



UNSW Course Outline

BENV4000 Research Methods in the Built Environment - 2024

Published on the 23 May 2024

General Course Information

Course Code : BENV4000

Year : 2024

Term : Term 2

Teaching Period : T2

Is a multi-term course? : No

Faculty : Faculty of Arts, Design and Architecture

Academic Unit : School of Built Environment

Delivery Mode : In Person

Delivery Format : Standard

Delivery Location : Kensington

Campus : Sydney

Study Level : Undergraduate

Units of Credit : 6

Useful Links

[Handbook Class Timetable](#)

Course Details & Outcomes

Course Description

Research Methods in the Built Environment provides an introduction to the research process, qualitative and quantitative research methods, and mixed methods research. The course also covers the basic techniques of survey design, data collection and analysis, and introductory

statistics, which are an integral component of a built environment graduate's skill set. You will learn the fundamentals of research, which include processes such as: the formulation of a research problem, articulating research aims and objectives, review of previous studies and literature, construction of a research design, including the methods and data collection tools and techniques, methods of data analysis and interpretation and discussion of research findings. In addition, you will learn about research integrity, ethics consideration, and suitable referencing style. Through the course, you will develop the knowledge and skills required for carrying out a research project in the built environment.

Course Learning Outcomes

Course Learning Outcomes
CL01 : Evaluate different types of research designs and methods relevant to the built environment.
CL02 : Produce a literature review on a chosen research topic.
CL03 : Apply knowledge of academic integrity and ethical considerations to the research process.
CL04 : Produce a research proposal addressing research aims, objectives and questions or hypotheses.
CL05 : Analyse qualitative and quantitative data using appropriate software.

Course Learning Outcomes	Assessment Item
CL01 : Evaluate different types of research designs and methods relevant to the built environment.	<ul style="list-style-type: none"> • Summary Report • Proposal Report
CL02 : Produce a literature review on a chosen research topic.	<ul style="list-style-type: none"> • Proposal Report
CL03 : Apply knowledge of academic integrity and ethical considerations to the research process.	<ul style="list-style-type: none"> • Proposal Report
CL04 : Produce a research proposal addressing research aims, objectives and questions or hypotheses.	<ul style="list-style-type: none"> • Data Report • Proposal Report
CL05 : Analyse qualitative and quantitative data using appropriate software.	<ul style="list-style-type: none"> • Data Report

Learning and Teaching Technologies

Moodle - Learning Management System

Assessments

Assessment Structure

Assessment Item	Weight	Relevant Dates
Summary Report Assessment Format: Individual	10%	Due Date: Week 3: 10 June - 16 June
Proposal Report Assessment Format: Individual	40%	Due Date: Week 5: 24 June - 30 June
Data Report Assessment Format: Individual	50%	Due Date: Week 10: 29 July - 04 August

Assessment Details

Summary Report

Assessment Overview

You will produce a summary report on your research project. Grading will be done against assessment criteria, accompanied by written feedback.

Course Learning Outcomes

- CL01 : Evaluate different types of research designs and methods relevant to the built environment.

Detailed Assessment Description

Week 3; 5:00 pm Wednesday

Submission notes

Due Wednesday at 5:00 pm

Assignment submission Turnitin type

This assignment is submitted through Turnitin and students can see Turnitin similarity reports.

Proposal Report

Assessment Overview

You will write a research proposal that includes a comprehensive review of the relevant literature. Grading will be done against assessment criteria, accompanied by written feedback.

Course Learning Outcomes

- CL01 : Evaluate different types of research designs and methods relevant to the built environment.
- CL02 : Produce a literature review on a chosen research topic.

- CL03 : Apply knowledge of academic integrity and ethical considerations to the research process.
- CL04 : Produce a research proposal addressing research aims, objectives and questions or hypotheses.

Assignment submission Turnitin type

This assignment is submitted through Turnitin and students can see Turnitin similarity reports.

Data Report

Assessment Overview

You will analyse and interpret data addressing your research question, together with conclusions and recommendations. Grading will be done against assessment criteria, accompanied by written feedback..

Course Learning Outcomes

- CL04 : Produce a research proposal addressing research aims, objectives and questions or hypotheses.
- CL05 : Analyse qualitative and quantitative data using appropriate software.

Submission notes

Due Wednesday at 5:00 pm

Assignment submission Turnitin type

This assignment is submitted through Turnitin and students can see Turnitin similarity reports.

