

SUBJECT OUTLINE



Subject Name:

Foundations of Critical Enquiry

Subject Code:

SOCQ121

SECTION 1 – GENERAL INFORMATION

Award/s:	Total course credit points:	Level:
Bachelor of Health Science (Naturopathy)	128	1 st Year
Bachelor of Health Science (Acupuncture)	128	2 nd Year
Bachelor of Health Science (Nutritional and Dietetic Medicine)	96	1 st Year
Bachelor of Health Science (Myotherapy)	96	1 st Year
Bachelor of Complementary Medicine	48	1 st Year

Duration: 1 Semester

Subject Coordinator: Nina Mezyk (Sydney campus)

Subject is: Core

Subject Credit Points: 2

Student Workload:

No. timetabled hours per week:	No. personal study hours per week:	Total hours per week:
3	2	5

Delivery Mode:

Face to face	2 hour lecture	1 hour tutorial
E-Learning	Details:	Narrated PowerPoint presentations Tutorial - Asynchronous tutor-moderated discussion forum and activities Student handouts, web resources. Live interactive webinars.
Intensive	Details:	Summer school delivered 2 x 3.5 hours per week over 6 weeks. Assessments for the Summer School intensive are due to be uploaded by 11.55pm Sunday AEST on the week assigned through the Summer School period. Summer School assessment – Assignment 1 due Week 2, Assignment 2 due Week 3, Assignment 3 due Week 5, and Assignment 4 completed in the final class in week 6.
Full Time		
Part Time		

Pre-requisites: Nil

Co-requisites: Nil

SECTION 2 – ACADEMIC DETAILS

Subject Rationale

The application of evidence to inform practice in health care requires an understanding of research designs and analytic methods, as well as traditional forms of knowledge. This subject introduces different types and methodologies of research and their strengths and weaknesses as related to the health sciences. Students will explore the process of clinical research and research methods and become familiar with research literature in relation to specific therapeutic modalities, including the ethics involved, different approaches used, and the assumptions and underlying paradigms. The knowledge gained will equip students with skills required to locate and read research articles, as well as appreciate the quality of this evidence. This is a foundational subject for the later study of all degrees.

Learning Outcomes

1. Recognise traditional evidence and modern perspectives of the evidence hierarchy.
2. Identify the level and quality of literature sources and demonstrate an understanding of the research process.
3. Describe the nature of research including the ethics involved, different approaches utilised, and the assumptions underlying these approaches.
4. Explain the application of qualitative and quantitative statistical techniques appropriate to a particular research design.
5. Outline the use of different research models in the field of complementary medicine and use this knowledge to review and identify quality research articles.

Assessment Tasks

Type	Learning Outcome Assessed	Week Content Delivered	Week Due	Weighting
Discussion Forums (minimum 50 words per forum)	1-5	2-11	Weeks 2-11	20%
Assignment 1: Short response (5 questions; up to 500 words total)	1	1-3	Sunday following Week 4	10%
Assignment 2: Database Search and Literature Retrieval (200 words)	2 and 5	1-5	Sunday following Week 6	20%
Assignment 3: Literature Review (1200 words)	1-5	1-6	Sunday following Week 11	40%
Assignment 4: Oral presentation of abstract (minimum 5 min; in class or recorded)	1-5	1-12	Week 13	10%

Prescribed readings:

1. Greenhalgh, T. (2014). *How to read a paper: The basics of evidence based medicine* (5th ed.). Chichester, England: Wiley Blackwell BMJ Books. [ebook available]

Recommended readings:

1. American Psychological Association. (2010). *Publication manual of the American Psychological Association* (6th ed.). Washington, DC: American Psychological Association.
2. Fink, A. (2014). *Conducting research literature reviews: From internet to paper* (4th ed.). Thousand Oaks, CA: Sage.
3. Lewith, G., Jones, W.B., & Walach, H. (2010). *Clinical research in complementary therapies: Principles, problems and solutions* (2nd ed.). Edinburgh, Scotland: Churchill Livingstone.
4. Summers, J., & Smith, B. (2014). *Communication skills handbook* (4th ed.). Milton, Qld: Wiley & Sons.

Subject Content		
Week	Lecture	Tutorial Activities
1.	Introduction: <ul style="list-style-type: none"> Overview and expectations of the subject Types of knowledge and ways of knowing Empiricism 	Students consider types of knowledge utilised in Complementary and Alternative Medicine Introduction to the assessments
2.	Evidence & Research: <ul style="list-style-type: none"> Traditional use and evidence The Scientific Method David Sackett – The evolution of evidence based practice 	Tutor directed learning activity to support students in formulating a plan to prepare for Assessment 1 Discussion forum
3.	Publications and Literature Sources: <ul style="list-style-type: none"> Databases Websites Journals Textbooks Searching the Literature 	Library Session on-line (or equivalent in class) narrated presentation Retrieval Skills Activity to assist with assignment 2. Discussion forum
4.	Overview of types of research: <ul style="list-style-type: none"> Qualitative, Quantitative and Mixed Methods Hierarchy of evidence 	Library Session on-line (or equivalent in class) narrated presentation Referencing activity Discussion forum
5.	Reviewing the literature: <ul style="list-style-type: none"> Literature Reviews Types of Literature reviews The need for critical evaluation 	Literature Searching: How to develop effective information retrieval strategies to assist with Assignment 3, Literature Review Discussion forum
6.	Understanding Empirical Research: <ul style="list-style-type: none"> From clinical observation to meta-analysis Understanding the stages in the research process 	Scenario based exercise: understanding the research process Discussion forum
7.	How to write a literature review: <ul style="list-style-type: none"> How to write a literature review Preparation to write a literature review 	Tutor directed learning activity to support student formulating a plan to prepare for their literature review activity Discussion forum
NON-TEACHING WEEK (note that make-up classes may be scheduled in this week) Semester 1 - This aligns with the week after Easter so it may fall between weeks 6 to 8. Semester 2 & Online students - The break week falls between Weeks 7 and 8.		
8.	Methodology & Methods: <ul style="list-style-type: none"> Methodology – the theory of method Methods for CAM research Sampling, reliability and validity Observation Surveys Interviews and Questionnaires 	Students answer questions relating to methods & methodology in CAM research Discussion forum

9.	Developing understanding of research results in large scale studies: <ul style="list-style-type: none"> • P values • Confidence intervals • Standard deviations • Simple statistics • Mean, median and mode • Figures, charts and diagnostic tables 	Students analyse research and interpret research results Discussion Forum
10.	Developing understandings of research results in small scale studies: <ul style="list-style-type: none"> • Case studies • Focus groups • Narratives • Comparisons • Themes 	Scenario based exercise: assessing appropriateness of methods and research design Discussion forum
11.	Ethics in research: <ul style="list-style-type: none"> • Informed consent • Confidentiality • Minimise harms and risks and maximise benefits • Respect human dignity • Privacy and autonomy • Vulnerable populations • Strive to distribute the benefits and burdens of research fairly • Legal requirements 	Scenario based exercise: Case Study Discussion forum
12.	Research into practice: <ul style="list-style-type: none"> • Critiques of Evidence Based Medicine 	Analyse research and interpret research results
13.	Review & Application of Subject content: <ul style="list-style-type: none"> • The difference between efficacy and evidence • Key message: A lack of evidence is not a lack of efficacy • Research its benefits and drawbacks 	Presentations
14-15.	Non-Teaching / Practical Exam Weeks 1 & 2. Note that make-up classes may be scheduled in these weeks.	
16-17.	Final Exam Weeks 1 & 2 This subject does not have a final exam.	