SUBJECT OUTLINE

Subject Name:

Evidence Based Approaches in Complementary Medicine

Subject Code:

SOCA321

SECTION 1 – GENERAL INFORMATION

Award/s: Bachelor of Complementary Medicine

Total course credit points: 48

Level: 3rd Year

Duration: 1 Semester

Subject Coordinator: Dr Romina Aizpurua (Brisbane campus)

Subject is: Core

Subject Credit Points: 2

Student Workload:

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

Delivery Mode:

Face to face	Details:	2 hour lecture, 1 hour practical
E-learning	Details:	Narrated Powerpoint presentations Asynchronous tutor moderated discussion forum and activities Student handouts, web resources
Full Time		
Part Time		

Pre-requisites: SOCQ121

Co-requisites: Nil

SECTION 2 – ACADEMIC DETAILS

Subject Rationale

This subject builds on the underpinning knowledge acquired within the subject Foundations of Critical Enquiry and provides the opportunity for students to evaluate and discuss different research methodologies in complementary medicine within their application for real world practice. Students will learn principles of balanced research for the purpose of critically evaluating evidence-based research in complementary medicine.

Learning Outcomes

1. Identify and distinguish between research methodologies used in different health contexts.
2. Critically analyse Complementary Medicine research choices with the view to evaluating model validity, internal and external validity, reporting quality, ethics and outcome validity.
3. Evaluate research issues pertinent to Complementary Medicine with the view to developing a balanced hierarchy of evidence based research.
4. Identify and apply different research methods in order to critique research used in Complementary Medicine.
5. Compare and contrast competing paradigms that define research in Conventional and Complementary Medicine.

Assessment Tasks

Type	Learning Outcomes Assessed	Week Content Delivered	Week Due	Weighting
Written Assignment (1500 words)	1, 2, 5	1-6	7	35%

Group Presentation Recorded - 15 minutes	1, 2, 5	1-7	Sunday following Week 10	15%
Research Project (2000 words)	3,4	1-12	Sunday following Week 13	50%

Prescribed readings:

1. Lewith, G., Jonas, W. B., & Walach, H. (Eds.). (2011). *Clinical Research in Complementary Therapies* (2nd ed.). Sydney, NSW: Elsevier.

Recommended readings:

1. Bryman, A. (2012). *Social Research Methods* (4th ed.). New York, NY: Oxford University Press.
2. Greenhalgh, T. (2010). *How to read a paper: The basics of evidence based medicine* (4th ed.). London, England: BMJ Publishing.
3. Haveman-Nies, A. (Ed.). (2010). *Epidemiology in Public Health Practice*. Wageningen, Netherlands: Wageningen Academic Publishers.
4. Holloway, W. (2012). *Doing qualitative research differently: free association, narrative and the interview method* (2nd ed.). London, England: Sage Publications.
5. Polgar, S., & Thomas, S. A. (2013). *Introduction to Research in the Health Sciences* (6th ed.). Edinburgh, Scotland: Churchill Livingstone.
6. Webb, P. M., & Bain, C. J. (2017). *Essential Epidemiology: An Introduction for Students and Health Professionals* (3rd ed.). Edinburgh, Scotland: Cambridge University Press.
7. Wheeldon, J., & Ahlberg, M. K. (2012). *Visualizing social science research: Maps, methods, & meaning.* Thousand Oaks, CA: Sage Publications Ltd.

Subject Content

Week	Lecture	Tutorial
1.	Introduction: (Subject Outline/Subject Aims/Assessment/Teaching Resources) **Research Skills in Complementary Medicine** • Research Skills from a Complementary Medicine Perspective • Complementary Medicine Practitioners as Researchers • The Importance of Research in Complementary Medicine • Balanced Research Strategies • Standards of Quality in CAM Research	Explanation of the assessment tasks/activities/expectations. Lectures and tutorials are informed and supported by the use of current relevant research papers. • Overview of the subject and introduction to the prescribed reading "Clinical Research in Complementary Therapies"
2.	**Understanding the Research Process in Evidence Based Practice** • The eight elements of a Research Project • Theoretical issues • Epistemology • Deductive reasoning • Inductive reasoning • Concept and Mind Maps	• Advanced Searching of databases to locate critical readings for Public Health Research Project • Facilitated discussion on "How to write a synopsis for a research proposal" • Establishing the eight elements for a Research project (Case study) • Creating a mind map and visualising how to plan a research project

