7th edition, Blackwell, 2004
Recommended: Fraise AP, Lambert PA & Maillard J-Y. Russell, Hugo & Ayliffe's Principles and Practice of Disinfection Preservation & Sterilization. 4th edition, Blackwell, 2004
Tortora G.J, Funke BR & Case CL. Microbiology: An Introduction. 8th edition, Pearson, 2004

PHAR2813

Therapeutic Principles

Credit points: 6 **Teacher/Coordinator:** Dr R Fois **Session:** Semester 1
Classes: 3 x lectures/wk and 2hr x workshops/wk **Prerequisites:** CHEM1611, CHEM1612, BIOL1003, MBLG1001, PHAR1812, PHAR1822 **Corequisites:** PHSI2601 **Assessment:** Quizzes (summative and formative), workshops (formative), assignments, final examination (summative). All assessments are compulsory.

Associated degrees: B Pharm, UG Study Abroad Program.

This unit of study is intended to provide knowledge in a number of fundamental areas that guide and provide evidence to support the safe, effective and ethical use of medicines. These fundamental areas of knowledge start with an understanding of the relationship between drugs interacting with target sites in the body and the effect produced (i.e. pharmacodynamic principles) and understanding the physiological and physicochemical factors that govern the movement of drugs around the body and the time course of exposure of body tissues and blood to drugs (i.e. pharmacokinetics). These principles involve developing concepts and models to explain drug activity in patients and to guide appropriate drug dosage selection. To support this, relevant mathematical principles involving calculus are introduced during this unit of study.

This unit will also explore reasons behind variability in response to medicines among different individuals. The effects of disease, other drugs, demographics and the genetic basis for variable response will be introduced. Basic pharmacogenetic principles for explaining and predicting pharmacodynamic and pharmacokinetic variability in response will be explored.

Students are also exposed to the notion that medicines may produce adverse effects (as well as beneficial ones). The mechanisms underlying adverse reactions to drugs and how these are classified are explored as are the principles for detecting and avoiding these effects.

Ultimately, many options often exist to manage illness. While the fundamental principles described above assist in understanding how individual drugs should be used, they do not alone provide knowledge to select among alternative options. This unit will introduce students to methods that are used to provide evidence of efficacy and safety of different therapeutic options and to define the place in therapy of these options. To do this, the principles that underpin evidence based medicine (including the clinical trial and pharmacoepidemiology) and the notion of levels of evidence are introduced. Exposure to these principles is intended to develop in students a basic understanding of how to critically evaluate therapeutic options. The evaluation of therapeutic options requires an understanding of statistical methods, which are also introduced during this unit of study.

PHAR2821

Drug Discovery and Design B

Credit points: 6 **Teacher/Coordinator:** Dr C C Duke **Session:** Semester 2
Classes: 3 x lectures/wk, tutorials and workshops will be scheduled as required
Corequisites: PHAR2811 and PCOL2605 **Assessment:** 2hr exam (55%), workshops, practical and quizzes (45%) **Practical field work:** 9 hrs practical work/workshops

Associated degrees: B Pharm, UG Study Abroad Program.

Drug design; physicochemical properties of drugs and how this determines the interactions of small molecules (drugs) with biological macromolecules (enzymes and receptors). All stages in the process of drug design and development will be investigated, including computational drug design and the required mathematics for computation and statistical treatment; role of stereochemistry in drug action, structure-activity relationships and molecular modelling; drug metabolism, bioactivation and inactivation; advanced analytical methods for the identification of drugs, their metabolites and degradation products; introductory toxicology, sources of drugs; discovery of new small molecules as leads for drug development. Workshops consist of the drug design/SAR computer-based problem-solving workshop, drug metabolism/toxicology problem-based learning workshop and drug action workshop.

Textbooks

D.G. Watson (2005) Pharmaceutical Analysis: A Textbook for Pharmacy Students and Pharmaceutical Chemists, 2nd Edition, Churchill Livingstone
G L Patrick (2005) An Introduction to Medicinal Chemistry, 3rd Edition, Oxford University Press

PHAR2822

Pharmacy Practice

Credit points: 6 **Teacher/Coordinator:** Dr S Bosnic-Anticevich **Session:** Semester 2
Classes: 3 x lectures/wk, 1.5 hr tutorial/wk **Prerequisites:** PHAR1811 and PHAR1821 **Corequisites:** PHSI2601 and PCOL2605
Assessment: Written exam (45%), oral assessment (40%), and continuous assessment through tutorial participation and contribution (15%)

Associated degrees: B Pharm, UG Study Abroad Program.

This unit of study is an introduction to Pharmacy Practice. It will integrate previously acquired knowledge in Physiology and Pharmacology with the mechanisms underlying pathological conditions of the cardiovascular, respiratory and endocrine systems, as well as common acute conditions associated with the use of over the counter medications. This unit of study will outline disease processes, treatment and will enable students to gain the knowledge and skills required to manage these conditions utilising effective communication techniques. Different models of health care may be used to demonstrate effective health strategies.

Textbooks

Communication Skills in Pharmacy Practice. W.N. Tindall et al. 4rd Edition. Lea & Febiger 2007
Clinical Pharmacy and Therapeutics. Walker, R. & Edwards, C. editors. 3rd Edition Edinburgh: Churchill Livingstone, 2003

PHAR2823

Formulating and Dispensing

Credit points: 6 **Teacher/Coordinator:** Dr P Young **Session:** Semester 2
Classes: Lectures and classes will be arranged as required **Prerequisites:** CHEM1611, CHEM1612, PHAR1812, PHAR1822 **Corequisites:** PHAR2812
Assessment: Written and practical exam, assignment **Practical field work:** Laboratory work

Associated degrees: B Pharm, UG Study Abroad Program.

This unit of study builds on the material presented in Physical Pharmaceutics. The topics covered in this unit include: solid dose forms and particle science, rheology; dispersion dose forms including suspensions, colloidal dispersions, and emulsions; topical dose forms and semisolids; inhalation pharmaceutical aerosols; protein and peptide drugs and formulations; rectal products; novel drug delivery technologies. Aspects pertaining to the stability of dose forms are also presented in this unit. Practical activities relate to the preparation and dispensing of a range of dosage forms.

PHAR3602**Dispensing**

Credit points: 6 **Teacher/Coordinator:** Dr R Fois **Session:** Semester 2
Classes: Periodic lectures throughout semester, weekly 3.5hr workshops
Prerequisites: A pass in all first year units of study; either PHAR2615 or (MICR2605 and (PHAR2607 or PHAR2627)); either PHAR2616 or (PHAR2613 and (PHAR2614 or PHAR2624)); either PHAR2617 or (PHAR2611 and PHAR2612) **Corequisites:** PHAR3631 **Assessment:** Periodic practical examinations throughout semester (30%), one theory examination (30%), continuous assessment (40%) this may include in-semester assignments, group work and individual work. Satisfactory performance in all areas of this unit of study is required. Compulsory attendance. Consistent adherence to satisfactory standards in laboratory. **Practical field work:** Weekly practical classes

Associated degrees: B Pharm, B Pharm (Rural), UG Study Abroad Program.

Introduction to dispensing practice, the importance of accuracy in dispensing, the prescription, approaches to dispensing prescriptions, labelling of dispensed medicines, containers, documentation of dispensing procedures, dispensing of particular formulations, effect of changing formulation variables on the physical properties and efficacy of pharmaceutical products.

A series of practical classes are complemented by workshops. Lectures will provide formative feedback. Students will learn the skills and techniques required to prepare a variety of pharmaceutical products. They will also learn to develop processes in quality assurance and quality control, developing critical skills in minimising errors, maximising the detection of errors and preparing products of consistently high quality.

Textbooks

Australian Pharmaceutical Formulary (APF) - most recent edition

PHAR3609**Medicinal Chemistry 3A**

Credit points: 6 **Teacher/Coordinator:** Dr A Ammit **Session:** Semester 1
Classes: Lectures each week, tutorial classes will be arranged as needed
Prerequisites: A pass in all first year units of study; PHAR2609; PHAR2618 or PHAR2610 or PHAR2620 **Assessment:** Mid-term exam (35%), final exam (35%), practical report (30%). **Practical field work:** Laboratory work

Associated degrees: B Pharm, B Pharm (Rural), UG Study Abroad Program.

This unit of study applies the principles of medicinal chemistry as presented in Medicinal Chemistry 2A and 2B to classes of drugs categorised by their common physiological targets or chemical properties. For each drug class, the chemistry and biochemistry relating to their development, metabolism, toxicology, mode of action and pharmacological application will be examined.

Drug classes examined will include agents acting on the peripheral nervous system including cholinergics, adrenergics and antihistamines; agents acting on the central nervous system including opioids, dopaminergics and serotonergics; agents acting on the cardiovascular system such as antihyperlipidemics, ACE inhibitors and drugs acting on the immune system.

Laboratory work will consist of the preparation of an analytical drug profile for an assigned compound in a format suitable for submission to the TGA. This activity will be undertaken as a group over a period of six weeks.

Textbooks

Recommended text: WO Foye, TL Lemke & DA Williams Principles of Medicinal Chemistry (Williams & Wilkins, 5th Ed, 2002)

PHAR3610**Medicinal Chemistry 3B**

Credit points: 6 **Teacher/Coordinator:** Assoc Prof M Collins **Session:** Semester 2
Classes: 4 x lectures/wk **Prerequisites:** All first year units of study; PHAR2609; PHAR2618 or PHAR2610 or PHAR2620. **Corequisites:** PHAR3609 **Assessment:** Mid-term exam (35%), final exam (35%) and workshops (30%) **Practical field work:** 4hr weekly workshop

Associated degrees: B Pharm, B Pharm (Rural), UG Study Abroad Program.

This unit of study continues on the principles of medicinal chemistry established and developed in PHAR3609 Medicinal Chemistry 3A. Lecture topics include: steroids, chemotherapy, herbal medicines and radiation effects. Laboratory work will include forensic analysis of a

drug involved in a suspicious death and either a QSAR practical or a herbal workshop.

Textbooks

WO Foye, TL Lemke & DA Williams Principles of Medicinal Chemistry (Williams & Wilkins, 5th Ed, 2002)

PHAR3613**Pharmacy Practice 3A**

Credit points: 6 **Teacher/Coordinator:** Dr T F Chen **Session:** Semester 1
Classes: 2 x lectures/week, tutorial classes will be arranged as needed
Prerequisites: All first year units of study; PSPC2601 or (PCOL2603 and PHSI2604); PSPC2602 or (PCOL2604 and PHSI2605); PHAR2617 or (PHAR2611 and PHAR2612) **Corequisites:** PCOL3605 or (PCOL3603 and PCOL3604) **Assessment:** Written exam (35%), tutorials (20%), externship (10%), multiple choice question exam (35%) **Practical field work:** 11 x 3hr fieldwork sessions

Associated degrees: B Pharm, B Pharm (Rural), UG Study Abroad Program.

Therapeutics: This strand is a continuation of the therapeutics section of Pharmacy Practice 2 (PHAR2617). Topics covered include renal diseases, hepatic diseases, haematology, diseases of the eye and ear, gastrointestinal diseases, rheumatology, and urology. Each of these areas will be covered in terms of epidemiology, pathophysiology, signs and symptoms, and the drug and non-drug management. This unit of study will also explore the role of pharmacists in implementing clinical interventions, medication management review and interprofessional communication.

Externships: The externship will integrate lecture and tutorial material with practice. Students will complete patient interviews and report back to tutorials. Problem-solving skills will be enhanced.

Tutorials: The tutorials will employ case-based learning techniques. A number of computerised drug information databases will be used. Role-plays will be used to develop students' communication skills in pharmacist/patient and pharmacist/doctor interactions. Familiarisation with drug information software will also take place.

Textbooks

Current editions of: AMH, Therapeutic Guidelines, Clinical Pharmacy and Therapeutics (4th ed)

PHAR3615**Pharmacy Practice 3B**

Credit points: 6 **Teacher/Coordinator:** Dr R Moles **Session:** Semester 2
Classes: 2 x lectures per/wk, 12 x 2hr tutorials, other classes may be arranged as needed **Prerequisites:** All first year units of study. **Corequisites:** PHAR3613; PCOL3605 or (PCOL3603 and PCOL3604) **Assessment:** Multiple choice question exam (35%), oral/written exam (35%), tutorials (20%) and externship (10%). Both exams must be passed to satisfy the requirements of the course. **Practical field work:** 10 x 3hr field work sessions

Associated degrees: B Pharm, UG Study Abroad Program.

Therapeutics: This section is a continuation of the therapeutics section of Pharmacy Practice 3A (PHAR3613). Topics covered will include neurology, mental health, obstetrics and gynaecology, dermatology, oncology and palliative care. Each of these therapeutic areas will be covered in terms of epidemiology, pathophysiology, signs and symptoms, and the drug and non-drug management. The unit of study will also explore the role of pharmacists in conducting medication regimen reviews and interprofessional communication.

Externships: The externship will integrate lecture material with practice. Students will complete patient interviews and report back to tutorials. Problem-solving skills will be enhanced.

Tutorials: The tutorials will employ case-based learning techniques. A number of computerised drug information databases will be used. Role-plays will be used to develop students' communication skills in pharmacist/patient and pharmacist/doctor interactions. Familiarisation with computer software written specifically for pharmacists will also take place.

Textbooks

Clinical Pharmacy and Therapeutics. Walker, R & Edwards C (eds), 3rd Edition
 Current editions of Australian Medicines Handbook and Therapeutic Guidelines
 Victorian Drug Usage Advisory Committee, North Melbourne, VIC

PHAR3630

Pharmacokinetics and Pharmacogenetics

Credit points: 6 **Teacher/Coordinator:** Dr M Bebawy **Session:** Semester 1
Classes: 3 - 5 x lectures/week, 2hr tutorial classes once per fortnight
Prerequisites: All first year units of study; either PHAR2616 or (PHAR2613 and (PHAR2614 or PHAR2624)); either PSPC2601 or (PCOL2603 and PHSI2604); either PSPC2602 or (PCOL2604 and PHSI2605) **Corequisites:** Either PCOL3605 or (PCOL3603 and PCOL3604) **Assessment:** Exam (70%) and quizzes (30%)

Associated degrees: B Pharm, B Pharm (Rural), UG Study Abroad Program.

This unit of study deals with basic and advanced concepts in pharmacokinetics and pharmacogenetics, followed by the application of these principles to clinical situations. Lecture topics designed for the learning and teaching of basic concepts include: Introduction to pharmacokinetics and pharmacogenetics; Mono-exponential pharmacokinetics; Understanding graphs in pharmacokinetics; Multi-exponential pharmacokinetics; IV infusions; Multiple dosing; Oral dosing; Drug absorption and influencing factors; Drug distribution and protein binding; Renal and hepatic clearance; Metabolite kinetics; Non-linear pharmacokinetics; Bioequivalence and bioavailability; Drug interactions; Pharmacodynamics; Causes and consequences of PK variability and Characterisation of genetic variability and mechanisms responsible for genetic variability. Lecture topics designed for the learning and teaching of advanced concepts include: Factors affecting drug efficacy (drug transporters); Factors affecting drug efficacy (drug metabolism); Factors affecting drug efficacy (drug targets: receptors); Factors affecting drug efficacy (drug targets: signalling pathways). Lecture topics designed for the learning and teaching of applied concepts include: Characterising PK variability and introduction to therapeutic drug monitoring; Therapeutic drug monitoring of various drug classes; Pharmacogenomics in oncology; immunology; cardiovascular disease; neurology; gastroenterology; respiratory disease, neurodegenerative disease and dermatology; and ethical considerations in pharmacogenomics.

Textbooks

Recommended texts: Clinical Pharmacokinetics - Ed Roland M and Tozer TN; Lippincott, Williams & Wilkins Pharmacokinetics Made Easy - DJ Birkett (University of Sydney Library 615.7 366) Applied Biopharmaceutics and Pharmacokinetics - Shargel & Yu Applied Pharmacokinetics and Pharmacodynamics - Burton, Shaw, Shantag, Evans Basic Clinical Pharmacokinetics (4th ed) - Michel e Winter, Lippincott, Williams & Wilkins Pharmacogenomics: The Search for individualised Therapies- Licinio and Wong

PHAR3631

Physical Pharmaceutics and Formulation B

Credit points: 6 **Teacher/Coordinator:** Dr P Young **Session:** Semester 2
Classes: 3 x lectures/week, classes will be arranged as needed. **Prerequisites:** All first year units of study; either PHAR2615 or (MICR2605 and (PHAR2607 or PHAR2627)); either PHAR2616 or (PHAR2613 and (PHAR2614 or PHAR2624)) **Corequisites:** PHAR3630 **Assessment:** Exam (60%), minor exam (15%), prac/labs (15%), assignments (10%). **Practical field work:** 2 x practical sessions

Associated degrees: B Pharm, B Pharm (Rural), UG Study Abroad Program.

This unit of study builds on the material presented in Physical Pharmaceutics and Formulation A. The topics covered in this unit include: solid dose forms and particle science, rheology; dispersion dose forms including suspensions, colloidal dispersions, and emulsions; topical dose forms and semisolids; inhalation pharmaceutical aerosols; protein and peptide drugs and formulations; rectal products; novel drug delivery technologies. Aspects pertaining to the stability of dose forms are also presented in this unit. A workshop designed to integrate and apply the information from Physical Pharmaceutics and Formulation A and B concludes this unit.

Textbooks

H.C. Ansel Pharmaceutical Dose Forms and Drug Delivery Systems 8th edition, Williams & Wilkins, 2005. A.T. Florence & D Attwood Physicochemical Principles of Pharmacy MacMillan 1988.

PHAR4616

Pharmacotherapeutics in Practice

Credit points: 6 **Teacher/Coordinator:** Dr M Sukkar **Session:** Semester 2
Classes: 1 x 2hr lecture/week, 3hrs tutorials/week, 1 x 3hr workshop/fortnight. Classes will be arranged as needed **Prerequisites:** A pass in all second year units of study. **Corequisites:** PHAR4618 **Assessment:** Tutorial participation

(20%), student problem based learning case/problem (20%), written exam (40%) and workshops (20%). Satisfactory performance in all areas of this unit of study is required.

Associated degrees: B Pharm, UG Study Abroad Program.

This unit of study should consolidate previous study units from Year 1 to Semester 1 of Year 4 of the undergraduate curriculum, through the presentation and solving of real-life clinical and ethical problems. It continues a focus on knowledge consolidation, therapeutics, application of knowledge, and medication management review and disease state management within a self-directed learning environment (problem based learning). Lectures will be followed up with tutorials which will be practice-based in order to illustrate specific practice situations. In addition, two ethics workshops and four disease state management workshops will develop student skills in ethical problem solving and delivery of elements of disease state management services for diabetes, asthma, drugs of dependence and heart failure.

PHAR4618

Integrated Pharmacy Practice

Credit points: 12 **Teacher/Coordinator:** Dr B Saini & Dr B Chaar **Session:** Semester 1 **Classes:** 1 x 2hr lecture/wk, 2 x 2hr tutorials/week, 2 x 4hr tutorials for orientation and feedback sessions, other classes will be arranged as needed **Prerequisites:** A pass in all second year units of study; PHAR3609 or PHAR3629; PHAR3610; either PHAR3630 or (PHAR3611 and PHAR3612); either PHAR3613 or PHAR3623; PHAR3614 or PHAR3615 or PHAR3624 or PHAR3627; either PCOL3605 or (PCOL3603 and PCOL3604) **Assessment:** Oral presentations - Clinical pathology (10%), PBL tutorial participation (10%), PBL case presentations (10%), final exam (40%), reflective diaries (10%), medication review cases and portfolios (10%), preceptor assessments (10%). Satisfactory performance in all areas of this unit of study is required. **Practical field work:** 10 x 5hr clinical placement fieldwork

Associated degrees: B Pharm, B Pharm (Rural), UG Study Abroad Program.

This unit of study focuses on knowledge consolidation, therapeutics, application of knowledge, medication management review and disease state management within a self-directed learning environment (problem based learning) and supplemented by clinical placements. Lectures will be followed up with tutorials which will be practice-based in order to illustrate specific practice situations. In addition, PBL tutorials will provide the opportunity for further development of students' skills in information gathering, assessment and communication skills. The therapeutic topics to be covered in this unit include cardiovascular, infectious diseases and primary care. The unit of study will expand the role of the pharmacist in monitoring therapeutic outcomes, and in participating in therapeutic decision-making. The principles and practice of clinical chemistry as it is applied to the diagnosis, screening and monitoring of physiological processes in health and disease will be covered, as will the measurement of specific analyses. The clinical interpretation of the results of clinical chemistry investigations in diagnosis, screening and monitoring will also be discussed.

Textbooks

Essential texts: Australian Medicines Handbook (AMH). Newstyle Printing, Mile End SA, 2008 or later Drug interaction facts - The authority on drug interactions. David S Tatro (ed) Facts and comparison, St. Louis, Missouri, 2006 Complete set of Therapeutic Guidelines (recent versions) Case studies in Clinical Practice. Use of Laboratory Test data: Process guide and reference for pharmacists. Jeff Hughes (ed) Contributors Jeff Hughes, Peter Tenni, Natalie Soulsby, Andrew James. Pharmaceutical Society of Australia, 2004 Recommended texts: Applied Therapeutics: The clinical use of drugs. Mary Anne Koda-Kimble et.al. Lippincott Williams and Wilkins, Philadelphia, Pennsylvania, 2005, 8th ed Clinical Chemistry: Interpretation and techniques. Alex Kaplan et. al. Baltimore: Williams & Wilkins, 1995; 4th ed Clinical Chemistry: Principles, procedures, correlations. Michael L. Bishop, et. al. Philadelphia: Lippincott Williams & Wilkins, 2005, 5th ed Clinical Pharmacy and therapeutics. Roger Walker, Clive Edwards (ed). Churchill Livingstone, Edinburgh, 1999, 2nd ed Pharmacotherapy: A pathophysiologic approach. Joseph T Dipiro, et al. McGraw-Hill Medical publishing Division, New York, 2002, 5th ed The Merk Manual of diagnosis and therapy, Merk Research Laboratories. whitehouse Station, NJ, 17th ed or later Tietz Textbook of Clinical Chemistry. Eds Carl A. Burtis, Edward R. Ashwood Philadelphia: Saunders, 1994, 2nd ed Tietz Textbook of Clinical Chemistry. Editors: Carl A. Burtis, Edward R. Ashwood, Norbert W. Tietz. 3rd ed Tietz Fundamentals of Clinical Chemistry Eds. Edward R. Ashwood 2001, 5th ed

PHAR4619**Drug Development & New Drug Technologies**

Credit points: 6 **Teacher/Coordinator:** Dr T Grewal **Session:** Semester 1
Classes: 1 x 2hr lecture/wk, 1 x 2hr workshop/wk. Classes will be arranged as needed
Prerequisites: A pass in all Second Year units of study; either PHAR3630 or (PHAR3611 and PHAR3612); either PHAR3631 or (PHAR3607, PHAR3608, PHAR2616 or PHAR2613 and (PHAR2614 or PHAR2624)); PHAR3609 or PHAR3629; PHAR3610 or PHAR3620; either PCOL3605 or (PCOL3603 and PCOL3604). **Assessment:** Final exam (40%), assignment (25%), workshops (35%). All assessments must be passed to satisfy requirements of the course.

Associated degrees: B Pharm, B Pharm (Rural), UG Study Abroad Program.

This unit of study consists of two streams: (1) Pharmaceutical Biotechnology stream (lectures) and (2) Design of Biological Drugs stream (workshops). Stream 1 aims to expose students to developing biotechnologies relevant to pharmacy. The course materials will be covered by a series of lectures given by the faculty and specialised lectures/tutorials presented by invited scientific professionals. Stream 2 consists of a series of workshops that focus on the areas involved in protein drug development: native protein purification; gene cloning; cloned gene expression; recombinant protein isolation; recombinant protein dosage form design; preclinical and clinical testing. This unit of study expands on second and third year pharmaceutical science units of study by exposing you to drug development and developing biotechnologies, such as gene therapy, vaccines, DNA arrays, new drug targets and drugs/therapies as well as clinical trials. This unit of study will introduce you to developing biotechnologies, new drug targets and therapies enabling you to be aware of up and coming biotechnologies and how they will impact on pharmaceutical care. Such knowledge will help you decide your future career direction and give you understanding of practical problems encountered in design and use of biotechnology derived drugs. In addition, this unit of study promotes integration and application of prior knowledge in pharmaceutical science to solving problems in tasks encountered in pharmaceutical research and development as well as allowing students to develop knowledge related to biotechnology derived drugs and skills in obtaining and critically assessing peer-reviewed publications. It also allows students to obtain people skills by participating in group work, resolve conflict management and obtain written and oral communication skills.

Textbooks

Foye, W.O. et al. Principles of Medicinal Chemistry (5th Ed), Williams and Wilkins (2002) Shargel L & Yu ABC Applied Biopharmaceutics and Pharmacokinetics (1999) Burton, Evans WE, Schentag JJ & Shaw: Applied Pharmacokinetics and Pharmacodynamics (LWW, 2005) Aulton ME, Pharmaceutics: The Science of dosage form Design (Churchill Livingstone, 2004) Ansel HC, Allen LV and Popovich N (7th Ed) Pharmaceutical Dosage Forms and Drug Delivery Systems (LWW, 1999)

PHAR4620**Integrated Dispensing**

Credit points: 6 **Teacher/Coordinator:** E Sainsbury and Dr P Aslani **Session:** Semester 1
Classes: 1 x 2hr lecture and 1 x 2hr workshop/week **Prerequisites:** A pass in all second year units of study; either PHAR3601 or PHAR3602; either PHAR3613 or PHAR3623; either PHAR3614 or PHAR3615 or PHAR3624 or PHAR3627. **Assessment:** Demonstrate adequate performance in practical exams (30%), continuous assessment (30%), written exam (30%) and portfolio presentation (10%) **Practical field work:** 1 x 2hr practical/week

Associated degrees: B Pharm, B Pharm (Rural), UG Study Abroad Program.

Integrated Dispensing links together the skills and knowledge that students have developed in Dispensing and Pharmacy Practice. The emphasis is on clinical practice and develops the theme that dispensing is not a single event but draws on skills and knowledge from a variety of areas of pharmacy practice, including communication with the patient and prescriber. This is achieved using a simulated practice environment. Students learn to integrate the training they have received in dose form preparation with patient counselling skills, forensic and administrative requirements (including the use of computer-based dispensing programs), as well as the professional aspects of pharmacy to allow them to become competent dispensers of medicines.

Textbooks

Australian Medicines Handbook (2008 or 2009) Australian Pharmaceutical Formulary (latest edition) Pharmacy and Poisons legislation is required but is made available in a specific format for the unit

PHAR4621**Clinical Practice**

Credit points: 12 **Teacher/Coordinator:** Dr L Pont **Session:** Semester 2
Classes: On-campus workshops **Prerequisites:** A pass in all second year units of study. **Corequisites:** PHAR4618 **Assessment:** Preceptor assessment (20%), reflective diaries (5%), oral presentation (5%), portfolio tasks (10%), medication management reviews (20%) and written exam (40%). Satisfactory performance in all areas of this unit of study is required. **Practical field work:** Clinical placement and online learning

Associated degrees: B Pharm, UG Study Abroad Program.

This is an experiential unit of study which allows students to integrate their knowledge and skill-base within a variety of professional placements. Sites may include community and hospital pharmacies as well as professional organisations. In the clinical setting, students gain an awareness of the role of the pharmacist and the interaction between patient, pharmacist and other health professionals. In the non-clinical setting, the focus is on provision of healthcare services within Australia. Students complete a series of placements over a 10-week period. An optional 2-week July block placement may also be undertaken. Students not participating in the optional placement undertake an additional 10-week placement during semester 2. Additionally students will participate in campus-based workshops that provide a forum for discussion of the various issues experienced during clinical placement.

Textbooks

Latest edition of Australian Medicines Handbook. Therapeutic Guidelines (Complete set). Victorian Drug Usage Advisory Committee. North Melbourne, VIC.

Australian Medicines Handbook (Latest edition)

Case Studies in Clinical Practice. Use of Laboratory Test Data: Process Guide and Reference for Pharmacists. Jeff Hughes (ed). Pharmaceutical Society of Australia.

Drug Interaction Facts 2007. Tatro D (ed). Wolters Kluwer Health.

PHAR4622**Pharmacy Management**

Credit points: 6 **Teacher/Coordinator:** Professor L White **Session:** Semester 2
Classes: 1 x 2hr lecture/wk and 1 x 2hr tutorial/wk. Classes will be arranged as required. Self directed/experiential learning required - 1.5 hrs/wk
Prerequisites: A pass in all second year units of study. **Assessment:** Final exam (40%), mid-semester exam (30%), group assignment (part A) (10%) and group assignment (part B) (20%). Both exams must be passed to satisfy the requirements of the course.

Associated degrees: B Pharm, UG Study Abroad Program.

This course will introduce management issues that are crucial for understanding pharmacy business operations. It includes finance and accounting, human resources and marketing topics.

PHAR4927**Pharmaceutics Advanced 4A**

Credit points: 6 **Teacher/Coordinator:** Dr F Zhou **Session:** Semester 1
Classes: Seminar, tut/workshop, project/wk. **Assessment:** Oral presentations (30%), seminars and postgraduate presentations (10%), literature review (60%), workshop attendance/contributions, project/report.

Note: Department permission required for enrolment. Note: Enrolment is by invitation only.

Associated degrees: B Pharm.

This unit of study is designed to extend the Pharmacy undergraduate's knowledge and skills in research methodology, problem solving and written and oral scientific communication in specialist areas of Pharmaceutics. It provides an important basis in advanced coursework and laboratory research for those who wish to become candidates for the PhD, MSc and MPhil degrees. Advanced students will also retain essentially all of the professionally based training of the Pass degree and complete in the same time.

PHAR4928

Pharmaceutical Chemistry Advanced 4A

Credit points: 6 **Teacher/Coordinator:** Dr C C Duke **Session:** Semester 1
Classes: Seminar, tut/workshop, project/wk **Assessment:** Assignments (5%), oral presentations (45%), written reports (35%), seminar attendance (15%)

Note: Department permission required for enrolment. Note: Enrolment is by invitation only.

Associated degrees: B Pharm.

Pharmaceutical Chemistry Advanced 4A is designed to extend the Pharmacy undergraduate's knowledge and skills in research practice and problem solving, and written and oral scientific communication. It provides an important basis for those who wish to become candidates for the PhD, MSc and MPhil degrees. In addition, the unit of study provides extra training in specialised areas and will be particularly useful for those seeking employment in industrial, government and hospital laboratories. Advanced students will also retain essentially all of the professionally based training of the pass degree and complete in the same time.

PHAR4929

Pharmacy Practice Advanced 4A

Credit points: 6 **Teacher/Coordinator:** Assoc Prof I Krass **Session:** Semester 1
Classes: Seminar, tut/workshop/wk **Assessment:** Seminar attendance (10%), research diary (30%), literature essay (10%), literature review (30%), assignment (10%), presentation (10%)

Note: Department permission required for enrolment. Note: Enrolment is by invitation only.

Associated degrees: B Pharm.

Weekly discussion between students, their supervisors and other pharmacy practice personnel will take place in order to evaluate and formulate possible methodologies for research projects. Students will provide short oral presentations for open discussion with other staff and postgraduate students. Research projects in areas of Pharmacy Practice such as Pharmacoeconomics, Pharmacoepidemiology, Professional Practice, Geriatric Patients, Asthma Management and Clinical Practice will be offered. Advanced students will also retain essentially all of the professionally based training of the Pass degree and complete in the same time.

Textbooks

Recommended texts: Bland. Martin, An introduction to medical statistics Oxford; New York: Oxford University Press, 2000. 3rd ed P. Armitage, G. Berry, J.N.Matthews. Statistical methods in medical research. Malden, MA: Blackwell Science, 2001 4th ed Kerr. C, Taylor. R & Heard. G Handbook of Public Health Methods McGraw Hill Co. Inc., 1999

PHAR4930

Pharmaceutics Advanced 4B

Credit points: 18 **Teacher/Coordinator:** Dr F Zhou **Session:** Semester 2
Classes: Seminar, tut/workshop, project/wk. **Prerequisites:** A credit average in first semester marks, including PHAR4927 **Corequisites:** PHAR4616
Assessment: Oral presentation (30%), project/report (40%), seminar attendance/reports (10%), research capability/commitment (20%)

Note: Department permission required for enrolment.

Associated degrees: B Pharm.

