



## Course Information Guide

### > Graduate Program in Health Services Research and Development

### > Graduate Program in Survey Research Methods

#### ▶ Graduate Program in Health Services Research and Development

Health is one of the largest industries in Australia. There is a major ongoing need for staff skilled in health service research techniques to enhance the efficiency, quality, sustainability and affordability of health services. This need is increased by the current focus on reform of the health system.

Health services research (HSR) strength comes from the application of many disciplines to health service issues including health economics, quantitative and qualitative research methods, and evaluation techniques. The Centre for Health Service Development (CHSD) at the University of Wollongong is one of the largest centres for Health Services Research in Australia and that extensive experience in the conduct of health services research is a core underpinning of this new academic award.

The Graduate Certificate in Health Services Research and Development will equip students with basic skills required to understand and conduct health services research.

On successful completion of the Graduate Certificate in Health Services Research and Development, students may apply to enter the Masters of Health Services (Research) program. Students may also wish to supplement their skills in health services research by also undertaking the Graduate Certificate in Survey Research methods (see over) or by undertaking the Graduate Certificates in the Master of Public Health program.



This course is aimed to suit the needs of a wide variety of careers including those working in:

- policy, planning and public health units of health agencies
- universities
- health research units and centres
- clinical units

### Entry Requirements

Applicants must have a bachelor degree in a relevant discipline from a recognised institution and at least two years relevant professional work experience.

### Course Delivery

This new award is offered at the Sydney Campus of Sydney Business School, University of Wollongong, facing Hyde Park, on a part-time basis, with most classes being offered on a one day every second week basis.

### Duration

The normal course duration for the graduate certificate is one year on a part time basis.

### Fees

Full fees for the graduate certificate is AU\$8,820. The Master of Health Services Research is a research program. It is exempt from tuition fees after successful completion of the Graduate Certificate in Health Services Research.

### Contact Details

For further information on this program, please contact:

#### Professor Ian Ring

#### Centre for Health Service Development

University of Wollongong  
Wollongong NSW 2522

**Phone:** +61 2 4221 4411

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### Program Structure

Graduate Certificate in Health Services Research and Development has four core subjects totalling 24 credit points.

### Research Studies Design

In this subject students will examine issues in the design of health services research, and then explore

the foundations for choosing methods and techniques in applied health services research. Students will develop and extend analytical skills required for successful research, including statistical design techniques, the use of relevant software, case studies, ethnography, and surveys, as well as ethical issues in health services research and the influence of ethical considerations on research methods and methodology.

### Health service research analysis

Health service research analysis provides an introduction to statistical data analysis techniques. Topics covered are: data presentation and interpretation; probability, binomial and Poisson distributions; Normal distribution; inference for single samples; comparison of two samples; analysis of variance and multiple comparisons; linear regression and correlation; analysis of categorical variables and contingency tables, logistic regression and standardisation. It will involve the use of a statistical analysis package.

### Health services evaluation and development

This subject provides an overview of key aspects of the organisation and funding of health services, some of the core health service research tools and an overview of how to translate research findings into practice. Research tools include measurement of health status and determinants of health, health needs assessment and gap analysis, health service performance measurement and introduction to basic evaluation techniques including program evaluation and evaluation designs. Research translation strategies include service planning, service development and service re-design.

### Health economic principles and research methods

This subject provides an overview of the health care system and research methodologies commonly used by health economists. Specific topics will include the analysis of health care markets and their special characteristics. Both factor markets (such as those for medical doctors and nurses) and goods and services markets (such as ambulatory and hospital care, pharmaceuticals and health insurance) will be analysed. Considerable attention will be given to economic evaluation in health care including cost-effectiveness analysis, cost-utility analysis and cost-benefit analysis.



> Graduate Program in Health Services Research and Development

> Graduate Program in Survey Research Methods

▶ Graduate Program in Survey Research Methods

A large number of sample surveys are conducted or sponsored by government agencies, research centres and businesses to provide evidence in social, market, business and health research.

The University of Wollongong's Centre for Statistical and Survey Methodology (CSSM) has teamed up with the Sydney Business School (SBS) to provide a program in Survey Research Methods. CSSM is a centre of excellence in survey methodology and has links with agencies, businesses and research centres in Australia and overseas. The SBS is a well-established centre of professional and executive development and has extensive experience in delivery of programs tailored to the needs of professionals.

