

NUT503 Research Design

School: School of Health - Nutrition and Dietetics

2025 | Semester 2

Online

ONLINE

You can do this course without coming onto campus, unless your program has specified a mandatory onsite requirement.

Please go to usc.edu.au for up to date information on the teaching sessions and campuses where this course is usually offered.

1. What is this course about?

1.1. Description

In this course you will begin to apply a range of appropriate health research and evaluation methodologies in practice, inclusive of quantitative and qualitative research methods. You will gain an understanding of ethical processes and culturally safe approaches to research. The course provides a foundation for further research pathways.

1.2. How will this course be delivered?

ACTIVITY	HOURS	BEGINNING WEEK	FREQUENCY
ONLINE			
Learning materials – A combination of online materials, readings and associated activities	1hr	Week 1	10 times
Tutorial/Workshop 1 – Online workshop	3hrs	Week 1	12 times
Independent Study/Research – Meetings with your group in relations to assigned course tasks.	1hr	Week 2	10 times

1.3. Course Topics

- Introduction to research design
- Reviewing and critiquing the literature
- Writing a literature review
- Developing a research proposal
- Research methodology
- Quantitative and qualitative methods
- Human ethics requirements
- Culturally safe approaches to research
- Research in practice

2. What level is this course?

500 Level (Advanced)

Engaging with new discipline knowledge and skills at an advanced level or deepening existing knowledge and skills within a discipline. Independent application of knowledge and skills in unfamiliar contexts.

3. What is the unit value of this course?

12 units

4. How does this course contribute to my learning?

COURSE LEARNING OUTCOMES	GRADUATE QUALITIES MAPPING	PROFESSIONAL STANDARD MAPPING *
On successful completion of this course, you should be able to...	Completing these tasks successfully will contribute to you becoming...	Dietitians Australia
1 Assemble a critical and systematic review, analysis, consolidation and synthesis of research literature using established methods and present in a professional manner	Knowledgeable Creative and critical thinker	1.4.4, 1.4, 2.1.1, 2.1.3, 2.1, 3.1.4, 3.1
2 Design a research project from existing identified literature gaps applying appropriate research methods and ethical principles to provide a solution to a complex nutrition problem.	Creative and critical thinker Ethical Sustainability-focussed	1.2.1, 1.2.3, 1.4.3, 1.2, 1.4, 3.1.1, 3.1.2, 3.1.4, 3.1
3 Reflect on research practice and articulate the mentoring and supervision process.	Empowered Ethical	1.1.3, 1.2.1, 1.3.4, 1.1, 1.2, 1.3, 3.1.1, 3.1.2, 3.1.5, 3.1
4 Demonstrate recognition of cultural identities and needs of diverse populations across research practices.	Empowered	1.5.3, 1.5

* Competencies by Professional Body

CODE	COMPETENCY
DIETITIANS AUSTRALIA	
1.4.4	Demonstrates management: Utilises relevant technology and equipment efficiently, effectively and safely
1.2.1	Demonstrates ethical and legal practice: Exercises professional duty of care in accordance with relevant codes of conduct, ethical requirements, and other accepted protocols
1.2.3	Demonstrates ethical and legal practice: Prepares, stores and transmits accurate and timely documentation according to accepted standards
1.4.3	Demonstrates management: Identifies and assesses risks, incidents and errors, follows relevant protocols, and develops basic risk, incident and error management strategies for services
1.1.3	Demonstrates safe practice: Consistently demonstrates reflective practice in collaboration with supervisors, peers and mentors
1.3.4	Demonstrates leadership: Participates in supervision, teaching and mentoring processes with peers, students and colleagues
1.5.3	Demonstrates cultural safety and responsiveness: Applies evidence- and strengths-based best practice approaches in Aboriginal and Torres Strait Islander health care, valuing Aboriginal and Torres Strait Islander ways of knowing, being and doing
1.1	Professional Practice: Demonstrates safe practice
1.2	Professional Practice: Demonstrates ethical and legal practice
1.3	Professional Practice: Demonstrates leadership
1.4	Professional Practice: Demonstrates management
1.5	Professional Practice: Demonstrates cultural safety and responsiveness
2.1.1	Adopts an evidence-based approach to dietetic practice: Adopts a questioning and critical approach in all aspects of practice
2.1.3	Adopts an evidence-based approach to dietetic practice: Systematically searches for, evaluates, interprets and applies findings from food, nutrition, dietetic, social, behavioural and education sciences into dietetic practice