This unit of study is designed to extend the Pharmacy undergraduate's knowledge and skills in research practice and problem solving, and written and oral scientific communication acquired in the Semester 1 unit of study PHAR4927 Pharmaceutics Advanced 4A. It provides an important basis for those who may wish to branch into specialised areas and will be particularly useful for those seeking employment in industry, government or hospital laboratories, research institutions and also for those considering continuation to postgraduate studies.

The workshop and seminar components of the unit of study will assist in the development of advanced research skills and will complement the research project. The individual research project prepared in semester 1 will be pursued under the direct supervision of a member of the academic staff. A final research presentation and report describing research results and conclusions is to be presented at the end of the year.

PHAR4931

Pharmaceutical Chemistry Advanced 4B

Credit points: 18 **Teacher/Coordinator:** Dr C C Duke **Session:** Semester 2
Classes: Seminar/project work/wk **Prerequisites:** A credit average in first semester marks, including PHAR4928 **Corequisites:** PHAR4616 **Assessment:** Oral presentation (20%), seminar attendance/reports (5%), project/report (75%)

Note: Department permission required for enrolment.

Associated degrees: B Pharm.

Pharmaceutical Chemistry Advanced 4B is designed to extend the Pharmacy undergraduate's knowledge and skills in research practice and problem solving, and written and oral scientific communication acquired in the first semester unit of study PHAR4928 Pharmaceutical Chemistry Advanced 4A. The unit of study provides an important basis for those who may wish to branch into specialised areas and will be particularly useful for those seeking employment in industry, government, hospital laboratories, research institutions and also for those considering continuation to postgraduate studies.

The seminar component of the course will assist in the development of advanced laboratory based research skills and will complement the research project. The individual research project planned in the first semester will be pursued. A final research presentation and report describing research results and conclusions is to be presented at the end of the year.

PHAR4932

Pharmacy Practice Advanced 4B

Credit points: 18 **Teacher/Coordinator:** Assoc Prof I Krass **Session:** Semester 2
Classes: Seminar/tut/workshop, project/wk **Prerequisites:** A credit average in first semester marks, including PHAR4929 **Corequisites:** PHAR4616
Assessment: Oral presentation (10%), project/report (45%), seminar attendance (10%), research presentation (25%), supervisor assessment (10%)

Note: Department permission required for enrolment.

Associated degrees: B Pharm.

This unit of study is designed to extend the Pharmacy undergraduate's knowledge and skills in research practice and problem solving, and written and oral scientific communication acquired in PHAR4929 Pharmacy Practice Advanced 4A.

Pharmacy Practice Advanced 4B provides an important basis for those who may wish to branch into specialised areas and will be particularly useful for those seeking employment in industry, government, hospital laboratories, research institutions and also for those considering continuation to postgraduate studies.

The workshop/tutorial/seminar component of the course will assist in the development of advanced research skills and will complement the research project. A final research presentation and report describing research results and conclusions is to be presented at the end of the semester.

PHSI2601

Physiology for Pharmacy

Credit points: 6 **Teacher/Coordinator:** Dr Bronwyn McAllan **Session:** Semester 1
Classes: 4x1hr lect and 1x2hr tut per week **Prerequisites:** CHEM1611 and CHEM1612 and (BIOL1001 or BIOL1101 or BIOL1901 or BIOL1003 or BIOL1903) and MBLG1001 **Assessment:** 1x2hr exam, mid-semester test, continuous assessment

Associated degrees: B Pharm, B Pharm (Rural), UG Study Abroad Program.

Physiology for Pharmacy provides a broad basic knowledge of human structure and function. Topics covered include studies of nerve and muscle physiology, and movement and consciousness. It also covers human endocrine hormones, reproduction, blood, heart and circulation, fluid regulation and electrolyte balance, the skin, sensory perception, gastro-intestinal function and respiration.

Textbooks

Sherwood L Human Physiology: From Cells to Systems (6th ed). Thomson Brooks Cole, 2007

3. Undergraduate degree regulations and policies

Resolutions of the Senate

Bachelor of Pharmacy

1. Requirements for the Bachelor of Pharmacy

- 1.1 To qualify for the pass degree of the Bachelor of Pharmacy candidates must:
 - 1.1.1 complete successfully units of study giving credit for a total of 192 credit points; and
 - 1.1.2 satisfy the requirements of all relevant By-laws, Rules and Resolutions of the University.

2. Specialisations, Streams or Majors

- 2.1 The following majors will be awarded in the Bachelor of Pharmacy:
 - 2.1.1 Rural
 - 2.1.2 Industrial
 - 2.1.3 International

3. Requirements for the honours degree (where honours is an option)

- 3.1 To qualify for the award of the honours degree candidates must complete the honours requirements published in the Faculty Resolutions relating to the course.

Resolutions of the Faculty

Bachelor of Pharmacy

1. Admission

- 1.1 Admissions to the BPharm course is based on:
 - 1.1.1 Results of a Special Tertiary Admission Test (STAT)
 - 1.1.2 NSW HSC Universities Admissions Index (UAI) or equivalent, or a tertiary studies record.
- 1.2 Under the Faculty of Pharmacy Rural Students Entry Scheme a number of places have been set aside for entry to the Bachelor of Pharmacy program for prospective rural students who meet the selection criteria approved by the Academic Board, as set out below. Details of the application process are available from the Faculty.
- 1.3 Criteria for Admission to the BPharm under the Faculty of Pharmacy Rural Students Entry Scheme.
 - 1.3.1 Current NSW HSC or interstate equivalent applicants may be offered a place under the Faculty of Pharmacy Rural Students Entry Scheme if they meet all the criteria set out below:
 - 1.3.1.1 The applicant's UAI is not more than five points below the UAC main round cut off mark for the year of entry.
 - 1.3.1.2 Applicants must have completed at least the last four years of secondary education at a rural school (the definition of "rural" is detailed below).
 - 1.3.1.3 Applicants must have had a permanent home address in a rural area for a significant period (at least four years) at any time prior to their application (the definition of "rural" is detailed below).
 - 1.3.1.4 Applicants must be able to demonstrate a commitment to a career in a rural health setting. (This may include an exceptional record of involvement and achievement in community affairs at school or local community level in a rural environment).
 - 1.3.1.5 Applicants are not eligible for a place under this Scheme if they have completed one full-time year (or part-time equivalent) of tertiary study. (Tertiary study refers to Diploma, Advanced Diploma, Bachelors Degree or higher qualification recognised by the University of Sydney).

- 1.3.1.6 Applicants are not eligible for a place under this Scheme if they accept an offer under any other Access and Equity Program offered by the University.
- 1.3.2 Applicants must satisfy the Special Tertiary Admissions Test criterion outlined above.

Definition of 'rural'

The basis for the definition of "rural" will be the area encompassing the rural NSW Area Health Service regions, as announced by the NSW Department of Health on 16 March 1966, or the equivalent definition of rural applicable to other states. Basically, all of New South Wales is considered rural with the exception of Sydney, Central Coast, Newcastle, Wollongong, the Blue Mountains and their surrounding areas. In other states, similar definitions will apply.

2. Units of study

- 2.1 The units of study for the degree are as set out in the Faculty of Pharmacy Handbook.

3. Requirements for the Bachelor of Pharmacy

- 3.1 To qualify for the award of Pass degree students must:
 - 3.1.1 gain a minimum of 192 credit points by successfully completing all first year, second year, third year and fourth year units of study;
 - 3.1.2 satisfy the requirements of all other relevant By-Laws, Rules and Resolutions of the University.

4. Requirements for the Honours degree

- 4.1 The degree of Bachelor of Pharmacy shall be awarded in two grades, namely, Pass and Honours.
- 4.2 Except with the permission of the Faculty, candidates of more than four years standing in the degree shall not be awarded the degree with honours.
- 4.3 Except with the permission of the Faculty, Honours will not normally be awarded to any student with a grade of F or AF in any unit of study.
- 4.4 Honours students can progress to Second Semester Advanced only if they obtain a credit average in their first semester marks. Students who fail this requirement will go back to the Pass stream, Fourth Year Second Semester.
- 4.5 In order to be considered for the award of the University Medal, a student must obtain a WAM of 85 or greater over the entire degree, and must achieve minimum final honours mark of 90 or greater in two Advanced units of study – Research Methods and Research Project in the same stream. The decision to award a University Medal shall be made by the Faculty Honours Board of Examiners.
- 4.6 To be eligible for the grade of Honours from 2001, a student must successfully complete two Advanced units of study in the same stream.
- 4.7 A weighted average mark (WAM) will be calculated for each candidate as an overall measure of performance in the degree.
- 4.8 The degree will be awarded with the following grades:
 - 4.8.1 First Class Honours: HWAM of 75 or greater with a minimum final honours mark of 85;
 - 4.8.2 Second Class Honours, division I: HWAM of 70–74 with a minimum final honours mark of 80; Second Class Honours, division II: HWAM of 65–69 with a minimum final honours mark of 75;
- 4.9 HWAM means the Honours weighted average mark calculated by the Faculty from results for all 2000, 3000 and 4000 level units attempted for the degree, weighted 2, 3, 4 for the respective levels. The Advanced (Honours) units of study are given double weighting in this calculation



Calculation of HWAM	
(HWAM =)	$\frac{\sum M \times C \times L}{\sum C \times L}$
where C = credit value of unit; L = level or weighting of unit; M = mark gained in unit	

5. Award of Bachelor of Pharmacy with Major

- 5.1 Except with the permission of the Faculty, candidates of more than four years standing in the degree shall not be permitted to undertake a unit of study resulting in award of the degree with a major.
- 5.2 In order to receive the award of Pass Degree with Major students must complete the required unit(s) of study.
- 5.3 Entry to the prescribed units of study leading to the award of a Major will be on basis of academic merit.

6. Enrolment in more/less than minimum load

- 6.1 In the first year of attendance candidates, unless granted credit in accordance with section 13, shall enrol in all the First Year units of study listed in Table 1.
- 6.2 Except with the permission of the Faculty, and subject to the exigencies of the timetable, candidates in subsequent years of attendance shall enrol in the maximum number of prescribed units of study for which they are qualified, provided that they may not take units of study totalling in excess of 54 credit points.
- 6.3 Students who have attempted or gained credit for all units of study in First and Second Years of the degree may be eligible to apply for prerequisite waiver which would allow enrolment in the full complement of units of study for the following academic year, together with the failed unit, provided they have no prior grade fail.

7. Restrictions on enrolment

- 7.1 Except with the permission of the Faculty, candidates may not take a Second Year unit of study until they have:
 - 7.1.1 gained credit for at least 24 credit points in First Year units of study; and
 - 7.1.2 completed the First Year units of study, if any, prescribed by the Faculty as qualifying units of study or prerequisites for the Second Year of Study, as set out in Table 1.
- 7.2 Except with the permission of the Faculty, candidates may not take a Third Year unit of study until they have:
 - 7.2.1 gained credit for at least 18 credit points derived from Second Year units of study; and
 - 7.2.2 completed all the First Year units of study, and all the Second Year units of study, if any, prescribed as qualifying units of study or prerequisites for the Third Year unit of study, as set out in Table 1.
- 7.3 Except with the permission of the Faculty, candidates may not take a Fourth Year unit of study until they have:
 - 7.3.1 gained credit for at least 18 credit points derived from Third Year units of study; and
 - 7.3.2 completed all the Second Year units of study, and all the Third Year units of study, if any, prescribed by the Faculty as qualifying units of study or prerequisites for the Fourth Year unit of study, as set out in Table 1.
- 7.4 Candidates may not take a higher unit of study in any subject area without having previously completed the lower unit of study, if any, in the same subject.
- 7.5 The enrolment of candidates in units of study shall be limited by the exigencies of the timetable.

8. Discontinuation of enrolment

- 8.1 A candidate must re-enrol each calendar year unless the Faculty has approved suspension of candidature. Candidature lapses if a candidate has not obtained approval for suspension and does not re-enrol. Candidates whose candidature has lapsed must be selected for admission again before they can re-enrol.
- 8.2 Except with the prior permission of the Faculty, a candidate shall not be granted a suspension of candidature in order to enrol in another course of tertiary study. Candidature shall lapse if a candidate enrolls in another course of tertiary study without prior permission of the Faculty.

9. Re-enrolment after an absence

- 9.1 A student must enrol in the semester following a period of approved absence.
- 9.2 Failure to re-enrol immediately after an approved suspension of candidature will result in candidature lapsing.

10. Satisfactory progress

- 10.1 Refer to the *University of Sydney (Coursework) Rule 2000 (as amended)* and Academic Board policies.

11. Time limit

- 11.1 Refer to the *University of Sydney (Coursework) Rule 2000 (as amended)*.

12. Assessment policy

- 12.1 Candidates may be tested by written and oral class examinations, oral examinations, assignments, exercises, essays, or practical work or any combination of these; and
 - 12.1.1 the results of such tests may be taken into account by the Faculty Board of Examiners in determining the final results for a unit of study.
- 12.2 In all units of study, work of a higher standard than that required for an ordinary pass may be recognised by the award of high distinction, distinction or credit.
- 12.3 Candidates who have been prevented by duly certified illness or misadventure from sitting for the whole or part of a unit of study assessment may be tested at such times and in such a way as the head of department concerned shall determine.
- 12.4 Candidates who do not pass in a unit of study shall, unless exempted by the Faculty:
 - 12.4.1 again attend lectures and other classes; and
 - 12.4.2 complete the prescribed written and other work in all such units of study in which they are permitted to re-enrol.
- 12.5 Candidates who present themselves for re-examination in any unit of study shall not be eligible for any prize or scholarship awarded in connection with such examination.
- 12.6 With the consent of the Faculty, additional assessment will only be permitted where:
 - 12.6.1 a specific case of special consideration has been approved by the Faculty; or
 - 12.6.2 a student in his or her final year fails a single compulsory assessment resulting in a grade of fail in only that unit of study preventing him or her from completing the degree that year.

13. Credit transfer policy

- 13.1 Refer to the *University of Sydney (Coursework) Rule 2000 (as amended)* and Academic Board policies.

4. Postgraduate degree requirements

This chapter sets out requirements for both research and coursework postgraduate programs offered in the Faculty of Pharmacy. Following a brief description of the research degrees and notes on the presentation of theses, details of the requirements and units of study for the coursework programs are listed.

The information in this chapter is in summary form and is subordinate to the provisions of the relevant degree resolutions (see Chapter 5).

Another valuable resource for intending and current postgraduate students is the *Postgraduate Research and Coursework Handbook* published by the University of Sydney. See: www.usyd.edu.au/handbooks/handbooks_admin/postgraduate.shtml

Also relevant is *The Thesis Guide* and the *Survival Manual* published by the Sydney University Postgraduate Representative Association.

Research degrees

Research degrees offered by the faculty are:

- Doctor of Philosophy
- Master of Philosophy

Doctor of Philosophy (PhD)

Course code: PB000

The degree of Doctor of Philosophy is a research degree awarded for a thesis considered to be a substantially original contribution to the subject concerned. Some coursework may be required (mainly in the form of seminars) but in no case is it a major component. See Chapter 5 for the Resolutions of the Senate and Academic Board relating to the degree of Doctor of Philosophy.

Applicants should normally hold a masters degree or a bachelor's degree with first class honours from the University of Sydney, or an equivalent qualification from another university or institution.

The degree may be taken on either a full-time or part-time basis. In the case of full-time candidates:

- the minimum period of candidature can, with the permission of the faculty, be two years for candidates holding an MSc degree or equivalent, or three years in the case of candidates holding a bachelor's degree with first class or second class honours
- the maximum period of candidature is normally four years.

Part-time candidature may be approved for applicants who can demonstrate that they are engaged in an occupation or other activity, which leaves them substantially free to pursue their candidature for the degree. For part-time candidates:

- the minimum period of candidature will normally be determined on the recommendation of the faculty but in any case will not be less than three years
- the maximum period of candidature is normally eight years.

Doctor of Philosophy degree resolutions

See Chapter 5.

Master of Philosophy (MPhil)

Course code: PC082

The degree is awarded on the successful examination of a thesis based on original research. The faculty offers a wide choice of research areas (see below). There is a coursework component to this

degree, consisting of a Research Methods unit of study, but by no means is it a major component.

The minimum admission requirements are:

- a bachelor's degree with first or second class honours from the University of Sydney in pharmacy or science (eg pharmacology, chemistry or biochemistry), or
- a bachelor's degree from the University of Sydney or other approved institution *without* first or second class honours, after the applicant has passed a qualifying examination at a standard equivalent to the bachelor's degree with first or second class honours.

The Faculty of Pharmacy may exempt an applicant from the qualifying examination if the applicant has obtained at least a credit in the highest course available in the subject or subjects relevant to the Master of Philosophy (Pharmacy).

The degree may be taken on either a full-time or part-time basis. The minimum period of candidature will be one year with a maximum of two years for students enrolled on a full-time basis. For students enrolled on a part-time basis, the minimum period of candidature is two years, and four years maximum.

Master of Philosophy degree resolutions

See Chapter 5.

Research in the Faculty of Pharmacy

Research in Pharmacy covers a broad spectrum of pharmaceutical and clinical sciences, including:

- the design, synthesis, testing and mechanism of action of drugs
- studies on advanced drug delivery
- investigation of the fate of drugs in humans including pharmacogenomics and other aspects of drug disposition, and
- research on the clinical and sociological aspects of pharmacy and health services research.

Within the pharmacy profession, the Faculty of Pharmacy at the University of Sydney is established as a leader in research and innovation. We are experiencing a sustained period of significant growth as we continue to attract outstanding researchers to the faculty through the provision of facilities that promote world class research.

Research income has increased from approximately \$0.5M in 1999 to over \$3.4M in 2007. Research in the faculty is supported through nationally competitive grant funding from professional bodies, such as the Pharmacy Guild of Australia, National Health and Medical Research Council, Australian Research Council, Ramaciotti Foundation and Rebecca L Cooper Medical Research Foundation, among others.

Research projects are also conducted as collaborative ventures and contracts with the pharmaceutical industry or with State or Commonwealth Departments of Health.

The research activities at the Faculty of Pharmacy can be divided into three broad streams incorporating our research strengths. These are:

- Pharmaceutical Chemistry
- Pharmaceutics
- Pharmacy Practice

Pharmaceutical Chemistry

Drug Discovery – Research in Drug Discovery focuses on the conceptualization, design and testing of drugs (including drug quality). Utilising molecular modelling and computational chemistry, the



structural group has been active in its work aimed at targets for inflammation and schizophrenia, allowing it to develop compounds with promising therapeutic profiles.

The neuroscience team is involved in the design and synthesis of analogues of gamma aminobutyric acid (GABA), the major inhibitory neurotransmitter in the mammalian central nervous system.

GABA receptors are key targets for drugs which have important therapeutic actions including epilepsy, depression, anxiety and memory-related deficits implicated in Alzheimer's disease and schizophrenia.

Biological Mechanisms of Drug Action – Research on biological mechanisms of drug actions explores how and why drugs work and the identification of potential future drug targets.

Our current research programs in this area include investigation of novel therapeutic targets for future pharmacological intervention in inflammatory diseases such as asthma and cancer, and structure-activity studies of receptors implicated in neurological conditions using mutagenesis methods to help us identify key amino acid residues that are important in the binding and function of receptors in neuroscience.

Herbal Medicines – The Herbal Medicines Research and Education Centre was founded in 1997, the first of its kind in Australia, which was established within the pharmaceutical chemistry program. The centre focuses on scholarship and research into the quality, safety and efficacy of herbal and complementary medicines and their interactions with conventional drugs.

Linkages and cooperation between the pharmaceutical, herbal and complementary medicine industries and user groups are actively promoted. The use of plants and other naturally occurring materials as sources of safe and effective therapeutic agents is a major objective of research carried out in the Herbal Medicines Research and Education Centre.

Pharmaceutics

Pharmacogenomics and Drug Development – The Pharmacogenomics and Drug Development Group has interests in how human gene variation influences drug action and safety. The principal focus is on human drug metabolising enzymes (cytochromes P450 in particular) and transporters that determine the concentrations of drugs in tissues and their durations of action.

Projects cover clinical aspects of human drug safety in addition to laboratory-based projects of human gene regulation in cells. At present, the emphasis is on anti-cancer agents and on atypical antipsychotic drugs.

Advanced Drug Delivery – The Advanced Drug Delivery Group is focussed on understanding physical properties of materials used in pharmaceutical sciences and relating those to in-vitro and subsequent in-vivo performance. More specifically, the group's main focus is in respiratory drug delivery science.

In addition to the basic aerosol characterisation techniques, the group utilises a series of advanced techniques to allow direct insight into how surface morphology and chemistry influence in-vitro performance parameters in respiratory physical science.

Pharmacy Practice

Health Services Research – A particular strength of the Pharmacy Practice group is health services research focusing on the role of pharmacy in the health care setting. Implementing change to pharmacy practice in recent decades has required a solid base of research and evidence to support the clinical and economic value of extended roles for pharmacists.

Active research projects in this group include: airway smooth muscle and mast cells in asthma, private hospital pharmacy services and QUM indicators, exploring ethnic and cultural differences in behaviours

and attitudes toward medicine-taking, customer perceptions and clinical assessment of home medicines reviews, continuity of care and home medicine reviews, optimising business viability in Australian community pharmacies by integrating cognitive pharmacy services, hospital pharmacy workforce and industrial relations, investigating the valproate-clozapine interacting in people with schizophrenia, extemporaneous compounding in community pharmacy, measuring perceived service quality in the public healthcare system, chronic disease and health economics, health services and policy, the impact of model of service delivery variables on the self management and metabolic control of children and adolescents with Type 1 diabetes, development and evaluation of a prescribing decision support tool for anticoagulation in the prevention of atrial fibrillation, psychotropic drug use in nursing homes, optimal dosing in children with malignant disease, ethnic differences in drug response, provision of mental health services in community pharmacy, asthma devices and self-management, development and provision of CMI, patient perceptions and their satisfaction with pharmacy services, medication counselling practice in community pharmacy, drug access, policy and clinical trials in paediatrics, sociocognitive examination of service quality and satisfaction within professional health services and measuring pharmacist inter-professional communication.

Quality Use of Medicines – Assuring medication safety and the Quality Use of Medicines in the community and institutional setting is also the key focus of research activity. Examples of research in the institutional setting include drug use reviews, clinical therapeutic drug monitoring, the role of drug committees and the impact of clinical services in the hospital setting.

In the community setting, research focuses on the impact of Residential Medication Management Review (RMMR) and HMR on medicines use and health outcomes. Medicines information is another focus of research activity with investigations into consumer needs, preferences, experiences and impacts on medicine taking behaviour.

Understanding the causes and consequences of age-related changes in response to medicines is a major focus in the research area of Pharmacy Aged Care within the Pharmacy Practice discipline. This involves investigations into the use of medicines in older people, clinical pharmacology studies to characterise changes in drug disposition and how these translate into practice.

Asthma – Cellular research in asthma is centred on examining the roles, mechanisms and interactions of inflammatory mediators, mast and smooth muscle cells in the pathophysiology of asthma. This may lead to the identification of new therapeutic targets to improve prevention and management of the condition.

Pharmacy Management - In an increasingly competitive environment, skills such as marketing, human resources, leadership, retail management and strategic management are vital for the ongoing success of pharmacy. The Faculty of Pharmacy at the University of Sydney is the first school in Australia, and one of only a few in the world, to address this need through the development of a research program.

Research projects have commenced concerning strategic barriers to entry, human resource management in community pharmacy, home medicines reviews, the success factors affecting the introduction of automated dispensing systems into community pharmacy and perceived services quality.

The current focus is on integrating the business and professional aspects of practice by optimising business viability. Organisational frameworks, such as organisational flexibility are being used to examine and support the practical implementation of professional services in community pharmacies.

Presentation of theses

The following information is presented for the guidance of candidates. It should be regarded as a summary only. Candidates should also

consult the *Postgraduate Research and Coursework Handbook 2007/08* for the most current and detailed advice. See: www.usyd.edu.au/handbooks/handbooks_admin/postgraduate.shtml

Formal requirements for Doctor of Philosophy

- Four copies of the candidate's thesis should be submitted for examination for the degree of Doctor of Philosophy. These may be bound in either a temporary or a permanent form.
- Theses submitted in temporary binding should be strong enough to withstand ordinary handling and postage.
- The degree shall not be awarded until the candidate has submitted a permanently bound copy of the thesis (containing any corrections or amendments that may be required), printed on acid-free or permanent paper.
- The thesis shall be accompanied by a certificate from the supervisor stating whether in the supervisor's opinion the form of presentation of the thesis is satisfactory.
- Thesis in permanent form shall normally be on International Standard A4 size paper sewn and bound in boards covered with book cloth or buckram or other binding fabric.
- The title of the thesis, the candidate's initials and surname, the title of the degree, the year of submission and the name of the University of Sydney should appear in lettering on the front cover or on the title page. The lettering on the spine, reading from top to bottom, should conform as far as possible to the above except that the name of the University of Sydney may be omitted and the thesis title abbreviated.
- Supporting material should be bound in the back of the thesis as an appendix or in a separate sheet of covers.

Formal requirements for Master of Philosophy

- Similar formal requirements to those above exist for the presentation of masters theses.
- Three copies must be submitted.

Coursework degrees

Requirements for the following coursework degrees offered by the Faculty, and their associated units of study, are listed in this chapter in the following order:

- Master of Pharmacy
- Master of Herbal Medicines
- Graduate Diploma in Herbal Medicines
- Graduate Certificate in Herbal Medicines

Results

For all coursework programs, the following mark ranges apply:

Grades		
HD	High Distinction	85–100
D	Distinction	75–84
CR	Credit	65–74
P	Pass	50–64
R	Satisfied requirements	
F	Fail	Below 50
AF	Absent Fail	

Coursework degree resolutions

See Chapter 5.

Master of Pharmacy (MPharm)

Course code: PC034

This postgraduate coursework program in pharmacy is a graduate entry level or professional masters degree offered to applicants who have completed an undergraduate degree. With a strong practical focus, the course is designed to provide an alternative mode of entry into the pharmacy profession.

The course has been designed to satisfy the academic requirements for registration with the Pharmacy Board of New South Wales.

Admission requirements

Successful applicants must meet each of the following admission requirements:

- a prior bachelor's degree
- satisfactory score in the GAMSAT for local applicants or MCAT for international applicants
- a minimum GPA as determined by the faculty
- meeting a minimum of five out of the seven prerequisite units of study – human biology, chemistry, calculus, statistics, biochemistry, physiology and pharmacology
- a satisfactory score for the Pharmacy Case Study Scenario.

Summary of requirements

The degree of Master of Pharmacy is a full-time two year course, including clinical placements undertaken during the summer and winter inter-semester periods. Progression towards the degree is by the accumulation of credit points. The requirements for the degree are set out in the Senate Resolutions (see Chapter 5) which should be read by all intending candidates.

To satisfy the requirement for the degree candidates must gain a minimum of 96 credit points by completing the units of study prescribed for the degree. Table 2 outlines the units of study which comprise the program of study for the Master of Pharmacy.

Registration requirements for pharmacists

A student who intends to qualify to be registered as a pharmacist under the Pharmacy Act 1964 is first required to qualify for the degree of Master of Pharmacy. In addition he or she is required to serve not less than 2000 hours as an assistant to a registered pharmacist in a pharmacy within the Commonwealth of Australia. This period must be served following the successful completion of the degree.

Further details concerning the requirements for registration can be obtained from the Pharmacy Board of New South Wales:

3rd Floor, 28 Foveaux Street
 Surry Hills
 NSW 2010 Australia
 Phone: +61 2 9281 7736
 Fax: +61 2 9281 2924

Postal address:
 Locked Bag 2
 Haymarket
 NSW 1240 Australia

Master of Pharmacy degree resolutions

See Chapter 5.

Postgraduate coursework programs in Herbal Medicines

Master of Herbal Medicines

(MHerbMed) – Course code PC032

Graduate Diploma in Herbal Medicines

(GradDipHerbMed) – Course code PF002

Graduate Certificate in Herbal Medicines

(GradCertHerbMed) – Course code PG000

Objectives

The Master of Herbal Medicines, Graduate Diploma in Herbal Medicines, and Graduate Certificate in Herbal Medicines are designed to provide health care professionals and science graduates with an advanced education encompassing scientific and pharmaceutical aspects of herbal medicines, and their clinical applications. Candidates will at the same time acquire systematic knowledge of traditional medicine.

The programs are suitable for postgraduate studies by pharmacists, practitioners and dispensers of complementary medicine and Chinese

4. Postgraduate degree requirements

medicine, medical practitioners, science graduates and professionals who would like to specialise in herbal medicines manufacturing, government regulation and research.

Program outcomes

Graduates with a pharmacy or medical background will gain appropriate knowledge and skills to enable them to provide information and in-depth advice on herbal products in their practice.

Graduates with a traditional Chinese medicine or medical acupuncture background will extend their scientific and pharmaceutical knowledge underpinning the clinical application of Chinese herbal medicines, attain knowledge on the interaction between Western and Chinese medicine, and extend skills necessary to prescribe or dispense scheduled herbs safely in the regulatory context.

Graduates from other scientific disciplines will gain and/or expand their knowledge and further develop skills necessary for work in manufacturing, teaching and the research areas of herbal medicines.

Admission requirements

The basic entry requirement is a bachelor's degree in pharmacy, medicine, nursing, Chinese medicine, complementary medicine, science, veterinary science, agriculture or other appropriate disciplines from an approved university. Under special circumstances other applicants with demonstrable relevant occupational experience and holding relevant diplomas may, on successfully meeting such requirements, be eligible for admission subject to approval by the Dean. The faculty's usual English language admission requirements also apply.

Program requirements

The Herbal Medicines programs are available for both part-time and full-time study. However, international students are only permitted to enrol full-time.

The course consists of lectures, tutorials, laboratory practical, excursions, and assignment projects. There are approximately eight hours (two/three evenings) of lectures/tutorials per week during semester for part-time study and approximately 16 hours (five evenings) of lectures/tutorials per week during semester for full-time study.

Extra hours are required to attend excursions, carry out literature searches, complete assignments and undertake other self-directed study. Honours students should be prepared to conduct their research at the university during the daytime in addition to attending classes in the evening.

The candidates are required to complete 48 credit points to qualify for the masters pass degree, with an additional 12 credit points for the honours dissertation; 36 credit points to qualify for the graduate diploma; 24 credit points to qualify for the graduate certificate.

For part-time study, the Master of Herbal Medicines is to be taken over two to four years. The Graduate Diploma in Herbal Medicines is to be taken over one and a half to three years. The Graduate Certificate in Herbal Medicines is to be taken over one to two years.

For full-time study, the Master of Herbal Medicines is to be taken over one to two years; the honours component for the Master of Herbal Medicines adds an extra semester to the initial masters program; the Graduate Diploma in Herbal Medicines is to be taken over one to one and a half years; the Graduate Certificate in Herbal Medicines is to be taken over half a year to one year.

Summary of requirements for full-time study

Program	Credit points required	Minimum time for completion	Maximum time for completion
Master of Herbal Medicines	48	1 year	2 years
Master of Herbal Medicines (honours level)*	60	1.5 years	2.5 years
Graduate Diploma in Herbal Medicines	36	1 year	1.5 years
Graduate Certificate in Herbal Medicines	24	0.5 year	1 year

Summary of requirements for part-time study

Program	Credit points required	Minimum time for completion	Maximum time for completion
Master of Herbal Medicines	48	2 years	4 years
Master of Herbal Medicines (honours level)*	60	2.5 years	4 years
Graduate Diploma in Herbal Medicines	36	1.5 years	3 years
Graduate Certificate in Herbal Medicines	24	1 year	2 years

* A dissertation is required for the Master of Herbal Medicine at honours level.

Flexibility between courses

This is a fully embedded program. The graduate certificate and graduate diploma are linked to the masters degree. Candidates enrolled in the masters degree or graduate diploma may choose to terminate their enrolment earlier to qualify for the graduate diploma or graduate certificate. Candidates are eligible to apply to transfer their enrolment from graduate certificate to graduate diploma, or from graduate diploma to masters. Local candidates are eligible to apply for conversion between part-time and full-time study.

Course structure

The Master of Herbal Medicines program has four core units of study and seven electives, with the core units of study offered Monday to Thursday, and the elective units of study offered Monday to Friday. Full-time candidates are required to attend classes potentially for five days (evenings) per week, depending on electives chosen, but with a minimum of four days (evenings) per week. The table below shows the graduate programs in herbal medicines, including the suggested units of study for those candidates wishing to specialise in different fields: clinical, industry and dispensary fields. Flexibility is allowed for electives and students also have the option of choosing one unit of study from other disciplines within the university, or from another university, subject to approval by the course coordinator.

