

HLSC4120: Research Methodology and Design

Online

Summer 2 - 2024



THE UNIVERSITY OF
NEWCASTLE
AUSTRALIA

OVERVIEW

Course Description This course advances the student's understanding of health-related research methods and concepts. The course will explore human research ethics, qualitative research methods, and quantitative research methods. Students will read and critique both qualitative and quantitative published research.

Academic Progress Requirements Nil

Requisites This course is only available to students who are active in one of the following programs:
Graduate Certificate in Health Science [11686]
Bachelor of Health Science (Honours) [11691]
Bachelor of Medical Radiation Science (Honours) (Diagnostic Radiography) [40002]
Bachelor of Medical Radiation Science (Honours) (Radiation Therapy) [40010]
Bachelor of Medical Radiation Science (Honours) (Nuclear Medicine) [40011]
Bachelor of Midwifery (Honours) [12330]
Bachelor of Nursing (Honours) [10954]
Bachelor of Nutrition and Dietetics (Honours) [12339]
Bachelor of Physiotherapy (Honours) [12337]
Bachelor of Occupational Therapy (Honours) [12338]
Graduate Diploma in Workplace Health and Safety [12274]
Graduate Certificate in Workplace Health and Safety [12275]
Master of Workplace Health and Safety [12273]
Bachelor of Podiatric Medicine [50021]
Bachelor of Podiatric Medicine (Honours) [50022].

Assumed Knowledge A completed degree in a relevant cognate discipline or completion of two years of a 4 year degree.

Contact Hours
Online
Online Activity
Online
48 hour(s) per term starting Week 1

Unit Weighting Workload 10
Students are required to spend on average 120-140 hours of effort (contact and non-contact) including assessments per 10 unit course.

COURSE OUTLINE

CONTACTS

Course Coordinator **Online**
Dr Jennifer St George
Jennifer.StGeorge@newcastle.edu.au
(02) 4921 6690
Consultation:

Teaching Staff Other teaching staff will be advised on the course Canvas site.

School Office **School of Health Sciences**
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SYLLABUS

Course Content

1. Ethical approach to research
2. Qualitative research principles and methods
3. Quantitative research principles and methods
4. Mixed methods research
5. Critical appraisal of research

Course Learning Outcomes **On successful completion of this course, students will be able to:**

1. Describe ethical considerations pertaining to human research
2. Define, compare and contrast the common qualitative, quantitative and mixed methods research methodologies
3. Evaluate the appropriateness of common qualitative, quantitative and mixed methods research methodologies
4. Select appropriate methodologies to address a research question
5. Critically appraise qualitative, quantitative and mixed methods research

Course Materials All learning materials are online, in Modules and Course readings.

SCHEDULE

Week	Module	Topics	Related Assessment (not in due date/chronological order)
Week 1 Begins 15 Jan	Module 1 Introduction & Human Research Ethics	1. Introduction 2. Critical Appraisal 3. Human Ethics	QUIZ 1
Weeks 1-2 Begins 22 January	Module 2 Qualitative Research Methods	1. Evaluating the Qualitative Research Enquiry 2. Identifying the Qualitative Research Method 3. Evaluating Qualitative Sampling Methods 4. Determining Data Quality and Interpreting the Findings	QUIZ 2 Qualitative Critical Appraisal task
Weeks 3-4 Begins 29 January	Module 3 Quantitative Research Methods	1. Evaluating the Quantitative Research Question 2. Identifying Quantitative Research Study Types 3. Evaluating Sampling Methods 4. Identifying Variables and Constructs 5. Evaluating Data Quality 6. Interpreting Statistics in Quantitative Research	QUIZ 3 Quantitative Critical Appraisal task
Week 4 Begins 5 February	Module 4 Mixed Methods Research	1. Evaluating the Mixed Methods Research Question 2. Identifying Mixed Methods Research Designs	QUIZ 3
Examination Week Begins 12 February			

ASSESSMENTS

This course has 2 main assessments. Each assessment is described in more detail in the sections below.

