

HLSC4120: Research Methodology and Design

Online

Semester 1 - 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]

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: By Phone, email, ZOOM, in person
Teaching Staff	Other teaching staff will be advised on the course Canvas site.
School Office	School of Health Sciences Room 302, ICT Building Callaghan SchoolHealthSciences@newcastle.edu.au +61 2 4921 7053

SYLLABUS

Course Content	<ol style="list-style-type: none">1. Ethical approach to research2. Qualitative research principles and methods3. Quantitative research principles and methods4. Mixed methods research5. Critical appraisal of research
Course Learning Outcomes	On successful completion of this course, students will be able to: <ol style="list-style-type: none">1. Describe ethical considerations pertaining to human research2. Define, compare and contrast the common qualitative, quantitative and mixed methods research methodologies3. Evaluate the appropriateness of common qualitative, quantitative and mixed methods research methodologies4. Select appropriate methodologies to address a research question5. Critically appraise qualitative, quantitative and mixed methods research
Course Materials	All learning materials are online in course readings etc.

SCHEDULE

Sem 1 Week	Week Begins 2024	Module topic	Sem 1 Assessable activities
1	26 Feb	ETHICS 1 – Principles, Risk & Consent	
2	4 Mar	QUANT 1 - Evaluating Quantitative Research Questions	QUIZ 1 - Ethics (15%)
3	11 March	QUANT 2 - Identifying Quantitative Research Study Types	
4	18 Mar	QUANT 3 - Evaluating Sampling Methods	
5	25 Mar	QUANT 4 - Identifying Variables and constructs	
6	1 April	QUANT 5 - Evaluating Data Quality in Quantitative Research	
7	8 April	QUANT 6 - Interpreting Statistics in Quantitative research	QUIZ 2 Quant (15%)
	15 April	Mid-Term Break	CRITICAL APPRAISAL Quant (25%)
	22 April	Mid-Term Break	
8	29 April	QUAL 1 - Evaluating the Qualitative Research Enquiry	
9	6 May	QUAL 2 - Identifying the Qualitative Research Method	
10	13 May	QUAL 3 - Evaluating Qualitative Sampling Methods	
11	20 May	QUAL 4 - Determining Data Quality and Interpreting the Findings	
12	27 May	MM1 - Evaluating the MMR research question	QUIZ 3 Qual (15%)
13	3 June	MM2 - Describing the MMR Design	CRITICAL APPRAISAL Qual (25%)
EXAM week	10 June		QUIZ 4 MMR (5%)

ASSESSMENTS

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

	Assessment Name	Due Date	Involvement	Weighting	Learning Outcomes
1	Online quizzes x 4	<p>QUIZ 1 - Ethics (15%) From: 1 Mar 2024, 00:00 Due: 6 Mar 2024, 23:59</p> <p>QUIZ 2 Quant (15%) From: 12 Apr 2024, 00:00 Due: 14 Apr 2024, 23:59</p> <p>QUIZ 3 Qual (15%) From: 27 May 2024, 00:00 Due: 29 May 2024, 23:59</p> <p>QUIZ 4 MMR (5%) From: 10 Jun 2024, 00:00 Due: 12 Jun 2024, 23:59</p>	Individual	50%	1, 2, 3, 4
2	Critical appraisal portfolio	<p>CRITICAL APPRAISAL Quant (25%) From: 1 Apr 2024, 00:00 Due: 17 Apr 2024, 23:59</p> <p>CRITICAL APPRAISAL Qual (25%) From: 13 May 2024, 00:00 Due: 5 Jun 2024, 23:59</p>	Individual	50%	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

Assessment Type Description

Quiz
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 Assessment

- 50% total
- 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
 - Location of the assessment details and submission portal
 - o In assignment folder on Canvas
 - Assessment criteria
 - o MCQ answers are correct or incorrect

- Your responses will be shown to you once, upon completion
- Correct answers will be shown after all students have submitted the assessment item
- Short Answers will be marked according to the rubric
- Individual feedback will not be given

Assessment

QUIZ 2 - Quantitative assessment (15 marks)

- Number of questions
 - ~25 MCQ, multiple answer and matching questions (randomly drawn from larger pool)
- Allowed time to complete
 - 80 minutes
- Due date and period of availability
 - See table above;
- Location of the assessment details and submission portal
 - In assignment folder on Canvas
- Assessment criteria
 - Quiz answers are correct or incorrect
 - Your responses will be shown to you once, upon completion
 - Correct answers will be shown after all students have submitted the assessment item
 - Individual feedback will not be given.

Assessment

QUIZ 3 - Qualitative research methods assessment (15 marks)

- Number of questions
 - ~22 MCQ, multiple answer and matching questions (randomly drawn from larger pool)
- Allowable time to complete
 - 60 minutes
- Due date and period of availability
 - See table above;
- Location of the assessment details and submission portal
 - In assignment folder on Canvas
- Assessment criteria
 - Quiz answers are correct or incorrect
 - Your responses will be shown to you once, upon completion
 - Correct answers will be shown after all students have submitted the assessment item
 - Individual feedback will not be given

Assessment

QUIZ 4 – Mixed method research methods assessment (5 marks)

- Number of questions
 - ~10 MCQ, multiple answer and matching questions (randomly drawn from larger pool)
- Allowed time to complete
 - 30 minutes
- Due date and period of availability
 - See table above;
- Location of the assessment details and submission portal
 - In assignment folder on Canvas
- Assessment criteria
 - Quiz answers are correct or incorrect
 - Your responses will be shown to you once, upon completion
 - Correct answers will be shown after all students have submitted the assessment item
 - Individual feedback will not be given.

Assessment 2 - Critical appraisal portfolio

Assessment Type	Portfolio
Description	Item 1: QUANTITATIVE Critical Appraisal And Item 2: QUALITATIVE Critical Appraisal 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. Task details on CANVAS
Weighting	50% total, 25% each.
Due Date	Item 1: QUANTITATIVE Critical Appraisal: see table above Item 2: QUALITATIVE Critical Appraisal: see table above
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	Some Individual Feedback and General feedback to the cohort.

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: email, check-ins (ZOOM), Discussion Board, Announcements.

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/no-room-for/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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