To be eligible to apply for the dissertation required for the Master of Herbal Medicines at honours level, students need an average weighted mark of at least 65 in 24 credit points of core unit coursework in Semester 1. A weighted average mark of 70 must be maintained in Semester 2. Approved students are then required to undertake a small supervised research project in herbal medicines and complete a formal dissertation component. The offer of a dissertation is subject to availability of staff and laboratory space.

Program	Credit points required	Minimum time for completion	Maximum time for completion
Master of Herbal Medicines	48	1 year	2 years
Master of Herbal Medicines (honours level)*	60	1.5 years	2.5 years
Graduate Diploma in Herbal Medicines	36	1 year	1.5 years
Graduate Certificate in Herbal Medicines	24	0.5 year	1 year

At least 50 per cent of total credit points earned should be from core units. Flexibility is allowed for electives, however there are recommended electives for each stream. An elective unit of study may not be offered if a certain enrolment number is not reached.

Credit

Prior to admission to candidature, a candidate who has completed relevant graduate coursework in the University of Sydney or another recognised university may be eligible for credit of up to one third of the overall degree towards the requirements for the Master of Herbal Medicines, the Graduate Diploma in Herbal Medicines, or the Graduate Certificate in Herbal Medicines degrees respectively. The graduate study completed (within the previous five years) must be considered by the faculty to be equivalent to programs prescribed for the degree.

Herbal Medicines degree resolutions

See Chapter 5.

Units of study: tables

Table 2: Master of Pharmacy degree

Unit of study	Credit points	A: Assumed knowledge	P: Prerequisites	C: Corequisites	N: Prohibition	Session
Year 1						
PCOL5001 Current Topics in Pharmacology	6					Semester 1
PHAR5513 Pharmaceutical Chemistry 1A	6					Semester 1
PHAR5515 Pharmaceutical Science	6					Semester 1
PHAR5516 Pharmaceutical Chemistry 1B	6		C PHAR5513 and PHAR5515			Semester 2
PHAR5517 Pharmaceutics 1B	6		C PHAR5515			Semester 2
PHAR5518 Pharmacy Practice A	6					Semester 2
PHAR5505 Clinical Residency 1	12		C PHAR5518			S2 Late Int
Year 2						
PHAR5507 Dispensing Practice	6		P PHAR5517			Semester 1
PHAR5508 Pharmacy Practice B	6		P PHAR5505 and PHAR5518			Semester 1
PHAR5514 Pharmaceutics 2A	6					Semester 1
PHAR5506 Pharmaceutical Chemistry 2B	6		P PHAR5513, PHAR5516			Semester 2
PHAR5509 Integrated Pharmaceutics	6		P PHAR5517 C PHAR5514			Semester 2
PHAR5510 Pharmacy Practice C	6		C PHAR5508			Semester 2
PHAR5512 Clinical Residency 2	12		C PHAR5508 and PHAR5510			S2 Late Int

Table 3: Postgraduate coursework programs in Herbal Medicine

<i>Unit of study</i>	<i>Credit points</i>	<i>A: Assumed knowledge P: Prerequisites C: Corequisites N: Prohibition</i>	<i>Session</i>
HERB5550 Integrative Herbal Therapeutics	6		Semester 1
HERB5551 Botany and Herbal Chemistry	6		Semester 1
HERB5552 Herbal Pharmacology	6		Semester 1
HERB5553 Herbal Regulation and Dispensing	6		Semester 1
HERB5554 Chinese Medicine and Materia Medica	6		Semester 1
HERB5555 Herbal Pharmaceutics and Analysis	6		Semester 2
HERB5556 Herbal Toxicology	6		Semester 2
HERB5557 Pharmacognosy	6		Semester 2
HERB5558 Clinical Studies and Monographs	6		Semester 2
HERB5559 Chinese Herbal Formulas and Processing	6		Semester 2
* For Master of Herbal Medicines (honours level)			
HERB5560 Dissertation	12	Note: Department permission required for enrolment Note: Department permission required for enrolment	Semester 1 Semester 1a Semester 1b Semester 2 Semester 2a Semester 2b

Units of study: listings

HERB5550

Integrative Herbal Therapeutics

Credit points: 6 **Session:** Semester 1 **Classes:** lectures 3 hrs/wk for 11 wks, practicals, tutorials, 3 hrs/wk for 2 wks **Assessment:** examinations (50%), assignments (25%), practical work (25%)

Associated degrees: Grad Cert H M, Grad Dip H M, M Herb Med, M Pharm (Clin), PG Coursework Exchange.

This unit of study is designed for the healthcare practitioners who would like to extend their understanding in clinical applications of traditional herbal medicines. 'Integration' is the essence of this unit of study, linking and combining the knowledge and practice of Western and traditional medicine in the treatment of common diseases. The unit covers some common chronic diseases, such as hypertension, hyperlipidemia, diabetes, asthma, rheumatism, prostate hypertrophy, menopausal syndrome, depression etc. The disease states based on the symptomatology of Western medicines are extended towards the syndrome and holistic model of traditional medicines (Chinese, Western and Ayurvedic).

Textbooks

Quick Access, Professional Guide to Conditions, Herbs & Supplements, Integrative Medicine Communications, 2000
Braun L & Cohen M. Herbs & Natural Supplements - An Evidence-based Approach. Sydney: Elsevier-Mosby, 2004
Bumental M (Ed), Herbal Medicine. Expanded Commission E Monographs. Texas: American Botanical Council, 2000
Mills S & Bone K, Principles and Practice of Phytotherapy - Modern Herbal Medicine, London: Churchill Livingstone, 2000
Grievies M (1st pub 1931), A Modern Herbal, Surrey, Merchant Book Company, 1973

HERB5551

Botany and Herbal Chemistry

Credit points: 6 **Session:** Semester 1 **Classes:** lectures 3 hrs/wk for 12 wks, practicals, tutorials, 3 hrs/wk for 4 wks **Assessment:** examinations (50%), assignments (25%), practical work (25%)

Associated degrees: Grad Cert H M, Grad Dip H M, M Herb Med, M Pharm (Clin), PG Coursework Exchange.

Medicinal botany is the study of the structure, morphology and taxonomy of medicinal plants. The objectives of the subject are to classify and identify medicinal plants, to ensure the safety and quality of herbal medicines by eliminating the confusion of herbal species, and to develop new resources of medicinal plants. Herbal chemistry comprises the study of extraction and separation, chemical properties, structure determination and biosynthesis pathways of chemical components in herbal medicines. The objective is to use both modern science and technology and traditional theory to study the relationship between chemical components and properties of herbal medicines.

Textbooks

Raven PH, Evert RF, Eichhorn SE. Biology of Plants. W.H. Freeman-Worth Publishers, 1999
Robinson L. Field Guide to the Native Plants of Sydney. Kangaroo Press, 1998
Lassak EV, McCarthy T. Australian Medicinal Plants. Reed Books, 1997
Robbers JE, Speedie JE, and Tyler VE, Pharmacognosy and Pharmabiotechnology. Williams & Wilkins, Lea & Febiger, 1996
Evans W C . Trease and Evans Pharmacognosy (14th Ed). London: WB Saunders, 1996
Harborne JB. Phytochemical Methods: a Guide to Modern Techniques of Plant Analysis (3rd Ed). Chapman & Hall, 1998

HERB5552

Herbal Pharmacology

Credit points: 6 **Session:** Semester 1 **Classes:** lectures 3 hrs/wk for 12 wks, practicals, tutorials, 3 hrs/wk for 3 wks **Assessment:** examinations (50%), assignments (25%), practical work (25%)

Associated degrees: Grad Cert H M, Grad Dip H M, M Herb Med, M Pharm (Clin), PG Coursework Exchange.

Herbal pharmacology is the study of the function and mechanism of action of herbal medicines with modern scientific methods. The objectives are: to understand pharmacological principles of herbal medicines which will help health-care practitioners to understand the prescribing of herbal medicines effectively; to understand the underlying nature of traditional medical theory; to provide data on pharmacodynamics and toxicology for new herbal products development. This subject will emphasise the pharmacological study of traditional herbal medicines. The pharmacology of each class of

drugs is discussed in relation to traditional theories and classification of herbs.

Textbooks

Rang HP, Dale MM, Ritter JM. Pharmacology (4th Ed). Edinburgh: Churchill Livingstone, 1999
 Braun L & Cohen M, Herbs & Natural Supplements - An Evidence-based Approach. Sydney: Elsevier-Mosby, 2004
 Montvale N.J. PDR for Herbal Medicines. Medical Economic, 1998
 Anderson LA, and Phillipson JD. Herbal Medicines: A Guide for Health-Care Professionals. Pharmaceutical Publishing Co, 2002
 Chang HM and But PPH. Pharmacology and Applications of Chinese Materia Medica Vol 1- 2. World Scientific, 1996

HERB5553

Herbal Regulation and Dispensing

Credit points: 6 **Session:** Semester 1 **Classes:** lectures 3 hrs/wk for 9 wks, practicals, tutorials, 3 hrs/wk for 2 wks **Assessment:** examinations (50%), assignments (25%), practical work (25%)

Associated degrees: Grad Cert H M, Grad Dip H M, M Herb Med, M Pharm (Clin), PG Coursework Exchange.

This unit of study covers the government legislation concerning products and practice of complementary medicines. The unit of study will help industry professionals to understand TGA Legislation to ensure that medicinal preparations are of acceptable quality, safety and efficacy, and for health-care practitioners to dispense herbal medicines safely. Topics in this unit of study will include: The Australian Therapeutic Goods Administration; accreditation of complementary medicine practitioners; Registration and Listing of traditional or complementary medicines; GMP of herbal manufacturing; dispensing and quality management of herbal medicines, and quality use of medicines.

Textbooks

Guidelines for the Appropriate Use of Herbal Medicines, World Health Organisation, 1998
 Botanical Medicine: Efficacy, Quality Assurance and Regulation, D Eskinazi, Mark Blumenthal, Norman Farnsworth, Chance W Riggins, Mary Ann Liebert, 1999
 Complementary Medicine and the Law, Julie Stone and Joan Matthews, Oxford University Press, 1996
 Therapeutic Goods Regulations, Australian Government Publishing Service, March 1995, Canberra

HERB5554

Chinese Medicine and Materia Medica

Credit points: 6 **Session:** Semester 1 **Classes:** lectures 3 hrs/wk for 13 wks, practicals, tutorials, 3 hrs/wk for 3 wks **Assessment:** lectures 3 hrs/wk for 13 wks; practicals, tutorials, 3 hrs/wk for 3 wks

Associated degrees: Grad Cert H M, Grad Dip H M, M Herb Med, M Pharm (Clin), PG Coursework Exchange.

Basic Chinese medicine includes basic theory and its application in the four diagnosis methods, pattern differentiation methods, treatment principles and methods. The unit of study provides systematic knowledge on Chinese medicine and lays a solid foundation for further study on the materia medica and formulary of Chinese medicine. Chinese materia medica is the study of basic theory of Chinese material medica and the origin, collection, property, function, and clinical application of Chinese herbs in Chinese medicine context. It bridges Chinese medicine theory, formulas and clinical practice. It also provides a foundation for modern herbal monographs.

Textbooks

Maciocia G. The Foundations of Chinese Medicine. Churchill Livingstone. 1989
 Bensky D, Gamble A. Chinese Herbal Medicine: Materia Medica. Seattle: Eastland Press, 1993

HERB5555

Herbal Pharmaceutics and Analysis

Credit points: 6 **Session:** Semester 2 **Classes:** lectures 3 hrs/wk for 11 wks, practicals, tutorials, 3 hrs/wk for 5 wks **Assessment:** examinations (50%), assignments (25%), practical work (25%)

Associated degrees: Grad Cert H M, Grad Dip H M, M Herb Med, M Pharm (Clin), PG Coursework Exchange.

Pharmaceutical technology of herbal medicines includes the study of formulation theory and manufacturing techniques, quality control and application of herbal products using methods of modern science and

technology, combined with traditional medicine theory. The primary objective of pharmaceutical technology of herbal medicines is to formulate herbal medicines into dosage forms, and meet the requirements of quality, efficacy, safety and stability. Analysis of herbal medicines" is the study of methods of chemical analysis, qualitative and quantitative analysis of chemical components, chemical analysis of formulations. The objectives of this course are to develop an understanding of the underlying principles of the analytical methodology used in identifying and quantifying the main chemical components of herbal medicines, as well as contaminants and impurities, and to become familiar with the concepts of method validation and stability-indicating analysis as applied to herbal substances.

Textbooks

List PH, Schmidt PC. Phytopharmaceutical Technology. Boca Raton: CRC Press Inc, 1989
 Martin A N. Physical Pharmacy. Lea & Febiger, 1993
 Ansel H C. Introduction to Pharmaceutical Dose Forms. Lea & Febiger, 1985
 Aulton M E (ed). Pharmaceutics: The Science of Dosage Form Design. Churchill Livingstone, 1988
 Watson D G. Pharmaceutical Analysis, Churchill Livingstone. London, 1999
 Wagner H, Bladt S, Zgainski EM. Plant Drug Analysis. Berlin: Springer-Verlag, 1984
 Quality Control Methods for Medicinal Plant Materials, Geneva :World Health Organisation, 1998
 Wichtl M, Herbal Drugs and Phytochemicals, translated by N Bisset. 1994

HERB5556

Herbal Toxicology

Credit points: 6 **Session:** Semester 2 **Classes:** lectures 3 hrs/wk for 7 wks, practicals, tutorials, 3 hrs/wk for 4 wks **Assessment:** examinations (50%), assignments (25%), practical work (25%)

Associated degrees: Grad Cert H M, Grad Dip H M, M Herb Med, M Pharm (Clin), PG Coursework Exchange.

Herbal toxicology deals with the theory and application of toxicology and safety aspects related to the herbal medicine industry and practice. Topics in this unit of study will include: mechanisms of toxicity, toxicological testing, toxicity of plants, adverse reactions, report mechanism for adverse reactions, contraindications and interactions with pharmaceutical drugs, scheduling of pharmaceutical and herbal medicines, list of toxic herbs.

Textbooks

Klaasen CD, Amdur MO & Doull J (eds). Casarett & Doull (eds). Toxicology: the Basic Science Of Poisons, (6th edn), McGraw-Hill. 2001
 McGuffin M, Hobbs C, Upton R, Goldberg A, American Herbal Products Association's Botanical Safety Handbook, (eds). Boca Raton: CRC Press, 1997
 Mills, S. and Bone, K., The Essential Guide to Herbal Safety, Elsevier Churchill Livingstone, 2005
 Brinker F. Herb Contraindications and Drug Interactions (2nd edn). Sandy, Oregon: Eclectic Medical Publications, 1998

HERB5557

Pharmacognosy

Credit points: 6 **Session:** Semester 2 **Classes:** lectures 3 hrs/wk for 9 wks, practicals, tutorials, 3 hrs/wk for 3 wks **Assessment:** examinations (50%), assignments (25%), practical work (25%)

Associated degrees: Grad Cert H M, Grad Dip H M, M Herb Med, M Pharm (Clin), PG Coursework Exchange.

Pharmacognosy is the study of natural substances, principally plants, used in medicine. The current subject, pharmacognosy-identification of herbs focuses on the study of herbal identification and quality and development of new herbal resources. It utilizes experience of traditional medicine and theory and methods of modern sciences such as botany, zoology, and chemistry. It studies the origin, characteristics, microscopic characters, chemical components, physical and chemical properties of herbal medicines to ensure the quality of herbal materials and develop new resources.

Textbooks

Evans WC, Saunders WB. Trease and Evans Pharmacognosy (14th Ed). London: 1996
 Montvale, N J. PDR for Herbal Medicines. Medical Economic, 1998

HERB5558

Clinical Studies and Monographs

Credit points: 6 **Session:** Semester 2 **Classes:** 3 hrs/wk for 11 wks, practicals, tutorials, 3 hrs/wk for 4 wks **Assessment:** examinations (50%), assignments (25%), practical work (25%)

Associated degrees: Grad Cert H M, Grad Dip H M, M Herb Med, M Pharm (Clin), PG Coursework Exchange.

Module 1 covers the evaluation of clinical studies which refers to the amount of scientific and clinical literature on herbal medicines which is rapidly expanding. This subject will cover the quantitative aspects of study design, the extent and type of use of herbal medicines in world communities, evaluation of methodology of clinical trials, recent developments in clinical trials of herbal medicines in Australia and overseas, literature search training. Module 2 covers herbal monographs which is the information and application of common herbs and herbal preparations available in Australia. Topics will cover botanic description, traditional usage, chemical composition, pharmacology, therapeutic application, toxicity, clinical trial data, TGA regulatory status, and products in the market.

Textbooks

National Statement on Ethical Conduct in Research Involving Humans, National Health and Medical Research Council, 1999
Lewith G, Jonas WB, Walach H. Clinical Research in Complementary Therapies, Principles, Problems and Solutions. Churchill Livingstone, 2002
DeAngelis C. An Introduction to Clinical Research. Oxford University Press
Iber FL, Riley WA, Murray PJ. Conducting Clinical Trials. Plenum Medical Book Company, 1989
Montvale NJ, PDR for Herbal Medicines. Medical Economic, 1998
Braun L & Cohen M. Herbs & Natural Supplements - An Evidence-based Approach. Sydney: Elsevier-Mosby, 2004
Anderson LA & Phillipson JD. Herbal Medicines: A Guide for Health-Care Professionals. Pharmaceutical Publishing Co, 2002
Monographs on the Medicinal Uses of Plant Drugs, European Scientific Cooperative on Phytotherapy
Zhu Y. Chinese Materia Medica, Chemistry, Pharmacology, and Applications

HERB5559

Chinese Herbal Formulas and Processing

Credit points: 6 **Session:** Semester 2 **Classes:** lectures 3 hrs/wk for 11 wks, practicals, tutorials, 3 hrs/wk for 3 wks **Assessment:** examinations (50%), assignments (25%), practical work (25%)

Associated degrees: Grad Cert H M, Grad Dip H M, M Herb Med, M Pharm (Clin), PG Coursework Exchange.

A formula of Chinese medicine is a preparation of a number of herbs for clinical use according to certain guidelines, on the basis of pattern differentiation and treatment methods. Formulary of Chinese medicine is based on the study of theory and application of formulae of Chinese medicine. Processing of Chinese medicine is a subject dealing with the theory, history and techniques of processing of Chinese materia medica, and the quality standard of processed herbs and the principles of processing. The objective of processing of Chinese herbal medicines is to maintain the quality of processed herbs, and ensure the safety and clinical efficacy of herbal medicines.

Textbooks

Barolet R & Bensky D. Chinese Herbal Medicine Formulae and Strategies. Eastland Press 1990
Sionneav P. Pao Zhi: An Introduction to the Use of Processed Chinese Medicinals. Blue Poppy Press, 1995
Whitten G. Herbal Harvest-Commercial Production of Quality Dried Herbs in Australia. Agmedia, 1997

HERB5560

Dissertation

Credit points: 12 **Teacher/Coordinator:** Dr G Li **Session:** Semester 1, Semester 1a, Semester 1b, Semester 2, Semester 2a, Semester 2b **Classes:** Weekly meetings with coordinator and supervisor. Students are required to spend approx 24 hrs/wk on their project for one semester on a part-time basis **Assessment:** Research and dissertation of up to 20,000 words, or as a manuscript (approx. 3500 words). The manuscript should match the style and content of a nominated journal. The dissertation or manuscript should be bound and will be sent to two examiners

Note: Department permission required for enrolment. Note: Note: Department permission required for enrolment

Associated degrees: M Herb Med (Hons).

To be eligible to apply for the Dissertation students need an average weighted mark of at least 65 in 24 credit points of core unit coursework in Semester 1. A weighted average mark of at least 70 must be maintained in Semester 2. Approved students are then required to undertake a small supervised research project in herbal medicines and complete a formal Dissertation component. The offer of Dissertation is subject to availability of staff and laboratory space. Students enrolled in the Master of Herbal Medicines (Honours) will undertake a research project over half (full-time) to one semester (part-time students). This research project will involve a literature review, the development of a research proposal and protocol, obtaining ethics approval, and collection of data, and then preparation of a minor treatise under the supervision of a faculty staff member. Supervision will normally involve a 1hr/week meeting with the student's supervisor. Facilities and equipment appropriate to the research will be arranged within the faculty as needed. Students will be required to write a major treatise up to 20,000 words documenting an original research endeavour in the area of herbal medicines. Students will be expected to attend the Postgraduate Research Symposium and to present their research proposal and their ongoing work to peer review.

PCOL5001

Current Topics in Pharmacology

Credit points: 6 **Teacher/Coordinator:** Dr Slade Matthews **Session:** Semester 1 **Classes:** 2hrs of lectures and 3hrs laboratory classes/workshops per week **Assessment:** final examination (50%), mid-semester examination (25%) in-semester assessments (25%)

Associated degrees: M Pharm.

This unit aims to develop students' understanding of the therapeutic applications of drugs based on their underlying pharmacodynamic and pharmacokinetic properties, concentrating on the pharmacology of agents most widely used in Australia and exploring issues related to the use and safety of these agents.

PHAR5505

Clinical Residency 1

Credit points: 12 **Teacher/Coordinator:** Dr B Bajorek **Session:** S2 Late Int **Classes:** 5hrs of lectures, 30hrs of tutorials/workshops and 40hrs of on-line workshops **Corequisites:** PHAR5518 **Assessment:** Continuous assessment via clinical portfolios, including skill-based competencies (30%); tutorial/workshop participation, including pre-work (30%); oral presentation (20%); reflection (10%); and preceptor evaluation (10%) **Practical field work:** 168hrs of off-campus experiential placements over 6 wks

Associated degrees: M Pharm.

This unit of study integrates the information and skills developed in Pharmacy Practice A and Current Topics in Pharmacology within an experiential setting, providing students with the opportunity to enhance their knowledge and skill base. Students will undertake their learning within both the community and hospital setting, where they will: observe the role of the pharmacist, and their relationship to other health care professionals, within the health care team; utilise their communication skills to educate and deliver drug information to pharmacy clients (patients, pharmacists, health professionals, peers); and develop their clinical knowledge by observing, monitoring, and researching the application of pharmacotherapy to patient care, focusing on the core therapeutic areas (as covered in coursework). Additionally, students will participate in campus-based (face-to-face and/or on-line) tutorial and/or workshop sessions, as well as on-line activities and self-directed learning modules, that will enable them to demonstrate, in a group setting, clinical knowledge and skill development, as well as provide a forum to discuss various practice issues, as experienced during clinical placement.

PHAR5506

Pharmaceutical Chemistry 2B

Credit points: 6 **Teacher/Coordinator:** Dr R Roubin **Session:** Semester 2 **Classes:** 2 x 1hr lectures/wk and 7 x 3hr workshops as well as self-directed learning **Prerequisites:** PHAR5513, PHAR5516 **Assessment:** Exam (50%), structure based drug design (20%), drug action workshop I (15%), drug action workshop II (15%)

Associated degrees: M Pharm.

The aim of this unit of study is to explore recent advances in drug technology and to illustrate how basic research underpins clinical practice and pharmaceutical care. Students will be exposed to the newly developed and "up-and-coming" biotechnologies such as gene therapy, immunotherapies and prodrugs in the context of neurological disorders, inflammatory diseases, cancer and AIDS. Students will also obtain molecular insights into the actions of natural products and structure based design. On successful completion of this unit of study, students will be aware of the latest advances in drug technology; understand how basic research underpins clinical practice and pharmaceutical care; have developed advanced literature searching skills and be able to comprehend the work in original research articles and extract the relevant information from those articles; have improved their writing and oral communication skills; and comprehend the role computational chemistry plays in determining the molecular basis of drug action. This unit of study will hone the student's critical thinking, literature searching and scientific presentation skills - thus equipping the students with the essential skills for life-long learning.

Textbooks

TL Lemke & DA Williams. Foye's Principles of Medicinal Chemistry (Lippincott Williams & Wilkins, 6th Ed, 2008)
W-C Shen & S.G. Louie. Immunology for pharmacy students (Harwood Academic, 1999)

PHAR5507

Dispensing Practice

Credit points: 6 **Teacher/Coordinator:** E Sainsbury **Session:** Semester 1 **Classes:** 1 x 2hr lecture/wk, 7 x 1hr tutorials and 6 x 2hr tutorials **Prerequisites:** PHAR5517 **Assessment:** Practical exams (30%), written exam (30%), continuous practical assessment (30%), dispensing portfolio (10%). Satisfactory performance in all areas of this unit of study is required. **Practical field work:** 7 x 3hrs practicals and 6 x 2hrs practicals

Associated degrees: M Pharm.

Introduction to dispensing practice, accuracy in dispensing, legal aspects of dispensing prescriptions, procedures for dispensing prescriptions, documentation of dispensing procedures, containers and labelling of dispensed medicines, dispensing of particular formulations, effect of changing formulation variables on the physical properties and efficacy of pharmaceutical products, dispensing and therapeutics, dosage, pricing of prescriptions. A series of workshops and practical classes complements the lectures, allowing students to dispense and critically assess a variety of pharmaceutical products and a range of proprietary items, as well as facilitating the development of error-detection skills. During the second half of the semester, the process of dispensing is extended to include therapeutic aspects and recommendations.

Textbooks

Australian Medicines Handbook 2008 or 2009 Australian Pharmaceutical Formulary (latest version)

PHAR5508

Pharmacy Practice B

Credit points: 6 **Teacher/Coordinator:** Dr S Megalli **Session:** Semester 1 **Classes:** 2 x lectures/wk and 2 x 2hr tutorials/wk **Prerequisites:** PHAR5505 and PHAR5518 **Assessment:** Tutorial contribution (40%) and written exam (60%)

Associated degrees: M Pharm.

This unit of study is a continuation of Pharmacy Practice A. A number of therapeutics topics will be covered in a problem-based learning format. Practice-based tutorials will be supplemented with relevant therapeutics lectures and other learning resources. Students will explore the role of the pharmacist in advising on primary and self care, performing clinical interventions, conducting medication reviews, monitoring therapeutic outcomes and participating in therapeutic decision making within these therapeutic areas. This unit of study will facilitate students to gain in-depth knowledge about the pharmacotherapy of disease states through self-directed learning. Themes such as evidence based practice, pharmacoepidemiology, drug information, medication safety, ethics and communication skills will be incorporated throughout the unit of study.

Textbooks

Therapeutic Guidelines, Therapeutic Guidelines Ltd, North Melbourne, Vic. (latest editions) Australian Medicines Handbook, Rossi S (ed), 2008 Clinical Pharmacy and Therapeutics (4th edn), Walker R, Whittlesea C (eds), 2007

PHAR5509

Integrated Pharmaceutics

Credit points: 6 **Teacher/Coordinator:** Dr M Bebawy **Session:** Semester 2 **Classes:** 1 x 2hr tutorial/wk and one introductory lecture **Prerequisites:** PHAR5517 **Corequisites:** PHAR5514 **Assessment:** Exam (50%) and quizzes (50%)

Associated degrees: M Pharm.

This unit of study consists of a series of workshops that focus on biotechnology based drug research and development including: native protein purification; gene cloning; cloned gene expression; recombinant protein isolation; recombinant protein dosage form design and preclinical and clinical testing. This unit of study promotes integration and application of prior knowledge in pharmaceutics to pharmaceutical research and development in respect to new and emerging technologies.

PHAR5510

Pharmacy Practice C

Credit points: 6 **Teacher/Coordinator:** Dr K Williams **Session:** Semester 2 **Classes:** 3 x lectures/wk and 2 x 2hr tutorials/wk **Corequisites:** PHAR5508 **Assessment:** Tutorial contribution (30%) and exams (70%)

Associated degrees: M Pharm.

This unit of study is a continuation of Pharmacy Practice A and B. A number of therapeutics topics will be covered in a problem-based learning format. Practice-based tutorials will be supplemented with relevant therapeutics lectures and other learning resources. Students will explore the role of the pharmacist in advising on primary and self care, performing clinical interventions, conducting medication reviews, monitoring therapeutic outcomes, participating in therapeutic decision making and involvement in health promotion and public health within these therapeutic areas. Themes such as evidence based practice, pharmacoepidemiology, drug information, medication safety, ethics and communication skills will be incorporated throughout the unit of study.

Textbooks

Therapeutic Guidelines. Therapeutic Guidelines Ltd, North Melbourne, Vic., latest editions Australian Medicines Handbook, Rossi S (ed), 2009 Clinical Pharmacy and Therapeutics (4th edn), Walker R, Whittlesea C (eds), 2007

PHAR5512

Clinical Residency 2

Credit points: 12 **Teacher/Coordinator:** Professor A McLachlan **Session:** S2 Late Int **Corequisites:** PHAR5508 and PHAR5510 **Assessment:** Block 1: reflective diary (10%), portfolio of cases and activities (10%), preceptor evaluation (20%), case two (15%); Block 2: reflective diary (10%), preceptor evaluation (20%), case two or project report (15%). All assessment tasks must be completed. Satisfactory performance in all areas of this unit of study is required. **Practical field work:** 2 x 2wk experiential placements

Associated degrees: M Pharm.

This is an experiential unit of study. Off-campus placements will provide students with opportunities to enhance their knowledge and skill-base within clinical and professional settings. The sites may include primary and tertiary health care, general and specialist practice in rural and metropolitan areas, professional organisations and Quality Use of Medicines settings as well as the pharmaceutical industry. Two block placements are undertaken, 1 x 2 weeks in July (Block 1) and 1 x 2 weeks in November/December (Block 2). The July placement must be undertaken in a clinical setting, either community pharmacy or hospital.

PHAR5513

Pharmaceutical Chemistry 1A

Credit points: 6 **Teacher/Coordinator:** Dr J Hanrahan **Session:** Semester 1 **Classes:** 2 x lectures/wk, 5 x 2hr tutorials, 4 x 4hr workshops and self-directed learning **Assessment:** Exam (60%), laboratories (25%), workshops (10%) and modelling (5%) **Practical field work:** 3 x 4hr labs

Associated degrees: M Pharm.

4. Postgraduate degree requirements

This unit will explore the physicochemical properties of drugs and how this determines the interactions of small molecules (drugs) with biological macromolecules (enzymes and receptors). All stages in the process of drug design and development will be investigated, including computational drug design, structure activity studies, synthesis and activity assays. Students will also gain experience in a variety of experimental techniques related to drug design. In addition, students will develop skills including critical thinking, the use of information technology and report writing.

Textbooks

Patrick GL. An Introduction to Medicinal Chemistry (3rd ed). Oxford University Press, 2005

PHAR5514

Pharmaceutics 2A

Credit points: 6 **Teacher/Coordinator:** Dr M Bebawy **Session:** Semester 1 **Classes:** 3-5 lectures/wk, 1 x 2hr tutorial/fortnight **Assessment:** Exam (70%) and quizzes (30%)

Associated degrees: M Pharm.

This unit of study deals with basic and advanced concepts in pharmacokinetics and pharmacogenetics, followed by the application of these principles to clinical situations. Lecture topics designed for the learning and teaching of basic concepts include: Introduction to pharmacokinetics and pharmacogenetics; Mono-exponential pharmacokinetics; Understanding graphs in pharmacokinetics; Multi-exponential pharmacokinetics; IV infusions; Multiple dosing; Oral dosing; Drug absorption and influencing factors; Drug distribution and protein binding; Renal and hepatic clearance; Metabolite kinetics; Non-linear pharmacokinetics; Bioequivalence and bioavailability; Drug interactions; Pharmacodynamics; Causes and consequences of PK variability; Characterisation of genetic variability and mechanisms responsible for genetic variability.

Lecture topics designed for the learning and teaching of advanced concepts include: Factors affecting drug efficacy (drug transporters); Factors affecting drug efficacy (drug metabolism); Factors affecting drug efficacy (drug targets: receptors); Factors affecting drug efficacy (drug targets: signalling pathways).

Lecture topics designed for the learning and teaching of applied concepts include: Characterizing PK variability and introduction to therapeutic drug monitoring; Therapeutic drug monitoring of various drug classes; Pharmacogenomics in oncology; immunology; cardiovascular disease; neurology; Gastroenterology; respiratory disease, neurodegenerative disease and dermatology; and ethical considerations in pharmacogenomics.