	Assessment Name	Due Date	Involvement	Weighting	Learning Outcomes
1	Online quizzes	ETHICS QUIZ: due 21 Jan 2024, 23:59; available from 18 Jan 2024. QUALITATIVE METHODS QUIZ: due 29 Jan 2024, 23:59; Available from 24 Jan 2024. QUANTITATIVE METHODS QUIZ: due 16 Feb 2024, 23:59; available from 14 Feb.	Individual	15% 15% 20%	1, 2, 3, 4
2	Critical appraisal portfolio	QUALITATIVE Critical Appraisal: DUE 30 Jan 2024, 23:59, available from 23 Jan 2024 QUANTITATIVE Critical Appraisal: DUE 12 Feb 2024, 23:59; available from 5 Feb 2024	Individual	25% 25%	1, 2, 3, 4, 5

Late Submissions

The mark for an assessment item submitted after the designated time on the due date, without an approved extension of time, will be reduced by 10% of the possible maximum mark for that assessment item for each day or part day that the assessment item is late. Note: this applies equally to week and weekend days.

Assessment 1 – Online quizzes

- Description** The purpose and benefit of the quizzes is to provide the opportunity for students to keep up with their learning throughout the course and to obtain regular summative feedback on their learning.
- Weighting** **50% total**
- Assessment** **QUIZ 1 - Ethics assessment (MCQ and Short Answer) (15 marks)**
- Number of questions
 - o 4 Short answers – 12 marks
 - o 6 Quiz questions – 3 marks
 - Allowable time to complete
 - o (2 hours preparation)
 - o 60 minutes
 - Due date and period of availability
 - o See table above; **due 21 Jan 2024, 23:59; available from 18 Jan 2024.**
 - Location of the assessment details and submission portal
 - o In assignment folder on Canvas
 - Assessment criteria
 - o MCQ answers are correct or incorrect
 - o Your responses will be shown to you once, upon completion
 - o Correct answers will be shown after all students have submitted the assessment item
 - o Short Answers will be marked according to the rubric
 - o Individual feedback will not be given
- Assessment** **QUIZ 2 - Qualitative research methods assessment (15 marks)**
- Number of questions
 - o ~22 MCQ, multiple answer and matching questions (randomly drawn from larger pool)
 - Allowable time to complete
 - o 60 minutes
 - Due date and period of availability
 - o See table above; **due 29 Jan 2024, 23:59; Available from 24 Jan 2024.**
 - Location of the assessment details and submission portal
 - o In assignment folder on Canvas
 - Assessment criteria
 - o Quiz answers are correct or incorrect
 - o Your responses will be shown to you once, upon completion
 - o Correct answers will be shown after all students have submitted the assessment item
 - o Individual feedback will not be given
- Assessment** **QUIZ 3 - Quantitative & mixed methods assessment (20 marks)**
- Number of questions
 - o ~30 MCQ, multiple answer and matching questions (randomly drawn from larger pool)
 - Allowed time to complete
 - o 80 minutes
 - Due date and period of availability
 - o See table above; **due 16 Feb 2024, 23:59; available from 14 Feb.**
 - Location of the assessment details and submission portal
 - o In assignment folder on Canvas
 - Assessment criteria
 - o Quiz answers are correct or incorrect
 - o Your responses will be shown to you once, upon completion
 - o Correct answers will be shown after all students have submitted the assessment item
 - o Individual feedback will not be given.