CODE	COMPETENCY
2.1	Expert Practice: Adopts an evidence-based approach to dietetic practice
3.1.4	Conducts research, evaluation, and quality management processes: Accurately documents and disseminates research, evaluation, and quality-management findings
3.1.1	Conducts research, evaluation, and quality management processes: Identifies and selects appropriate research, evaluation and quality-management methods to advance the practice of dietetics
3.1.2	Conducts research, evaluation, and quality management processes: Applies ethical processes to research, evaluation, and quality management
3.1.5	Conducts research, evaluation, and quality management processes: Translates the implications of research findings for dietetic practice, advocacy and key stakeholders
3.1	Research Practice: Conducts research, evaluation, and quality management processes

5. Am I eligible to enrol in this course?

Refer to the [UniSC Glossary of terms](#) for definitions of “pre-requisites, co-requisites and anti-requisites”.

5.1. Pre-requisites

Enrolled in MC001

5.2. Co-requisites

Not applicable

5.3. Anti-requisites

Not applicable

5.4. Specific assumed prior knowledge and skills (where applicable)

Not applicable

6. How am I going to be assessed?

6.1. Grading Scale

Standard Grading (GRD)

High Distinction (HD), Distinction (DN), Credit (CR), Pass (PS), Fail (FL).

6.2. Details of early feedback on progress

In week 3 you will submit the draft aim of your literature review, a search strategy for one database, and a data extraction table including data from two relevant primary studies. This submission will include brief feedback from your research mentor. This will form the basis for Task 1: Literature review.

6.3. Assessment tasks

DELIVERY MODE	TASK NO.	ASSESSMENT PRODUCT	INDIVIDUAL OR GROUP	WEIGHTING %	WHAT IS THE DURATION / LENGTH?	WHEN SHOULD I SUBMIT?	WHERE SHOULD I SUBMIT IT?
All	1a	Activity Participation	Group	0%	10 minutes	Week 3	In Class
All	1b	Artefact - Technical and Scientific	Individual	10%	1000 words	Week 4	Online Assignment Submission with plagiarism check
All	1c	Literature Review (or component)	Group	25%	3000 +/- 10% words	Week 8	Online Assignment Submission with plagiarism check
All	2a	Activity Participation	Individual	0%	10-minutes	Week 10	In Class
All	2b	Artefact - Technical and Scientific	Group	25%	2000 words	Week 12	Online Assignment Submission with plagiarism check
All	3	Oral	Individual	40%	20 - 30 minutes	Exam Period	To be Negotiated

All - Assessment Task 1a: Component of Literature review

GOAL:	To illustrate your ability to systematically identify relevant literature to answer a research question.		
PRODUCT:	Activity Participation		
FORMAT:	In class		
CRITERIA:	No.		Learning Outcome assessed
	1	Utilising appropriate technology and software programs to identify relevant scientific literature.	1
	2	Development of a research question and objectives to enhance understanding of the existing body of evidence on a nutrition-related topic.	1
GENERIC SKILLS:	Communication, Collaboration, Applying technologies		

All - Assessment Task 1b: Critical Appraisal

GOAL:	To appraise, interpret and integrate existing evidence in the field of dietetic practice.		
PRODUCT:	Artefact - Technical and Scientific		
FORMAT:	Find more information in your task instruction sheet on Canvas.		
CRITERIA:	No.		Learning Outcome assessed
	1	Ability to critically appraise scientific literature using an appropriate tool.	1
	2	Synthesise and interpret the literature on a relevant nutrition-related topic.	1
GENERIC SKILLS:	Communication, Problem solving		

