



UNSW Course Outline

GMAT3420 Cadastral Surveying and Land Law - 2024

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General Course Information

Course Code : GMAT3420

Year : 2024

Term : Term 3

Teaching Period : T3

Is a multi-term course? : No

Faculty : Faculty of Engineering

Academic Unit : School of Civil and Environmental Engineering

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

Introduction to the legal system in Australia and NSW. The nature of land law, including land tenure, estates in land, and interests in land. Land title systems, and especially land administration in Australia and NSW. Study of appropriate statutes and regulations. Boundary

surveying principles and cadastral mapping in NSW. Survey investigation for both artificial and natural boundaries; survey and title searching; field note preparation for cadastral surveying; survey marking and preparation of plans of survey; cadastral survey techniques for urban and rural properties; the status of roads in NSW; strata plan surveys; identification surveys; consents for MHWM, railways, rivers, kerbs in Sydney; and the role of coordinates in cadastral surveying.

Course Aims

The aims of the course are to introduce the principles of land law and cadastral surveying. In particular to assist students to learn factors that lead to the redefinition of boundaries in NSW and to guide students on the educational requirements that meet the registration requirements of the Board of Surveying & Spatial Information (BOSSI) for registration as a Cadastral Surveyor in NSW.

Course Learning Outcomes

Course Learning Outcomes
CLO1 : Understand the legal and practical principles that assist in the shaping of the cadastre, original definition and relocation of various land title boundaries in NSW, and understand the impact of such decisions on society
CLO2 : Develop an understanding of professional and ethical responsibilities, and demonstrate a commitment to uphold them
CLO3 : Have the ability to function effectively as an individual and in multidisciplinary and multicultural teams, as a team leader or manager as well as an effective team member

Course Learning Outcomes	Assessment Item
CLO1 : Understand the legal and practical principles that assist in the shaping of the cadastre, original definition and relocation of various land title boundaries in NSW, and understand the impact of such decisions on society	<ul style="list-style-type: none"> • Computer lab exercises and quizzes • Assignment: Identification Survey • Assignment: Strata Plan • Final Exam
CLO2 : Develop an understanding of professional and ethical responsibilities, and demonstrate a commitment to uphold them	<ul style="list-style-type: none"> • Computer lab exercises and quizzes • Assignment: Identification Survey • Assignment: Strata Plan • Final Exam
CLO3 : Have the ability to function effectively as an individual and in multidisciplinary and multicultural teams, as a team leader or manager as well as an effective team member	<ul style="list-style-type: none"> • Computer lab exercises and quizzes • Assignment: Identification Survey • Assignment: Strata Plan • Final Exam

Learning and Teaching Technologies

Moodle - Learning Management System | Echo 360

Additional Course Information

This course will require some reading and activities to be completed prior to the related lecture or workshop - this is to ensure that during class time you will be able to apply the concepts and understand them at a deeper level.

Assessments

Assessment Structure

Assessment Item	Weight	Relevant Dates
Computer lab exercises and quizzes	30%	Start Date: Not Applicable Due Date: Please refer to Moodle for more information
Assignment: Identification Survey	15%	Start Date: Not Applicable Due Date: Week 8: 28 October - 03 November
Assignment: Strata Plan	15%	Start Date: Not Applicable Due Date: Week 10: 11 November - 17 November
Final Exam	40%	Start Date: Not Applicable Due Date: During formal exam period

Assessment Details

Computer lab exercises and quizzes

Assessment Overview

There will be a variety of lab tasks in GMAT3420. The computer lab tasks will be delivered, managed and assessed via Moodle quizzes and auditing. Using Moodle to administer the tasks will enable students to see their progress and to work on the tasks at a pace that suits them. The requirements for lab work are given in the Moodle quizzes and assistance is available in the textbook files. Students will also be required to demonstrate their knowledge in a seminar presentation to the class and in a small test in the computer lab.

Course Learning Outcomes

- CL01 : Understand the legal and practical principles that assist in the shaping of the cadastre, original definition and relocation of various land title boundaries in NSW, and understand the impact of such decisions on society
- CL02 : Develop an understanding of professional and ethical responsibilities, and demonstrate a commitment to uphold them

- CLO3 : Have the ability to function effectively as an individual and in multidisciplinary and multicultural teams, as a team leader or manager as well as an effective team member

Detailed Assessment Description

Further information provided on Moodle. Note that feedback for at least one quiz will be provided prior to the census date.

Assessment information

Further information provided on Moodle.

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](#).

Assignment: Identification Survey

Assessment Overview

The assignment is designed to give students experience with real cadastral surveys. Group work, usually groups of 2 or 3 students. Students will be required to complete a field survey of a selected urban property that is to be approved by the course coordinator. This assignment will be completed outside of the time allocated for classes and students must obtain their own title and plan searches. The quality of these searches will be assessed and graded. Access is available to a limited range of the School's surveying instruments and equipment for these exercises and is subject to the approval of the lecturer-in-charge of the course.