Textbooks

Recommended texts:

Clinical Pharmacokinetics. Ed Roland M and Tozer TN; Lippincott, Williams & Wilkins

Pharmacokinetics Made Easy, DJ Birkett (University of Sydney Library 615.7 366)

Applied Biopharmaceutics and Pharmacokinetics - Shargel & Yu

Applied Pharmacokinetics and Pharmacodynamics - Burton, Shaw, Shantag, Evans

Pharmacogenomics: The search for Individualised Therapies- Licinio and Wong

PHAR5515

Pharmaceutical Science

Credit points: 6 **Teacher/Coordinator:** Dr R Rohanizadeh **Session:** Semester 1 **Classes:** 2 hr lect/wk, 2 hr self-directed learning/wk, 3 hr workshop/wk **Assessment:** 2 x 1.5hr exams (70%), metabolism assignments (10%), kinetics/drugs in solution quiz (10%), microbiology workshop (10%)

Associated degrees: M Pharm.

This unit of study will provide an introduction to the concepts required for the study of pharmacy and integrate knowledge from the various sub-disciplines within the pharmaceutical sciences. Topics studied include physicochemical properties underlying drug action, toxicology, drug metabolism, bioactivation and inactivation, identification of drugs and their metabolites, microorganisms in pharmacy, sterilisation, disinfection and preservation of pharmaceutical products, aseptic manufacture and cleanroom technology. These concepts will be further explored in workshop formats.

Textbooks

Florence AT & Attwood D. Physicochemical Principles of Pharmacy, Basingstoke: Palgrave, (3rd ed.), 1998

Denyer SP, Hodges NA & Gorman SP. Hugo & Russell's Pharmaceutical Microbiology, Blackwell, (7th ed.), 2004

Williams DA & T.L. Lemke TL. Foye's Principles of Medicinal Chemistry, Lippincott, Williams & Wilkins, (5th ed.), 2002

Cairns, D. Essentials of Pharmaceutical Chemistry, London: Pharmaceutical Press, (2nd ed.), 2003

Wallwork SC & Grant DJW, Physical Chemistry for students of Pharmacy and Biology, New York: Longman, (3rd ed.), 1977

Casarett and Doull's toxicology: the basic science of poisons, (6th ed.), 2001

Watson DG. Pharmaceutical Analysis, Churchill-Livingstone (2nd ed.) 2005

PHAR5516

Pharmaceutical Chemistry 1B

Credit points: 6 **Teacher/Coordinator:** Dr L Munoz **Session:** Semester 2 **Classes:** 3 lectures/wk, 12hrs of tutorial classes and self -directed learning **Corequisites:** PHAR5513 and PHAR5515 **Assessment:** 2 x 1.5 hr exams (60%); laboratories & workshops (40%) **Practical field work:** 6 x 4hr practicals

Associated degrees: M Pharm.

This unit of study utilises the knowledge gained in PHAR5513 Pharmaceutical Chemistry 1A to develop students' ability to apply basic scientific and medicinal chemistry concepts in the rationalization of observed biological activities for a series of drug molecules. The unit of study will be presented as a series of discrete topic areas based on therapeutic classes (hormonal, cardiovascular, herbal medicines, central nervous system, chemotherapy, antihistamines, photochemotherapy and sunscreens) and macromolecular targets (enzyme, G-protein coupled receptor, nuclear receptor). Lectures will be supported by self-directed learning and tutorials. Students will also undertake quantitative structure-activity relationship (QSAR) computer-based workshops and herbal medicine practicals as well as prepare a herbal monograph. These learning activities will further develop students' skills in critical thinking, the use of information technology and report writing.

Textbooks

Foye W.O. et al. Principles of Medicinal Chemistry (5th edn) Williams & Wilkins, 2002

Patrick, G. L. An Introduction to Medicinal Chemistry (3rd edn) Oxford University Press, 2005

PHAR5517

Pharmaceutics 1B

Credit points: 6 **Teacher/Coordinator:** Dr D Traini **Session:** Semester 2 **Classes:** 3 x lectures/wk **Corequisites:** PHAR5515 **Assessment:** Practicals (25%), mid semester exam (10%), group presentations (15%) and final exam (50%) **Practical field work:** 2 x 4hr lab/prac classes

Associated degrees: M Pharm.

In this unit of study students learn to evaluate the physicochemical principles, design, formulation, and manufacture of pharmaceutical dose forms. The formulation of liquid dose forms including parenteral, nasal, ophthalmic and aural products is discussed. Related topics such as diffusion and dissolution of drugs, drug solubilisation, surface and interfacial tension, surface active materials, micelle formation, pharmaceutical complexes and drug-packaging interactions are covered. Other topics covered in this unit include solid dose forms and particle science, rheology; dispersion dose forms including suspensions, colloidal dispersions, and emulsions; topical dose forms and semisolids; inhalation pharmaceutical aerosols; protein and peptide drugs and formulations; rectal products; novel drug delivery technologies. Aspects pertaining to the stability of dose forms are also presented in this unit.

Textbooks

Ansel HC. et al. Pharmaceutical Dosage Forms and Drug Delivery Systems (7th edn). Lea & Febiger, 1999

Aulton ME. Pharmaceutics: The Science of Dosage Form Design (2nd edn). Churchill Livingstone, 2002

PHAR5518

Pharmacy Practice A

Credit points: 6 **Teacher/Coordinator:** Dr K Williams **Session:** Semester 2 **Classes:** 3 x lectures/wk and 2 x 2hr tutorials/wk **Assessment:** Tutorial contribution (30%), exams (oral and written) (70%)

Associated degrees: M Pharm.

This unit of study is the first of three integrated units (Pharmacy Practice A, Pharmacy Practice B and Pharmacy Practice C) that will be completed during the MPharm program. It will commence with an introduction to the profession of pharmacy, the Australian health care and drug distribution systems, and the National Medicines Policy, including the National Strategy for Quality Use of Medicines. Themes such as evidence based practice, pharmacoepidemiology, drug information, medication safety, ethics and communication skills will be introduced early in the unit of study and will then be revisited and reinforced in the remainder of Pharmacy Practice A, as well as throughout Pharmacy Practice B and C. During the second half of semester, a number of therapeutics topics will be covered in a

problem-based learning format. Practice-based tutorials will be supplemented with relevant therapeutics lectures and other learning resources. Students will explore the role of the pharmacist in advising on primary and self care, performing clinical interventions, conducting medication reviews, monitoring therapeutic outcomes and participating in therapeutic decision making within these therapeutic areas.

Textbooks

Therapeutic Guidelines, Therapeutic Guidelines Ltd, North Melbourne, Vic. (latest editions)
Australian Medicines Handbook, Rossi S (ed), 2009
Clinical Pharmacy and Therapeutics (4th edn), Walker R, Whittlesea C (eds), 2007

5. Postgraduate degree regulations and policies

Resolutions of the Senate

Master of Herbal Medicines

1. Requirements for the Master of Herbal Medicines

- 1.1 To qualify for the award of Master of Herbal Medicines a student must:
 - 1.1.1 complete successfully units of study giving credit for a total of 48 credit points; and
 - 1.1.2 satisfy the requirements of all other relevant By-Laws, Rules and Resolutions of the University.

2. Requirements for the Honours degree

- 2.1 To qualify for the award of the honours degree a student must complete the honours requirements published in the Faculty Resolutions relating to the course.

Master of Pharmacy

1. Requirements for the Master of Pharmacy

- 1.1 To qualify for the award of the Master of Pharmacy a student must:
 - 1.1.1 complete successfully units of study giving credit for a total of 96 credit points; and
 - 1.1.2 satisfy the requirements of all other relevant By-laws, Rules and Resolutions of the University.

Master of Philosophy

1. Requirements for the Master of Philosophy

- 1.1 To qualify for the award of the Master of Philosophy a student must:
 - 1.1.1 complete a 6 credit point unit of study on research methods plus such courses or units of study, if any, as may be prescribed by the head of the discipline concerned;
 - 1.1.2 carry out supervised research on a topic approved by the Faculty on the recommendation of the head of the discipline concerned;
 - 1.1.3 write a thesis embodying the results of this research that passes examination; and
 - 1.1.4 satisfy the requirements of all other relevant By-laws, Rules and Resolutions of the University.

Graduate Diploma in Herbal Medicines

1. Requirements for the Graduate Diploma of Herbal Medicines

- 1.1 To qualify for the award of the Graduate Diploma of Herbal Medicines a student must:
 - 1.1.1 complete successfully units of study giving credit for a total of 36 credit points; and
 - 1.1.2 satisfy the requirements of all relevant By-Laws, Rules and Resolutions of the University.

Graduate Certificate in Herbal Medicines

1. Requirements for the Graduate Certificate in Herbal Medicines

- 1.1 To qualify for the award of the Graduate Certificate in Herbal Medicines a student must;

- 1.1.1 complete successfully units of study giving credit for a total of 24 credit points; and
- 1.1.2 satisfy the requirements of all other relevant By-Laws, Rules and Resolutions of the University

Resolutions of the Faculty

Master of Philosophy

1. Admission

- 1.1 Except as provided in Part 9, section 47 of the *University of Sydney (Amendment Act) Rule 1999*, the Faculty of Pharmacy may, admit to candidature for the degree of Master of Philosophy:
 - 1.1.1 an applicant who holds the degree of bachelor with first or second class honours, or
 - 1.1.2 an applicant who holds the degree of bachelor of the University of Sydney or other approved institution without first or second class honours after the applicant has passed a qualifying examination at a standard equivalent to the bachelor's degree with first or second class honours, provided that a faculty may exempt an applicant from the qualifying examination if the applicant has obtained at least a credit in the highest course available in the subject or subjects relevant to the proposed course of advanced study and research.
- 1.2 The qualifying exam may include completion of a period of relevant full-time or part-time advanced study and/or research towards a postgraduate award course in the University of Sydney, at such a standard as would demonstrate to the satisfaction of the faculty that the candidate is suitably prepared in the particular field of study to undertake candidature for the degree of Master of Philosophy.
- 1.3 The faculty may admit as a candidate for the degree an applicant holding qualifications which, in the opinion of the faculty concerned, are equivalent to those prescribed in 1.1 above and such candidate shall proceed to the degree under such conditions as the Faculty may prescribe.
- 1.4 The faculty may require a candidate, as part of the evidence of the candidate's training and ability to pursue the proposed course, to pass a special examination or assessment.
- 1.5 An applicant, for admission to candidature, shall submit to the Faculty a research proposal as part of the application. This proposal will detail a course of advanced study and research, in which the work is to be carried out to be undertaken by the applicant in a discipline of the Faculty of Pharmacy.
- 1.6 Admission to candidature will be conditional upon the appointment of an appropriate supervisor and associate supervisor as stipulated in the Academic Board Policy entitled "Postgraduate Research Higher Degree Training Supervision at the University of Sydney".

2. Method of Progression

- 2.1 A candidate for the Master of Philosophy shall proceed by completing a 6 credit point unit of study on research methods and by research and thesis.
- 2.2 A full-time candidate shall not keep the normal academic year but shall pursue candidature for the degree continuously throughout the year except for a period of 4 weeks recreation leave and shall dedicate a minimum of 35 hours per week to their candidature.
- 2.3 A candidate who does not comply with section 2.2 should be enrolled as a part-time candidate.

3. Requirements

- 3.1 A Master of Philosophy candidate proceeding by research shall:



- 3.1.1 complete a 6 credit point unit of study on research methods during the probationary period;
- 3.1.2 complete such other assessments or units of study, if any, as may be prescribed by the head of the discipline concerned;
- 3.1.3 carry out supervised research on a topic approved by the Faculty on the recommendation of the Dean;
- 3.1.4 write a thesis embodying the results of this research; and
- 3.1.5 lodge with the Registrar three copies of this thesis, typewritten and bound.
- 3.2 The candidate shall state in the thesis:
 - 3.2.1 the sources from which the information was derived;
 - 3.2.2 the extent to which the work of others has been used; and
 - 3.2.3 the portion of the work claimed as original.
- 3.3 The candidate may include in the thesis published papers of which the candidate is sole or joint author, provided that:
 - 3.3.1 the papers are based on work undertaken during the candidature for the degree;
 - 3.3.2 the papers are identified as published work;
 - 3.3.3 the papers are compatible with the overall coherence and organisation of the text of the thesis; and
 - 3.3.4 the candidate provides evidence to identify satisfactorily the sections of work for which the candidate is responsible, such as assigned, written statements from all authors attesting to the contribution of the candidate.
- 3.4 Any other papers of which the candidate is sole or joint author may be lodged in support of the thesis.
- 3.5 The thesis contains original contributions to the knowledge of the subject concerned;
 - 3.5.1 the thesis affords evidence of originality by the exercising of independent critical ability;
 - 3.5.2 the thesis is a satisfactory literary presentation; and
 - 3.5.3 material in the thesis is suitable for publication.
- 3.6 The thesis shall be accompanied by a statement from the supervisor stating whether, in the supervisor's opinion, the form of presentation of the thesis is satisfactory.
- 3.7 A candidate may not present as the thesis a work which has been presented for a degree in this or another university, but will not be precluded from incorporating such in the thesis provided that in presenting the thesis the candidate indicates the part of the work which has been so incorporated.
- 3.8 satisfy the requirements of all other relevant By-Laws, Rules and Resolutions of the University.

4. Probation

- 4.1 A candidate will normally be accepted by the Faculty on a probationary basis for a period not exceeding twelve months.
- 4.2 The provision to waive probationary acceptance would only be exercised in exceptional circumstances. All requests to waive probation will need to be approved by the Chair of the Board of Postgraduate Studies.
- 4.3 A Probation Review Report must be completed by the candidate's supervisor in consultation with the Postgraduate Coordinator and submitted to the Faculty at least four weeks before the end of probation.
- 4.4 The Faculty will write to the candidate to advise of the outcome of the probation review, either confirming the candidate's status, extending the probationary period or terminating the candidature.
- 4.5 In the case of a candidate accepted on a probationary basis under section 4.1, the candidature shall be deemed to have commenced from the date of such acceptance.

5. Enrolment

- 5.1 A student must be enrolled in each semester in which he or she is actively pursuing the requirements for the award course.
- 5.2 The candidature of a student who has not re-enrolled and who has not obtained approval from the Faculty for a suspension of candidature for the relevant semester will be deemed to have lapsed.

6. Restrictions on enrolment

- 6.1 Admission to candidature may be limited by a quota. In determining the quota the Faculty will take into account:
 - 6.1.1 availability of resources;
 - 6.1.2 availability of adequate and appropriate supervision.
- 6.2 In considering an application for admission the Dean will take into account the quota.

- 6.3 Entry will be based on applicants who are most meritorious in terms of Section 1 above.

7. Discontinuation of enrolment

- 7.1 A candidate who wishes to discontinue enrolment from the Master of Philosophy must notify the Faculty in writing and will be presumed to have discontinued enrolment from the date of that notification, unless evidence is produced showing:
 - 7.1.1 that the discontinuation occurred at an earlier date; and
 - 7.1.2 that there was good reason why the notification could not be made at the earlier time.

8. Suspension of candidature

- 8.1 A candidate who wishes to suspend their candidature must apply, in writing, to the Faculty.
- 8.2 The application must be received by the Faculty prior to the commencement of the relevant semester.
- 8.3 A candidate may only apply for a period of suspension for one semester at any one time. Should a candidate wish to suspend their candidature for more than one semester another application must be made to the Faculty for each subsequent semester, prior to the commencement of the relevant semester.
- 8.4 Late applications may be considered at the Faculty's discretion.
- 8.5 Where the candidate has previously had two semesters of suspension the application will be considered by the Board of Postgraduate Studies for the Faculty.

9. Re-enrolment after an absence

- 9.1 A student must enrol in the semester following a period of approved suspension.
- 9.2 A student whose candidature has lapsed must apply for re-admission in accordance with procedures determined by the Faculty.

10. Satisfactory progress

- 10.1 At the end of each year each candidate shall complete an Annual Progress Report providing evidence of progress to the satisfaction of the supervisor, Dean, any postgraduate review committee and the Board of Postgraduate Studies.
- 10.2 On the basis of evidence provided, the Dean or the Chair of the Board of Postgraduate Studies shall recommend the conditions of candidature to apply for the following year and may require the candidate to provide further evidence of progress at the end of one semester or such other period as the Dean or the Chair of the Board of Postgraduate Studies considers appropriate.
- 10.3 If a candidate fails to submit evidence of progress or if the Dean considers that the evidence submitted does not indicate satisfactory progress, the Board of Postgraduate Studies may, on the Dean's recommendation, call upon that candidate to show cause why that candidature should not be terminated by reason of unsatisfactory progress towards completion of the degree and where, in the opinion of the Board of Postgraduate Studies, the candidate does not show good cause, the Board of Postgraduate Studies may terminate that candidature or may impose conditions on the continuation of that candidature.

11. Credit

- 11.1 A candidate who, before admission to candidature, has spent time in advanced study in the University of Sydney, or in another university, or in another institution whose courses are deemed by the Faculty to be equivalent, may be deemed by the Faculty to have spent such time after admission to candidature.

12. Time limits

- 12.1 Except with the permission of the Faculty on the recommendation of the Dean, a full-time research candidate shall complete the requirements for the degree not earlier than the end of the second semester of candidature and not later than the end of the fourth semester of candidature.
- 12.2 Except with the permission of the Faculty on the recommendation of the Dean, a part-time research candidate shall complete the requirements for either degree not earlier than the end of the fourth semester of candidature and not later than the end of the eighth semester of candidature.

13. Location

- 13.1 Subject to approval of the supervisor, Dean and Board of Postgraduate Studies, the candidate may request a period of time away to pursue the course of advanced study and research within industrial laboratories or research institutions or other institutions considered by the Board of Postgraduate Studies on the recommendation of the Dean to provide adequate facilities and appropriate supervision for that candidature.
- 13.2 A candidate pursuing candidature outside Australia must also complete a minimum of one semester of candidature within the University before submission [but not necessarily immediately before submission] of the thesis.

14. Examination of thesis

- 14.1 The examination of a thesis for the degree of Master of Philosophy shall follow closely the examination process as stipulated by the Resolutions of the Academic Board for the degree of Doctor of Philosophy (with any reference to the PhD Award Subcommittee being substituted by the Board of Postgraduate Studies) except for the following variations:
- 14.1.1 The Dean shall recommend the appointment of two examiners of the thesis of whom at least one shall be an external to the Faculty, not being a member of staff or a clinical academic title holder of the Faculty. Approval of the examiners is the responsibility of the Board of Postgraduate Studies.
- 14.1.2 The supervisor and Dean shall take all possible steps to ensure that examiners are appointed within four weeks of the submission of the thesis and where this does not occur, shall report the circumstances to the Board of Postgraduate Studies.

Master of Pharmacy**1. Admission**

- 1.1 Eligibility for admission to the Master of Pharmacy course is based on:
- 1.1.1 a prior bachelor's degree;
- 1.1.2 successful completion of the GAMSAT for local applicants or MCAT for international applicants;
- 1.1.3 meeting the minimum GPA as determined by the faculty
- 1.1.4 meeting a minimum of five out of the seven prerequisite units of study;
- 1.1.5 achieving a satisfactory mark for the Pharmacy Case Study Scenario.
- 1.2 Admission to candidature will be limited by quota. In determining the quota the Faculty will take into account:
- 1.2.1 availability of resources;
- 1.2.2 availability of adequate and appropriate supervision.
- 1.3 In considering an application for admission the Dean will take into account the quota.
- 1.4 Entry will be based on applicants who are most meritorious in terms of Section 1.

2. Units of study

- 2.1 The units of study for the degree are as set out in the Faculty Handbook.

3. Requirements for the Master of Pharmacy degree

- 3.1 To qualify for the award of the MPharm degree students must:
- 3.1.1 gain a minimum of 96 credit points by successfully completing all first year and second year units of study as set out in the Faculty Handbook.
- 3.1.2 satisfy the requirements of all other relevant By-Laws, Rules and Resolutions of the University.

4. Restrictions on enrolment

- 4.1 Refer to the *University of Sydney (Coursework) Rule 2000 (as amended)*.

5. Progression

- 5.1 Except with the permission of the Faculty, candidates may not take a second year unit of study until they have:

- 5.1.1 satisfactorily completed all outstanding entry criteria prerequisites, as outlined in the admission criteria for the Master of Pharmacy;
- 5.1.2 gained credit for at least 48 credit points in first year units of study; and
- 5.1.3 completed the first year units of study, if any, prescribed by the Faculty as qualifying units of study or prerequisites for the second year of study, as set out in the Faculty Handbook.
- 5.2 Students who have failed 12 or more credit points in Year 1 will not be permitted to progress to Year 2 until they have successfully gained credit for 48 credit points in Year 1 units of study.
- 5.3 Candidates may not take a higher unit of study in any subject area without having previously completed the lower unit of study, if any, in the same subject.
- 5.4 The enrolment of candidates in units of study shall be limited by the exigencies of the timetable.

6. Discontinuation of enrolment

- 6.1 Refer to the *University of Sydney (Coursework) Rule 2000 (as amended)*.

7. Suspension of candidature

- 7.1 A candidate who wishes to suspend their candidature must apply, in writing, to the Faculty.
- 7.2 The application must be received by the Faculty prior to the commencement of the relevant semester.
- 7.3 A candidate may only apply for a period of suspension for one semester at any time.
- 7.4 Should a candidate wish to suspend their candidature for more than one semester another application must be made to the Faculty for each subsequent semester, prior to the commencement of the relevant semester.
- 7.5 Late applications may be considered at the Faculty's discretion.
- 7.6 Where a student has previously enrolled for the relevant semester, a suspension of enrolment may be recorded as Withdrawn (W) or Discontinued – Not to count as failure (DNF):
- 7.6.1 where that application is received within the time-frames specified by the University and published by the Student Centre; or
- 7.6.2 where the student meets other conditions as specified by the Faculty.
- 7.7 Where the candidate has previously had two semesters of suspension the application will be considered by the Faculty.

8. Re-enrolment after an absence

- 8.1 A student must enrol in the semester following a period of approved suspension;
- 8.1.1 a student whose candidature has lapsed must apply for re-admission in accordance with procedures determined by the Faculty.

9. Satisfactory progress

- 9.1 The Faculty may:
- 9.1.1 call upon any candidate to show cause why that candidature should not be terminated by reason of unsatisfactory progress towards the completion of the degree; and
- 9.1.2 where the candidate does not show good cause, terminate the candidature.

10. Time limit

- 10.1 A candidate will proceed on a full-time basis and shall complete the requirements for the Master of Pharmacy degree:
- 10.1.1 not earlier than the end of the sixth semester; and
- 10.1.2 not later than the end of the twelfth semester, unless otherwise determined by the Faculty.

11. Assessment policy

- 11.1 With the consent of the Faculty, additional assessment will only be permitted where:
- 11.1.1 a specific case of special consideration has been approved by the Faculty; or
- 11.1.2 a student in his or her final year of study fails a single compulsory assessment resulting in a grade of fail in only that unit preventing him or her from completing the degree that year.

11.2 Refer to the *Resolutions of the Academic Board relating to Assessment and Examination of Coursework*.

12. Credit transfer policy

12.1 Refer to the *University of Sydney (Coursework) Rule 2000 (as amended)* and Academic Board policies.

Master of Herbal Medicines

1. Admission

1.1 Except as provided in Part 9, section 47 of the *University of Sydney (Amendment Act) Rule 1999* the Faculty may admit to candidature an applicant who:

- 1.1.1 has successfully completed a bachelor's degree in Pharmacy, Medicine, Nursing, Chinese Medicine, Complementary Medicine, Science, Veterinary Science, Agriculture or other appropriate disciplines from approved universities or;
- 1.1.2 has equivalent qualifications subject to approval by the Dean.

2. Units of study

2.1 The units of study for the degree are as set out in the Faculty Handbook.

3. Requirements for the Master of Herbal Medicines

3.1 A candidate for the Master of Herbal Medicines proceeding by coursework only shall:

- 3.1.1 successfully complete 48 credit points of coursework covering material new to the candidate, selected from units of study prescribed by the Faculty;
- 3.1.2 satisfy the requirements of all other relevant By-Laws, Rules and Resolutions of the University.

4. Admission for the Honours degree

4.1 A candidate for the Master of Herbal Medicines (Honours) proceeding by coursework and dissertation shall:

- 4.1.1 have achieved a minimum weighted average mark of 65 in at least 24 credit points of the degree prior to admission.

5. Requirements for honours degrees

5.1 A candidate for the Master of Herbal Medicines (Honours) proceeding by coursework and dissertation shall:

- 5.1.1 successfully complete 48 credit points of coursework covering material new to the candidate, selected from units of study prescribed by the Faculty;
- 5.1.2 obtain a final weighted average mark of at least 70 in the degree totalling 60 credit points;
- 5.1.3 successfully carry out a supervised research project and complete the Dissertation on a topic approved by the course coordinator;
- 5.1.4 satisfy the requirements of all other relevant By-Laws, Rules and Resolutions of the University.

6. Restrictions on enrolment

6.1 Refer to the *University of Sydney (Coursework) Rule 2000 (as amended)*

7. Award of Master of Herbal Medicines

7.1 The degree of Master of Herbal Medicines shall be awarded in either a pass grade, pass with merit or honours grade.

7.2 Honours

7.2.1 A candidate may be awarded the degree with honours at graduation where the candidate:

- 7.2.1.1 has enrolled for and successfully completed 48 credit points of coursework and 12 credit points of research resulting in a successfully completed dissertation;

7.3 Pass with merit

7.3.1 A candidate may be awarded pass with merit at graduation where the candidate has achieved a minimum weighted average mark of 75 upon completion of all units of study.

7.3.2 If a pass level degree has already been awarded, the testamur will be replaced by the honours level degree testamur after completing all requirements.

7.3.3 Not more than five years shall have elapsed between being awarded the pass level degree and beginning requirements for the Honours level degree.

8. Discontinuation of enrolment

8.1 Refer to the *University of Sydney (Coursework) Rule 2000 (as amended)*.

9. Suspension of candidature

9.1 A candidate who wishes to suspend their candidature must apply, in writing, to the Faculty.

9.2 The application must be received by the Faculty prior to the commencement of the relevant semester.

9.3 A candidate may only apply for a period of suspension for one semester at any one time.

9.4 Should a candidate wish to suspend their candidature for more than one semester another application must be made to the Faculty for each subsequent semester, prior to the commencement of the relevant semester.

9.5 Late applications may be considered at the Faculty's discretion.

9.6 Where a student has previously enrolled for the relevant semester, a suspension of enrolment may be recorded as Withdrawn (W) or Discontinued – Not to count as failure (DNF):

9.6.1 where that application is received within the time-frames specified by the University and published by the Student Centre; or

9.6.2 where the student meets other conditions as specified by the Faculty.

9.7 Where the candidate has previously had two semesters of suspension the application will be considered by the Faculty.

10. Re-enrolment after an absence

10.1 A student must enrol in the semester following a period of approved suspension;

10.1.1 a student whose candidature has lapsed must apply for re-admission in accordance with procedures determined by the Faculty.

11. Satisfactory progress

11.1 The Faculty may:

11.1.1 call upon any candidate to show cause why that candidature should not be terminated by reason of unsatisfactory progress towards completion of either degree; and

11.1.2 where, in the opinion of the Faculty, the candidate does not show good cause, terminate the candidature.

12. Time limits

12.1 A part-time candidate shall complete the requirements for the Master of Herbal Medicines pass degree:

12.1.1 not earlier than the end of the fourth semester; and

12.1.2 not later than the end of the eighth semester, unless otherwise determined by the Faculty.

12.2 A part-time candidate shall complete the requirements for the Master of Herbal Medicines honours degree:

12.2.1 not earlier than the end of the fifth semester; and

12.2.2 not later than the end of the eighth semester, unless otherwise determined by the Faculty.

12.3 A full-time candidate shall complete the requirements for the Master of Herbal Medicines pass degree:

12.3.1 not earlier than the end of the second semester; and

12.3.2 not later than the end of the fourth semester, unless otherwise determined by the Faculty.

12.4 A full-time candidate shall complete the requirements for the Master of Herbal Medicines honours degree:

12.4.1 not earlier than the end of the third semester; and

12.4.2 not later than the end of the fifth semester, unless otherwise determined by the Faculty.

13. Assessment policy

13.1 Refer to the *Resolutions of the Academic Board relating to Assessment and Examination of Coursework*

14. Examination

14.1 On completion of the requirements for the degree, the Faculty shall determine the result of candidature.

14.2 Examination of treatise/dissertation

- 14.2.1 The Faculty shall appoint two examiners, of whom at least one shall be an external examiner, who is not a member of the Faculty or a member of the part-time teaching staff of the Faculty.
- 14.2.2 The reports of the examiners shall be transmitted to the course coordinator who shall make them available to the supervisor.
- 14.2.3 The course coordinator shall transmit these reports to the Faculty, together with a recommendation concerning the award of the degree, and the Faculty shall determine the result of the candidature.
- 14.2.4 In special cases the Faculty, on the recommendation of the course coordinator concerned, may require the candidate to take a further examination in the area of the treatise/dissertation.
- 14.2.5 The Faculty may permit an unsuccessful candidate to revise and resubmit the treatise/dissertation if, in the opinion of the course coordinator, the candidate's work is of sufficient merit to warrant this concession; and may prescribe special conditions to be fulfilled by the candidate.

15. Credit transfer policy

- 15.1 Refer to the *University of Sydney (Coursework) Rule 2000 (as amended)* and Academic Board policies.

Graduate Diploma in Herbal Medicines**1. Admission**

- 1.1 Except as provided in Part 9, section 47 of the *University of Sydney (Amendment Act) Rule 1999* the Faculty may admit to candidature an applicant who:
 - 1.1.1 has successfully completed a bachelors degree in Pharmacy, Medicine, Nursing, Chinese Medicine, Complementary Medicine, Science, Veterinary Science, Agriculture or other appropriate disciplines from approved universities or;
 - 1.1.2 has equivalent qualifications subject to approval by the Dean.

2. Units of study

- 2.1 The units of study for the degree are as set out in the Faculty Handbook.

3. Requirements for the Graduate Diploma in Herbal Medicines

- 3.1 A candidate for the Graduate Diploma in Herbal Medicines proceeding by coursework only shall:
 - 3.1.1 successfully complete 36 credit points of coursework covering material new to the candidate, selected from units of study prescribed by the Faculty;
 - 3.1.2 satisfy the requirements of all other relevant By-Laws, Rules and Resolutions of the University.

4. Restrictions on enrolment

- 4.1 Refer to the *University of Sydney (Coursework) Rule 2000 (as amended)*.

5. Discontinuation of enrolment

- 5.1 Refer to the *University of Sydney (Coursework) Rule 2000 (as amended)*.

6. Suspension of candidature

- 6.1 A candidate who wishes to suspend their candidature must apply, in writing, to the Faculty.
- 6.2 The application must be received by the Faculty prior to the commencement of the relevant semester.
- 6.3 A candidate may only apply for a period of suspension for one semester at any one time.
- 6.4 Should a candidate wish to suspend their candidature for more than one semester another application must be made to the Faculty for each subsequent semester, prior to the commencement of the relevant semester.
- 6.5 Late applications may be considered at the Faculty's discretion.
- 6.6 Where a student has previously enrolled for the relevant semester, a suspension of enrolment may be recorded as Withdrawn (W) or Discontinued - Not to count as failure (DNF):

- 6.6.1 where that application is received within the time-frames specified by the University and published by the Student Centre; or
- 6.6.2 where the student meets other conditions as specified by the Faculty.
- 6.7 Where the candidate has previously had two semesters of suspension the application will be considered by the Faculty.

7. Re-enrolment after an absence

- 7.1 A student must enrol in the semester following a period of approved suspension;
 - 7.1.1 A student whose candidature has lapsed must apply for re-admission in accordance with procedures determined by the Faculty.

8. Satisfactory progress

- 8.1 The Faculty may:
 - 8.1.1 call upon any candidate to show cause why that candidature should not be terminated by reason of unsatisfactory progress towards completion of either degree; and
 - 8.1.2 where, in the opinion of the Faculty, the candidate does not show good cause, terminate the candidature.

9. Time limit

- 9.1 A part-time candidate shall complete the requirements for the Graduate Diploma in Herbal Medicines degree:
 - 9.1.1 not earlier than the end of the third semester; and
 - 9.1.2 not later than the end of the sixth semester, unless otherwise determined by the Faculty.
- 9.2 A full-time candidate shall complete the requirements for the Graduate Diploma in Herbal Medicines degree:
 - 9.2.1 not earlier than the end of the second semester; and
 - 9.2.2 not later than the end of the third semester, unless otherwise determined by the Faculty.

10. Assessment policy

- 10.1 Refer to the *Resolutions of the Academic Board relating to Assessment and Examination of Coursework*

11. Examination

- 11.1 On completion of the requirements for the degree, the Faculty shall determine the result of candidature.

