ENDEAVOUR College of Natural Health

SUBJECT OUTLINE

Subject Name: **Subject Code:**

Evidence Based Approaches in Complementary Medicine **SOCA321**

SECTION 1 – GENERAL INFORMATION

Award/s:		**Total Course Credit Points:**		**Level:**
	Bachelor of Complementary Medicine		48	3rd Year
Duration:	1 Semester			
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*:

☐ **On campus** ☒ **Online / Digital** ☐ **Blended** ☐ **Intensive**

Weekly Session^ Format/s - 1 session per week:

☒ eLearning modules:	Lectures: Interactive adaptive online learning modules Tutorials: can include asynchronous tutor moderated discussion forum and activities, learning journal activities or other web-based resources

*All modes are supported by the online learning management system which will include subject documents such as handouts, readings and assessment guides.

^A 'session' is made up of 3 hours of timetabled / online study time per week unless otherwise specified. Each subject has a set number of sessions as outlined above.

Study Pattern:	☒ 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 SOCQ121 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	Session Content Delivered	Due	Weighting
Written Assignment (1000 words)	1-2 & 5	1-6	Week 7	35%
Group Presentation (10 minutes; recorded)	1-2 & 5	1-7	Week 10	15%
Research Project (2000 words)	3-4	1-12	Week 13	50%
All written assessments and online quizzes are due at 11:55 p.m. Sunday and submitted through the LMS.				
Students are required to submit all assessment items with a value of greater than 15% to be eligible to receive a passing grade.				

Prescribed Readings:

Lewith, G., Jonas, W. B., & Walach, H. (Eds.). (2011). *Clinical research in complementary therapies* (2nd ed.). Elsevier Health Sciences. [ebook available]

Recommended Readings:

Bryman, A. (2016). *Social research methods* (5th ed.). Oxford University Press.

Greenhalgh, T. (2019). *How to read a paper: The basics of evidence-based medicine and healthcare* (6th ed.). John Wiley & Sons. [ebook available]

Haveman-Nies, A. (Ed.). (2017). *Epidemiology in public health practice* (2nd Rev. ed.). Wageningen Academic Publishers.

Hollway, W., & Jefferson, T. (2012). *Doing qualitative research differently: A psychosocial approach* (2nd ed.). Sage Publications. [ebook available]

Polgar, S., & Thomas, S. A. (2013). *Introduction to research in the health sciences* (6th ed.). Churchill Livingstone. [ebook available]

Webb, P. M., & Bain, C. J. (2017). *Essential epidemiology: An introduction for students and health professionals* (3rd ed.). Cambridge University Press.

Wheeldon, J., & Ahlberg, M. K. (2012). *Visualizing social science research: Maps, methods, & meaning*. Sage Publications Ltd.

Subject Content

Week	Lectures	Tutorials / Practicals
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 Complementary and Alternative Medicine (CAM) research	Activities are developed to allow the students to explore relevant concepts, expand on ideas and have peer and lecturer interaction. Activities also allow for formative assessment and feedback. Lectures and tutorials are informed and supported by the use of current relevant research papers. • Introduction to the prescribed reading
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 • Methodology • Data collection	• Advanced searching of databases to locate critical readings for research project • Establishing the eight elements for a research project (case study) • Creating a mind map and visualising how to plan a research project **Facilitated Discussion** • "How to write a synopsis for a research proposal"
3.	**Overview of Evidence Qualitative and Quantitative** Types of evidence • Randomized controlled trials • Cohort studies • Case studies	**Facilitated Discussion** • How to assess methodological quality • Understanding and interpreting statistics for the non-statistician • How to evaluate research evidence • Analysis of paradigms and emerging research

	• 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	• Methodologies • Combining traditional and modern research • Discuss proposal **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
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.ncbi.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.	**Developing the Research Project** • Visualising the research project • Title • Introduction and assumptions • Literature review and research questions • Methodology and data collection	**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 non-teaching 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 collection	**Class Discussion** • Stages of a research project
9.	**Developing the Research Project** • Findings • Discussion and limitations • Concept maps • Conclusions • References • Evaluation	**Class Discussion** • 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** • Recent case studies
11.	**Case Studies** • Mixed methods	**Facilitated Discussion and Analysis** • Exploratory sequential design
12.	**Case Studies** • Public health research project	**Facilitated Discussion and Activities** • Research project
13.	**Case Studies** • Public health research project	**Facilitated Discussion and Activities** • Research project
14.	**Non-Teaching Week/Practical Examination Week 1** Note that make-up classes may be scheduled in this week	

15.	**Non-Teaching Week/Practical Examination Week 2** Note that make-up classes may be scheduled in this week
16.	**Final Examination Week 1** There is no final exam for this subject
17.	**Final Examination Week 2** There is no final exam for this subject