All - Assessment Task 1c: Literature review

GOAL:	The goal of this assessment is to provide a foundation for your research proposal. You will apply your knowledge of research principles and methods to critically and systematically review, analyse, consolidate and synthesise the literature to demonstrate a broad understanding of your allocated research topic.		
PRODUCT:	Literature Review (or component)		
FORMAT:	You will be assigned a research group and topic at the beginning of the course. You will investigate the evidence using a systematic process to search credible research databases and critically review, analyse, consolidate and synthesis the literature to write a coherent well-structured literature review.		
CRITERIA:	No.		Learning Outcome assessed
	1	Ability to review, analyse, consolidate and synthesise the literature applying a knowledge of research methods and paradigms to existing research	1
	2	Critical thinking and judgement in developing understanding of the topic and identifying directions for research	1
	3	Logical sequence, flow, structure and clarity to writing and presented in an appropriate professional style	1
GENERIC SKILLS:	Communication, Collaboration, Problem solving, Organisation, Information literacy		

All - Assessment Task 2a: Component of Research Proposal

GOAL:	To provide an update on progress with development of your research proposal in class.		
PRODUCT:	Activity Participation		
FORMAT:	See task instruction sheet in Canvas for more information on the format.		
CRITERIA:	No.		Learning Outcome assessed
	1	Identify appropriate research question, aim, and objectives to investigate an identified gap in the literature.	2
	2	Identify appropriate research methodology to answer a specific research question.	2
GENERIC SKILLS:	Communication, Collaboration, Problem solving		

All - Assessment Task 2b: Research proposal

GOAL:	Using your research topic from task 1 you will work in a group to develop and produce a research proposal. You will draw from the evidence in your literature review to provide a rationale for the research design.		
PRODUCT:	Artefact - Technical and Scientific		
FORMAT:	Find more information of the task format in the instruction sheet on Canvas.		
CRITERIA:	No.		Learning Outcome assessed
	1	Critical reasoning regarding justification for the project based on gaps in the current literature	1
	2	Definition of research aims and objectives and an understanding and application of research design concepts	2
	3	Selection of appropriate methods for collection, analysis and interpretation of qualitative and/or quantitative data	2 4
	4	An understanding of ethical and culturally safe research principles and procedures that will lead to a viable, achievable and timely research project, and outline of expected outcomes	4
	5	Presentation and clarity of communication	2
GENERIC SKILLS:	Communication, Collaboration, Problem solving, Organisation		

All - Assessment Task 3: Oral defence

GOAL:	The goal of this assessment is to demonstrate your ability to share research and information to support sound decision making and disseminate research through effective communication. This assessment task enables you to communicate and reflect on the various research tasks you undertook as part of this course.		
PRODUCT:	Oral		
FORMAT:	You will participate in an interactive oral interview. You are expected to answer questions that are based on the research project you have worked on during this course. The interview will be up to 30 minutes in duration.		
CRITERIA:	No.		Learning Outcome assessed
	1	Describes the relevance and outcomes of the research tasks, with self-reflection on individual participation	3
	2	Demonstrates an understanding of the current evidence, the relationship to the research proposal including the aims and objectives, methodology and methods, expected outcomes and limitations	3
	3	Communicates recognition of cultural identities and divers population needs within research practices	4
GENERIC SKILLS:	Communication, Problem solving		