General Assessment Information

For assessment tasks in this course, you may use AI-based software to research and prepare prior to writing your assessment. You are permitted to use standard editing and referencing functions in word processing software in the creation of your submission (note: this is limited to spelling and grammar checking and reference citation generation). You must not use any functions that generate or paraphrase or translate passages of text, whether based on your own work or not. Please note that your submission will be passed through an AI-generated text detection tool. If your marker has concerns that your answer contains passages of AI-generated text you may be asked to explain your work. If you are unable to satisfactorily demonstrate your understanding of your submission you may be referred to UNSW Conduct & Integrity Office for investigation for academic misconduct and possible penalties.

Course Schedule

Teaching Week/Module	Activity Type	Content
Week 0 : 20 May - 26 May	Activity	<p>Introduction to research resources</p> <ul style="list-style-type: none"> • Use digital databases, research training and upskilling • Topic and keyword selections, aim, objectives, research questions and 'summary' components. <p>Research timeline - Justification of time allocation for each task; risk assessment</p>
Week 2 : 3 June - 9 June	Activity	<p>Literature Review, Conceptual Framework and Digital-based Research Topics</p> <ul style="list-style-type: none"> • Making sense of thesis writing, Tips for thesis management and time management; writing problem statements • Introduction to digital platforms, including Virtual Reality, BIM and GIS applications • Theoretical and conceptual framework • Types of literature review • Referencing, citation and plagiarism • Data collection methods: Surveys, interviews and focus groups. Primary and secondary sources. • Data analysis overview: Statistical and thematic analysis • Ethics and integrity
Week 3 : 10 June - 16 June	Activity	<p>Critical Literature Review and Overall Research Methods</p> <ul style="list-style-type: none"> • The Literature review: writing about literature, organising and structuring • Research design: Paradigms, hypotheses and propositions Research approaches: Qualitative, Experimental; Quantitative; Ethnography; Narrative; Phenomenological; Grounded Theory; Case Study • Qualitative research characteristics and types • Data collection methods • Qualitative data analysis: Textual data and write-up
Week 4 : 17 June - 23 June	Activity	<p>Proposal Development and Sampling</p> <ul style="list-style-type: none"> • Academic writing for proposal development • Quantitative research characteristics and components • Descriptive and inferential statistics • Sampling and measurement <p>Quantitative data analysis: Representation of data and normal distribution. Visualisation of results and write-up</p>
Week 5 : 24 June - 30 June	Activity	<p>Mixed-methods research and advanced digital technologies</p> <ul style="list-style-type: none"> • The nature of mixed-methods research • Mixed-method strategies • Introduction to platforms to build innovative 3D geospatial • Data collection procedures • Mixed-methods analysis: Combination of qualitative and quantitative data sources • Open data and digital platforms • Data mining and data management
Week 6 : 1 July - 7 July	Activity	Flexibility Week --no scheduled classes
Week 7 : 8 July - 14 July	Activity	<p>Digital Technology and Data</p> <ul style="list-style-type: none"> • BIM, GIS and Virtual Reality as research tools • Automated and manual coding • Deductive and inductive coding • Hierarchical coding frame
Week 8 : 15 July - 21 July	Activity	<p>Coding and qualitative data analysis</p> <ul style="list-style-type: none"> • Identification of concepts and issues • Cross-checking and coding decisions • Thematic analysis and maps
Week 9 : 22 July - 28 July	Activity	<p>Quantitative data analysis</p> <ul style="list-style-type: none"> • Hypothesis Testing, Statistical Significance, • t-test, and ANOVA • Chi-square and Correlation
Week 10 : 29 July - 4 August	Activity	<p>Writing Report</p> <ul style="list-style-type: none"> • Overview of Validity, reliability and trustworthiness • Bivariate and multi-variable regression

Attendance Requirements

You are expected to be regular and punctual in attendance at all classes for the School of Built Environment courses in which you are enrolled. If and where individual courses have specific attendance requirements, these will be stated in the course outline.

If you do not attend, engage, or participate in scheduled class activities, including lectures, tutorials, studios, labs, etc, you run the risk of failing a course.

If illness or unexpected and beyond your control circumstances prevent you from completing a task on time, or substantially disturb your assessment performance, you should apply for [Special Consideration](#), as soon as practicable, accompanied by appropriate documentation.

No special consideration will be provided if you miss out on essential course information and materials, or if you miss assessment tasks and deadlines due to unexplained absences or an unapproved lack of attendance.

You may be advised by the Course Convenor to withdraw from the course if significant learning activities are missed.

Staff Details

Position	Name	Email	Location	Phone	Availability	Equitable Learning Services Contact	Primary Contact
Convenor	Samad Mohammad Ebrahimzade Sepasgozar		Room 3004, Anita B Lawrence Building		please email me for an appointment	No	Yes

Other Useful Information

Academic Information

Due to evolving advice by NSW Health, students must check for updated information regarding online learning for all Arts, Design and Architecture courses this term (via Moodle or course information provided).

