SECTION 1 - GENERAL INFORMATION

Award/s: Total Course Credit Points: Level:
Bachelor of Health Science (Acupuncture) 128 1st Year
Bachelor of Health Science (Naturopathy) 128 1st Year
Bachelor of Health Science (Nutritional and Dietetic Medicine) 96 1st Year
Bachelor of Health Science (Myotherapy) 96 1st Year
Bachelor of Complementary Medicine 48 3rd Year

Duration: 1 Semester

Subject Coordinator: Dr Paul Strube (Adelaide campus)

Subject is: Core Subject Credit Points: 2

Student Workload:

<table>
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<tr>
<th>No. timetabled hours per week:</th>
<th>No. personal study hours per week:</th>
<th>Total hours per week:</th>
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<tr>
<td>3</td>
<td>2</td>
<td>5</td>
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Delivery Mode:

- Face to Face (On campus):
  - 1 x 2 hour lectures
  - 1 x 1 hour tutorial

- e-Learning (Online):
  - Narrated PowerPoint presentations
  - Tutorials: Asynchronous tutor moderated discussion forum and activities
  - Student handouts, web-based resources

- Intensive Delivery (Summer School):
  - Contact hours are delivered over 6 weeks with 2 x 3.5 hour days delivered per week
  - Content: Combination lecture and tutorial activities

  - Assessment: Discussion Forum Posts - Weeks 2-11; Part A - Short Response - Week 2; Part B - Database Search and Literature Retrieval - Week 3; Part C - Literature Review – Week 5; Part – D Oral Presentation of Abstract - 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**

<table>
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<tr>
<th>Type</th>
<th>Learning Outcomes Assessed</th>
<th>Session Content Delivered</th>
<th>Due</th>
<th>Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discussion Forum Posts (minimum 50 words per weekly post)</td>
<td>1-5</td>
<td>2-11</td>
<td>Weeks 2-11</td>
<td>20%</td>
</tr>
<tr>
<td>Part A - Short Responses (500 words over 5 questions)</td>
<td>1</td>
<td>1-3</td>
<td>Week 4</td>
<td>10%</td>
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<tr>
<td>Part B - Database Search and Literature Retrieval (200 words)</td>
<td>2 &amp; 5</td>
<td>1-5</td>
<td>Week 6</td>
<td>20%</td>
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<tr>
<td>Part C - Literature Review (1200 words)</td>
<td>1-5</td>
<td>1-6</td>
<td>Week 11</td>
<td>40%</td>
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<tr>
<td>Part D - Oral Presentation of Abstract (minimum 5 mins; in class or recorded)</td>
<td>1-5</td>
<td>1-12</td>
<td>Session 13 (on campus) Week 13 (online)</td>
<td>10%</td>
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All written assessments and online quizzes are due at 11:55 p.m. and submitted through the LMS

**Prescribed Readings:**


**Recommended Readings:**

### Subject Content

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<tr>
<th>Week</th>
<th>Lectures</th>
<th>Tutorials / Practicals</th>
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| 1.   | Introduction  
- Subject Outline / Subject Aims / Assessment / Teaching Resources  
- Overview and expectations of the subject  
- Types of knowledge and ways of knowing  
- Empiricism  
- Tutor directed learning activity to support students in formulating a plan to prepare for Short Responses assessment  
- Discussion Forum Post due this week | 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  
- Students consider types of knowledge utilised in Complementary and Alternative Medicine (CAM)  
- Introduction to the assessments |
| 2.   | Evidence & Research  
- 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 Short Responses assessment  
- Discussion Forum Post due this week |  
- Library Session on-line (or equivalent in class) narrated presentation  
- Retrieval skills activity to assist with Database Search and Literature Retrieval assessment  
- Discussion Forum Post due this week |
| 3.   | Publications and Literature Sources  
- Databases  
- Websites  
- Journals  
- Textbooks  
- Searching the literature  
- Library Session on-line (or equivalent in class) narrated presentation  
- Retrieval skills activity to assist with Database Search and Literature Retrieval assessment  
- Discussion Forum Post due this week |  
- Library Session on-line (or equivalent in class) narrated presentation  
- Referencing activity  
- Discussion Forum Post due this week  
- Part A - Short Responses due this week |
| 4.   | Overview of Types of Research  
- Qualitative, quantitative and mixed methods  
- Hierarchy of evidence  
- Tutor directed learning activity to support student formulating a plan to prepare for their Literature Review assessment  
- Discussion Forum Post due this week |  
- Library Session on-line (or equivalent in class) narrated presentation  
- Referencing activity  
- Discussion Forum Post due this week  
- Part A - Short Responses due this week |
| 5.   | Reviewing the Literature  
- Literature reviews  
- Types of literature reviews  
- The need for critical evaluation  
- Literature Searching  
- How to develop effective information retrieval strategies to assist with Literature Review assessment  
- Discussion Forum Post due this week |  
- Library Session on-line (or equivalent in class) narrated presentation  
- Referencing activity  
- Discussion Forum Post due this week  
- Part A - Short Responses due this week |
| 6.   | Understanding Empirical Research  
- From clinical observation to meta-analysis  
- Understanding the stages in the research process  
- Scenario based exercise: Understanding the research process  
- Discussion Forum Post due this week  
- Part B - Database Search and Literature Retrieval due this week |  
- Tutor directed learning activity to support student formulating a plan to prepare for their Literature Review assessment  
- Discussion Forum Post due this week |
| 7.   | How to write a Literature Review  
- 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 assessment  
- Discussion Forum Post due this week |  
- Tutor directed learning activity to support student formulating a plan to prepare for their Literature Review assessment  
- Discussion Forum Post due this week |
| 8.   | Methodology & Methods  
- 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 Post due this week |  
- Students answer questions relating to methods & methodology in CAM research  
- Discussion Forum Post due this week |

**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
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| 9. | **Developing understanding of research results in large scale studies** | • Students analyse research and interpret research results  
• Discussion Forum Post due this week |
|   | • P values  
• Confidence intervals  
• Standard deviations  
• Simple statistics  
• Mean, median and mode  
• Figures, charts and diagnostic tables |   |
| 10. | **Developing Understandings of Research Results in Small Scale Studies** | • Scenario based exercise: Assessing appropriateness of methods and research design  
• Discussion Forum Post due this week |
|   | • Case studies  
• Focus groups  
• Narratives  
• Comparisons  
• Themes |   |
| 11. | **Ethics in Research** | • Scenario based exercise: Case study  
• Discussion Forum Post due this week  
• Part C - Literature Review due this week |
|   | • 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 |   |
| 12. | **Research into Practice** | • Analyse research and interpret research results |
|   | • Critiques of evidence based medicine |   |
| 13. | **Review & Application of Subject Content** | Part D - Oral Presentations of Abstract |
|   | • The difference between efficacy and evidence  
• Key message: A lack of evidence is not a lack of efficacy  
• Research its benefits and drawbacks |   |
| 14. | **Non-Teaching Week/Practical Examination Week 1** | Note that make-up classes may be scheduled in this week |
|   | 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 |