6.4. Assessment to competency mapping

PROGRAMME DELIVERY MODE	ASSESSMENT TYPE	TITLE	COMPETENCY	TEACHING METHODS
NATIONAL COMPETENCY STANDARDS FOR DIETITIANS IN AUSTRALIA (2021)				
All delivery modes	Activity Participation	Component of Literature review	1.4.4	Taught, Practiced, Assessed
			2.1.1	Taught, Practiced, Assessed
		Component of Research Proposal	3.1.1	Taught, Practiced, Assessed
	Artefact - Technical and Scientific	Critical Appraisal	2.1.1	Taught, Practiced, Assessed
			2.1.3	Taught, Practiced, Assessed
		Research proposal	1.2.1	Taught, Practiced, Assessed
			1.2.3	Taught, Practiced, Assessed
			1.4.3	Taught, Practiced, Assessed
			3.1.1	Taught, Practiced, Assessed
			3.1.2	Taught, Practiced, Assessed
	Literature Review (or component)	Literature review	1.4.4	Taught, Practiced, Assessed
			2.1.1	Taught, Practiced, Assessed
			2.1.3	Taught, Practiced, Assessed
			3.1.4	Taught, Practiced, Assessed
	Oral	Oral defence	1.1.3	Practiced, Assessed
			1.2.1	Taught, Practiced, Assessed
			1.3.4	Taught, Practiced, Assessed
			1.5.3	Taught, Practiced, Assessed
			3.1.1	Taught, Practiced, Assessed
			3.1.2	Taught, Practiced, Assessed
			3.1.5	Taught, Practiced, Assessed

7. Directed study hours

A 12-unit course will have total of 150 learning hours which will include directed study hours (including online if required), self-directed learning and completion of assessable tasks. Student workload is calculated at 12.5 learning hours per one unit.

8. What resources do I need to undertake this course?

Please note: Course information, including specific information of recommended readings, learning activities, resources, weekly readings, etc. are available on the course Canvas site– Please log in as soon as possible.

8.1. Prescribed text(s) or course reader

Please note that you need to have regular access to the resource(s) listed below. Resources may be required or recommended.

REQUIRED?	AUTHOR	YEAR	TITLE	EDITION	PUBLISHER
Recommended	Pranee Liamputtong	2017	Research Methods in Health	3rd edition	Oxford University Press, USA
Required	John W. Creswell,J. David Creswell	2018	Research Design	5th Edition.	SAGE Publications, Incorporated

8.2. Specific requirements

Not applicable

9. How are risks managed in this course?

Health and safety risks for this course have been assessed as low. It is your responsibility to review course material, search online, discuss with lecturers and peers and understand the health and safety risks associated with your specific course of study and to familiarise yourself with the University's general health and safety principles by reviewing the [online induction training for students](#), and following the instructions of the University staff.

10. What administrative information is relevant to this course?

10.1. Assessment: Academic Integrity

Academic integrity is the ethical standard of university participation. It ensures that students graduate as a result of proving they are competent in their discipline. This is integral in maintaining the value of academic qualifications. Each industry has expectations and standards of the skills and knowledge within that discipline and these are reflected in assessment.

Academic integrity means that you do not engage in any activity that is considered to be academic fraud; including plagiarism, collusion or outsourcing any part of any assessment item to any other person. You are expected to be honest and ethical by completing all work yourself and indicating in your work which ideas and information were developed by you and which were taken from others. You cannot provide your assessment work to others. You are also expected to provide evidence of wide and critical reading, usually by using appropriate academic references.

In order to minimise incidents of academic fraud, this course may require that some of its assessment tasks, when submitted to Canvas, are electronically checked through Turnitin. This software allows for text comparisons to be made between your submitted assessment item and all other work to which Turnitin has access.

10.2. Assessment: Additional Requirements

Eligibility for Supplementary Assessment

Your eligibility for supplementary assessment in a course is dependent of the following conditions applying:

- (a) The final mark is in the percentage range 47% to 49.4%; and
- (b) The course is graded using the Standard Grading scale

Your eligibility for supplementary assessment in a course is dependent of the following conditions applying:

- The final mark is in the percentage range 47% to 49.4%
- The course is graded using the Standard Grading scale
- You have not failed an assessment task in the course due to academic misconduct

10.3. Assessment: Submission penalties

Late submissions may be penalised up to and including the following maximum percentage of the assessment task's identified value, with weekdays and weekends included in the calculation of days late:

- (a) One day: deduct 5%;
- (b) Two days: deduct 10%;
- (c) Three days: deduct 20%;
- (d) Four days: deduct 40%;
- (e) Five days: deduct 60%;
- (f) Six days: deduct 80%;
- (g) Seven days: A result of zero is awarded for the assessment task.