Course Learning Outcomes

- CLO1 : Understand the legal and practical principles that assist in the shaping of the cadastre, original definition and relocation of various land title boundaries in NSW, and understand the impact of such decisions on society
- CLO2 : Develop an understanding of professional and ethical responsibilities, and demonstrate a commitment to uphold them
- CLO3 : Have the ability to function effectively as an individual and in multidisciplinary and multicultural teams, as a team leader or manager as well as an effective team member

Assignment submission Turnitin type

This is not a Turnitin assignment

Generative AI Permission Level

No Assistance

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For more information on Generative AI and permitted use please see [here](#).

Assignment: Strata Plan

Assessment Overview

The assignment is designed to give students experience with real cadastral surveys. Group work, usually groups of 2 or 3 students. The strata survey uses architectural plans provided. Students will be required to prepare a Strata Plan to standards required by NSW Legislation.

Course Learning Outcomes

- CL01 : Understand the legal and practical principles that assist in the shaping of the cadastre, original definition and relocation of various land title boundaries in NSW, and understand the impact of such decisions on society
- CL02 : Develop an understanding of professional and ethical responsibilities, and demonstrate a commitment to uphold them
- CL03 : Have the ability to function effectively as an individual and in multidisciplinary and multicultural teams, as a team leader or manager as well as an effective team member

Detailed Assessment Description

Further information provided on Moodle.

Assignment submission Turnitin type

This is not a Turnitin assignment

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.

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Final Exam

Assessment Overview

The Final exam will be in the UNSW exam period. Past papers will be supplied.

Course Learning Outcomes

- CLO1 : Understand the legal and practical principles that assist in the shaping of the cadastre, original definition and relocation of various land title boundaries in NSW, and understand the impact of such decisions on society
- CLO2 : Develop an understanding of professional and ethical responsibilities, and demonstrate a commitment to uphold them
- CLO3 : Have the ability to function effectively as an individual and in multidisciplinary and multicultural teams, as a team leader or manager as well as an effective team member

Detailed Assessment Description

Further information provided on Moodle.

Assignment submission Turnitin type

This is not a Turnitin assignment

Hurdle rules

A minimum of mark 40% in the Final Exam is required to pass the course.

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.

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General Assessment Information

Grading Basis

Standard

Course Schedule

Teaching Week/Module	Activity Type	Content
Week 1 : 9 September - 15 September	Blended	Introduction to: • this course • the Legal System of NSW as it applies to Cadastral Surveying • interpretation of Plans of Survey
	Assessment	Workshop Activity - Reading a Plan of Survey
Week 2 : 16 September - 22 September	Blended	• Torrens and Old System Land Titles • Investigating Titles • Document and Plan Searching
	Assessment	Moodle Quiz - Title System
Week 3 : 23 September - 29 September	Blended	Cadastral Boundaries: • General and Fixed • Urban Boundaries • Monuments & Occupations • Redefinition Surveys • Identification Surveys
	Assessment	Prac: Boundary Location in the Field
Week 4 : 30 September - 6 October	Blended	Cadastral Boundaries: • Natural Features • Rural Surveys
	Assessment	Weekly Quiz - Natural Boundaries
	Assessment	Mid-term Test
Week 5 : 7 October - 13 October	Blended	Interests in Land: • Easements and Restrictions • Sec 88B Instruments • Covenants • Deed Descriptions
	Assessment	Moodle Quiz: Easements
Week 6 : 14 October - 20 October	Fieldwork	Groups to undertake their fieldwork for the Ident Survey assessment independently.
Week 7 : 21 October - 27 October	Blended	Cadastral Boundaries: • Roads • Railways • Lease Surveys
	Assessment	Weekly Quiz - Leases
Week 8 : 28 October - 3 November	Blended	Strata & Community Titles: • Case Studies • Preparation and Calculation of a Strata Plan
	Assessment	Submission of Ident Survey due.
Week 9 : 4 November - 10 November	Blended	• Cadastral Coordinates and Land XML • Case Studies
	Assessment	Student presentations in class.
	Assessment	Weekly Quiz - Cadastral Coordinates
	Assessment	Weekly Quiz - Case Studies
Week 10 : 11 November - 17 November	Blended	• Ethics and Professionalism • Revision
	Assessment	Submission of Strata Plan Assignment due.

Attendance Requirements

Students must attend at least 80% of the workshops in which they are enrolled for the duration of the session.

Course Resources

Recommended Resources

Lists of reading material will be made available together with handouts on the class Moodle site, related to specific topics in relevant weeks. Students should read the relevant material prior to the lecture and should then be in a position to ask questions to clarify and ensure their understanding of each topic. Additional materials will be provided on Moodle

Additional Costs

The Identification Survey assignment involves the students undertaking a field survey at a location of their choice. The students are able to borrow survey equipment from the store however transportation to and from the field survey site will be the responsibility of the student. A site within the vicinity of the university can be provided if necessary.

Course Evaluation and Development

Conversations with students and MyExperience feedback has outlined the following points:

- Connecting with industry experts as guest lecturers is very valuable
- The independent nature of the Ident Assignment helped students to be "work-ready"
- More real-world examples would be helpful

As a result this year we will include more case-studies within the classroom.