12. Credit transfer policy

- 12.1 Refer to the *University of Sydney (Coursework) Rule 2000 (as amended)* and Academic Board policies.

Graduate Certificate in Herbal Medicines**1. Admission**

- 1.1 Except as provided in Part 9, section 47 of the *University of Sydney (Amendment Act) Rule 1999* the Faculty may admit to candidature an applicant who:
 - 1.1.1 has successfully completed a bachelor's degree in Pharmacy, Medicine, Nursing, Chinese Medicine, Complementary Medicine, Science, Veterinary Science, Agriculture or other appropriate disciplines from approved universities or;
 - 1.1.2 has equivalent qualifications subject to approval by the Dean.

2. Units of study

- 2.1 The units of study for the degree are as set out in the Faculty Handbook.

3. Requirements for the Graduate Certificate in Herbal Medicines

- 3.1 A candidate for the Graduate Diploma in Herbal Medicines proceeding by coursework only shall:
 - 3.1.1 successfully complete 24 credit points of coursework covering material new to the candidate, selected from units of study prescribed by the Faculty;
 - 3.1.2 satisfy the requirements of all other relevant By-Laws, Rules and Resolutions of the University.

4. Restrictions on enrolment

- 4.1 Refer to the *University of Sydney (Coursework) Rule 2000 (as amended)*.

5. Discontinuation of enrolment

- 5.1 Refer to the *University of Sydney (Coursework) Rule 2000 (as amended)*.

6. Suspension of candidature

- 6.1 A candidate who wishes to suspend their candidature must apply, in writing, to the Faculty.
6.2 The application must be received by the Faculty prior to the commencement of the relevant semester.
6.3 A candidate may only apply for a period of suspension for one semester at any one time.
6.4 Should a candidate wish to suspend their candidature for more than one semester another application must be made to the Faculty for each subsequent semester, prior to the commencement of the relevant semester.
6.5 Late applications may be considered at the Faculty's discretion.
6.6 Where a student has previously enrolled for the relevant semester, a suspension of enrolment may be recorded as Withdrawn (W) or Discontinued – Not to count as failure (DNF):
6.6.1 where that application is received within the time-frames specified by the University and published by the Student Centre; or
6.6.2 where the student meets other conditions as specified by the Faculty.
6.7 Where the candidate has previously had two semesters of suspension the application will be considered by the Faculty.

7. Re-enrolment after an absence

- 7.1 A student must enrol in the semester following a period of approved suspension;

- 7.1.1 A student whose candidature has lapsed must apply for re-admission in accordance with procedures determined by the Faculty.

8. Satisfactory progress

- 8.1 The Faculty may:
8.1.1 call upon any candidate to show cause why that candidature should not be terminated by reason of unsatisfactory progress towards completion of either degree; and
8.1.2 where, in the opinion of the Faculty, the candidate does not show good cause, terminate the candidature.

9. Time limits

- 9.1 A part-time candidate shall complete the requirements for the Graduate Certificate in Herbal Medicines degree:
9.1.1 not earlier than the end of the second semester; and
9.1.2 not later than the end of the fourth semester, unless otherwise determined by the Faculty.
9.2 A full-time candidate shall complete the requirements for the Graduate Certificate in Herbal Medicines degree:
9.2.1 not earlier than the end of the first semester; and
9.2.2 not later than the end of the second semester, unless otherwise determined by the Faculty.

10. Assessment policy

- 10.1 Refer to the *Resolutions of the Academic Board relating to Assessment and Examination of Coursework*.

11. Examination

- 11.1 On completion of the requirements for the degree, the Faculty shall determine the result of candidature.

12. Credit transfer policy

- 12.1 Refer to the *University of Sydney (Coursework) Rule 2000 (as amended)* and Academic Board policies.

The Sydney Summer and Winter Schools

2009	Dates
Summer School	December 2008 to February 2009
Winter School	29 June to 25 July 2009

The Summer School

The Summer School is a full fee-paying, intensive program offering high quality undergraduate and postgraduate subjects from nine faculties. These subjects are the same as those offered in Semesters One and Two, but are taught as an intensive program over summer.

Some classes commence in December; others commence in the first week of January; others in the third week and continue into February (including the exam week). Some subjects run for six weeks; others are shorter. Students can take a maximum of two subjects.

The Winter School

The Winter School is a smaller, more intensive program that runs for four weeks, including the exam week, during July.

Advantages

Attending classes at Sydney University during Summer and Winter School offers many advantages. You can:

- accelerate your academic career and finish your degree sooner
- devote your full attention to a single area of study
- take subjects that are outside your normal degree
- reduce your workload throughout the rest of the year
- repeat subjects in which you may have been unsuccessful
- combine study with a field trip in Australia or a tour overseas.

High school graduates can sample a university subject, and get an early start on their degree.

How to apply

Applications are only accepted online at www.summer.usyd.edu.au. Most subjects have limited places and fill very quickly. All places are filled strictly on a first-in, first-served basis so it is recommended that you apply early.

Applications open on:

- 29 September 2008 (Summer School)
- 25 May 2009 (Winter School)

Applications close:
28 November 2008 (Session 1, Summer December)
12 December 2008 (Session 2, Summer Main)
9 January 2009 (Session 3, Summer Late)
12 June 2009 (Winter School)

Late application fees may apply after these dates.

Census dates

Students can withdraw from their subject without academic penalty and receive a full refund until the census date (based on when the class commences). However, a late withdrawal fee may apply.

There is one census date for the Winter School, and three for the Summer School, as classes start between December and February.

ID	Session name	Classes begin	Census date
42*	Summer December	8 December 2008	2 January 2009
43	Summer Main	5 January 2009	9 January 2009
44**	Summer Late	19 January 2009	5 February 2009
11	Winter School	29 June 2009	3 July 2009

* 42 Summer December: Allows for a unit to run for 3-9 weeks, provided that the 20 per cent criterion is met.

** 44 Summer Late: Last exam must be held by 1 March.

Withdrawal and refund policy

- For Summer School classes starting in **December 2008**, students who withdraw from a subject between 29 November 2008 and the relevant census date will receive a refund of tuition fees but will be liable for a \$500 late withdrawal fee.
- For Summer School classes starting in **January 2009**, students who withdraw from a subject between 13 December 2008 and the relevant census date will receive a refund of tuition fees but will be liable for a \$500 late withdrawal fee.
- For Winter School classes starting on **29 June 2009**, students who withdraw from a subject between 27 June 2009 and the relevant census date will receive a refund of their tuition fees but will be liable for a \$500 late fee withdrawal.

Students may withdraw from their Summer or Winter School subject(s) up until 4pm on the last day of the teaching period for that particular subject. However, there may be an academic penalty (please refer to our website). The teaching period for purposes of this policy is defined in hours of published classes from the first day through to the last day of classes, excluding any final examination or assessment.

Students who withdraw from a subject after 4pm on the relevant census date will receive no refund of their tuition fee.

Transferring between subjects

Students on a waiting list can transfer between subjects at any time prior to the commencement of class. For all other students, transfers should be completed a week before classes commence. **No** transfers will be allowed after commencement of the class.

Summer and Winter School scholarships

Merit scholarships

Three undergraduate merit scholarships and one postgraduate merit scholarship are available. These are automatically awarded to the top four students in their respective faculty (Arts, Science, or Economics and Business) for their Summer School subject.

Educational/Financial Disadvantage scholarships

Full Summer School scholarships are available to local undergraduate students who have a good academic record. To be eligible for consideration you will need to provide evidence of long-term and serious educational disadvantage based on two or more criteria, one of which must be financial hardship. Please check our website for further details. Scholarship applications close on 31 October 2008 (Summer School), and 10 June 2009 (Winter School).

For more information

Website: www.summer.usyd.edu.au

Email: info@summer.usyd.edu.au

Phone: +61 2 9351 5542 Fax: +61 2 9351 5888



General University information

For further information or advice, please call our toll-free helpline on **1300 362 006**.

This section includes information on the following:

Academic progression
 Accommodation Service
 Admissions Office
 Applying for a course
 Attendance
 Bus service
 Campuses
 Careers Centre
 Centre for Continuing Education (CCE)
 Centre for English Teaching (CET)
 Child Care Information Office
 The Co-op Bookshop
 Counselling Service
 Disability Services
 Employment opportunities for students
 Enrolment
 Environmental Policy
 Equity Support Services
 Examinations
 Fees
 Financial Assistance Office
 Freedom of Information
 Graduations Office
 Grievances and appeals
 HECS and Fees Office
 Information and Communications Technology
 International Office
 International Student Support Unit (ISSU)
 Koori Centre and Yooroang Garang
 Learning Centre
 Library
 Mathematics Learning Centre
 Museums and galleries
 MyUni Student Portal
 Orientation and O-Week
 Part-time, full-time attendance
 Policy online
 Printing Service (UPS)
 Privacy
 Research Office
 Scholarships for undergraduates
 Security Service
 Service Management, Information and Communications Technology (ICT)
 Staff and Student Equal Opportunity Unit (SSEOU)
 Student Administration and Support
 Student Centre
 Student identity cards
 Sydney Summer School
 Sydney Student Development
 Sydney Welcome Orientation and Transition Program (SWOT)
 The University of Sydney Foundation Program (USFP)
 Timetabling Unit
 University Health Service

Academic progression

The University requires students to maintain a minimum rate of progression throughout their candidature. Any student who does not satisfy progression requirements for their degree will be placed on a monitored academic progression program. This program requires students to consult an academic adviser in their faculty, to attend a support services information session, and fill in a survey. Students will be advised of the requirements of the program by their faculty.

Students who do not sustain the minimum academic progression requirements may be asked to show cause as to why they should not be excluded from their degree. For further information, please see www.usyd.edu.au/secretariat/students.

Student Affairs, Registrar's Division
 Quadrangle, A14
 The University of Sydney
 NSW 2006 Australia

Phone: +61 2 9351 3183
 Fax: +61 2 9351 3572
 Email: appeals@secretariat.usyd.edu.au

Accommodation Service

This service maintains an extensive database of off-campus accommodation, including shared, full-board and rental properties. Current students can access the online database through the accommodation website or MyUni student portal (myuni.usyd.edu.au).

Level 5, Jane Foss Russell Building, G02
 The University of Sydney
 NSW 2006 Australia

Phone: +61 2 9351 3312
 Fax: +61 2 9351 8262
 Email: accomm@stuserv.usyd.edu.au
 Website: www.usyd.edu.au/stuserv/accommodation

Admissions Office

The Admissions Office, located in the Student Centre, is responsible for overseeing the distribution of offers to undergraduate applicants through the Universities Admission Centre (UAC). They can advise prospective local undergraduate students on admission requirements. Postgraduate students should contact the appropriate faculty.

- If you are an Australian citizen, or permanent resident with qualifications from a non-Australian institution, you can get more information by phoning +61 2 9351 4118.
- For enquiries regarding special admissions (including mature-age entry), phone +61 2 9351 3615.
- Applicants without Australian citizenship or permanent residency should contact the International Office.

Admissions Office, Student Centre
 Level 3, Jane Foss Russell Building, G02
 The University of Sydney
 NSW 2006 Australia

Phone: +61 2 9351 4117 or +61 2 9351 4118
 Fax: +61 2 9351 4869
 Email: admissions@records.usyd.edu.au
 Website: www.usyd.edu.au/studentcentre/admissions



Applying for a course

Domestic applicants for undergraduate courses and programs of study

For the purpose of admission and enrolment, 'domestic applicant' refers to citizens and permanent residents of Australia and citizens of New Zealand. If you are in this group and wish to apply for admission to an undergraduate course, you would generally apply through the Universities Admissions Centre (UAC).

The deadline for applications is the last working day in September in the year before enrolment. For more information see www.uac.edu.au.

Some faculties have additional application procedures, such as the Conservatorium of Music, Sydney College of the Arts and Pharmacy.

Domestic applicants for postgraduate courses and programs of study

For the purpose of admission and enrolment, 'domestic applicant' refers to citizens and permanent residents of Australia and citizens of New Zealand. Application is direct to the faculty which offers the course that you are interested in. Application forms for postgraduate coursework, postgraduate research and the master's qualifying or preliminary program and for non-award postgraduate study can be found at www.usyd.edu.au/studentcentre.

Note: some faculties use their own specially tailored application forms for admission into their courses. Check with the relevant faculty.

International applicants for all course types (undergraduate and postgraduate)

'International applicants' refers to all applicants other than Australian citizens, Australian permanent residents and citizens of New Zealand. In the majority of cases international applicants apply for admission through the University's International Office (IO). All the information international applicants need, including application forms, is available from the IO website (www.usyd.edu.au/internationaloffice).

Attendance

In cases of illness or misadventure, students should complete an *Application for Special Consideration* form, accompanied by relevant documentation, such as medical certificates, and submit it to the relevant faculty office.

The forms are available at faculty offices, the Student Centre, and online at www.usyd.edu.au/studentcentre/forms.shtml.

Exemption from re-attendance

Although you may have attended certain lectures or practical classes before, exemption from re-attendance is granted only in exceptional circumstances. In any case, you are required to enrol in all units of study in which you propose to take examinations, whether or not you have been granted leave of absence (or exemption) from re-attendance at lectures and/or practical work. To obtain exemption from re-attendance, apply at your faculty office.

Bus service

A free bus service operates to, from and around Camperdown and Darlington campuses each weekday that Fisher Library is open (except for public holidays). The service commences at 4.15pm and concludes at Fisher Library closing time.

Two buses operate along the route, starting at Fisher Library and finishing at Redfern station. The buses leave at approximately 10 minute intervals during semester and in semester breaks.

The bus timetable/route guide can be collected from Security Administration or Campus Infrastructure Services reception.

Floor 2, Services Building G12
Corner of Codrington and Abercrombie Streets
Darlington Campus

The University of Sydney
NSW 2006 Australia

Phone: +61 2 9351 4753

Fax: +61 2 9351 5699

Website: www.security.usyd.edu.au

Campuses

The University has ten different teaching campuses, located throughout the Sydney area. For information on each campus, including maps, contact details and parking information, see www.usyd.edu.au/about/campus/pub/campus.shtml.

Campus	Faculties
Camperdown and Darlington campuses	Faculty of Arts Faculty of Architecture, Design and Planning Faculty of Agriculture, Food and Natural Resources Faculty of Economics and Business Faculty of Education and Social Work Faculty of Engineering and Information Technologies Faculty of Medicine Faculty of Pharmacy Faculty of Science Faculty of Veterinary Science The Sydney Summer School
Cumberland Campus	Faculty of Health Sciences
St James Campus	Faculty of Law
Mallett Street Campus	Faculty of Nursing and Midwifery The Centre for English Teaching The NHMRC Clinical Trials Centre
Sydney Conservatorium of Music	The Sydney Conservatorium of Music
Sydney College of the Arts	Sydney College of the Arts (SCA)
Camden Campus	Faculty of Veterinary Science Faculty of Agriculture, Food and Natural Resources
Surry Hills Campus	Faculty of Dentistry
Burren Street Campus	Institute of Transport and Logistics Studies

Careers Centre

The University's Careers Centre can provide you with assistance if you are not sure of your career path, and help you to find both casual and career-related employment.

The Careers Centre provides a range of free and accessible services for students, including:

- help in finding casual and part-time work
- finding career-related work experience and graduate employment
- an internet vacancy database
- individual careers advice and counselling, by appointment
- comprehensive library and online resources
- workshops in resume writing, interview skills, and job searching
- careers fairs, employer presentations and talks.

Careers Centre

Jane Foss Russell Building, G02

The University of Sydney

NSW 2006 Australia

Phone: +61 2 9351 3481

Fax: +61 2 9351 5134

Email: careers.information@usyd.edu.au

Website: www.careers.usyd.edu.au

Centre for Continuing Education (CCE)

The CCE provides the community with the opportunity to engage with the University of Sydney, offering people access to the academic expertise of one of Australia's finest educational institutions.

As a community leader, the CCE provides lifelong learning opportunities for people at all stages of life who want to undertake a course in self-enrichment, engage in active retirement learning,

upgrade their professional skills and qualifications, or bridge a gap between previous study and university. CCE offers short courses in all areas of the Humanities and Social Sciences, Languages, Science and Technology, Business and Management, and Continuing Professional Development.

160 Missenden Road
Newtown NSW 2042

Postal address:
Locked Bag 2020
Glebe NSW 2037

Phone: +61 2 9036 4789
Fax: +61 2 9036 4799
Email: cce.info@usyd.edu.au
Website: www.cce.usyd.edu.au

Centre for English Teaching (CET)

The CET offers English language and academic study skills programs to international students who need to develop their English language skills in order to meet academic entry requirements.

Wentworth Building, G01
The University of Sydney
NSW 2006 Australia

Phone: +61 2 9036 7900
Fax: +61 2 9036 7910
Email: info@cet.usyd.edu.au
Website: www.usyd.edu.au/cet

Child Care Information Office

The Child Care Information Office has information for parents who are students and staff of the University, about child care centres, vacation and occasional care. For more details, see the child care website, via the MyUni student portal (myuni.usyd.edu.au) or the Services for Students website (www.usyd.edu.au/stuserv).

Child Care Information Office
Level 5, Jane Foss Russell Building, G02
The University of Sydney
NSW 2006 Australia

Phone: +61 2 9351 5667
Fax: +61 2 9351 7055
Email: childc@stuserv.usyd.edu.au
Website: www.usyd.edu.au/childcare

The Co-op Bookshop

The Co-op Bookshop is a one-stop store for:

- textbooks
- general books
- reference books
- University of Sydney clothing and memorabilia
- DVDs
- flash drives
- software at academic prices

Take advantage of a lifetime of membership benefits. For a one-time joining fee of \$20, you are entitled to great member pricing, promotional offers and much more.

The Co-op Bookshop
Sports and Aquatic Centre Building, G09
The University of Sydney
NSW 2006 Australia

Phone: +61 2 9351 3705
Fax: +61 2 9660 5256
Email: sydu@coop-bookshop.com.au
Website: www.coop-bookshop.com.au

Counselling Service

The Counselling Service aims to help students fulfil their academic, individual and social goals, by providing short-term, problem-focused counselling to promote psychological wellbeing and help students develop effective and realistic coping strategies. International students can access counselling assistance through the International Student Support Unit (ISSU).

Each semester the Counselling Service runs a program of workshops which are designed to help students master essential study and life management skills. These are open to all local and international students. Phone to make an appointment. Daily walk-in appointments are also available between 11am and 3pm.

For details of workshops, activities and online resources, see the Counselling Service website via the MyUni portal (myuni.usyd.edu.au) or the Services for Students website (www.usyd.edu.au/stuserv).

Camperdown and Darlington campuses

Level 5, Jane Foss Russell Building, G02
The University of Sydney
NSW 2006 Australia

Phone: +61 2 9351 2228
Fax: +61 2 9351 7055
Email: counsell@stuserv.usyd.edu.au
Website: www.usyd.edu.au/counsel

Cumberland Campus

Ground Floor, A Block, C42
The University of Sydney
East Street, Lidcombe
NSW 2141 Australia

Phone: +61 2 9351 9638
Fax: +61 2 9351 9635
Email: CS.Cumberland@stuserv.usyd.edu.au

Disability Services

Disability Services is the principal point of contact for advice on assistance available for students with disabilities. Students need to register to receive support and assistance. Disability Services works closely with academic and administrative staff to ensure that students receive reasonable accommodation in their areas of study.

Assistance includes note taking, interpreters, and negotiation with academic staff regarding assessment and course-requirement modifications where appropriate. For details on registering, including required documentation and online resources, see the Disability Services' website via the MyUni student portal (myuni.usyd.edu.au) or the Services for Students website (www.usyd.edu.au/stuserv).

Camperdown and Darlington campuses

Level 5, Jane Foss Russell Building, G02
The University of Sydney
NSW 2006 Australia

Phone: +61 2 9351 7040
Fax: +61 2 9351 3320
TTY: +61 2 9351 3412
Email: disserv@stuserv.usyd.edu.au
Website: www.usyd.edu.au/disability

Cumberland Campus

Ground Floor, A Block, C42
The University of Sydney
East Street, Lidcombe
NSW 2141 Australia

Phone: +61 2 9351 9638
Fax: +61 2 9351 9635
Email: DS.Cumberland@stuserv.usyd.edu.au

Employment opportunities for students

See 'Sydney Student Development'.

Enrolment

Domestic and international students entering their first year via UAC

Details of enrolment procedures will be sent to students with their UAC offer of enrolment. Enrolment takes place during the last week of January or in February for the later offer rounds.

Domestic and international students entering their first year via a direct offer from the University

Details of the enrolment procedures will be sent to students with their University offer of enrolment. Enrolment takes place during the first two weeks of February.

All continuing domestic and international students

A pre-enrolment package is sent to all enrolled students in late September and contains instructions on the procedure for web-based pre-enrolment.

Environmental Policy

The University of Sydney's Environmental Policy promotes sustainable resource and product use and encourages the practice of environmental stewardship by staff and students. The policy is supported by the University-wide Sustainable Campus Program. Enquiries can be directed to:

Manager, Campus Sustainability
Phone: +61 2 9036 5441
Email: sustainable@usyd.edu.au

Visit the website www.usyd.edu.au/sustainable to find out what the University is doing, and learn how you can get involved, make suggestions or receive the Sustainable Campus Newsletter.

Equity Support Services

Equity Support Services, located within Student Administration and Support, brings together a number of student support services that produce practical assistance and information to help students meet their academic and personal goals while at University.

Services include the Accommodation Service, Casual Employment Service, Child Care Information Office, Disability Services and the Financial Assistance Office.

More information is available through the MyUni student portal (myuni.usyd.edu.au) or the Services for Students website (www.usyd.edu.au/stuserv).

Examinations

Most examinations are facilitated primarily through the Examinations Office. However, some faculties arrange and conduct their own examinations.

Information and timetables on examinations can be located by searching the University's website. For more details, contact the Examinations Office.

Student Centre
Level 3, Jane Foss Russell Building, G02
The University of Sydney
NSW 2006 Australia

Phone: +61 2 9351 4005 or +61 2 9351 4006
Fax: +61 2 9351 7330
Email: exams.office@exams.usyd.edu.au

Fees

The Fees Office provides information on where and how to pay fees, and how to find out if payments have been received. The office can also provide information on obtaining a refund for fee payments. More details are available on the website (listed below).

Fees Office
Margaret Telfer Building, K07
The University of Sydney
NSW 2006 Australia

Phone: +61 2 9351 5222
Fax: +61 2 9114 0556
Email: feespay@usyd.edu.au
Website: www.finance.usyd.edu.au/revenue_income/fees.shtml
Office hours: 9am to 4.30pm, Monday to Friday

Financial Assistance Office

The University of Sydney has a number of loan and bursary funds to assist students experiencing financial difficulties. Loan assistance is available for undergraduate and postgraduate students enrolled in degree and diploma courses at the University.

The assistance is not intended to provide the principle means of support but to help enrolled students in financial need with expenses such as housing bonds and rent, phone and electricity bills, medical expenses, and buying textbooks and course equipment.

Loans are interest-free and are usually repayable within one year. Bursaries may be awarded depending on financial need and academic merit and are usually only available to local full-time undergraduate students. Advertised bursaries, including first-year bursaries, are advertised through the MyUni student portal in January each year.

For details of types of assistance and online resources provided by the service see the Financial Assistance website via the MyUni student portal (myuni.usyd.edu.au) or the Services for Students website (www.usyd.edu.au/stuserv).

Level 5, Jane Foss Russell Building, G02
The University of Sydney
NSW 2006 Australia

Phone: +61 2 9351 2416
Fax: +61 2 9351 7055
Email: fao@stuserv.usyd.edu.au
Website: www.usyd.edu.au/fin_assist

Freedom of Information

The University of Sydney falls within the jurisdiction of the *NSW Freedom of Information Act 1989*. The Act:

- requires information concerning documents held by the University to be made available to the public
- enables a member of the public to obtain access to documents held by the University; and
- enables a member of the public to ensure that records held by the University concerning his or her personal affairs are not incomplete, incorrect, out of date or misleading.

A 'member of the public' includes staff and students of the University.

It is a requirement of the Act that applications be processed and a determination made within a specified time period, generally 21 days. Determinations are made by the University's Registrar.

While an application may be made to access University documents, some may not be released in accordance with particular exemptions provided by the Act. There are review and appeal mechanisms which apply when access has been refused.

The University is required to report to the public on its freedom of information activities on a regular basis and to produce two documents: a *Statement of Affairs* (annually) and a *Summary of Affairs* (every six months).

The *Statement of Affairs* contains information about the University, its structure, function and the kinds of documents held. The *Summary of Affairs* identifies the University's policy documents and provides information on how to make an application for access to University documents. More information and copies of the reports can be found at www.usyd.edu.au/arms/info_freedom.

Graduations Office

The Graduations Office is responsible for organising graduation ceremonies and informing students of their graduation arrangements.

Student Centre
Level 3, Jane Foss Russell Building, G02
The University of Sydney
NSW 2006 Australia

Phone: +61 2 9351 3199 or +61 2 9351 4009
Protocol enquiries: +61 2 9351 4612
Fax: +61 2 9351 5072

Grievances and appeals

You may consider that a decision affecting your candidature for a degree or other activities at the University has not taken into account all relevant matters. In some cases the by-laws or resolutions of the Senate provide for a right of appeal against particular decisions. For example, there is provision for appeal against academic decisions, disciplinary decisions and exclusion after failure.

A document outlining the current procedures for appeals against academic decisions is available at the Student Centre, the Student Representative Council, and on the Policy Online website (www.usyd.edu.au/policy (click on 'Study at the University', then 'Appeals' – see the Academic Board and Senate resolutions).

For assistance or advice regarding an appeal contact:

Undergraduates

Students' Representative Council
Level 1, Wentworth Building, G01
The University of Sydney
NSW 2006 Australia
Phone: +61 2 9660 5222

Postgraduates

Sydney University Postgraduate Representative Association (SUPRA)
Corner of Raglan and Abercrombie Streets
The University of Sydney
NSW 2006 Australia
Phone: +61 2 9351 3115

HECS and Fees Office

Student Centre
Level 3, Jane Foss Russell Building, G02
The University of Sydney
NSW 2006 Australia

Phone: +61 2 9351 5659
Fax: +61 2 9036 6111
Email: hecs.fees@records.usyd.edu.au

Information and Communications Technology (ICT)

See 'Service Management, Information and Communications Technology'.

International Office

The International Office helps international students with application, admission and enrolment procedures. The International Office has units responsible for international marketing, government and student relations, international scholarships (including AusAID scholarships and administrative support for international financial aid programs), and compliance with government regulations relating to international students.

The Study Abroad and Student Exchange units assist both domestic and international students who wish to enrol for study abroad or exchange programs.

International Office

Services Building, G12
The University of Sydney
NSW 2006 Australia

Phone: +61 2 9351 4079
Fax: +61 2 9351 4013
Email: info@io.usyd.edu.au
Website: www.usyd.edu.au/internationaloffice

Study Abroad

Phone: +61 2 9351 3699
Fax: +61 2 9351 2795
Email: studyabroad@io.usyd.edu.au
Website: www.usyd.edu.au/studyabroad

Student Exchange

Phone: +61 2 9351 3699
Fax: +61 2 9351 2795
Email: exchange@io.usyd.edu.au
Website: www.usyd.edu.au/studentexchange

International Student Support Unit (ISSU)

The ISSU helps international students through the provision of orientation, counselling and welfare services to both students and their families. ISSU aims to help international students cope successfully with the challenges of living and studying in an unfamiliar culture, to achieve success in their studies and to make the experience of being an international student rewarding and enjoyable.

For details of orientation activities, counselling and welfare services provided to both students and their families and online resources, see the MyUni student portal (myuni.usyd.edu.au) or the Services for Students website (www.usyd.edu.au/stuserv). International students also have access to all University student support services.

Camperdown and Darlington campuses

Level 5, Jane Foss Russell Building, G02
The University of Sydney
NSW 2006 Australia

Phone: +61 2 9351 4749
Fax: +61 2 9351 6818
Email: info@issu.usyd.edu.au
Website: www.usyd.edu.au/issu

Cumberland Campus

Ground Floor, A Block, Cumberland Campus, C42
The University of Sydney
East Street, Lidcombe
NSW 2141 Australia

Phone: +61 2 9351 9638
Fax: +61 2 9351 9635
Email: ISSU.Cumberland@stuserv.usyd.edu.au
Website: www.usyd.edu.au/issu

Koori Centre and Yooroang Garang

The Koori Centre and Yooroang Garang support Aboriginal and Torres Strait Islander people in all aspects of tertiary education at the University of Sydney. The Cadigal Special Entry Program assists Indigenous Australians to enter undergraduate study across all areas of the University.

As well as delivering block-mode courses for Indigenous Australian students, the Koori Centre teaches Indigenous Australian Studies in various faculties across mainstream courses. The Koori Centre also provides tutorial assistance, and student facilities including a computer lab, indigenous research library and study rooms for Indigenous Australian students at the University.

In particular, the Koori Centre aims to increase the successful participation of Indigenous Australians in undergraduate and postgraduate degrees, develop the teaching of Aboriginal studies, conduct research in the field of Aboriginal education, and establish working ties with schools and communities.

The Koori Centre works in close collaboration with Yooroang Garang, School of Indigenous Health Studies in the Faculty of Health Sciences at the Cumberland Campus. Yooroang Garang provides assistance, advice and academic support for Indigenous students in the faculty, as well as preparatory undergraduate and postgraduate courses.

Koori Centre

Ground Floor, Old Teachers College, A22
The University of Sydney
NSW 2006 Australia

Phone: +61 2 9351 2046 (general enquiries)
Toll-free within Australia: 1800 622 742
Community Liaison Officer: +61 2 9351 7003
Fax: +61 2 9351 6923
Email: koori@koori.usyd.edu.au
Website: www.koori.usyd.edu.au

Yooroang Garang

T Block, Level 4, Cumberland Campus, C42
The University of Sydney
NSW 2006 Australia

Phone: +61 2 9351 9393
Toll free: 1800 000 418
Fax: +61 2 9351 9400
Email: yginfo@fhs.usyd.edu.au
Website: www.yg.fhs.usyd.edu.au

Learning Centre

The Learning Centre helps students develop the generic learning and communication skills that are necessary for university study and beyond. The centre is committed to helping students achieve their academic potential during their undergraduate and postgraduate studies.

Learning Centre staff can be found at the Camperdown, Darlington and Cumberland campuses. The centre's program includes a wide range of workshops on study skills, academic reading and writing, oral communication skills and postgraduate writing and research skills. Other services include an individual learning program, a faculty-based program and access to online and print-based learning resources.

For details of programs, activities and online resources available from the Learning Centre, see its website via the MyUni student portal (myuni.usyd.edu.au) or the Services for Students website (www.usyd.edu.au/stuserv).

Camperdown and Darlington campuses

Level 7, Education Building, A35
The University of Sydney
NSW 2006 Australia

Phone: +61 2 9351 3853
Fax: +61 2 9351 4865
Email: lc@stuserv.usyd.edu.au
Website: www.usyd.edu.au/lc

Cumberland Campus

Ground Floor, A Block, C42
The University of Sydney
East Street, Lidcombe
NSW 2141 Australia

Phone: +61 2 9351 9638
Fax: +61 2 9351 9635
Email: LC.Cumberland@stuserv.usyd.edu.au
Website: www.usyd.edu.au/stuserv/learning_centre/cumberl.shtml

Library

The University of Sydney Library provides services via a network of 14 libraries on 10 campuses, and online at www.library.usyd.edu.au.

The location, opening hours and specific subject focus of each library is listed on the website. Over 5.5 million items are available via the library catalogue, including more than 67,000 online journals and 325,000 online books.

Enrolled students are entitled to borrow from any of the University libraries. Reading list books and articles are available via the reserve service either online or in print. Past examination papers are also available online.

Library facilities include individual and group study spaces, computers, printers, multimedia equipment, photocopiers and adaptive technologies. Refer to the 'Libraries' link on the University website to find out about services and facilities in specific libraries.

Library staff are available in every library to support students with their study and research. Faculty liaison librarians assist students to find great information on any topic and provide training in using a wide range of resources. For contact details of faculty liaison librarians, see www.library.usyd.edu.au/contacts/subjectcontacts.html. It is also possible to learn research and information skills online; see www.library.usyd.edu.au/skills.

Comments and suggestions about library services are welcome.

