UNSW Course Outline

PLAN2002 Geographical Information Systems and Urban Informatics - 2024

Published on the 23 Sep 2024

General Course Information

Course Code : PLAN2002
Year : 2024
Term : Term 3
Teaching Period : T3
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

In this course, you will explore Geographical Information Systems (GIS) and their applications to

an array of urban situations, including strategic planning, spatial planning, transport planning, environmental planning and urban property management. This course will equip you with the conceptual knowledge and practical skills needed to utilise GIS and spatial analysis tools for data analysis, digital mapping and data visualisation. You will learn how to access meta-databases and use open-source GIS software and you will develop competency in the application of the technology to an array of spatial problems.

Course Aims

Course Learning Outcomes

Course Learning Outcomes
CLO1 : Interpret select open data sets and the principles of geospatial thinking in the context of urban planning.
CLO2 : Use GIS and geospatial tools to inform planning practices.
CLO3 : Critically evaluate the effectiveness of geospatial tools for addressing and resolving urban planning challenges.

Course Learning Outcomes	Assessment Item
CLO1 : Interpret select open data sets and the principles of geospatial thinking in the context of urban planning.	• Lab activities • Quiz
CLO2 : Use GIS and geospatial tools to inform planning practices.	• Final project • Lab activities
CLO3 : Critically evaluate the effectiveness of geospatial tools for addressing and resolving urban planning challenges.	• Reflection on Final Project

Learning and Teaching Technologies

Moodle - Learning Management System

Assessments

Assessment Structure

Assessment Item	Weight	Relevant Dates
Reflection on Final Project Assessment Format: Individual	45%	Start Date: Not Applicable Due Date: 24/10/2024 11:55 PM
Final project Assessment Format: Group	30%	Start Date: Not Applicable Due Date: 24/10/2024 11:55 PM
Lab activities Assessment Format: Individual	15%	Start Date: Not Applicable Due Date: Deadlines are given in Moodle - Assessment hub
Quiz Assessment Format: Individual	10%	Start Date: Not Applicable Due Date: 29/10/2024 04:00 PM

Assessment Details

Reflection on Final Project

Assessment Overview

As an individual, you will present key findings from your storymap/dashboard to the class and will write a short reflection on your experience of using open data/platforms to address planning issues. Marking will be done against assessment criteria, accompanied by written feedback.

Course Learning Outcomes

- CLO3 : Critically evaluate the effectiveness of geospatial tools for addressing and resolving urban planning challenges.

Detailed Assessment Description

See Moodle, Assessments hub section for full description.

Assignment submission Turnitin type

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

Generative AI Permission Level

Planning/Design Assistance

You are permitted to use generative AI tools, software or services to generate initial ideas, structures, or outlines. However, you must develop or edit those ideas to such a significant extent that what is submitted is your own work, i.e., what is generated by the tool, software or service should not be a part of your final submission. You should keep copies of your iterations to show your Course Authority if there is any uncertainty about the originality of your work.

If your Convenor has concerns that your answer contains passages of AI-generated text or media that have not been sufficiently modified you may be asked to explain your work, but we recognise that you are permitted to use AI generated text and media as a starting point and some traces may remain. 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.

For more information on Generative AI and permitted use please see here.

Final project

Assessment Overview

As a group, you will develop a storymap or dashboard to present your GIS skills professionally. Marking will be done against assessment criteria, accompanied by written feedback.

Course Learning Outcomes

- CLO2 : Use GIS and geospatial tools to inform planning practices.

Detailed Assessment Description

See Moodle, Assessments hub section for full description.

Assignment submission Turnitin type

Not Applicable

Generative AI Permission Level

Planning/Design Assistance

You are permitted to use generative AI tools, software or services to generate initial ideas, structures, or outlines. However, you must develop or edit those ideas to such a significant extent that what is submitted is your own work, i.e., what is generated by the tool, software or service should not be a part of your final submission. You should keep copies of your iterations to show your Course Authority if there is any uncertainty about the originality of your work.

If your Convenor has concerns that your answer contains passages of AI-generated text or media that have not been sufficiently modified you may be asked to explain your work, but we recognise that you are permitted to use AI generated text and media as a starting point and some traces may remain. 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.

For more information on Generative AI and permitted use please see here.

Lab activities

<u>Assessment Overview</u>

You will complete a number of lab exercises through the term to develop your technical skills. Work will be marked against assessment criteria and verbal feedback will also be provided.

<u>Course Learning Outcomes</u>

- CLO1 : Interpret select open data sets and the principles of geospatial thinking in the context of urban planning.
- CLO2 : Use GIS and geospatial tools to inform planning practices.

<u>Detailed Assessment Description</u>

See Moodle, Assessments hub section for full description.