Assessment 2 - Critical appraisal portfolio

Description	<p>Item 1: QUALITATIVE Critical Appraisal And Item 2: QUANTITATIVE Critical Appraisal</p> <p>These tasks require you to critically appraise two given research papers. Short answers and some MCQ questions are included. For each short answer question, you may use dot points. 'Yes/no' questions require a rationale response statement. Word limit per question: Do not exceed 100 words for any one answer. Some answers may be as short as 20 words, others up to 100. No references are required. You can copy and paste from the research paper to provide evidence where relevant.</p> <p>Task details on CANVAS</p>
Weighting	25% each
Due Date	<p>Item 1: QUALITATIVE Critical Appraisal: DUE 30 Jan 2024, 23:59, available from 23 Jan 2024</p> <p>Item 2: QUANTITATIVE Critical Appraisal: DUE 12 Feb 2024, 23:59; available from 5 Feb 2024</p>
Submission Method	Online in Canvas portal
Assessment Criteria	Marks will be based on how well the instructions are followed and on a demonstrated ability to critically appraise a research paper based on knowledge and material covered in the course and to convey this clearly in a well presented and articulate manner.
Return Method	Online
Feedback Provided	No Individual Feedback - General feedback to the cohort. The mark for the assignment will be posted on the Canvas 'grades' system.

ADDITIONAL INFORMATION

Grading Scheme

This course is graded as follows:

Range of Marks	Grade	Description
85-100	High Distinction (HD)	Outstanding standard indicating comprehensive knowledge and understanding of the relevant materials; demonstration of an outstanding level of academic achievement; mastery of skills*; and achievement of all assessment objectives.
75-84	Distinction (D)	Excellent standard indicating a very high level of knowledge and understanding of the relevant materials; demonstration of a very high level of academic ability; sound development of skills*; and achievement of all assessment objectives.
65-74	Credit (C)	Good standard indicating a high level of knowledge and understanding of the relevant materials; demonstration of a high level of academic achievement; reasonable development of skills*; and achievement of all learning outcomes.
50-64	Pass (P)	Satisfactory standard indicating an adequate knowledge and understanding of the relevant materials; demonstration of an adequate level of academic achievement; satisfactory development of skills*; and achievement of all learning outcomes.
0-49	Fail (FF)	Failure to satisfactorily achieve learning outcomes. If all compulsory course components are not completed the mark will be zero. A fail grade may also be awarded following disciplinary action.

*Skills are those identified for the purposes of assessment task(s).

Communication Methods

Communication methods used in this course include: ZOOM meetings, Announcements, Discussion Board, email, phone calls, and face to face meeting if required.

Course Evaluation

Each year feedback is sought from students and other stakeholders about the courses offered in the University for the purposes of identifying areas of excellence and potential improvement.

Oral Interviews (Vivas)

As part of the evaluation process of any assessment item in this course an oral examination (viva) may be conducted. The purpose of the oral examination is to verify the authorship of the material submitted in response to the assessment task. The oral examination will be conducted in accordance with the principles set out in the [Oral Examination \(viva\) Procedure](#). In cases where the oral examination reveals the assessment item may not be the student's own work the case will be dealt with under the [Student Conduct Rule](#).

Academic Misconduct

All students are required to meet the academic integrity standards of the University. These standards reinforce the importance of integrity and honesty in an academic environment. Academic Integrity policies apply to all students of the University in all modes of study and in all locations. For the Student Academic Integrity Policy, refer to <https://policies.newcastle.edu.au/document/view-current.php?id=35>.

Adverse Circumstances

The University acknowledges the right of students to seek consideration for the impact of allowable adverse circumstances that may affect their performance in assessment item(s). Applications for special consideration due to adverse circumstances will be made using the online Adverse Circumstances system where:

1. the assessment item is a major assessment item; or
2. the assessment item is a minor assessment item and the Course Co-ordinator has specified in the Course Outline that students may apply the online Adverse Circumstances system;
3. you are requesting a change of placement; or
4. the course has a compulsory attendance requirement.

Before applying you must refer to the Adverse Circumstance Affecting Assessment Items Procedure available at:

<https://policies.newcastle.edu.au/document/view-current.php?id=236>

**Important Policy
Information**

The Help button in the Canvas Navigation menu contains helpful information for using the Learning Management System. Students should familiarise themselves with the policies and procedures at <https://www.newcastle.edu.au/current-students/respect-at-uni/policies-and-procedures> that support a safe and respectful environment at the University.

This course outline was approved by the Head of School. No alteration of this course outline is permitted without Head of School approval. If a change is approved, students will be notified and an amended course outline will be provided in the same manner as the original.

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