The University of Sydney Library, F03
Camperdown Campus
NSW 2006 Australia

Phone: +61 2 9351 2993
Website: www.library.usyd.edu.au

Mathematics Learning Centre

The Mathematics Learning Centre helps undergraduate students to develop the mathematical knowledge, skills and confidence that are needed for studying first-level mathematics or statistics units at university. The centre runs bridging courses in mathematics at the beginning of the academic year (fees apply). The centre also provides ongoing support to eligible students during the year through individual assistance and small group tutorials.

For details of activities and online resources provided by the centre see the website via the MyUni student portal (myuni.usyd.edu.au) or the Services for Students website (www.usyd.edu.au/stuserv).

Level 4, Carslaw Building, F07
The University of Sydney
NSW 2006 Australia

Phone: +61 2 9351 4061
Fax: +61 2 9351 5797
Email: mlc@stuserv.usyd.edu.au
Website: www.usyd.edu.au/mlc

Museums and galleries

The University of Sydney has one of the largest and finest university collections of antiquities, art, ethnography and natural history in Australia. While these collections are used for teaching, they also provide an opportunity for the University to contribute to the cultural life of the country.

University Art Gallery

Founded in the 1860s, the University of Sydney Art Collection now holds more than 3000 paintings, sculptures and works on paper by Australian, Asian and European artists, as well as more than 700 works from the University Union Art Collection. The University Art Gallery showcases changing exhibitions of works from the collection as well as high-quality exhibitions of both contemporary and historical works.

War Memorial Arch
Quadrangle, A14
Camperdown Campus

Phone: +61 2 9351 6883
Fax: +61 2 9351 7785
Website: www.usyd.edu.au/museums

Macleay Museum

The Macleay Museum originated with the eighteenth century collection of insects owned by Alexander Macleay. The oldest of its kind in Australia, the museum today holds significant collections of ethnographic artefacts, scientific instruments, biological specimens and historic photographs. Changing exhibitions engage with the diversity of the collection.

Macleay Building, A12
Gosper Lane (off Science Road)
Camperdown Campus

Phone: +61 2 9036 5253
Fax: +61 2 9351 5646
Email: macleaymuseum@usyd.edu.au
Website: www.usyd.edu.au/museums

Nicholson Museum

The Nicholson Museum contains the largest and most prestigious collection of antiquities in Australia. It is also the country's oldest university museum, and features works of ancient art and objects of daily life from Greece, Italy, Egypt, Cyprus the Near and Middle East, as well as Northern Europe. A regular changing schedule of exhibitions highlights various parts of the collection.

Quadrangle, A14
Camperdown Campus

Phone: +61 2 9351 2812
Fax: +61 2 9351 7305
Email: nicholsonmuseum@usyd.edu.au
Website: www.usyd.edu.au/museums

The Tin Sheds Gallery

The Tin Sheds Gallery is part of the Art Workshop complex within the University of Sydney's Faculty of Architecture, Design and Planning. The gallery hosts exhibitions across a wide variety of contemporary visual arts practices from individuals and groups, as well as community projects and curated exhibitions.

Tin Sheds Gallery and Art Workshops
Faculty of Architecture
Wilkinson Building
148 City Road

Phone: +61 2 9351 3115
Fax: +61 2 9351 4184
Email: tinsheds@arch.usyd.edu.au
Website: www.arch.usyd.edu.au/art_workshop

MyUni Student Portal

The MyUni student portal (myuni.usyd.edu.au) is the starting point and 'one-stop' environment for students to access all their web-based University information and services.

MyUni automatically tailors what a student sees based on their login and offers students the option of further personalising content. Most importantly, MyUni allows students to complete tasks online that would previously have required attendance in person. The following are examples of MyUni services and information:

- support services relating to health, counselling, employment, child care, accommodation, and general wellbeing
- student administration systems for obtaining examination results, enrolment and variations, timetabling, email services and links to courses and units of study information
- links to the University's e-learning systems
- library services
- important messages and student alerts
- information and communications technology and support services
- information for local, Indigenous and international students
- campus maps, with descriptions of cultural, sporting and campus facilities.

Orientation and O-Week

Orientation

Transition to University involves both opportunities and challenges. A successful transition is important in developing a sense of belonging and better academic adjustment and success. The University seeks to facilitate students' successful transition through a wide range of programs and activities.

Orientation activities for both undergraduate and postgraduate students are scheduled at the beginning of each semester. Transition support continues throughout the academic year within faculties while student support services are available to assist students for the duration of their study.

For more information, see www.usyd.edu.au/orientation.

Undergraduate students

Sydney Welcome Orientation and Transition (SWOT) Program

In the week prior to Semester One, the SWOT program offers all commencing undergraduate students an opportunity to learn more about the University of Sydney.

During this week you can get to know the University, develop key skills for success, discover other key resources for getting the most out of university life and develop a sense of belonging. All students are welcome to attend activities which are based at the Camperdown and Darlington campuses. Faculties based on other campuses also provide orientation activities and programs.

SWOT 2009 will run from **25 to 27 February 2009**.

For more information, see www.swot.usyd.edu.au.

Postgraduate students

The University of Sydney Postgraduate Induction Program is a specialised program for postgraduate students organised by the Dean of Graduate Studies. See www.dogs.usyd.edu.au.

O-Week

O-Week is the orientation event at the beginning of Semester One. Organised by the University of Sydney Union (USU) and other student organisations, it runs in parallel with the SWOT program. O-Week provides an opportunity to learn about and participate in the many clubs and societies available at the University and the services and activities of the student organisations.

It's packed with fun activities and events, plus information to help you get acquainted with the University and grab hold of all of the opportunities this campus has to offer.

Rock, jazz, orchestral and choral concerts, plays, demonstrations, symposia on current affairs, reviews, competitions, sports, bus tours, games, special-interest meetings, guest speakers, debates, films, food and freebies are all organised for commencing students' participation and enjoyment. You need to know what's on and what's available in order to make the most out of your time here.

O-Week 2009 will run from **25 to 27 February 2009**. Programs are available at www.usuonline.com.

Part-time, full-time attendance

Undergraduate students

Undergraduate students are usually considered full-time if they have a student load of at least 0.375 each semester. Anything under this amount is considered a part-time study load.

Note that some faculties have minimum study load requirements for satisfactory progress.

Postgraduate students (coursework)

Part-time or full-time status for postgraduate coursework students is determined by credit-point load. Enrolment in units of study which total at least 18 credit points in a semester is classed as full-time. Anything under this amount is a part-time study load.

Please note that classes for some coursework programs are held in the evenings (usually 6pm to 9pm).

Postgraduate students (research)

Full-time candidates for research degrees do not keep to the normal semester schedule. Instead they work continuously throughout the year with a period of four weeks recreation leave.

There is no strict definition of what constitutes full-time candidature but if you have employment or other commitments that would prevent you from devoting at least the equivalent of a 35-hour working week to your candidature (including attendance at the University for lectures, seminars, practical work and consultation with your supervisor) you should enrol as a part-time candidate. If in doubt, consult your faculty or supervisor.

International students

Student visa regulations require international students to undertake full-time study. International students on visas other than student visas may be permitted to study part-time.

Policy Online

In addition to the resolutions covering specific courses there are a number of University policies that apply to students. These include:

- Code of Conduct for students
- Academic Honesty in Coursework
- Student Plagiarism: Coursework Assessment and Examination of Coursework
- Identifying and Supporting Students at Risk

All of these policies can be accessed at the University's Policy website online (www.usyd.edu.au/policy).

Printing Service

The University Printing Service (UPS) provides printing and binding services including: high-volume printing and copying, short run/low-volume printing, and four-colour process printing. It also offers finished artwork and design, including website design, document scanning, file conversion and CD burning.

UPS products range from stationery, books, brochures, handbooks, graduation certificates and examination papers through to invitations, flyers and banners.

UPS also offers a variety of finishing options plus collating, addressing and filling of envelopes, mail merge options and print-broking services.

University Printing Service
Room 314, Top Floor
Services Building, G12
Codrington Street

Phone: +61 2 9351 2004
Fax: +61 2 9351 7757
Email: ups@ups.usyd.edu.au
Website: www.usyd.edu.au/ups

Privacy

The University is subject to the *NSW Privacy and Personal Information Protection Act 1998* and the *NSW Health Records and Information Privacy Act 2002*. Central to both Acts are the sets of information protection principles (IPPs) and health privacy principles which regulate the collection, management, use and disclosure of personal and health information.

In compliance with the *Privacy and Personal Information Protection Act* the University developed a *Privacy Management Plan* which includes the *University Privacy Policy*. The *Privacy Management Plan* sets out the IPPs and how they apply to functions and activities carried out by the University. Both the plan and the *University Privacy Policy* were endorsed by the Vice-Chancellor on 28 June 2000.

Further information and a copy of the plan may be found at www.usyd.edu.au/arms/privacy.

Any questions regarding the *Freedom of Information Act*, the *Privacy and Personal Information Protection Act*, the *Health Records and Information Privacy Act* or the *Privacy Management Plan* should be directed to one of the following:

Tim Robinson: +61 2 9351 4263
Anne Picot: +61 2 9351 7262
Email: foi@mail.usyd.edu.au

Research Office

The Research Office administers the major government-funded research awards. Details of these awards and many others may be obtained from www.usyd.edu.au/ro/training.

The closing date for Australian Postgraduate Awards (APA) and University of Sydney Postgraduate Awards (UPA) is October every year.

National Health and Medical Research Council (NHMRC) Postgraduate Research Scholarships usually close in mid-July. It is wise to confirm in advance the exact closing date.

Research Office
Level 6, Jane Foss Russell Building, G02
Phone: +61 2 8627 8112
Email: research.training@usyd.edu.au
Website: www.usyd.edu.au/ro/training

Scholarships for undergraduates

The Scholarships and Prizes Office administers scholarships and prizes for undergraduate and postgraduate coursework degrees at the University of Sydney. To learn more, see the website.

Scholarships and Prizes Office
Jane Foss Russell Building, G02
The University of Sydney
NSW 2006 Australia
Phone: +61 2 9351 2717
Fax: +61 2 9036 7879
Email: scholarships.reception@usyd.edu.au
Website: www.usyd.edu.au/scholarships

Security Services

Security staff patrol the University's Camperdown and Darlington campuses 24 hours a day, seven days a week and are easily identified by their blue uniforms and distinguishing badges.

Security Escort Service

The University's Security Escort Service may be booked by telephoning +61 2 9351 3487. This service provides transportation around the Camperdown and Darlington campuses as well as to the nearest transport point at its edge (it generally operates after the Security Bus has ceased). The service is for security situations and is not designed for convenience use. Requests for this service will be prioritised against other security demands.

Emergency contact

Phone: +61 2 9351 3333

Enquiries

Phone: +61 2 9351 3487 or (toll-free within Australia) 1800 063 487

Fax: +61 2 9351 4555

Email: security.admin@mail.usyd.edu.au

Website: www.security.usyd.edu.au

Traffic

Phone: +61 2 9351 3336

Lost property

Phone: +61 2 9351 5325

Service Management, Information and Communications Technology (ICT)

Client Services are responsible for the delivery of many of the computing services provided to students. Students can contact Client Services by phoning the ICT Helpdesk on (02) 9351 6000, through the IT Assist website (www.switch.usyd.edu.au) or by visiting the staff at one of the University Access Labs.

Access labs on the Camperdown and Darlington campuses:

- Fisher Library (Level 2)
- Carslaw Building (Room 201)
- Education Building (Room 232)
- Christopher Brennan Building (Room 232)
- Engineering Link Building (Room 222)
- Pharmacy and Bank Building (Room 510)

Other labs are available at the Law Campus, Westmead Hospital and Cumberland Campus.

The labs provide students free access to computers, including office productivity and desktop publishing software. Some services are available on a fee-for-service basis, such as Internet access, printing facilities, and the opportunity for students to host their own non-commercial website.

Each student is supplied with an account, called a 'Unikey' account, which allows access to a number of services including:

- free email (www-mail.usyd.edu.au)
- WebCT/elearning online resources via <https://learn-on-line.ce.usyd.edu.au/webct/entryPageIns.dowebct>
- access to the Internet from home or residential colleges (www.switch.usyd.edu.au/services.html)
- facilities via the MyUni student portal: myuni.usyd.edu.au including exam results, enrolment variations and timetabling
- free courses in basic computing (such as MS Office, basic html and Excel), run by Access Lab staff in the week following orientation week. To register contact the Access Lab Supervisor on +61 2 9351 6870.

Service Management, Helpdesk
University Computer Centre, H08
Camperdown Campus

Phone: +61 2 9351 6000

Fax: +61 2 9351 6004

Email: support@usyd.edu.au

Website: www.switch.usyd.edu.au

Staff and Student Equal Opportunity Unit (SSEOU)

The Staff and Student Equal Opportunity Unit works with the University community to promote equal opportunity in education and employment, to create opportunities for staff and students who have traditionally been disadvantaged by mainstream practices and policies, and to create an environment that is free from discrimination and harassment.

The Staff and Student Equal Opportunity Unit is responsible for:

- providing policy advice to staff on harassment and discrimination
- providing equal opportunity policy development, promotion and training for staff and students
- coordinating and monitoring equity programs and initiatives
- providing information and advice to staff and students on equal opportunity matters
- resolving individual staff and student concerns about harassment and discrimination
- overseeing the University's Harassment and Discrimination Resolution procedure
- monitoring and reporting to external bodies on the University's progress in the equal opportunity area.

Every student and employee at the University of Sydney has the right to expect from their fellow students and colleagues behaviour that reflects these key values, irrespective of background, beliefs or culture.

In addition, every student and employee has a right to expect from the University-equitable practices that preserve and promote equal opportunity to access, participate, and excel in their chosen field.

Second Floor, Margaret Telfer Building, K07
The University of Sydney
NSW 2006 Australia

Phone: +61 2 9351 2212

Fax: +61 2 9351 3195

Email: admin@eeo.usyd.edu.au

Website: www.usyd.edu.au/eeo

Student Administration and Support

The University provides personal, welfare, administrative and academic support services to facilitate your success. Many factors can have an impact on your wellbeing while studying, and Student Services can help you to manage these more effectively.

For details of services and online resources provided, see the MyUni student portal (myuni.usyd.edu.au) or the Services for Students website (www.usyd.edu.au/stuserv).

Student Centre

Level 3, Jane Foss Russell Building, G02
The University of Sydney
NSW 2006 Australia

General enquiries: +61 2 9351 3023

Academic records: +61 2 9351 4109

Handbooks: +61 2 9351 5057

Fax: +61 2 9351 5081 or +61 2 9351 5350 (academic records)

Website: www.usyd.edu.au/studentcentre

Student identity cards

The student identity card functions as a library borrowing card, a transport concession card (when suitably endorsed) and a general identity card. The card must be carried at all times on the grounds of the University and must be shown on demand, and must be taken to all examinations. Details for obtaining a student card can be found at: www.usyd.edu.au/cstudent/student_cards.shtml

Sydney Student Development

Sydney Student Development offers paid course-related employment to students with the aim of increasing their employment prospects upon graduation. During the semester students can work part-time to accommodate their study commitments and potentially full-time during the semester break.

For more information, see www.usyd.edu.au/student_employment.

Sydney Summer School

Nine faculties at the University offer subjects from undergraduate and postgraduate degree programs during summer. As the University uses its entire quota of Commonwealth-supported places in Semesters One and Two, these units are full fee-paying for both local and international students and enrolment is entirely voluntary.

Summer School enables students to accelerate their degree progress, make up for a failed subject or fit in a subject which otherwise would not suit their timetables. New students may also gain an early start by completing subjects before they commence their degrees.

Three Summer Sessions are offered, commencing in mid December, the first week of January and the third week of January and run for up to six weeks (followed by an examination week). Details of the available subjects are on the Summer School website and is usually circulated to students with their results notices.

A smaller Winter School is also run by the Summer School office. It will commence on 29 June 2009 and run for three weeks (followed by an examination week). The Winter School offers both postgraduate and undergraduate subjects.

To find out information about subjects offered and to enrol, see the Summer School website: www.summer.usyd.edu.au.

Sydney Welcome Orientation and Transition Program (SWOT)

The Sydney Welcome Orientation and Transition program (SWOT) offers a head start to commencing undergraduate students at the University, helping you to become familiar with the University and its student support services. The Library and central student support services work together with faculties to provide the SWOT program.

SWOT 2009 runs from **25 to 27 February 2009**.

For more information, see www.swot.usyd.edu.au.

The University of Sydney Foundation Program (USFP)

The University of Sydney provides a foundation program to international students as a preparation for undergraduate degrees at several Australian universities.

The program is conducted by Taylors College on behalf of Study Group Australia and the University of Sydney. It allows both first and second semester entry to undergraduate courses at the University of Sydney and other universities within Australia.

Contact details

Phone: +61 2 8263 1888

Fax: +61 2 9267 0531

Email: info@taylorscollege.edu.au

Website: www.usyd.edu.au/foundationprogram

College address

The University of Sydney Foundation Program

Taylors College

965 Bourke St

Waterloo NSW 2017

Phone: +61 2 8303 9700

Fax: +61 2 8303 9777

Timetabling Unit

The Timetabling Unit in the Student Centre is responsible for producing students' class and tutorial timetables. Semester One timetables are available ten days prior to the beginning of semester.

Website: www.usyd.edu.au/studentcentre/timetabling.shtml

University Health Service

The University Health Service provides a full experienced general practitioner service and emergency medical care to all members of the University community. You can consult a doctor either by appointment or on a walk-in basis (for more urgent matters only). The Health Service bills Medicare or your overseas student health care provider (Worldcare or Medibank Private) directly for the full cost of most consultations.

Email: i.marshall@unihealth.usyd.edu.au

Website: www.unihealth.usyd.edu.au

Phone: +61 2 9351 3484

Fax: +61 2 9351 4110

University Health Service (Wentworth)

Level 3, Wentworth Building, G01

The University of Sydney

NSW 2006 Australia

Opening hours: 8.30am to 5.30pm, Monday to Friday

Phone: +61 2 9351 3484

University Health Service (Holme)

Holme Building, A09

Entry Level, Science Road

The University of Sydney

NSW 2006 Australia

Opening hours: 8.30am to 5.30pm, Monday to Friday

Phone: +61 2 9351 4095

Student organisations

Students' Representative Council (SRC)

The Students' Representative Council (SRC) represents, campaigns and advocates for undergraduate students throughout the University.

SRC caseworkers advise students on a range of issues, including academic appeals, Centrelink and Austudy, tenancy, harassment and discrimination. The solicitor (from Redfern Legal Centre) provides legal assistance and court representation. These services are free and confidential. The SRC also offers financial support in the form of emergency loans up to \$50.

In addition, the SRC runs a second-hand bookshop that specialises in the purchase and sale of coursework textbooks. Among the publications produced by the SRC are the weekly student newspaper *Honi Soit*, the *Counter-Course Handbook* and the *O-Week Handbook*.

Recently celebrating its 80th anniversary, the SRC is one of the oldest student organisations in Australia, and is run by and for students. This is a great way for you to be involved in student life. Office bearers elected to student council campaign on issues that directly affect students, such as course cuts and assessments, fee increases, discrimination and welfare rights. They also advocate on social justice matters both within the University and throughout the wider community.

SRC main office

Level 1, Wentworth Building, City Road
 Phone: +61 2 9660 5222
 Fax: +61 2 9660 4260
 Email: help@src.usyd.edu.au
 Email (*Honi Soit* editors): editors@src.usyd.edu.au
 Website: www.src.usyd.edu.au

Contain the main office for details of other campuses.

The SRC Secondhand Bookshop

Level 3, Wentworth Building, City Road
 Phone: +61 2 9660 4756
 Fax: +61 2 9660 4260
 Email: books@src.usyd.edu.au
 Website: www.src.usyd.edu.au

Sydney University Postgraduate Representative Association (SUPRA)

SUPRA is an independent association which provides advice, advocacy and support services to postgraduate students. SUPRA is both the voice and safety net of these students, and represents their interests by:

- ensuring the representation of postgraduate views within the University and wider community
- providing free, confidential assistance and advocacy for postgraduates through the employment of Student Advice and Advocacy Officers (SAAOs)
- providing free legal advice for postgraduate students, in association with the Redfern Legal Centre
- representing postgraduates on University policy-making bodies such as the Academic Board, its committees and working parties
- meeting with members of the Senate on the Senate/Student Organisations Liaison Committee
- regularly consulting with the Vice-Chancellor, Registrar and other senior University officers
- drawing postgraduates together at all levels of University life.

SUPRA Council, committees and networks

The SUPRA Council is elected annually by and from the postgraduate student community. Council meetings are held monthly and postgraduate students are encouraged to attend. SUPRA committees and networks help to coordinate activities and run campaigns, and are a great way to get involved. All postgraduates can stand for the Council or attend any SUPRA events provided they are a SUPRA subscriber.

Advice and advocacy

SUPRA employs professional Student Advice and Advocacy Officers (SAAOs) to help postgraduate students with any academic or personal problems that may be affecting their study, such as:

- fee paying and administrative issues
- academic appeals and exclusions
- supervision problems
- tenancy issues
- Centrelink and financial assistance concerns
- harassment and discrimination.

This is a free and confidential service for all postgraduates at the University of Sydney. To access the SAAO service, you must be a SUPRA subscriber. It's free to subscribe and you can do it online, in the office, or when you see an SAAO. To find out more about the SAAO service, email: help@supra.usyd.edu.au.

Publications

SUPRA places the highest priority upon communication, being responsive to postgraduates and encouraging maximum participation in SUPRA through the following publications:

- *eXpress*, a magazine-style publication
- *eGrad*, a regular email bulletin
- *Survive!* Postgraduate Survival Manual
- *The Counter Course Handbook*
- *Thesis Guide*
- a range of factsheets and brochures.

Electronic versions are available at www.supra.usyd.edu.au.

All of SUPRA's services, activities and publications are free to SUPRA subscribers. By subscribing, you also show your support for all the work that SUPRA does on your behalf. It's free to subscribe and you can sign up online or drop into the SUPRA offices and fill out the form.

SUPRA Office

Raglan St Building, G10
 Corner Raglan and Abercrombie Streets
 Phone: +61 2 9351 3715 or toll-free 1800 249 950
 Fax: +61 2 9351 6400
 Email: admin@supra.usyd.edu.au
 Website: www.supra.usyd.edu.au

University of Sydney Union (USU)

USU is the organisation that coordinates activities, programs, events, services and facilities in and around Manning House, Wentworth Building and Holme Building, to provide an exciting and varied student experience. USU looks after on-campus catering and functions, spaces to relax and eat in, clubs and societies, entertainment, and other social and cultural programs.

For more information on USU, see www.usuonline.com.



Access Card Benefits Program

The Access program is a savings and benefits scheme offered by USU. Once you've bought an Access Card, you can take advantage of great discounts, such as 15 per cent off purchases from USU catering and retail outlets, and 20 percent off coffee and water across campus.

As part of your membership, you can also make fantastic savings off-campus from Access Partners offering discounts and deals on gifts, clothing, family entertainment and food.

For more information, see www.accessbenefits.com.au.

Clubs and societies

The USU funds, accommodates, trains and supports around 250 clubs and societies – groups that students can join and operate to pursue their own interests. Clubs and societies organise their own activities and events and are funded by USU. Being part of a club or society is the best way to get involved in campus life, meet people who share your interests, network and gain valuable organisational skills, training and experience.

There are clubs and societies focused on politics, culture, the arts, the environment, religion, volunteering, skills, hobbies, departments and faculties. If there isn't a club or society catering to your interests, we'll help you create and operate your own!

USU provides all of their clubs and societies with grants, insurance, venues, training and support for a range of events and projects including barbecues, dinners, annual balls, dance parties, cocktail parties, video nights, camps, conferences, excursions, trivia nights, fundraisers, merchandise and t-shirt production, postage and printing.

Registered clubs and societies can make free use of USU meeting rooms (as available) and free photocopying. Registered clubs can also use letterbox hire and USU equipment hire.

C&S Office

University of Sydney Union
Level 1, Manning House, Manning Road
Phone: +61 2 9563 6161
Email: clubsandsocs@usu.usyd.edu.au

The USU Student Leadership Program

The USU believes that a university should educate you, prepare you for life, and be fun!

The University of Sydney is able to boast the broadest, most inclusive extra-curricular program of all universities in Australia, and the USU prides itself on the world-class student experience program it delivers for the University.

The USU takes very seriously the need to create a vibrant community outside the classroom. Our programs are designed not only to entertain, but to teach and prepare participants for their lives after graduation. At the apex of what we do is mentoring, personal development, and leadership training.

The vitality of the USU is founded on the involvement of students as leaders within its community. These positions range from a student Board of Directors, Club and Society Executives, Festival Directors, Debate Directors, volunteers, and community portfolio convenors.

Sydney Uni Sport & Fitness

Sydney Uni Sport & Fitness invites you to choose from our range of value membership options, giving access to many sport and recreation clubs, fitness programs, top-level sporting facilities, regular competition and events, and great member benefits.

Join a vast array of sporting and recreational clubs for men and women with well-developed juniors programs, take part in excellent courses and world-class sporting events, and improve your performance under

the guidance of some of Australia's most accomplished coaches and sportspeople.

Purpose-built venues, such as the University Sports and Aquatic Centre, Arena Sports Centre with the Ledge Climbing Centre, and the HK Ward Gymnasium, offer tennis and squash courts, rock-climbing, fitness equipment, a martial arts room and an Olympic-size heated swimming pool.

Check out the historic and panoramic sporting ovals, rowing sheds and a multi-purpose facility at Tempe, and don't forget the on-campus Grandstand Sports Bar.

Sydney Uni Sport & Fitness
University Sports & Aquatic Centre
Phone: +61 2 9351 4960
Fax: +61 2 9351 4962
Email: admin@sport.usyd.edu.au
Website: www.susf.com.au

Facilities

Sydney Uni Sport & Fitness has three main fitness centres.

University Sports & Aquatic Centre

Corner Codrington and Darlington Streets
Darlington Campus
Phone: +61 2 9351 4978
Email: nmrc@sport.usyd.edu.au

Facilities at the centre include:

- 50-metre heated swimming pool
- six synthetic tennis courts
- four squash courts
- multi-function sports hall
- modern fitness equipment
- group fitness studio
- RPM Studio
- health assessments and fitness testing
- personal training
- a café.

Arena Sports Centre

Western Avenue
Camperdown Campus
Phone: +61 2 9351 8111
Email: arenaman@sport.usyd.edu.au

Facilities at the Arena Sports Centre include:

- extensive weights room
- Yoga classes
- personal training
- modern cardio equipment
- multi-purpose sports hall (Badminton)
- two squash courts
- sports clinic
- The Ledge Climbing Centre
- Ralph's Café.

HK Ward Gymnasium

Between Ovals 1 and 2
Camperdown Campus
Phone: +61 2 9351 4988
Email: hk@sport.usyd.edu.au

Facilities at the gymnasium include:

- martial arts facility
- international-standard sports hall
- boxing ring and gym
- group fitness studio
- boxercise and kickboxing classes
- ergometer training
- sports equipment hire.

International students

The following information is for international students studying onshore on an Australian student visa.

Completion within the expected duration

Education Providers are required to ensure that international students complete their studies within the duration specified on the electronic Confirmation of Enrolment (eCoE). Extensions to a student's course duration are allowed only in limited circumstances. For example, for compassionate or compelling reasons, where an intervention strategy has been implemented or where there has been an approved leave of absence or suspension.

It is important for students to ensure they are on track to complete their studies within the expected duration, or that they have permission from their faculty to extend their duration.

Satisfactory academic progress

Maintaining satisfactory course progress is a mandatory student visa condition. Education providers are required to monitor course progress, intervene where students are at risk of failing to achieve satisfactory course progress, notify students who fail to achieve satisfactory course progress, and report students who fail to achieve satisfactory course progress to the Department of Immigration and Citizenship (DIAC).

It is important that every student is aware of the progress rules for their course and participates in the intervention strategies implemented by their faculty. Exclusion from a course due to unsatisfactory progress can have serious implications for student visa holders including visa cancellation and restrictions on returning to Australia.

The University provides many avenues of support for students who are struggling academically. International students who are experiencing any difficulties with their academic progress should consult their faculty, the international student advisers in the International Office or the counsellors in the International Student Support Unit (ISSU).

Distance/web-based study

International students may undertake no more than 25 per cent of their total course by distance and/or online learning. Students must not enrol in exclusively distance or online study in any compulsory study period.

Work permits

International students with a work permit are permitted to work for up to 20 hours during semester and full-time during the University's official vacation periods. Contact the international student advisers in the International Office for more information.

Change of address

International students must notify the University of their residential address within seven days of arrival and notify any change of address within seven days. This should be done online via the University's MyUni student portal (<http://myuni.usyd.edu.au>).

Sponsored students

Sponsored students will need permission from their sponsors before transferring courses, suspending their studies or varying their study load. Students sponsored by the Australian Government (AusAID, Endeavour), or Asia Development Bank (ADB) should contact the International Office in the early stages of considering a change to their program.

Suspension/discontinuation

The University is required to report to DIAC any international students who discontinue or suspend their studies. Students who suspend their studies for medical or compassionate reasons should contact the International Student Advisers in the International Office urgently.

Overseas student health cover

The Australian government requires that all international students and their families pay for health insurance in Australia through the Overseas Student Health Cover (OSHC) scheme. The University-preferred provider is OSHC Worldcare. The International Office will, on receipt of the student's first payment of tuition fees and the OSHC premium, pay the compulsory amount to OSHC Worldcare on his/her behalf.

OSHC provides free access to the University health service and public hospitals. Higher-level coverage (eg, access to private hospitals coverage for spouse and family) is the student's responsibility.

The University of Sydney Foundation Program (USFP)

The University of Sydney offers its foundation program to international students as a preparation for undergraduate degrees at several Australian universities.

The Foundation Program is conducted by Taylors College on behalf of Study Group Australia and the University of Sydney. The Foundation Program allows both first and second-semester entry to undergraduate courses at the University of Sydney and other Australian universities.

University of Sydney Foundation Program

Taylors College
965 Bourke Street
Waterloo NSW 2017

Phone: +61 2 8303 9700

Fax: +61 2 8303 9777

Email: info@taylorscollege.edu.au

Website: www.usyd.edu.au/foundationprogram



International Office

The International Office provides advice and assistance with application, admission and enrolment procedures for international students. The International Office also includes units responsible for international marketing, government and student relations, international scholarships, including AusAID scholarships and administrative support for international financial aid programs, and compliance with government regulations related to international students.

The International Office also coordinates student exchange and study abroad programs, and other inter-institutional links. The Study Abroad and Exchange unit assists both domestic and international students who wish to enrol for study abroad or exchange programs.

International Admissions and Customer Services

Jane Foss Russell Building, G02
The University of Sydney
NSW 2006 Australia

Phone: +61 2 9351 4079
Future student enquiries: 1800 899 376 (domestic free call)
Fax: +61 2 9351 4013
Email: info@io.usyd.edu.au
Website: www.usyd.edu.au/internationaloffice

Study Abroad

Phone: +61 2 9351 3699
Fax: +61 2 9351 2795
Email: studyabroad@io.usyd.edu.au
Website: www.usyd.edu.au/studyabroad

Student Exchange

Phone: +61 2 9351 3699
Fax: +61 2 9351 2795
Email: studyabroad@io.usyd.edu.au
Website: www.usyd.edu.au/studentexchange

International Student Support Unit

The International Student Support Unit (ISSU) provides support to international students through the provision of information, orientation programs, welfare advice and counselling.

The ISSU provides advice to international students on:

- preparations before leaving their home country
- what to expect upon arrival in Sydney
- emotional changes that can take place when moving to a different country
- academic concerns, including understanding the University system and liaising with staff members
- preparing family visit letters
- preparing to return to their home country.

The ISSU has two offices:

Camperdown Campus

Jane Foss Russell Building, G02
University of Sydney
NSW 2006 Australia

Phone: +61 2 9351 4749
Fax: +61 2 9351 6818
Email: info@issu.usyd.edu.au
Website: www.usyd.edu.au/stuserv/issu

Cumberland Campus

Ground Floor, A Block, C42
75 East St, Lidcombe
NSW 2141 Australia

Phone: +61 2 9351 9638
Email: ISSU.Cumberland@stuserv.usyd.edu.au
Website: www.usyd.edu.au/stuserv/issu

Essential information for students

Calendar

The annual *University of Sydney Calendar* and its online updates are the University of Sydney's central source of official information.

The *Calendar* provides general and historical information about the University of Sydney, the statutes and regulations under which it operates and the Resolutions of the Senate relating to constitutions of and courses in each faculty. The statutes and regulations, as well as some Resolutions of the Senate, also appear in Policy Online (www.usyd.edu.au/policy).