<u>Assignment submission Turnitin type</u>

Not Applicable

<u>Generative AI Permission Level</u>

Planning/Design Assistance

You are permitted to use generative AI tools, software or services to generate initial ideas, structures, or outlines. However, you must develop or edit those ideas to such a significant extent that what is submitted is your own work, i.e., what is generated by the tool, software or service should not be a part of your final submission. You should keep copies of your iterations to show your Course Authority if there is any uncertainty about the originality of your work.

If your Convenor has concerns that your answer contains passages of AI-generated text or media that have not been sufficiently modified you may be asked to explain your work, but we recognise that you are permitted to use AI generated text and media as a starting point and some traces may remain. 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.

For more information on Generative AI and permitted use please see here.

Quiz

<u>Assessment Overview</u>

You will complete one online quiz during class time, covering key concepts from the lectures. Feedback will be given in the form of correct answers, with additional feedback available from the course convenor upon request.

Course Learning Outcomes

- CLO1 : Interpret select open data sets and the principles of geospatial thinking in the context of urban planning.

Detailed Assessment Description

See Moodle, Assessments hub section for full description.

Assignment submission Turnitin type

Not Applicable

Generative AI Permission Level

No Assistance

This assessment is designed for you to complete without the use of any generative AI. You are not permitted to use any generative AI tools, software or service to search for or generate information or answers.

For more information on Generative AI and permitted use please see here.

General Assessment Information

Grading Basis

Standard

Course Schedule

Teaching Week/Module	Activity Type	Content
Week 1 : 9 September - 15 September	Activity	Lecture on "Introduction to GIS and Urban Informatics" Tutorial on "Introduction to QGIS for Urban Informatics"
Week 2 : 16 September - 22 September	Activity	Lecture on "Fundamental GIS concepts and map design principles" Tutorial on "GIS for Urban and Regional Planning Concepts"
Week 3 : 23 September - 29 September	Activity	Lecture on "Types and dimensions of GIS data" Tutorial on "Data for Urban and Regional Planning"
Week 4 : 30 September - 6 October	Activity	Lecture and tutorial on "web mapping and storymaps"
Week 5 : 7 October - 13 October	Activity	Lecture and tutorial on "spatial analysis and geocoding"
Week 6 : 14 October - 20 October	Other	No class- flexibility week
Week 7 : 21 October - 27 October	Activity	Lecture and tutorial on "Multi-Criteria evaluation (suitability analysis)"
Week 8 : 28 October - 3 November	Activity	Lecture and tutorial on "Network analysis for Transportation planning"
Week 9 : 4 November - 10 November	Activity	Q and A with City Council on final projects during lecture time Feedback sessions during tutorial sessions
Week 10 : 11 November - 17 November	Activity	Feedback on final projects during lecture time and tutorial classes
Week 11 : 18 November - 24 November	Presentation	In person presenation of storymaps on 19th November 12-5pm in F10 building M11 lecture theatre

Attendance Requirements

Students are strongly encouraged to attend all classes and review lecture recordings.

Course Resources

Prescribed Resources

Resources will be introduced on weekly basis during the lectures.

Recommended Resources

Resources will be introduced on weekly basis during the lectures.

Course Evaluation and Development

We encourage and support students to maintain regular contact with the course convenor to provide informal feedback throughout the course. For specific issues or detailed feedback, please arrange a meeting with the course convenor via email.

In this course there is an option for students to provide anonymous feedback via the course's Moodle page, which is directly sent to the convenor. As a final step, students are invited to share their insights and experiences by completing the MyExperience survey. The feedback gathered each year is integral to the continuous enhancement and development of the course.

Staff Details

Position	Name	Email	Location	Phone	Availability	Equitable Learning Services Contact	Primary Contact
Convenor	Sara Shirowzhan		Room 2018, Red Centre		Wednesdays	Yes	Yes

Other Useful Information

Academic Information

For essential student information relating to:

- UNSW and Faculty policies and procedures;
- Student Support Services;
- Student equity and disability;
- Special Consideration in the event of illness or misadventure;
- Examination information;

- Review of results;

Please see: https://www.unsw.edu.au/arts-design-architecture/student-life/resources-support/protocols-guidelines

Academic Honesty and Plagarism

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

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.

Important note: UNSW has a "fit to sit/submit" rule, which means that if you sit an exam or submit a piece of assessment, you are declaring yourself fit to do so and cannot later apply for Special Consideration. This is to ensure that if you feel unwell or are faced with significant circumstances beyond your control that affect your ability to study, you do not sit an examination or submit an assessment that does not reflect your best performance. Instead, you should apply for Special Consideration as soon as you realise you are not well enough or are otherwise unable to sit or submit an assessment.

School Contact Information

beadmin@unsw.edu.au