The following penalties will apply for a late submission for an online examination:

Less than 15 minutes: No penalty

From 15 minutes to 30 minutes: 20% penalty

More than 30 minutes: 100% penalty

10.4. SafeUniSC

UniSC is committed to a culture of respect and providing a safe and supportive environment for all members of our community. For immediate assistance on campus contact SafeUniSC by phone: [07 5430 1168](tel:0754301168) or using the [SafeZone](#) app. For general enquires contact the SafeUniSC team by phone [07 5456 3864](tel:0754563864) or email safe@usc.edu.au.

The SafeUniSC Specialist Service is a Student Wellbeing service that provides free and confidential support to students who may have experienced or observed behaviour that could cause fear, offence or trauma. To contact the service call [07 5430 1226](tel:0754301226) or email studentwellbeing@usc.edu.au.

10.5. Study help

For help with course-specific advice, for example what information to include in your assessment, you should first contact your tutor, then your course coordinator, if needed.

If you require additional assistance, the Learning Advisers are trained professionals who are ready to help you develop a wide range of academic skills. Visit the [Learning Advisers](#) web page for more information, or contact Student Central for further assistance: +61 7 5430 2890 or studentcentral@usc.edu.au.

10.6. Wellbeing Services

Student Wellbeing provide free and confidential counselling on a wide range of personal, academic, social and psychological matters, to foster positive mental health and wellbeing for your academic success.

To book a confidential appointment go to [Student Hub](#), email studentwellbeing@usc.edu.au or call 07 5430 1226.

10.7. AccessAbility Services

Ability Advisers ensure equal access to all aspects of university life. If your studies are affected by a disability, learning disorder mental health issue, injury or illness, or you are a primary carer for someone with a disability or who is considered frail and aged, [AccessAbility Services](#) can provide access to appropriate reasonable adjustments and practical advice about the support and facilities available to you throughout the University.

To book a confidential appointment go to [Student Hub](#), email AccessAbility@usc.edu.au or call 07 5430 2890.

10.8. Links to relevant University policy and procedures

For more information on Academic Learning & Teaching categories including:

- Assessment: Courses and Coursework Programs
- Review of Assessment and Final Grades
- Supplementary Assessment
- Central Examinations
- Deferred Examinations
- Student Conduct
- Students with a Disability

For more information, visit <https://www.usc.edu.au/explore/policies-and-procedures#academic-learning-and-teaching>

10.9. Student Charter

UniSC is committed to excellence in teaching, research and engagement in an environment that is inclusive, inspiring, safe and respectful. The [Student Charter](#) sets out what students can expect from the University, and what in turn is expected of students, to achieve these outcomes.

10.10.General Enquiries

In person:

- **UniSC Sunshine Coast** - Student Central, Ground Floor, Building C, 90 Sippy Downs Drive, Sippy Downs
- **UniSC Moreton Bay** - Service Centre, Ground Floor, Foundation Building, Gympie Road, Petrie
- **UniSC SouthBank** - Student Central, Building A4 (SW1), 52 Merivale Street, South Brisbane
- **UniSC Gympie** - Student Central, 71 Cartwright Road, Gympie
- **UniSC Fraser Coast** - Student Central, Student Central, Building A, 161 Old Maryborough Rd, Hervey Bay
- **UniSC Caboolture** - Student Central, Level 1 Building J, Cnr Manley and Tallon Street, Caboolture

Tel: +61 7 5430 2890

Email: studentcentral@usc.edu.au