



School of Anatomy & Human Biology (M309)

## Graduate Certificate in Adult Sleep Science

Sleep disorders are increasingly recognised as a worldwide public health concern. This has led to a rapid growth in the number of clinical sleep laboratories. As a result there is a tremendous shortage of people qualified to work in these laboratories. This shortage will continue as new sleep labs open every year.

The Graduate Certificate in Adult Sleep Science is intended as a University-level training program for anyone with a background in science or allied health wishing to be trained to work as a sleep technologist (sleep scientist). The course will also be of interest to individuals who simply wish to better understand the scientific principles that underpin adult sleep science.

### INTRODUCTION

The Graduate Certificate in Adult Sleep Science provides students with core competencies for a sleep technologist including an understanding of the history of sleep, its fundamental physiology and neurobiology, and the various technologies with which sleep is monitored and interpreted. Students are provided with basic skills in sleep technology including equipment calibration, setup of patients for sleep studies, maintenance and signal recognition, scoring normal and abnormal sleep patterns, and application of common therapies for obstructive sleep apnoea.

The course operates from the main campus of the *University of Western Australia* (UWA), the State's oldest and most prestigious university, located beside the picturesque Swan River. UWA is a leading Australian research university and has an international reputation for excellence, innovation and enterprise. UWA has formal agreements with more than 120 international institutions, promoting staff and student exchanges, collaborative research and exchange of teaching materials and methods.

The clinical partner for the Graduate Certificate in Adult Sleep Science is the *West Australian Sleep Disorders Research Institute*, a major research and clinical centre for the investigation and management of breathing disorders of sleep including snoring, sleep apnoea and sleep-related hypoventilation. The Institute consists of a 9 bed sleep investigations unit, accommodates about 70 staff members and performs in excess of 2,000 sleep studies per year. The Institute is based at Sir Charles Gairdner Hospital, one of

Australia's largest public teaching hospitals, located about ten minutes walk from the University of Western Australia.

## AIMS

The course aims to provide students with an understanding of sleep biology and the skills to use sophisticated equipment and instrumentation in order to perform laboratory-based and home sleep studies, apply different protocols to sleep monitoring and perform basic scoring and analysis of sleep studies.

## LEARNING MATERIALS

This course is offered via a combination of online and face-to-face units. Online course materials will be available using the state of art e-learning WebCT system, making the course accessible to all with the requisite computer and web access. While enrolled in the course, students will be able to access the online version of *Principles and Practice of Sleep Medicine*, the major reference book for sleep medicine.

Intensive laboratory-based units provide students with hands-on experience in a busy clinical sleep laboratory to synthesise knowledge and ensure translation of this knowledge into practical competencies. The units will be held at the *University of Western Australia* and the *West Australian Sleep Disorders Research Institute* and require students to reside in Perth for a period of two weeks.

## COURSE STRUCTURE

**The 2009 Graduate Certificate of Adult Sleep Science consists of:**

- two online units, run concurrently over a 13 week period from July 20 - October 16; and
- two intensive practical units, run concurrently over a 2 week period in Perth, Western Australia from November 16 - 27.

### **Unit 1: Fundamentals of Sleep Technology (ONLINE)**

This unit will provide students with knowledge and comprehension of equipment and instrumentation utilized in laboratory-based and portable sleep monitoring systems and an understanding of the different protocols using in sleep monitoring. The unit provides the theoretical foundation for the practical unit *Sleep Technology in Practice*.

## **Unit 2: Fundamentals of Sleep Biology (ONLINE)**

This unit will introduce students to the history of sleep, the anatomy, physiology and neurobiology of sleep, and the pathophysiology and treatment of respiratory and non-respiratory sleep disorders. The unit provides the theoretical foundation for the practical unit *Sleep Biology in Practice*.

## **Unit 3: Sleep Technology in Practice (LABORATORY-BASED)**

This unit will provide students with the practical competencies to setup and monitor patients for laboratory-based and portable sleep studies, including independently preparing and calibrating specialized hardware and software.

## **Unit 4: Sleep Biology in Practice (LABORATORY-BASED)**

This unit will provide students with the practical competencies to read, score, analyze and report laboratory-based and portable sleep studies, and to apply positive airway pressure therapy to patients and to titrate their therapy during overnight sleep studies.