Along with the University of Sydney handbooks, the *Calendar* forms the official legal source of information relating to study at the University of Sydney.

The latest *Calendar* is available in hard copy from the Student Centre. It is also available online, at www.usyd.edu.au/calendar. The PDF and Word document files can be downloaded and printed if required.

Coursework Rule

It is very important that students are aware of the *University of Sydney (Coursework) Rule 2000*, which governs all coursework award courses in the University.

The Coursework Rule relates to:

- award course requirements
- credit points and assessment
- enrolment
- credit
- cross-institutional study and its upper limits
- progression
- discontinuation of enrolment and suspension of candidature
- unsatisfactory progress and exclusion
- exceptional circumstances
- award of degrees
- diplomas and certificates
- transitional provisions.

It should be read in conjunction with two other documents:

- *University of Sydney (Amendment Act) Rule 1999*; and
- Resolutions of the Senate and the faculty resolutions relating to each award course. These are found in the relevant faculty handbook.

The Coursework Rule can be found in the following places:

- *University of Sydney Calendar* (print or online version): www.usyd.edu.au/calendar
- Policy Online: www.usyd.edu.au/policy
- Handbooks online: www.usyd.edu.au/handbooks/university_information/01_uni_coursework_rule

PhD Rule

The *University of Sydney (Doctor of Philosophy (PhD)) Rule 2004* deals with matters relating to the degree of Doctor of Philosophy, including admission, probation, supervision and submission of theses.

It should be read in conjunction with two other documents:

- *University of Sydney (Amendment Act) Rule 1999*; and
- Senate and faculty resolutions relating to each award course (found in the relevant faculty handbook).

The PhD Rule can be found in the following locations:

- *University of Sydney Calendar* (print or online version): www.usyd.edu.au/calendar
- Policy Online: www.usyd.edu.au/policy
- Handbooks online: www.usyd.edu.au/handbooks/postgrad_hb/ap04_phd_rule.shtml

Plagiarism

The University of Sydney is opposed to and will not tolerate plagiarism. It is the responsibility of all students to:

- ensure that they do not commit or collude with another person to commit plagiarism
- report possible instances of plagiarism
- comply with the University's policy and procedure on plagiarism.

The policy and procedure on plagiarism can be found at the Policy Online website www.usyd.edu.au/policy.

The Policy Online website also lists related policies and procedures, including:

- *Academic Honesty in Coursework (plagiarism) policy*; and
- *Code of Conduct for Responsible Research Practice and Guidelines for Dealing with Allegations of Research Misconduct*.

The University will treat all identified cases of student plagiarism seriously, in accordance with this policy and procedure, and with Chapter 8 of the *University of Sydney By-Law 1999 (as amended)*, which deals with student discipline.

Students at Risk Policy

The Students at Risk Policy enables early detection of students who are making poor or unsatisfactory progress and are therefore at risk of exclusion from their degree.

The policy outlines procedures and processes to support students in their ongoing studies, including:

- timely intervention and the provision of advice and assistance
- regularly and effectively advising students of progress requirements
- identifying students at risk
- alerting students that they are at risk
- providing assistance to address the risk
- tracking the progress of students after they are identified as being at risk.

For more information on this policy, please see the Secretariat website at www.usyd.edu.au/secretariat/students/riskstudents.

Grievance procedure

The University's policy and procedures document on student grievances, appeals and applications for review is available on the Policy Online website: www.usyd.edu.au/policy.

The *Grievance Procedure* document is a statement of the University's processes for handling student grievances, appeals and applications for review regarding academic and non-academic matters.

Study at the University presents opportunities for interacting with other members of the University community. The University recognises and values the diversity of student experiences and expectations, and is committed to treating students, both academically and administratively, in a fair and transparent manner.



Abbreviations

Listed below are commonly used acronyms that appear in University documents and publications. (See also the Glossary.)

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

A	
AARNet	Australian Academic Research Network
AAUT	Australian Awards for University Teaching
AAM	Annual Average Mark
ABC	Activity-based costing
ABSTUDY	Aboriginal Study Assistance Scheme
ACER	Australian Council for Educational Research
AGSM	Australian Graduate School of Management
ANZAAS	Australian and New Zealand Association for the Advancement of Science
APA	Australian Postgraduate Awards
APAC	Australian Partnership for Advanced Computing
APAI	Australian Postgraduate Awards (Industry)
APA-IT	Australian Postgraduate Awards in Information Technology
APDI	Australian Postdoctoral Fellowships Industry
APEC	Asia-Pacific Economic Cooperation
APF	Australian Postdoctoral Fellowship
AQF	Australian Qualifications Framework
ARC	Australian Research Council
ARTS	Automated Results Transfer System
ASDOT	Assessment Fee Subsidy for Disadvantaged Overseas Students
ATN	Australian Technology Network
ATP	Australian Technology Park
AUQA	Australian Universities Quality Agency
AusAID	Australian Agency for International Development
AUTC	Australian Universities Teaching Committee
AVCC	Australian Vice-Chancellors' Committee

B	
BAA	Backing Australia's Ability
BAC	Budget Advisory Committee
BITLab	Business Intelligence Lab
BLO	Business Liaison Office
BOTPLS	Bridging for Overseas Trained Professionals Loans Scheme

C	
CAF	Cost adjustment factor
CPS	Campus Property Services
CAUT	Committee for Advancement of University Teaching
CDP	Capital Development Program
CEP	Country Education Profile
CEQ	Course Experience Questionnaire
CES	Casual Employment Service
CFO	Chief Financial Officer
CHASS	College of Humanities and Social Sciences
CHESN	Commonwealth Higher Education System Student Number
CHS	College of Health Sciences
CIO	Chief Information Officer
COE	Confirmation of Enrolment
CPSU	Community and Public Sector Union
CRC	Cooperative Research Centre

C	
CREO	Centre for Regional Education, Orange
CRICOS	Commonwealth Register of Institutions and Courses for Overseas Students
CRRRI	Centre for Rural and Regional Innovation
CSIRO	Commonwealth Scientific and Industrial Research Organisation
CST	College of Sciences and Technology
CULT	Combined Universities Language Test
CUTSD	Committee for University Teaching and Staff Development

D	
DAC	Data Audit Committee
DEST	Commonwealth Department of Education, Science and Training
DET	NSW Department of Education and Training
DIMA	Department of Immigration and Multicultural Affairs
D-IRD	Discovery-Indigenous Researchers Development Program
DVC	Deputy Vice-Chancellor

E	
EB	Enterprise bargaining
EFTSU	Equivalent full-time student unit
EFTSL	Equivalent full-time student load
EIP	Evaluations and Investigations Program
ELICOS	English Language Intensive Course of Study
EMU	Electron Microscope Unit
ESOS Act	Education Services for Overseas Student Act

F	
FFT	Fractional full-time (equivalent staff)
FlexSIS	Flexible Student Information System
FHS	Faculty of Health Sciences
FOS	Field of study
FTE	Full-time equivalent (staff)
FRM	Faculty of Rural Management

G	
GATS	General Agreement on Trade in Services
GCCA	Graduate Careers Council of Australia
GDS	Graduate destination survey
GPOF	General Purpose Operating Funds
GSA	Graduate Skills Assessment
GSG	Graduate School of Government
GWSLN	Greater Western Sydney Learning Network

H	
HDR	Higher Degree Research
HECS	Higher Education Contribution Scheme
HEEP	Higher Education Equity Program
HEFA	Higher Education Funding Act 1988
HEIMS	Higher Education Information Management System
HEIP	Higher Education Innovation Program (DEST)
HELP	Higher Education Loan Program



Abbreviations

H	
HEO	Higher education officer
HEP	Higher education provider
HERDC	Higher Education Research Data Collection
HESA	Higher Education Support Act

I	
IAF	Institutional Assessment Framework
IAS	Institute of Advanced Studies
ICT	Information and Communication Technology
IELTS	International English Language Testing Scheme
IGS	Institutional Grants Scheme (DEST)
IO	International Office
IP	Intellectual property
IPRS	International Postgraduate Research Scholarships
IREX	International Researcher Exchange Scheme
ISFP	Indigenous Support Funding Program
ISIG	Innovation Summit Implementation Group
ISSU	International Student Services Unit
ITC	Information Technology Committee
ITL	Institute for Teaching and Learning
ITS	Information Technology Services

J	
JASON	Joint Academic Scholarships Online Network

L	
LBOTE	Language background other than English

M	
MISG	Management Information Steering Group
MNRF	Major National Research Facilities Scheme
MOU	Memorandum of Understanding
MRB	Medical Rural Bonded Scholarship Scheme

N	
NBCOTP	National Bridging Courses for Overseas Trained Program
NCG	National Competitive Grant
NESB	Non-English-speaking background
NHMRC	National Health and Medical Research Council
NOIE	National Office for the Information Economy
NOOSR	National Office for Overseas Skill Recognition
NRSL	Non-recent school leaver
NSW VCC	New South Wales Vice-Chancellors' Conference
NTEU	National Tertiary Education Industry Union

O	
OECD	Organisation for Economic Cooperation and Development
OLA	Open Learning Australia
OLDPS	Open Learning Deferred Payment Scheme
OPRS	Overseas Postgraduate Research Scholarships

P	
PELS	Postgraduate Education Loans Scheme
PSO	Planning Support Office
PVC	Pro-Vice-Chancellor

Q	
QA	Quality assurance
QACG	Quality Advisory and Coordination Group

R	
R&D	Research and development
R&R	Restructuring and Rationalisation Program
RC	Responsibility Centre
REG	Research and Earmarked Grants
REP	Research Education Program
RFM	Relative Funding Model
RIBG	Research Infrastructure Block Grant (DEST)
RIEF	Research Infrastructure Equipment and Facilities Scheme
RISF	Restructuring Initiatives Support Fund
RMO	Risk Management Office
ROA	Record of Achievement
RQ	Research Quantum
RQU	Recognition Quality Unit (Higher Education Division – DEST)
RRTMR	Research and Research Training Management Reports
RSL	Recent school leaver
RTS	Research Training Scheme (DEST)

S	
SCA	Sydney College of the Arts
SCEQ	Sydney Course Experience Questionnaire
SCM	Sydney Conservatorium of Music
SCR	Science Capability Review
SDF	Strategic Development Fund
SEG	Senior Executive Group
SES	Socioeconomic status
SI	Scholarship Index
SLE	Student Learning Entitlement
SNA	Safety net adjustment
SPIRT	Strategic Partnerships with Industry – Research and Training
SPR	Student Progress Rate
SRC	Students' Representative Council
SSR	Student–staff ratio
STABEX	Study Abroad Exchange (database)
SUPRA	Sydney University Postgraduate Students' Representative Association
SUSport	Sydney Uni Sport & Fitness

T	
TAFE	Technical and Further Education
TOEFL	Test of English as a foreign language
TPI	Teaching Performance Indicator

U	
UAC	Universities Admissions Centre
UMAP	University Mobility in Asia and the Pacific
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UPA	University Postgraduate Awards

V	
VCAC	Vice-Chancellor's Advisory Committee
VET	Vocational Education and Training

W	
WAM	Weighted Average Mark
WRP	Workplace Reform Program
WTO	World Trade Organization

Y	
YFE	Year of first enrolment

Glossary

For a table of commonly used acronyms and abbreviations that appear in University documents and publications, see 'Abbreviations'.

This glossary describes terminology in use at the University of Sydney.

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

A

Academic Board

The senior academic body within the University. In conjunction with faculties, the Academic Board has responsibility for approving new or amended courses and endorsing faculty development of units of study. The board is also responsible for the formulation and review of policies, guidelines and procedures in relation to academic matters. For further information, see the *University of Sydney (Academic Governance) Rule 2003 (as amended)*.

Academic Consortium 21 (AC21)

An international network, of which the University is a member, comprising educational, research and industrial organisations throughout the world with the objective of encouraging the further advancement of global cooperation to the benefit of higher education and to contribute to world and regional society.

Academic cycle

The program of teaching sessions offered over a year. Currently the cycle runs from the enrolment period for Semester One to the completion of the processing of results at the end of Semester Two. See also 'Academic year', 'Stage'.

Academic dishonesty

Academic dishonesty occurs when a student presents another person's ideas, findings or written work as his or her own by copying or reproducing them without due acknowledgement of the source and with intent to deceive the examiner. Academic dishonesty also covers recycling, fabrication of data, engaging another person to complete an assessment or cheating in exams. See also 'Plagiarism'.

Academic record

The complete academic history of a student at the University. It includes, among other things: personal details; all units of study and courses taken; assessment results (marks and grades); awards and prizes obtained; infringements of progression rules; approvals for variation in course requirements and course leave; thesis and supervision details.

Access to a student's academic record is restricted to authorised University staff and is not released to a third party without the written authorisation of the student. See also 'Academic transcript'.

Academic transcript

A printed statement setting out a student's academic record at the University. There are two forms of academic transcript: external and internal.

See also 'Academic record', 'External transcript', 'Internal transcript'

Academic year

The current calendar year in which a student is enrolled. See also 'Academic cycle', 'Stage'.

Ad eundem gradum

Long-standing full-time members of the University's academic and general staff who are not graduates of the University may be considered by Senate, upon their retirement, for admission *Ad eundem gradum* ('to the same degree') to an appropriate degree of the University.

Admission

Governed by the University's admission policy, this is the process for identifying applicants eligible to receive an initial offer of enrolment in a course at the University. Admission to most courses is based on performance in the HSC, with applicants ranked on the basis of their UAI. Other criteria such as a portfolio, interview, audition, or results in standard tests may also be taken into account for certain courses.

Admission basis

The main criterion used by a faculty in assessing an application for admission to a course. The criteria used include, among other things, previous secondary, TAFE or tertiary studies; work experience; special admission; and the Universities Admission Index (UAI).

Admission (Deferment)

An applicant who receives an offer of admission to a course may apply to defer enrolment in that course for one semester or one academic cycle.

Admission mode

A classification based on how a student was admitted to a course, for example 'UAC' or 'direct'.

Admission period

The period during which applications for admission to courses are considered.

Admission year

The year the student expects to begin the course. See also 'Commencement date'.

Advanced diplomas

See 'Award course'.

Advanced standing

See 'Credit'.

Adviser

A member of academic staff appointed in an advisory role for some postgraduate coursework students.

See also 'Associate supervisor', 'Instrumental supervisor/teacher', 'Research supervisor', 'Supervision'.

Aegrotat

In exceptional circumstances involving serious illness or death of a student prior to completion of their course, the award of aegrotat and posthumous degrees and diplomas may be conferred.

Alumni

See 'Graduate'

Alumni sidneiensis

A searchable database of graduates of the University from 1857 to 30 years prior to the current year.



Annual average mark (AAM)

The average mark over all units of study attempted in a given academic year (equivalent to the calendar year).

The formula for this calculation is:

$$AAM = \frac{\sum (\text{marks} \times \text{credit point value})}{\sum (\text{credit point value})}$$

(sums over all units of study completed in the selected period)

Where the mark is the actual mark obtained by the student for the unit of study, or in the case of a failing grade with no mark – 0. Pass/fail assessed subjects and credit transfer subjects (from another institution) are excluded from these calculations. However, the marks from all attempts at a unit of study are included.

Annual progress report

A form used to monitor a research student's progress each year. The form provides for comments by the student, the supervisor, the head of the department and the dean (or their nominee). The completed form is attached to the student's official file.

Annual Report

The University's yearly financial and audit report, submitted to the NSW Parliament. It also includes a broad range of the University's activities and the strength of their performance in relation to the University's stated roles, values and goals.

Appeals

Students may lodge an appeal against academic or disciplinary decisions.

Appeals against an academic decision

A student may appeal to the Student Appeals Body against a decision by the University that affects the academic assessment or progress of a student within his or her award course, including a decision:

(a) to exclude a student in accordance with the *University of Sydney (Coursework) Rule 2000 (as amended)*

(b) not to readmit or re-enrol a student following exclusion in accordance with the *University of Sydney (Coursework) Rule 2000 (as amended)*

(c) to terminate a student's candidature for a postgraduate award.

See also 'Student Appeals Body'.

Appeal against a disciplinary decision

A student may appeal to the Student Disciplinary Appeals Committee against a determination being:

(a) a finding by the Vice-Chancellor or the student Proctorial Board that the student is guilty of misconduct

(b) the imposition of a penalty upon the student by the Vice-Chancellor or the Student Proctorial Board

(c) an order made by the Vice-Chancellor or the Student Proctorial Board.

See also 'Student Disciplinary Appeals Committee'.

Assessment

The process of measuring the performance of students in units of study and courses. Performance may be assessed by examinations, essays, laboratory projects, assignments, theses, treatises or dissertations.

See also 'Result processing', 'Result processing schedule'.

Formative assessment

Used principally to provide students with feedback on their progress in learning. It reinforces successful learning, and is an opportunity for students to expose the limits in their knowledge and understanding.

Summative assessment

Used to certify competence, or to arrange students in a rank order of merit. It certifies the attainment of a standard, and is used as the basis for progression to the next part of a program, or to graduation.

Associate supervisor

A person who is appointed in addition to the supervisor of a research student, who can provide the day-to-day contact with the candidate or provide particular expertise or additional experience in supervision. See also 'Adviser', 'Instrumental supervisor/teacher', 'Research supervisor', 'Supervision'.

Association of Pacific Rim Universities (APRU)

A consortium of leading research universities in the Pacific Rim, of which the University is a member, which aims to foster education, research and enterprise thereby contributing to the economic, scientific and cultural advancement in the Pacific Rim.

Assumed knowledge

For some units of study, a student is assumed to have passed a relevant subject in the HSC and this is called assumed knowledge. While students are generally advised against taking a unit of study for which they do not have the assumed knowledge, they are not prevented from enrolling in the unit of study.

See also 'Prerequisite'.

Attendance pattern

Attendance pattern is classified as full-time, part-time or external. It depends on the student's mode of attendance and the student load.

Attendance mode

A Department of Education, Science and Training (DEST) classification defining the manner in which a student is undertaking a course, such as internal, external, mixed or offshore.

Australian Qualifications Framework (AQF)

The framework for recognition and endorsement of qualifications established by the Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA).

AUSTUDY

Provides financial help to students who are 25 years old or over who meet the required criteria, and are undertaking an approved full-time course at an approved institution.

See also 'Youth allowance'.

Automated Results Transfer System (ARTS)

This system was developed by the Australasian Conference of Tertiary Admissions Centres (ACTAC) to allow the electronic academic record of a student to be accessed, via an admission centre, by tertiary institutions.

Award course

See 'Course'.

B**Bachelor's degree**

The highest undergraduate award offered at the University. A bachelor's degree course normally requires three or four years of full-time study or the part-time equivalent.

See also 'Award course'.

Barrier

An instruction placed on a student's record that prevents the student from re-enrolling or graduating.

See also 'Deadlines (fees)', 'Suppression of results'.

Board of studies

An academic body which supervises a course or courses, and is similar to a faculty except that it is headed by a chair rather than a dean and does not supervise PhD candidates.

Bursaries

Financial award made to a student, based primarily on need.

See also 'Scholarships'.

C

Calendar

See 'University Calendar'.

Cadigal program

A program, named in recognition of the Aboriginal people of the land on which the University is located, designed to increase the successful participation of Aboriginal and Torres Strait Islander people in degree courses in all faculties at the University of Sydney.

Campus

The grounds on which the University is situated. There are ten campuses of the University of Sydney:

- Burren Street (Institute of Transport Studies)
- Camperdown
- Darlington
- Camden (Agriculture and Veterinary Science)
- Conservatorium (Sydney Conservatorium of Music)
- Cumberland (Health Sciences)
- Mallett Street (Nursing)
- Rozelle (Sydney College of the Arts)
- St James (Law)
- Surry Hills (Dentistry)

Cancellation

Where enrolment is cancelled for non-payment of fees.

Candidature

Candidature commences when a student is admitted to a course of study leading to the award of a degree, diploma or certificate. There are maximum periods and in some cases minimum periods of candidature depending on the award course and whether the candidate is a full-time or part-time student.

See 'Course enrolment status'.

Census date

The date at which a student's enrolment, load and HECS liability are finalised before this information is reported to DEST.

See also 'HECS-HELP'.

Ceremony

See 'Graduation ceremony'.

Chancellor

The non-executive head of the University. An honorary position, the Chancellor presides over meetings of the University's governing body, the Senate, and important ceremonial occasions such as graduations.

Clinical experience

Students undertake clinical placements in a professional environment as part of their course requirements. Many require University-approved supervision. In order to undertake clinical placements a student may be required to fulfil additional requirements.

Combined course

A course which leads to two awards. For example the Arts/Law course leads to the separate awards of Bachelor of Arts and Bachelor of Laws.

Combined degree

A single program with a single set of course resolutions leading to the award of two degrees (unless otherwise specified in the resolutions). See also 'Combined course'.

Commencement date

The date a student commences candidature.

Commonwealth Supported Place (CSP)

(Previously known as a HECS Place.) A student in a Commonwealth Supported Place makes a contribution towards the cost of their education (known as the student contribution) while the Australian Government contributes the majority of the cost.

Confirmation of Enrolment form (COE)

This form is issued to each student after enrolment, showing the course and the units of study in which the student is enrolled, together with the credit point value of the units of study and the HECS weights. Until all fees are paid, it is issued provisionally. A new confirmation of enrolment form is produced every time a student's enrolment is varied.

Conjoint ventures

Two or more institutions cooperate to provide a unit or course of study to postgraduate coursework students. Arrangements exist between individual departments at the University of Sydney and individual departments at the University of New South Wales (UNSW) and the University of Technology Sydney (UTS).

In these arrangements, students enrolled for a degree at one institution complete one or more units of study at the other institution to count towards the award program at their 'home' institution.

Continuing professional education

A process which provides a number of programs of continuing education courses for professionals as they move through their career. These programs are presently administered by the Centre for Continuing Education (CCE) and a number of departments and foundations across the University. This process supports the whole of life learning concept and involves the maintenance of a long-term relationship between the student and the University.

Convocation

The body comprising the Fellows and former Fellows of the Senate of the University of Sydney; members of the former governing bodies of the institutions with which the University has amalgamated or their predecessors; the graduates of the University of Sydney, which include graduates of the institutions with which the University has amalgamated or their predecessors; professors and other full-time members of the academic staff of the University; and principals of the incorporated colleges. This is as per clause 14 of the *University of Sydney Act 1989*.

Core unit of study

A unit of study that is compulsory for a particular course or subject area.

See also 'Unit of study'.

Corequisite

A unit of study which must be taken in the same semester or year as a given unit of study (unless it has already been completed). These are determined by the faculty or board of studies concerned, published in the faculty handbook and shown in FlexSIS.

See also 'Prerequisite', 'Waiver'.

Cotutelle Scheme

Agreement between the University and any overseas university for joint supervision and examination of a PhD student as part of an ongoing cooperative research collaboration. If successful, the student receives a doctorate from both universities with each testamur acknowledging the circumstances under which the award was made.

Course

An undertaking of study at the University of Sydney.

Award course

A formal course of study that will see attainment of a recognised award. Award courses are approved by Academic Board and endorsed by Senate. The University broadly classifies courses as undergraduate, postgraduate coursework or postgraduate research.

See also 'Bachelor's degree', 'Course rules', 'Diploma', 'Doctorate', 'Major', 'Master's degree', 'Minor', PhD, 'Stream'.

Non-award course

Studies undertaken by students who are not seeking an award from the University.

See also 'Cross-institutional enrolment'.

Coursework

An award course not designated as a research award course. While the program of study in a coursework award course may include a component of original work, other forms of instruction and learning will normally be dominant.

Research

A course in which at least 66 per cent of the overall course requirements involve students undertaking supervised research, leading to the production of a thesis or other piece of written or creative work, over a prescribed period of time.

Course alias

A unique five character alpha-numeric code which identifies a University course.

Course code

See 'Course alias'.

Course enrolment status

A student's enrolment status in a course is either 'enrolled' or 'not enrolled'. 'Not enrolled' reasons include: cancelled; suspended; under examination; or terminated.

See also 'Cancellation', 'Candidature', 'Course leave', 'Enrolment', 'Enrolment variation', 'Terminated', 'Under examination'.

Course leave

Students are permitted to apply for a period away from their course without losing their place. Course leave is formally approved by the supervising faculty for a minimum of one semester. Students on leave are regarded as having an active candidature, but they are not entitled to a student card. At undergraduate level, leave is not counted towards the total length of the course. Students who are absent from study without approved leave may be discontinued and may be required to formally reapply for admission.

See also 'Progression'.

Course rules

Rules which govern the allowable enrolment of a student in a course. Course rules may be expressed in terms of types of units of study taken, length of study, and credit points accumulated. For example, a candidate may not enrol in units of study having a total value of more than 32 credit points per semester. Course rules also govern the requirements for the award of the course, for example a candidate must have completed a minimum of 144 credit points.

See also 'Award course', 'Corequisite', 'Prerequisite'.

Course suspension

See 'Course leave'.

Course transfer

A transfer occurs when a student changes from one course in the University to another course in the University without the requirement for an application and selection process (for example from a PhD to a master's program in the same faculty).

Credit

The recognition of previous studies successfully completed at this University, or another university or tertiary institution recognised by the University of Sydney, as contributing to the requirements of the course to which the applicant requesting such recognition has been admitted. It may be granted as specified credit or non-specified credit.

Specified credit

The recognition of previously completed studies as directly equivalent to units of study.

Non-specified credit

A 'block credit' for a specified number of credit points at a particular level. These credit points may be in a particular subject area but are not linked to a specific unit of study.

See also 'Annual average mark (AAM)', 'Waiver', 'Weighted average mark (WAM)'.

Credit points

The value of the contribution each unit of study provides towards meeting course completion requirements. Each unit of study normally has a six credit point value assigned to it. The total number of credit points required for completion of award courses will be specified in the Senate Resolutions relevant to the award course.

Cross-institutional enrolment

An enrolment in units of study at one university to count towards an award course at another university. Cross-institutional enrolments incur a student-contribution liability (see Commonwealth-supported student) or tuition fee charge at the institution at which the unit of study is being undertaken.

See also 'Non-award course'.

D**Data Audit Committee (DAC)**

The Data Audit Committee's role is to oversee the integrity and accuracy of the course and unit of study data as strategic University data. It also advises the Academic Board on suggested policy changes related to course and unit of study data. A subcommittee of the VCAC Enrolment Working Party, it is chaired by the Registrar, with membership including the deans, the Student Centre, FlexSIS and Planning and Statistics.

Deadlines (Enrolment variations)

See 'Enrolment variation'.

Deadlines (Fees)

The University has deadlines for the payment of fees (for example, HECS, compulsory subscriptions, course fees). Students who do not pay fees by these deadlines may have their enrolment cancelled or they may have a barrier placed on the release of their record.

See also 'Barrier', 'Cancellation'.

Dean

The head of a faculty, or the principal or director of a college (such as the Sydney Conservatorium of Music or the Sydney College of the Arts).

Dean's Certificate

A statement from the Dean certifying that all requirements, including fieldwork and practical work, have been met and that the student is eligible to graduate. Not all faculties use Dean's Certificates. In faculties that do, qualified students have 'Dean's Certificate' noted on their academic record.

Deferment (Deferral)

See also 'Admission (deferment)', 'Course leave'.

Degree

See also 'Award course', 'Bachelor's degree'.

Delivery mode

Indicates how students receive the instruction for a unit of study. The delivery mode must be recorded for each unit as distinct from the attendance mode of the student, for example an internal student may take one or more units by distance mode and an external student may attend campus for one or more units.

Distance education

Where subject matter is delivered in a more flexible manner, such as correspondence notes, a student may only attend campus if required. See also 'Extended semester', 'Distance education', 'International – off shore'.

Intensive on-campus

Core content is delivered with support learning in an intensive (one or more days) format on campus. Participation is usually compulsory. Previously this may have been called residential, block mode, or weekend workshop.

On-campus (normal)

Attendance of scheduled lectures, tutorials etc at a campus of the University.

Department

See 'School'.

Department of Education, Science and Training (DEST)

The Federal Government department responsible for higher education.

Diploma

The award granted following successful completion of diploma course requirements. A diploma course usually requires less study than a degree course.

See also 'Award course'.

Direct admissions

For some courses, applications may be made directly to the University. Applications are received by faculties or the International Office, and considered by the relevant department or faculty body. Decisions are recorded and letters are forwarded to applicants advising them of the outcome.

See also 'Admission', 'UAC'.

Disability information

Students may inform the University of any temporary or permanent disability which affects their life as a student. Disability information is recorded but it is only available to particular authorised users because of its sensitive nature and students will be informed of its use.

Disciplinary action

Undertaken as the result of academic or other misconduct, for example plagiarism, cheating, security infringement, criminal activity.

Discipline

A defined area of study, for example, chemistry, physics, economics.

Discipline group

A DEST code used to classify units of study in terms of the subject matter being taught or being researched.

Discontinuation (course)

See 'Enrolment variation'.

Discontinuation (unit of study)

See 'Enrolment variation'.

Dissertation

A written exposition of a topic which may include original argument substantiated by reference to acknowledged authorities. It is a required unit of study for some postgraduate award courses in the faculties of Architecture and Law.

Distance education

Where a student does not attend campus on a daily basis for a given course or unit of study.

See also 'Delivery mode', 'Extended semester'.

Doctorate

A high-level postgraduate award. A doctorate course normally involves research and coursework; the candidate submits a thesis that is an original contribution to the field of study. Entry to a doctorate course often requires completion of a master's degree course. Note that the doctorate course is not available in all departments at the University. See also 'Award course', 'PhD'.

Domestic student

A student who is not an international student.

See also 'Local student'.

Double degree

A double degree is a program where students are permitted by participating faculties (and/or by specific resolutions within a single award) to transfer between courses in order to complete two awards.

Downgrade

Where a student enrolled in a PhD reverts to a master's by research, either on the recommendation of the University on the basis that the research they are undertaking is not at an appropriate level for a PhD; or at the student's own request, for personal or academic reasons.

E**Equivalent full-time student unit (EFTSU)**

The equivalent full-time student unit (EFTSU) is a measure of student load based on the workload for a student undertaking a full year of study in a particular course. A student is then recorded as having generated one EFTSU.

See also 'Load', 'Stage'.

Equivalent full-time student load (EFTSL)

The equivalent full-time student load (EFTSL) for a year. It is a measure, in respect of a course of study, of the study load for a year of a student undertaking that course of study on a full-time basis.

Embedded courses

Award courses in the graduate certificate, graduate diploma and master's degree by coursework sequence which allow unit of study credit points to count in more than one of the awards, for example the Graduate Certificate in Information Technology, Graduate Diploma in Information Technology and Master of Information Technology.

Enrolment

A student enrolls in a course by registering with the supervising faculty in the units of study to be taken in the coming year, semester or session.

Commencing

An enrolment is classified as commencing if a student has enrolled in a particular degree or diploma for the first time.

Continuing

Students already in a course at the University re-enrol each year or semester. Most continuing students are required to pre-enrol.

See also 'Pre-enrolment'.

Enrolment list

A list of all currently enrolled students in a particular unit of study.

See also 'Unit of study'.

Enrolment status

See 'Course enrolment status'.

Enrolment Variation

Students may vary their enrolment at the start of each semester. Each faculty determines its deadlines for variations, but student-contribution liability depends on the Commonwealth census date.

See also 'Commonwealth Supported Place'.

Examination

A set of questions or exercises evaluating on a given subject given by a department or faculty.

See also 'Examination period', 'Assessment'.

Examination period

The time set each semester for the conduct of formal examinations.

Examiner (Coursework)

The person assessing a student or group of students, for example through written/oral examination, coursework assignments, presentations.

Exchange student

Either a University of Sydney student participating in a formally agreed program involving study at an overseas university, or an overseas student studying here on the same basis. The International Office provides administrative support for some exchanges.

Exclusion

A faculty may ask a student whose academic progress is considered to be unsatisfactory to 'show good cause' why the student should be allowed to re-enrol. If the faculty deems the student's explanation unsatisfactory, or if the student does not provide an explanation, the student may be excluded either from a unit of study or from a course or faculty. An excluded student may apply to the faculty for permission to re-enrol. Normally, at least two years must have elapsed before such an application would be considered. University policy relating to exclusions is set out in the *Calendar*.

See also 'Progression', 'Senate appeals'.

Exemption

A decision made at a sub-unit of study level to allow a student to complete a unit of study without also completing all the prescribed components of coursework and/or assessment.

See also 'Credit', 'Waiver'.

Expulsion

The ultimate penalty of disciplinary action is to expel the student from the University. The effect of expulsion is:

- the student is not allowed to be admitted or to re-enrol in any course at the University
- the student does not receive their results
- the student is not allowed to graduate
- the student does not receive a transcript or testamur.