	• Methodology • Data Collection	
3.	**Overview of Evidence Qualitative and Quantitative** Types of evidence • Randomized controlled trials • Cohort studies • Case Studies • Cross-sectional surveys • Bio statistics • Epidemiological methods for Public Health studies Features of evidence • Efficacy • Comparative effectiveness • Evidence Review - Systematic Reviews; Meta- Analysis • Mixed Methods- Exploratory, Competing Paradigms	Facilitated discussion on: • How to assess methodological quality • Understanding and interpreting statistics for the non-statistician • How to evaluate research evidence **Handouts:** • Testing Theories in Quantitative Research • Steps in Hypothesis testing • Design stage considerations in Qualitative research • Mapping Data collection and Data analysis considerations • Seven stages of Interview investigation • Analysis of paradigms and emerging research Methodologies Combining traditional and modern research • Discuss proposal
4.	**Complementary Medicine Research using Case Studies** • Placebo-controlled Explanatory randomized trial • Pragmatic randomized controlled trials • Cost effectiveness studies • Non-randomized matched cohort studies • Mixed methods • Evaluation of Public Health Epidemiological studies	Facilitated discussion: • Identification of theoretical frameworks in research and how knowledge develops. **Handouts:** • Classical theory building in Qualitative research • Different types of research questions and their suitability for randomized controlled trials • The Evidence House **Case Study 1** • **RCT- Randomised Controlled Trial** **Case study 2** • **PCERT- Placebo-controlled Explanatory randomized trial** **Case study 3** • **Mixed Methods** **Case study 4** • Public Health Epidemiological study
5.	**Evidence Review as a research tool** • Systemic Evidence review Articles • Meta-analysis Articles	Facilitated discussion of recent case studies: See also for other case work http://www.ncbbi.nlm.nih.gov/pubmed
6.	**Research Methods for the Complementary therapies** • Construction Herbal medicine • Homeopathy • Manual therapies • Acupuncture • Occidental Medicine • Naturopathy	Research articles that cover different disciplines and discuss how the methodology is different/similar.

	• Infection control and public Health research - A Complementary Medicine Perspective	
7.	**Issues for Complementary Medicine** • Measures of cost and safety • Pragmatic vs Fastidious testing • Placebo and non-placebo effects • Model validity • Rigor vs a vs relevance • Blinding and unconscious projections • The requirements of efficacy • Using traditional evidence • Reliability of evidence • Assessing the rigor of evidence	**Handouts:** • Working through the Tutorial sheet with examples of each category • Assessing the Rigor of evidence: Initial elements for consideration • Using and applying traditional evidence
	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.	**Developing the Research Project** • Visualising the Research Project • Title • Introduction and Assumptions • Literature review and Research questions • Methodology and data collect	**Class Discussion on stages of a research project**
9.	**Developing the Research Project** • Findings • Discussion and limitations • Concept maps • Conclusions • References • Evaluation	**Class Discussion on stages of a research project**
10.	**Case studies** • Placebo-controlled Explanatory randomized trial • Pragmatic randomized controlled trials • Cost effectiveness studies • Public Health Research Evaluation Case Studies	**Class Discussion and Analysis of Recent Case studies** **Assessment 2 – Group Presentation due this week (Sunday)**
11.	**Case studies** • Mixed methods	**Facilitated discussion and Analysis** See http://www.cam-research-group.co.uk/ Complementary and Integrated Medicine Research Unit. • Exploratory Sequential design
12.	**Case studies** • Public Health Research Project	Facilitated discussion and activities pertaining to "Public Health Research Project – Assessment 3"
13.	**Case studies**	Facilitated discussion and activities pertaining to "Public Health Research Project – Assessment 3"

	• Public Health Research Project	**Assessment 3 – Research Project due this week (Sunday)**
14.	**Non-Teaching Week/Practical Exam Week 1. Note that make-up classes may be scheduled in this week.**	
15.	**Non-Teaching Week/Practical Exam Week 2. Note that make-up classes may be scheduled in this week.**	
16.	**Final Exam Week 1** Please refer to your Campus Timetable for the exact time and day of the final exam NOT ALL SUBJECTS HAVE A FINAL EXAM – PLEASE REFER TO THE ASSESSMENT INFORMATION ABOVE	
17.	**Final Exam Week 2** Please refer to your Campus Timetable for the exact time and day of the final exam NOT ALL SUBJECTS HAVE A FINAL EXAM – PLEASE REFER TO THE ASSESSMENT INFORMATION ABOVE	