Please see: <https://www.unsw.edu.au/arts-design-architecture/student-life/resources-support/protocols-guidelines> for essential student information relating to:

- UNSW and Faculty policies and procedures;
- Student Support Services;
- Dean's List;
- review of results;
- credit transfer;
- cross-institutional study and exchange;
- examination information;
- enrolment information;
- Special Consideration in the event of illness or misadventure;
- student equity and disability;

And other essential academic information.

Academic Honesty and Plagiarism

Plagiarism is using the words or ideas of others and presenting them as your own. It can take many forms, from deliberate cheating to accidentally copying from a source without acknowledgement.

UNSW groups plagiarism into the following categories:

- Copying: Using the same or very similar words to the original text or idea without acknowledging the source or using quotation marks. This includes copying materials, ideas or concepts from a book, article, report or other written document, presentation, composition, artwork, design, drawing, circuitry, computer program or software, website, internet, other electronic resource, or another person's assignment without appropriate acknowledgement.
- Inappropriate paraphrasing: Changing a few words and phrases while mostly retaining the original information, structure and/or progression of ideas of the original without acknowledgement. This also applies in presentations where someone paraphrases another's ideas or words without credit and to piecing together quotes and paraphrases into a new whole, without appropriate referencing.
- Collusion: Working with others but passing off the work as a person's individual work. Collusion also includes providing your work to another student for the purpose of them plagiarising, paying another person to perform an academic task, stealing or acquiring another person's academic work and copying it, offering to complete another person's work or seeking payment for completing academic work.
- Inappropriate citation: Citing sources which have not been read, without acknowledging the "secondary" source from which knowledge of them has been obtained.
- Duplication ("self-plagiarism"): Submitting your own work, in whole or in part, where it has previously been prepared or submitted for another assessment or course at UNSW or another university.

The UNSW Academic Skills support offers resources and individual consultations. Students are also reminded that careful time management is an important part of study. One of the identified

causes of plagiarism is poor time management. Students should allow sufficient time for research, drafting and proper referencing of sources in preparing all assessment items. UNSW Library has the ELISE tool available to assist you with your study at UNSW. ELISE is designed to introduce new students to studying at UNSW, but it can also be a great refresher during your study.

Completing the ELISE tutorial and quiz will enable you to:

- analyse topics, plan responses and organise research for academic writing and other assessment tasks
- effectively and efficiently find appropriate information sources and evaluate relevance to your needs
- use and manage information effectively to accomplish a specific purpose
- better manage your time
- understand your rights and responsibilities as a student at UNSW
- be aware of plagiarism, copyright, UNSW Student Code of Conduct and Acceptable Use of UNSW ICT Resources Policy
- be aware of the standards of behaviour expected of everyone in the UNSW community
- locate services and information about UNSW and UNSW Library

Use of AI for assessments

As AI applications continue to develop, and technology rapidly progresses around us, we remain committed to our values around academic integrity at UNSW. Where the use of AI tools, such as ChatGPT, has been permitted by your course convener, they must be properly credited and your submissions must be substantially your own work.

In cases where the use of AI has been prohibited, please respect this and be aware that where unauthorised use is detected, penalties will apply.

[Use of AI for assessments | UNSW Current Students](#)

Submission of Assessment Tasks

Turnitin Submission

If you encounter a problem when attempting to submit your assignment through Turnitin, please telephone External Support on 9385 3331 or email them on externalteltsupport@unsw.edu.au

Support hours are 8:00am – 10:00pm on weekdays and 9:00am – 5:00pm on weekends (365 days a year). If you are unable to submit your assignment due to a fault with Turnitin, you may

apply for an extension, but you must retain your ticket number from External Support (along with any other relevant documents) to include as evidence to support your extension application. If you email External Support, you will automatically receive a ticket number, but if you telephone, you will need to specifically ask for one. Turnitin also provides updates on their system status on Twitter.

Generally, assessment tasks must be submitted electronically via either Turnitin or a Moodle assignment. In instances where this is not possible, alternative submission details will be stated on your course's Moodle site. For information on how to submit assignments online via Moodle: <https://student.unsw.edu.au/how-submit-assignment-moodle>

Late Submission Penalty

UNSW has a standard late submission penalty of:

- 5% per calendar day,
- for all assessments where a penalty applies,
- capped at five calendar days (120 hours) from the assessment deadline, after which a student cannot submit an assessment, and
- no permitted variation.

Students are expected to manage their time to meet deadlines and to request [Special Consideration](#) as early as possible before the deadline. Support with [Time Management is available here](#).

School Contact Information

beadmin@unsw.edu.au