Extended semester

A distance-learning student may be allowed more time to complete a module or program if circumstances beyond the student's control, such as drought, flood or illness, affect the student's ability to complete the module or program in the specified time.

See also 'Distance education'.

External

See 'Attendance mode', 'Distance education'.

External transcript

A certified statement of a student's academic record printed on official University security paper. It includes the student's name, any credit granted, all courses the student was enrolled in and the final course result and all units of study attempted within each course together with the result. It also acknowledges prizes the student has received. Marks can be included or omitted, as required.

See also 'Academic transcript', 'Internal transcript'.

F**Faculty**

A formal part of the University's academic governance structure, consisting mainly of academic staff members and headed by a dean, which is responsible for all matters concerning the award courses that it supervises. Usually, a faculty office administers the faculty and student or staff inquiries related to its courses. The *University Calendar* sets out the constitution of each of the University's faculties.

See also 'Board of Studies', 'Supervising faculty'.

Faculty handbook

The annual University publication for each faculty which provides detailed information about the faculty, its courses and resolutions.

FEE-HELP

An eligible student in a postgraduate course or in a bridging study course (for overseas-trained professionals) can apply for assistance (in the form of a loan) in paying all or some of their tuition fees.

Fee-paying students

Students who pay tuition fees to the University and are not liable for student contributions to a Commonwealth Supported Place. The Commonwealth does not contribute towards the cost of the education of fee-paying students. Annual fees vary between the faculties. Students pay a per semester fee.

Fellows of Senate

Members of the governing body of the University who are either elected, appointed or ex-officio.

Flexible learning

See 'Delivery mode', 'Distance education'.

Flexible start date

Full fee-paying distance students are not restricted to the same enrolment time frames as campus-based or Commonwealth-supported students.

Flexible Student Information System (FlexSIS)

The computer-based Flexible Student Information System at the University of Sydney.

FlexSIS holds details of courses and units of study being offered by the University and the complete academic records of all students enrolled at the University.

Formative assessment

See also 'Assessment'.

Full-time student

See 'Attendance pattern', 'EFTSU'.

G**Grade**

The outcome for a unit of study linked with a mark range. For example, a mark in the range 85–100 attracts the grade 'high distinction' (HD). See also 'Mark'.

Graduand

A student who has completed all the requirements for an award course but has not yet graduated.

See also 'Graduation', 'Potential graduand'.

Graduate

A person who holds an award from a recognised tertiary institution.

See also 'Graduand', 'Graduation'.

Graduate certificate

See 'Award course'.

Graduate diploma

See 'Award course'.

Graduate-entry degree

A bachelor's, or undergraduate degree, that requires another undergraduate degree as a prerequisite of entry. Examples of graduate-entry degrees at the University of Sydney include the Medical Program, Graduate Law and the Bachelor of Dentistry.

Graduation

The formal conferring of awards either at a ceremony or in absentia.

See also 'In absentia', 'Potential graduand'.

Graduation ceremony

A ceremony where the Chancellor confers awards upon graduands.

Group of Eight (G08)

The Group of Eight represents Australia's major research-intensive universities and membership comprises the vice-chancellors (presidents) of the Australian National University, Monash University, the University of Adelaide, the University of Melbourne, the University of New South Wales, the University of Queensland, the University of Sydney, and the University of Western Australia.

The Group of Eight works to ensure a consistent and sustainable policy environment which maximises the wide-ranging economic, social and cultural benefits to the Australian community of higher education and which ensures Australian universities are recognised as among the best in the world.

Group work

Means a formally established project to be conducted by a number of students in common, resulting in a single piece of assessment or a number of associated pieces of assessment.

See also 'Legitimate cooperation'.

H**Handbook**

See 'Faculty handbook'.

Head of department/Head of school (HOD/HOS)

The head of the academic unit which has responsibility for the relevant unit of study, or equivalent program leader.

Higher Education Contribution Scheme (HECS)

The Higher Education Contribution Scheme (HECS) was the previous Commonwealth Government student loan scheme. It ceased to operate on 1 January 2005 and was replaced by HECS-HELP (see below).

HECS-HELP

An eligible student in a Commonwealth Supported Place can apply for assistance in paying their student contribution. This may take the form of a HECS-HELP loan to pay all or some of the student contribution, or a HECS-HELP discount if all (or at least \$500) of the student contribution is paid by the census date.

Honorary degrees

A degree *honoris causa* (translated from the Latin as 'for the purpose of honouring') is conferred on a person whom the University wishes to honour.

Honours

Some degrees may be completed 'with honours'. This may involve the completion of a separate honours year, additional work in the later years of the course or meritorious achievement over all years of the course. Honours are awarded in a class (Class I, Class II – which may have two divisions or, Class III).

NSW Higher School Certificate (HSC)

The NSW Higher School Certificate (HSC), which is normally completed at the end of year 12 of secondary school. The UAI (Universities Admission Index) is a rank out of 100 that is computed from a student's performance in the HSC.

I***In absentia***

Latin for 'in the absence of'. Awards are conferred *in absentia* when graduands do not, or cannot, attend the graduation ceremony scheduled for them. Those who have graduated *in absentia* may later request that they be presented to the Chancellor at a graduation ceremony.

See also 'Graduation'.

Instrumental supervisor/teacher

All students at the Sydney Conservatorium of Music have an instrumental teacher appointed.

See also 'Adviser', 'Associate supervisor', 'Research supervisor', 'Supervision'.

Internal mode

See 'Attendance mode'.

Internal transcript

A record of a student's academic record for the University's own internal use. It includes the student's name, student identifier (SID), address, all courses in which the student was enrolled and the final course result, and all units of study attempted within each course, together with the unit of study result.

See also 'Academic transcript', 'External transcript'.

International student

Any student who is not an Australian or New Zealand citizen or a permanent resident of Australia is an international student. An international student is required to hold a visa that allows study in Australia and may be liable for international tuition fees.

Fee-paying

A private international student who is liable to pay tuition fees for their studies with the University.

Fee-paying – outgoing exchange

An international fee-paying student undertaking short term study at a recognised overseas institution with which the University has a student exchange agreement. Exchange study counts towards the student's University of Sydney award and students remain enrolled in their University of Sydney course during the period of exchange.

International – cross-institutional

An international fee paying student undertaking non-award study at the University on a cross-institutional basis. They are liable to pay fees for the study they undertake at the University, but there is no compliance reporting requirement, which rests with their 'home' institution.

International – sponsored

A private international student who is fully sponsored for his/her tuition; his/her sponsorship may also include overseas health cover and compulsory subscriptions.

Offshore studies

International offshore students undertake their program of study at one of the University's offshore campuses and do not enter Australia. Therefore they do not require a visa. They are distinct from international students who are on outbound exchange programs as they never enter Australia during their program of study.

Short course

An international fee-paying student undertaking a short course with the University of Sydney such as international development programs, executive training or study visits. The study undertaken by these students is non-award and generally a student visa is not required.

Sponsored award

An international student sponsored by the Australian government, undertaking a program of study at the University. Currently Australian Development Scholarships holders, funded by AusAID, are the only students in this category. These students are fully sponsored for their tuition and other costs such as travel and health cover, and are paid a stipend.

Study Abroad

An international student who is undertaking short-term study at the University under the Study Abroad scheme. Study Abroad students must have completed at least one year of study towards a degree at a recognised institution in their home country and are continuing towards the degree of their home institution.

See also 'Local student', 'Student type'.

L**Learning entitlement**

Each student has a seven-year full-time period during which they can remain Commonwealth-supported. This seven year period is called their 'learning entitlement'.

Leave

See 'Course leave'.

Legitimate cooperation

Any constructive educational and intellectual practice that aims to facilitate optimal learning outcomes through student interaction.

See also 'Group work'.

Life membership

Life membership is no longer offered by the University of Sydney Union (USU). However, existing life Members continue to enjoy the right to vote in USU elections and at USU general meetings. Like all members, life members are encouraged to stand for election to the USU Board. Similarly, life members, once they have paid the appropriate annual fees, are able to enjoy the benefits of the Access Benefits program.

Load

The sum of the weights of all the units of study in which a student is enrolled. The weight is determined by the proportion of a full year's work represented by the unit of study in the degree or diploma for which the student is a candidate. Student load is measured in terms of Equivalent full-time student units (EFTSU).

See also 'Equivalent full-time student units (EFTSU)'.

Local student

Either an Australian or New Zealand citizen or Australian permanent resident. New Zealand citizens are required to pay their Higher Education Contribution Scheme (HECS) fees upfront.

See also 'Domestic student', 'International student'.

M**Major**

A field of study, chosen by a student, to represent their principal interest. This would consist of specified units of study from later stages of the award course. Students select and transfer between majors by virtue of their selection of units of study. One or more majors may be awarded upon the graduand's assessment of study.

See also 'Award course', 'Minor', 'Stream'.

Major timetable clash

The term used when a student attempts to enrol in units of study which have so much overlap in the teaching times that it has been decided that students must not enrol in the units simultaneously.

Mark

An integer (rounded if necessary) from 0 to 100 indicating a student's performance in a unit of study.

See also 'Grade'.

Master's degree

A postgraduate award. Master's degree courses may be offered by coursework, research only or a combination of coursework and research. Entry to the course often requires completion of an honours year at an undergraduate level.

See also 'Award course'.

Method of candidature

A course is either a research course or a coursework course and so the methods of candidature are 'research' and 'coursework'.

See also 'Course (Coursework)', 'Course (Research)'.

Mid-year intake

Admission to degree programs for Semester Two.

Minor

Studies undertaken to support a major. Requiring a smaller number of credit points than a major, students select and transfer between minors (and majors) by virtue of their selection of units of study. One or more minors may be awarded upon the graduand's assessment of study.

See also 'Award course', 'Major', 'Stream'.

Mixed mode

See 'Attendance mode'.

MPhil

The Master of Philosophy (MPhil) is a master's by research degree offered by some (but not all) of the University's faculties.

See also 'Award course', 'Master's degree'.

Mutually exclusive units of study

See 'Prohibited combinations of units of study'.

MyUni

The University of Sydney's student portal system. It provides access to email, library services, student self-administration, support services, e-learning software such as Blackboard and WebCT, as well as information about the University and its courses.

N**Non-award course**

See 'Course'.

Non-standard session

A teaching session other than the standard February and August sessions – such as Sydney Summer School or Winter School, in which units of study are delivered and assessed in an intensive mode during January or July respectively.

See also 'Semester', 'Session'.

O**Orientation Week**

Orientation or 'O Week', takes place in the week before lectures begin in Semester One. During O Week, students can join various clubs, societies and organisations, register for courses with departments and take part in activities provided by the University of Sydney Union.

P**Part-time student**

See also 'Attendance mode', 'Attendance pattern', 'Equivalent full-time student units (EFTSU)'.

Permanent home address

The address used for all official University correspondence with a student, both inside and outside of semester time (for example during semester breaks), unless the student provides a different address for use during the semester.

See also 'Semester address'.

PhD

The Doctor of Philosophy (PhD) and other doctorate awards are the highest awards available at the University. A PhD course is normally purely research-based; the candidate submits a thesis that is an original contribution to the field of study.

See also 'Award course', 'Doctorate'.

Plagiarism

Presenting another person's ideas, findings or work as one's own by copying or reproducing them without acknowledging the source.

See also 'Academic dishonesty'.

Policy Online

The website which provides access to the University's current policies, procedures and guidelines.

Postgraduate

A term used to describe a course leading to an award such as graduate diploma, a master's degree or PhD which usually requires prior completion of a relevant undergraduate degree (or diploma) course. A 'postgraduate' is a student enrolled in such a course.

See also 'Course (Coursework)', 'Course (Research)'.

Postgraduate Education Loans Scheme (PELS)

An interest-free loans facility for eligible students who are enrolled in fee-paying, postgraduate non-research courses. It is similar to the deferred payment arrangements available under the Higher Education Contribution Scheme (HECS). This scheme was replaced by the FEE-HELP scheme on 1 January 2005.

See also 'FEE-HELP'.

Potential graduand

A student who has been identified as being eligible to graduate on the satisfactory completion of their current studies.

See also 'Graduand', 'Graduation'.

Pre-enrolment

Pre-enrolment – also known as provisional re-enrolment – takes place in October, when students indicate their choice of unit of study enrolment for the following year. After results are approved, pre-enrolment students are regarded as enrolled in those units of study for which they are qualified. Their status is 'enrolled' and remains so provided they pay any money owing and comply with other requirements by the due date. Students who do not successfully pre-enrol in their units of study for the next regular session are required to attend the University on set dates during the January/February enrolment period.

See also 'Enrolment'.

Prerequisite

A unit of study that is required to be successfully completed before another unit of study can be attempted. Prerequisites can be mandatory (compulsory) or advisory.

See also 'Assumed knowledge', 'Corequisite', 'Waiver', 'Qualifier'.

Prizes

Awarded in recognition of outstanding performance, academic achievement or service to the community or University.

Probationary candidature

A student who is enrolled in a postgraduate course on probation for a period of time up to one year. The head of department/school is required to consider the candidate's progress during the period of probation and make a recommendation for normal candidature or otherwise to the faculty.

Professional practice

Some students undertake placement in a professional practice as part of their course requirements. This may require University-approved supervision. Professional placements are located in a wide range of professional practices environments, and may not require additional criteria to be fulfilled.

Progression

Satisfactory progression is satisfying all course and faculty rules (normally assessed on an annual basis) to enable the completion of the chosen award within the (maximum) completion time allowed.

See also 'Exclusion'.

Prohibited combinations of units of study

When two or more units of study contain a sufficient overlap of content, enrolment in any one such unit prohibits enrolment in any other identified unit.

See also 'Unit of study'.

Provisional re-enrolment

See 'Pre-enrolment'.

Q**Qualification**

An academic attainment recognised by the University.

Qualifier

A mandatory (compulsory) prerequisite unit of study which must have a grade of pass or better.

See also 'Assumed knowledge', 'Corequisite', 'Prerequisite', 'Waiver'.

R**Recycling**

The submission for assessment of one's own work, or of work which substantially the same, which has previously been counted towards the satisfactory completion of another unit of study, and credited

towards a university degree, and where the examiner has not been informed that the student has already received credit for that work.

Registration

In addition to enrolling with the faculty in units of study, students must register with the department responsible for teaching each unit. This is normally done during Orientation Week. Note that unlike enrolment, registration is not a formal record of units attempted by the student.

Research course

See 'Course (Research)'.

Research supervisor

A supervisor is appointed to each student undertaking a research postgraduate degree. The supervisor will be a full-time member of the academic staff or a person external to the University recognised for their association with the clinical teaching or the research work of the University. A research supervisor is commonly referred to as a supervisor.

See also 'Advisor', 'Associate supervisor', 'Supervision', 'Instrumental supervisor/teacher'.

Result processing

Refers to the processing of assessment results for units of study. For each unit of study, departments/schools tabulate results for all assessment activities and assign preliminary results.

See also 'Assessment', 'Formative assessment', 'Examination period', 'Summative assessment'.

Result processing schedule

The result processing schedule will be determined for each academic cycle. All schools and faculties are expected to comply with this schedule.

See also 'Assessment', 'Examination period', 'Result processing'.

Result

The official statement of a student's performance in each unit of study attempted as recorded on the academic transcript, usually expressed as a mark and grade.

See also 'Grade', 'Mark'.

Research Training Scheme (RTS)

The RTS provides Commonwealth-funded higher degree by research (HDR) students with an 'entitlement' to a HECS exemption for the duration of an accredited HDR course, up to a maximum period of four years full-time equivalent study for a doctorate by research and two years full-time equivalent study for a master's by research.

S**Scholarships**

Financial or other form of support made available to enable students to further their studies.

See also 'Bursaries'.

School

A school or academic unit shall encourage and facilitate teaching, scholarship and research, and coordinate the teaching and examining duties of members of staff in the subjects or courses of study with which it is concerned.

Semester

A half-yearly teaching session, the dates for which are determined by the Academic Board. Normally all undergraduate sessions will conform to the semesters approved by the Academic Board. Any offering of an undergraduate unit not conforming to the semester dates (non-standard session) must be given special permission by the Academic Board.

See also 'Session', 'Non-standard session'.

Semester address

The address to which all official University correspondence is sent during semester time, if it is different to the permanent address.

Senate

The governing body of the University. See the University Calendar for more details of its charter and powers.

Session

Any period of time during which a unit of study is taught. A session differs from a semester in that it need not be a six-month teaching period, but it cannot be longer than six months. Each session maps to either Semester One or Two for DEST reporting purposes.

Session offerings are approved by the relevant dean, taking into account all the necessary resources, including teaching space and staffing. The Academic Board must approve variation to the normal session pattern.

See also 'Semester', 'Non-standard teaching period'.

Session address

See 'Semester address'.

Short course

A fee-paying student undertaking a short course with the University of Sydney comprising professional development, executive training etc. The study undertaken by these students is a non-award course.

Show cause

See 'Progression', 'Exclusion'.

Special consideration

Candidates who suffer serious illness or misadventure which may affect performance in any assessment, may request that they be given special consideration in relation to the determination of their results.

Special Studies Program (SSP)

A period of release from normal duties to allow academic staff to undertake a planned program of academic activity and development.

Sponsorship

Financial support of a student by a company or government body.

Stage

A normal full-time course of study taken in a year.

See also 'Course rules', 'EFTSU', 'Progression'.

Strategic Directions

See also 'University Strategic Directions'.

Stream

A defined award course, which requires the completion of set units of study as specified by the course rules for the particular stream, in addition to the core program specified by the course rules. A stream will appear with the award course name on testamurs, eg Bachelor of Engineering in Civil Engineering (Construction Management).

See also 'Award course', 'Major', 'Minor'.

Student

Student means a person enrolled as a candidate for an award course or unit of study.

Student Appeals Body

Any student may appeal to the Student Appeals Body against an academic decision on the ground that due academic process has not been observed by the relevant faculty in relation to the academic decision.

See also 'Appeals', *University of Sydney (Student Appeals against Academic Decisions) Rule 2006*.

Student Disciplinary Appeals Committee

Any student may appeal to the Student Disciplinary Appeals Committee against a misconduct determination by the Vice-Chancellor or a Student Proctorial Board.

See also 'Appeals'.

Student identifier (SID)

A nine-digit number which uniquely identifies a student at the University.

Student ID Card

All students who enrol are issued with an identification card. The card includes the student's name, SID, the course code, a library borrower's bar code and a passport-style photo. The card identifies the student as eligible to attend classes and must be displayed at formal examinations. It must be presented to secure student concessions and to borrow books from all sections of the University Library.

Student progress rate (SPR)

A calculation which measures the rate at which load undertaken is passed annually in each award program.

Student type

Student type identifies whether a student is local or international and the type of study the student is undertaking.

See also 'International student', 'Domestic student', 'Exchange student'.

Study Abroad program

A scheme administered by the International Office which allows international students who are not part of an exchange program to take units of study at the University of Sydney, but not towards an award program. In most cases the units of study taken here are credited towards an award at their home institution.

See also 'Exchange student'.

Subject area

A unit of study may be associated with one or more subject areas.

The subject area can be used to define prerequisite and course rules, for example the unit of study 'History of Momoyama and Edo Art' may count towards the requirements for the subject areas 'Art History and Theory' and 'Asian Studies'.

Summative assessment

See 'Assessment'.

Summer School

See 'Sydney Summer School'.

Supervising faculty

The faculty that has the responsibility for managing the academic administration of a particular course, such as the interpretation and administration of course rules, approving students' enrolments and variations to enrolments. Normally the supervising faculty is the faculty offering the course.

However, in the case of combined courses, one of the two faculties involved will usually be designated the supervising faculty. Further, in the case where one course is jointly offered by two or more faculties (such as the Liberal Studies course), a joint committee may make academic decisions about candidature and the student may be assigned a supervising faculty for administration.

Supervision

A one-to-one relationship between a student and a nominated member of the academic staff or a person specifically appointed to the role.

See also 'Adviser', 'Associate supervisor', 'Research supervisor', 'Instrumental supervisor/teacher'.

Suppression of results

Results for a particular student can be suppressed by the University when the student has an outstanding debt to the University; or the student is facing disciplinary action. A student may also request a suppression for personal reasons.

Suspension

See also 'Course leave'.

Sydney Summer School

A program of accelerated, intensive study running for approximately six weeks during January and February each year. Both undergraduate and postgraduate units are offered. Summer School provides an opportunity for students at Sydney and other universities to catch up on needed units of study, to accelerate completion of a course or to undertake a unit that is outside their award course.

All units attract full fees and enrolled students are also liable for compulsory subscriptions. Some fee-waiver scholarships are available.

Sydney Winter School

An intensive session offered by the University in July during the mid-year break.

T

Teaching department

See 'School'.

Teaching end date

Official finish date of formal timetabled classes.

Teaching start date

Official commencement date of formal timetabled classes.

Terminated

Term used when a student's candidature has been officially closed because they are not able to complete the course requirements.

See also 'Candidature'.

Testamur

A certificate of award provided to a graduand, usually at a graduation ceremony. The award conferred will be displayed along with other appropriate detail.

Thesis

A major work that is the product of an extended period of supervised independent research.

See also 'Course (Research)'.

Timetable

The schedule of lectures, tutorials, laboratories and other academic activities that a student must attend.

Transcript

See 'Academic transcript'.

Transfer

See 'Course transfer'.

Tuition fees

Tuition fees may be charged to students in designated tuition fee-paying courses. Students who pay fees are not liable for HECS.

U

Universities Admissions Centre (UAC)

The UAC receives and processes applications for admission to undergraduate courses at recognised universities in NSW and the ACT. Most commencing, local undergraduate students at the University apply through the UAC.

Universities Admission Index (UAI)

A measure of overall academic achievement in the HSC that assists universities in ranking applicants for university selection. The UAI is based on the aggregate of scaled marks in ten units of the HSC, and is a number between 0.00 and 100.00 with increments of 0.05.

Under examination

Indicates that a research student has submitted their written work (thesis) for assessment, and is awaiting the finalisation of the examiners' outcome and recommendation.

Undergraduate

A term used to describe both a course leading to a diploma or bachelor's degree and a student enrolled in such a course.

Unit of study

Unit of study or unit means a stand-alone component of an award course. Each unit of study is the responsibility of a department.

See also 'Prohibited combinations of unit of study'.

Unit of study enrolment status

This indicates whether the student is still actively attending the unit of study (currently enrolled) or is no longer enrolled.

See also 'Discontinuation' or 'Cancellation'.

Unit of study level

Units of study are divided into Junior, Intermediate, Senior, Honours, Year 5, and Year 6. Most majors consist of 32 Senior credit points in a subject area (either 3000 level units of study or a mix of 2000 and 3000 level units of study).

University

Unless otherwise indicated, 'University' in this document refers to the University of Sydney.

University Calendar

The annual University publication, also available online, which provides general and historical information about the University of Sydney, the statutes and regulations under which it operates and the Senate resolutions relating to constitutions in each faculty.

University Medal

A faculty may recommend the award of a University Medal to a student qualified for the award of an undergraduate honours degree (or some master's degrees), whose academic performance is judged to be outstanding.

University Strategic Directions

This refers to the University of Sydney *Strategic Plan 2007–2010*.

Upgrade

Where a student enrolled in a master's by research course is undertaking research at such a standard that either the University recommends that the student upgrade their degree to a PhD, or the student seeks to upgrade to a PhD and this is supported by the University.

V

Variation of enrolment

See 'Enrolment variation'.

Vice-Chancellor and Principal

The chief executive officer of the University, responsible for its leadership and management. The Vice-Chancellor and Principal is head of both academic and administrative divisions.

W

Waiver

In a prescribed course, a faculty may waive the prerequisite or corequisite requirement for a unit of study or the course rules for a particular student. Unlike credit, waivers do not involve a reduction in the number of credit points required for a course.

See also 'Credit', 'Exemption'.

Winter School

See 'Sydney Winter School'.

Weighted average mark (WAM)

This mark uses the unit of study credit point value in conjunction with an agreed 'weight'. The formula for this calculation is:

$$WAM = \frac{\sum (W_c \times M_c)}{\sum (W_c)}$$

Where W_c is the weighted credit point value, ie the product of the credit point value and the level of weighting of 1, 2, 3, or 4 for a first, second, third or fourth year unit of study respectively; and where M_c is the greater of 45 or the mark out of 100 for the unit of study.

The mark is the actual mark obtained by the student for the unit of study, or in the case of a failing grade with no mark – 0.

Pass/fail assessed subjects and credit transfer subjects (from another institution) are excluded from these calculations. However, the marks from all attempts at a unit of study are included. (Effective from 1 January 2004.)

In addition, faculties may adopt other average mark formulae for specific progression or entry requirements. If such a formula is not specified in the faculty resolutions, the formula outlined above is used. See also 'WAM weight'.

WAM weight

A weight assigned to each unit of study to assist in the calculation of WAMs.

Y

Year of first enrolment (YFE)

The year in which a student first enrolls at the University. See also 'Commencement date'.

Youth Allowance

Youth allowance is payable to a full-time student or trainee aged 16–24 years of age who is enrolled at an approved institution such as a school, college, TAFE or university, and undertaking at least 15 hours a week face-to-face contact.

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The
University
of Sydney

'09

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www.facilities.sydney.edu.au/maps

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Bicycle map

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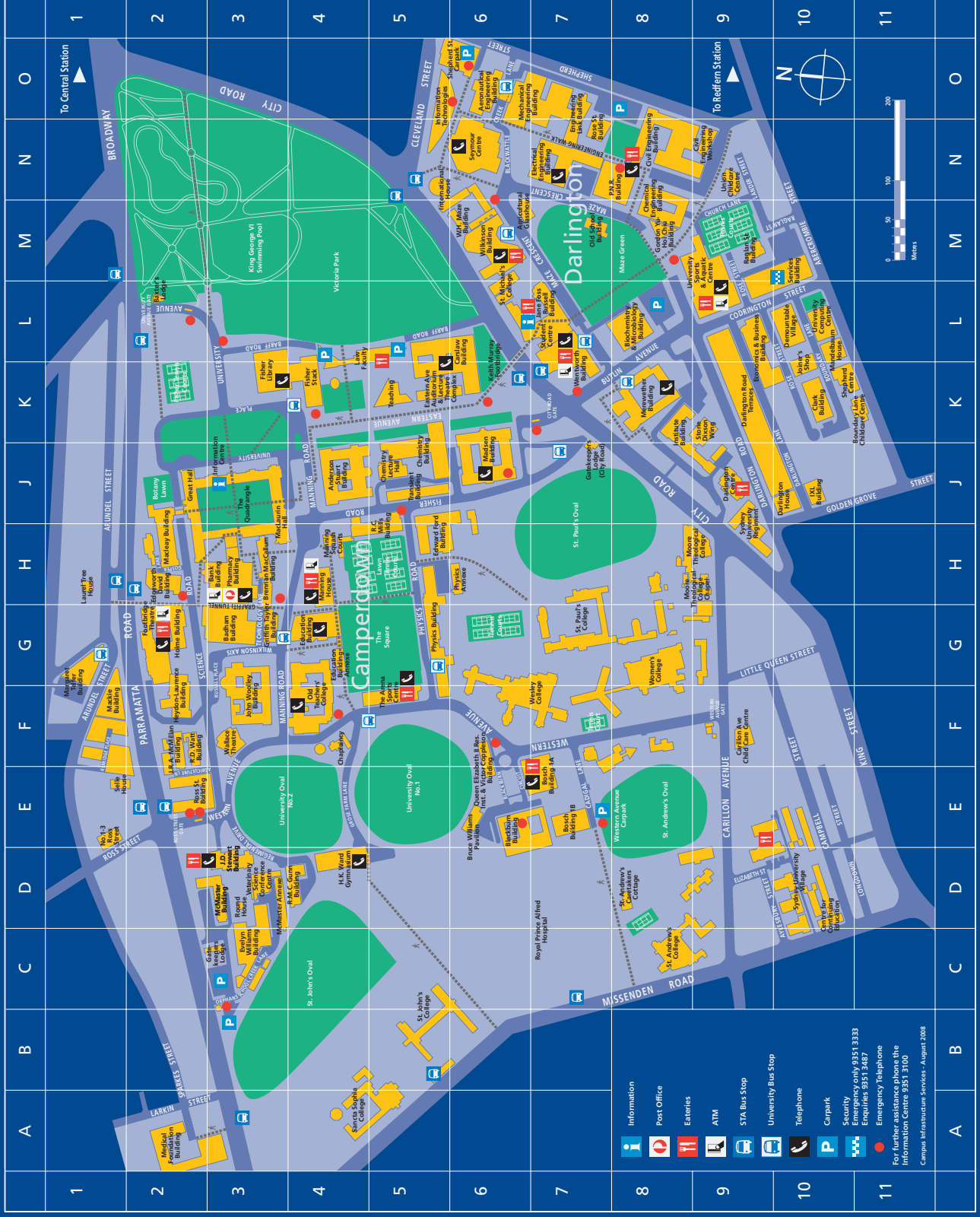
Disability access

Parking layout

2009 handbook maps

Map Code: 0102_MAIN

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- Information
- Post Office
- Entries
- ATM
- STA Bus Stop
- University Bus Stop
- Telephone
- Carpark
- Security
Emergency only 9351 1333
Enquiries 9351 3407
- For further assistance phone the
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Camperdown Infrastructure Services - August 2008

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F7	Wesley College
G8	Women's College

Computer Access Centres

H3	Brennan
G4	Education
K3	Fisher
N7	Link
L6	McGrath (Cardlaw)
H3	Pharmacy

Cultural venues

H2	Macleay Museum
J3	Nicholson Museum
N6	Seymour Centre
K7	Sir Hermann Black Gallery
M6	Tim Sheds Gallery
J2	War Memorial Art Gallery

Faculties (offices)

F2	Agriculture, Food and Natural Resources
M6	Architecture
H3	Arts
K8	Economics & Business
G4	Education and Social Work
N7	Engineering
H5	Medicine
H3	Pharmacy
L6	Science
D3	Veterinary Science

Libraries

G3	Badham
H5	Burkitt-Ford
K3	Curriculum Resources
K3	Fisher
E7	Medical
N6	Music
H5	Schaeffer Fine Arts
L7	SciTech

Retail

H3	Australia Post Office
J9	Darlington Centre
G2	Holme Building
L7	Jane Foss Russell Building
H4	Manning House
F5	The Arena Sports Centre
M9	University Copy Centre
K7	University Health Service
M9	University Sports & Aquatic Centre
M9	University Co-op Bookshop
C3	Valentine Charlton Cat Centre
C3	Veterinary Hospital & Clinic
K7	Wentworth Building

Security

M10	Emergency Services
M10	Lost Property
M10	Traffic & Parking

Sports & recreational venues

K2	Fisher Tennis Courts
D4	HK Ward Gymnasium
H5	Lawn Tennis Courts
H4	Manning Squash Courts
F5	The Arena Sports Centre
G5	The Square
E5	University Oval No. 1
E3	University Oval No. 2
M9	University Sports & Aquatic Centre

Unions & associations (offices)

K7	Students' Representative Council (SRC)
M9	Sydney University Postgraduate Representative Association (SUPRA)
M9	Sydney University Sport
G2	University of Sydney Union

University administration, centres & services

H3	Alumni Relations Office
L7	Careers Centre
L7	Cashier
D10	Centre for Continuing Education
K7	Centre for English Teaching
H3	Chancellor
L10	Computing Centre
H2	Executive Offices
J3	Information Centre
L10	Information and Communications Technology
L7	International Office
K8	Office of Development
M10	Office of University Relations (OUR)
G1	Personnel
L7	Publications Office
H3	Research Office
M10	Room Bookings & Venue Management
L7	Scholarships Unit
M10	SydneyPeople - HR Service Centre
G1	SydneyPeople - Sydney Learning
E1	SydneyPeople - Unistaff
L7	Student Centre
M10	Student Housing
L7	Student Services Unit
K8	Summer School
O5	Sydnovate
F3	United States Studies Centre
H3	University Relations (Vice Principal)
C3	Veterinary Hospital & Clinic
H2	Vice-Chancellor

Course planner

Year	Semester	Unit of study 1 & credit points		Unit of study 2 & credit points		Unit of study 3 & credit points		Unit of study 4 & credit points		Total credit points
1	1									
	2									
2	summer									
	1									
	winter									
	2									
3	summer									
	1									
	winter									
	2									
4	summer									
	1									
	winter									
	2									
5	summer									
	1									
	winter									
	2									
Total credit points										