This course has only minimal paediatric content. The clinical, technical and scientific aspects of paediatric sleep science are different to those for adult sleep science. Those interested in paediatric sleep science should consider enrolling in the Postgraduate Certificate in Paediatric Sleep Science. <http://www.paediatrics.uwa.edu.au/go/paeds>

## **COURSE PRE-REQUISITES**

### **Students are required:**

- To have graduated in medicine, science or an allied health degree *or* have two years' full-time or equivalent professional work experience in sleep science.
- To have computer facilities and access to the internet from their country of origin.
- Meet UWA's minimum English language requirements (see below).
- Hold a current national police clearance from their home country

## **ACCOMMODATION IN PERTH**

A variety of short term accommodation is available, all in close proximity to the University. These include shared facilities, backpackers accommodation, bed & breakfast, apartments, hotels, and University residential colleges. See the following website "Advice for Visiting and International Students" for further information: <http://www.studentservices.uwa.edu.au/ss/housing>

## ENGLISH LANGUAGE PROFICIENCY

All students must meet UWA's minimum English proficiency requirements.

- This includes Australian students, any student living in Australia who is not an Australian citizen or an official permanent resident, and International Students.
- Please refer for further details to the website: <http://www.studyat.uwa.edu.au/undergrad/australian/admission/english>

## MINIMUM COMPUTER REQUIREMENTS

Students must have regular access to an internet connection and a web browser *i.e.* Internet Explorer or Firefox.

## COURSE FEES

Fees are subject to change. A schedule of tuition fees are available:

**Australian Students:** \$5,341 AUD in 2009.

<http://www.unitcosts.uwa.edu.au>

**International Students:** \$8,700 AUD in 2009.

<http://www.studyat.uwa.edu.au/postgrad/gradcert>

### **Important Note:**

Students are responsible for their own computers and software, which are absolute requirements for this web-based course.

## HOW TO APPLY

### **Application for admission into this course due:**

International Students - 15<sup>th</sup> May, 2009

Domestic students 12<sup>th</sup> June, 2009

Australian-based Student Application Form available here:  
<http://www.studyat.uwa.edu.au/postgrad/forms>

International Student Application Form is available here:

<http://www.international.uwa.edu.au/postgraduate/apply>

Please ensure you attach all required supporting documentation with your application form. Failure to do so can result in delays in processing your application.

## HOW TO ENROL

If your application into the course is successful, you will be advised on how to go about enrolling in the required units.

Admission into the course does not automatically enrol you in units.

The unit enrolment process is completed online via Student Connect once you have accepted your offer of a place in the course. Instructions on how to enrol are provided in an “Authority to Enrol” letter which will be sent to you in your offer pack.

Enrolled students will then be able to access course materials online via WebCT.

It is the responsibility of the student to follow the enrolment instructions carefully, make sure all fee paperwork is returned and enrolment deadlines have been met.

## 2009 STUDY PERIODS, WITHDRAWAL AND CENSUS DATES

Students should be aware of the 2009 study periods, withdrawal and census dates

[http://www.studentadmin.uwa.edu.au/welcome/enrolment/2009\\_study\\_periods,\\_census\\_and\\_withdrawal\\_dates/domestic\\_non\\_standard\\_crawley/spare\\_1](http://www.studentadmin.uwa.edu.au/welcome/enrolment/2009_study_periods,_census_and_withdrawal_dates/domestic_non_standard_crawley/spare_1)

The **census date** is the last day to withdraw without incurring a fee liability for the units concerned (not applicable to international students - refer to refund policy).

If you have not finalised all enrolment and student contribution payment arrangements by the census date the University can cancel your enrolment. There is no provision to extend the census date for any semester. For this reason, the University sets a date prior to the census date for finalising arrangements for Commonwealth supported students.

The **academic withdrawal date** is the last day to withdraw without academic penalty. You will still be liable for the fees, but your results will be recorded as withdrawn. After this date a fail will be recorded and it will contribute to your GPA.

## FURTHER QUESTIONS?

Should you have any queries about the course, please contact:

**Administrative Assistant**  
**School of Anatomy and Human Biology**  
**University of Western Australia**

35 Stirling Highway  
CRAWLEY WA 6009

Ph: +61 8 6488 3290

Fax: +61 8 6488 1051

Email: [postgrad.enquiries@anhb.uwa.edu.au](mailto:postgrad.enquiries@anhb.uwa.edu.au)