



SUBJECT OUTLINE

Subject Name:

Subject Code:

Foundations of Critical Enquiry SOCQ1

SECTION 1 – GENERAL INFORMATION

Award/s:

Undergraduate Certificate in Human Biology

Total Course Credit Points:

14

Level:

1st 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 sessions 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:

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 complementary medicine and health sciences. Students will be introduced to the significance of personal values and motivation in the research process. Students will explore the range 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. Students will be able to appreciate the importance of the



research question, the method appropriate for answering that question and the quality of the research process. This is a foundational subject for the later study of all degrees.

Learning Outcomes

1. Describe research paradigms and associated research design and methodologies taking into account traditional and contemporary research evidence.
2. Identify a professional practice area of interest or an issue and incorporate knowledge of the research process.
3. Describe the nature of research including the ethics involved, different approaches utilised, and the assumptions underlying these approaches.
4. Identify the key features in qualitative and/or quantitative statistical techniques appropriate to a particular research design.

Assessment Tasks

| Type | Learning Outcomes Assessed | Session Content Delivered | Due | Weighting |
|---|----------------------------|---------------------------|---------|-----------|
| Research Question (750 words) | 1 & 2 | 1-3 | Week 5 | 20% |
| Review of quantitative methodology (1000 words) | 3 & 4 | 4-7 | Week 8 | 40% |
| Review of qualitative methodology (1000 words) | 3 & 4 | 4, 8-12 | Week 13 | 40% |

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 Reading:

Creswell, J.W., & Creswell, J.D. (2023). *Research design: Qualitative, quantitative and mixed methods approaches* (6th ed.). SAGE.

Recommended Readings:

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



Lewith, G., Jones, W.B., & Walach, H. (2010). *Clinical research in complementary therapies: Principles, problems and solutions* (2nd ed.). Elsevier Health Sciences. [\[ebook available\]](#).

Patton, M. (2015). *Qualitative research and evaluation Methods*. (4th ed.). Sage.

Wallace, B.A. (2006). *The attention revolution: Unlocking the power of the focused mind*. Wisdom Publications. [\[ebook available\]](#)

| Subject Content | | |
|-----------------|--|---|
| Week | Lectures | Tutorials / Practicals |
| 1. | Introduction (Subject Outline / Subject Aims / Assessment / Teaching Resources) Overview and expectations of the subject <ul style="list-style-type: none"> Types of knowledge and ways of knowing Introduction to data based searching skills The Four Fold Vision Quest included | <p>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.</p> <ul style="list-style-type: none"> Four Fold Vision Quest workshop: “This is a secular meditation, designed to cultivate conative intelligence, inspired by principles of Buddhist psychology” (B. A. Wallace, personal communication, May 15, 2019). Introduction to the assessments |
| 2. | Introduction to a discipline of inquiry; research problems and questions <ul style="list-style-type: none"> The importance of Epistemology Scientific knowledge and the scientific method Traditional use and evidence Research approaches Qualitative methods Quantitative methods Mixed Methods The Hierarchy of Evidence | <ul style="list-style-type: none"> The impact of a researcher's training, experience and personal values in the research process Developing a research question |
| 3. | Introduction to competing paradigms <ul style="list-style-type: none"> Overview of Research Methodologies What is Positivism? Positivist Research; what are its goals Positivist research; what are its basic assumptions Positivist Research; what are its methods What is meant by Interpretivist? Interpretivist Research; what are its goals Interpretivist research; what are its basic assumptions Interpretivist Research; what are its methods | <ul style="list-style-type: none"> Nature and purpose of ethical considerations Evidence sourcing |



| | | |
|--|---|--|
| 4. | Introduction to Research Ethics <ul style="list-style-type: none"> Ethics as a requirement for approved research Introduction to ethics and moral philosophy Ethics in research Key elements to consider in ethics 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 | <ul style="list-style-type: none"> Library Session online; narrated presentation Referencing activity |
| 5. | Evaluating Research validity and credibility <ul style="list-style-type: none"> P values Confidence intervals Standard deviations Simple statistics Mean, median and mode Figures, charts and diagnostic tables | <ul style="list-style-type: none"> Using given criteria, please evaluate competing research article Evidence sourcing |
| 6. | Quantitative research methods I <ul style="list-style-type: none"> Research Skill Development (RSD) Overview of the quantitative research process Writing research questions The Literature Review Methodologies Pilot Studies | <ul style="list-style-type: none"> Workshop quantitative research question and measurements Evidence sourcing |
| 7. | Quantitative research methods II <ul style="list-style-type: none"> Quantitative research question Data Collection Data analysis Results Conclusions of the research | <ul style="list-style-type: none"> Developing criteria check list for evaluating such qualitative research Evidence sourcing |
| NON-TEACHING WEEK (note that make-up classes may be scheduled in this week) Online students – The non-teaching week falls between Weeks 7 and 8 | | |
| 8. | Qualitative research methodology I <ul style="list-style-type: none"> Overview of the qualitative research process Writing qualitative research questions | <ul style="list-style-type: none"> Student exercise in writing a qualitative research memo Evidence sourcing |



| | | |
|-----|---|---|
| | <ul style="list-style-type: none"> ➤ Answering qualitative research question ➤ Sampling ➤ Negotiating access ➤ Data collection | |
| 9. | Qualitative research methodology II <ul style="list-style-type: none"> ➤ Coding ➤ Content Analysis ➤ Thematic Analysis ➤ Interpretation ➤ Accuracy and Quality ➤ Criteria of Evaluation ➤ Evaluating the method ➤ Evaluating the Results | <ul style="list-style-type: none"> ➤ Student exercise in writing qualitative research question ➤ Evidence sourcing |
| 10. | Research into Practice <ul style="list-style-type: none"> ➤ The evidence based medical framework and its limitations ➤ Criticisms of complementary medicine ➤ Written communication styles ➤ Complementary medicine and its relation to morality, ethics and the law | <ul style="list-style-type: none"> ➤ Scenario based exercise: Assessing appropriateness of methods and research design |
| 11. | Data collection and research results in small scale studies <ul style="list-style-type: none"> ➤ Case study: <ul style="list-style-type: none"> ○ Phenomenological inquiry ○ Narrative Analysis Hermeneutics ○ Symbolic Interaction ○ System Theory | <ul style="list-style-type: none"> ➤ Scenario based exercise: Case study |
| 12. | Reflection, Insight, and Feedback <ul style="list-style-type: none"> ➤ Critiques of evidence based medicine ➤ Generating new insight: ➤ The Four Fold Vision Quest included | <ul style="list-style-type: none"> ➤ Analyse research and interpret research results ➤ Evaluation ➤ The Four Fold Vision Quest workshop: “This is a secular meditation, designed to cultivate conative intelligence, inspired by principles of Buddhist psychology” (B. A. Wallace, personal communication, May 15, 2019). |
| 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 | Oral Presentations |



| | |
|-----|--|
| 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 |