The Graduate Program in Survey Research Methods will provide up-to-date and high quality education in survey methodology and research and the foundations for the development of professionals in survey methodology and research. This program will suit a wide variety of careers involving developing, conducting or analysing survey data.

The Graduate Certificate in Survey Research Methods will equip students with fundamental skills required to develop, conduct and analyse survey data and research. The Master of Survey Research Methods allows students to extend their knowledge and skills to a more advanced level and undertake a practical research project.

### Entry Requirements

Applicants must have a bachelor degree in a relevant discipline from a recognised institution and at least two years relevant professional work experience.

### Course Delivery

These new awards are offered at the Sydney Campus of Sydney Business School, facing Hyde Park, on a part-time basis, with most classes being offered on a one day every second week basis.

### Duration

The normal course duration for the Graduate Certificate is one year on a part time basis and the Masters degree is two years on a part time basis.

### Fees

Full fees for the Graduate Certificate is AU\$8,820 and the Masters is AU\$17,640.

### Contact Details:

For further information on this program, please contact:

**Professor David Steel**

### Centre for Statistical and Survey Methodology

University of Wollongong  
Wollongong NSW 2522

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**E-mail:** dsteel@uow.edu.au

### Program Structure

#### Graduate Certificate in Survey Research Methods

The Graduate Certificate consists of 4 core subjects. Each subject will involve 35 hours contact spread over 5 days in a session, with assignments and assessment.

#### Introduction to Research Design and Analysis for Surveys

**Quantitative research design:** Types of quantitative research-experiments, surveys, observational studies, panel and longitudinal designs, case control studies. Steps in survey process. Introduction to total survey error. Overview of quantitative data analysis. Mixed methods approach.

**Qualitative research design:** Qualitative research strategies-case studies, ethnography, action research, and grounded theory. Data collection methods: focus groups, in-depth interviews, observation, and documents. Qualitative research data analysis.

#### Statistical and Data Collection Methods for Surveys

**Introduction to statistical methods:** Inference for single samples; comparison of multiple samples; analysis of variance; linear regression and correlation; contingency tables, logistic regression. Use of a relevant statistical package.

**Data collection methods:** Sample frames. Sources of error and total survey error. Options: face-to-face, telephone, mail, internet and on-line methods, diaries, administrative records.

## SBS Course Information Guide

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#### Survey Methods

**Data quality:** Sources of error in surveys, total survey error. Introduction to measuring and reducing non-response and missing data. Imputation.

**Instrument design and testing:** Question wording. Form design principles. Cognitive aspect of surveys and cognitive testing. Testing and evaluation of questionnaires. Relationship with data collection mode.

#### Sample Design and Estimation

**Sampling methods:** Populations and sampling frames. Simple random sampling, stratification, probability proportional to size sampling, cluster and multistage sampling.

**Survey estimation and analysis:** Weighting, ratio estimation, post-stratification and generalised regression. Variance estimation, standard errors and confidence intervals. Use of a relevant statistical package.

#### Masters of Survey Research Methods

The Masters degree involves the subjects in the Graduate Certificate and either:

- a) a further 2 subjects and an industry focussed project equivalent to 2 subjects, or
- b) a further 3 subjects and an industry focussed project equivalent to 1 subject.

#### Project Management and Development for Surveys

**Project Development:** Consulting and communication skills. Finding projects. Preparing and presenting

proposal and tenders. Preparing quotes and budgeting. Ethical considerations and scientific integrity.

**Project Management:** Managing large-scale surveys. Data management. Quality Assurance. Scheduling. Report writing and presentation. Preparation of publications. Achieving timetable and budget. Project evaluation.

#### Advanced Sample Design and Analysis

**Advanced Sampling methods:** Multiphase, panel and longitudinal sampling, sampling rare populations, multiframe sampling. Online panels, telephone based sampling.

**Analysis of complex survey data:** Accounting for sample design in analysis of means, totals, regression and logistic regression, contingency table analysis.

#### Survey Quality and Measurement

**Survey Quality:** Designing for quality. Measuring and reducing errors due to coverage, non-response, respondents' and interviewer effects, mode and questionnaire effects.

**Survey Measurement:** Cognitive and social psychology and communication theories and their implications for survey measurement.

#### Project Options

##### Major Project in Survey Research Methods

- 12 credit points

##### Minor Project in Survey Research Methods

- 6 credit points

For further information on Health Services Research and Development programs, please contact:

#### Professor Ian Ring

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