Staff Details

Position	Name	Email	Location	Phone	Availability	Equitable Learning Services Contact	Primary Contact
Convenor	Sandra Hoffmann		CE409	02 9348 2227	Try knocking on my door, or arrange an appointment via email	Yes	Yes

Other Useful Information

Academic Information

I. Special consideration and supplementary assessment

If you have experienced an illness or misadventure beyond your control that will interfere with your assessment performance, you are eligible to apply for Special Consideration prior to, or within 3 working days of, submitting an assessment or sitting an exam.

Please note that UNSW has a Fit to Sit rule, which means that if you sit an exam, you are declaring yourself fit enough to do so and cannot later apply for Special Consideration.

For details of applying for Special Consideration and conditions for the award of supplementary assessment, please see the information on UNSW's [Special Consideration page](#).

II. Administrative matters and links

All students are expected to read and be familiar with UNSW guidelines and policies. In particular, students should be familiar with the following:

- [Attendance](#)
- [UNSW Email Address](#)
- [Special Consideration](#)
- [Exams](#)
- [Approved Calculators](#)
- [Academic Honesty and Plagiarism](#)
- [Equitable Learning Services](#)

III. Equity and diversity

Those students who have a disability that requires some adjustment in their teaching or learning environment are encouraged to discuss their study needs with the course convener prior to, or at the commencement of, their course, or with the Equity Officer (Disability) in the Equitable Learning Services. Issues to be discussed may include access to materials, signers or note-takers, the provision of services and additional exam and assessment arrangements. Early notification is essential to enable any necessary adjustments to be made.

IV. Professional Outcomes and Program Design

Students are able to review the relevant professional outcomes and program designs for their streams by going to the following link: <https://www.unsw.edu.au/engineering/student-life/student-resources/program-design>.

Note: This course outline sets out the description of classes at the date the Course Outline is published. The nature of classes may change during the Term after the Course Outline is published. Moodle or your primary learning management system (LMS) should be consulted for the up-to-date class descriptions. If there is any inconsistency in the description of activities between the University timetable and the Course Outline/Moodle/LMS, the description in the Course Outline/Moodle/LMS applies.

Academic Honesty and Plagiarism

UNSW has an ongoing commitment to fostering a culture of learning informed by academic integrity. All UNSW students have a responsibility to adhere to this principle of academic integrity. Plagiarism undermines academic integrity and is not tolerated at UNSW. *Plagiarism at UNSW is defined as using the words or ideas of others and passing them off as your own.*

Plagiarism is a type of intellectual theft. It can take many forms, from deliberate cheating to accidentally copying from a source without acknowledgement. UNSW has produced a website with a wealth of resources to support students to understand and avoid plagiarism, visit: student.unsw.edu.au/plagiarism. The Learning Centre assists students with understanding academic integrity and how not to plagiarise. They also hold workshops and can help students one-on-one.

You are also reminded that careful time management is an important part of study and one of the identified causes of plagiarism is poor time management. Students should allow sufficient time for research, drafting and the proper referencing of sources in preparing all assessment tasks.

Repeated plagiarism (even in first year), plagiarism after first year, or serious instances, may also be investigated under the Student Misconduct Procedures. The penalties under the procedures can include a reduction in marks, failing a course or for the most serious matters (like plagiarism in an honours thesis or contract cheating) even suspension from the university. The Student Misconduct Procedures are available here:

www.gs.unsw.edu.au/policy/documents/studentmisconductprocedures.pdf

Submission of Assessment Tasks

Work submitted late without an approved extension by the course coordinator or delegated authority is subject to a late penalty of five percent (5%) of the maximum mark possible for that assessment item, per calendar day.

The late penalty is applied per calendar day (including weekends and public holidays) that the assessment is overdue. There is no pro-rata of the late penalty for submissions made part way through a day. This is for all assessments where a penalty applies.

Work submitted after five days (120 hours) will not be accepted and a mark of zero will be

awarded for that assessment item.

For some assessment items, a late penalty may not be appropriate. These will be clearly indicated in the course outline, and such assessments will receive a mark of zero if not completed by the specified date. Examples include:

- Weekly online tests or laboratory work worth a small proportion of the subject mark;
- Exams, peer feedback and team evaluation surveys;
- Online quizzes where answers are released to students on completion;
- Professional assessment tasks, where the intention is to create an authentic assessment that has an absolute submission date; and,
- Pass/Fail assessment tasks.

Faculty-specific Information

[Engineering Student Support Services](#) – The Nucleus - enrolment, progression checks, clash requests, course issues or program-related queries

[Engineering Industrial Training](#) – Industrial training questions

[UNSW Study Abroad](#) – study abroad student enquiries (for inbound students)

[UNSW Exchange](#) – student exchange enquiries (for inbound students)

[UNSW Future Students](#) – potential student enquiries e.g. admissions, fees, programs, credit transfer

Phone

(+61 2) 9385 8500 – Nucleus Student Hub

(+61 2) 9385 7661 – Engineering Industrial Training

(+61 2) 9385 3179 – UNSW Study Abroad and UNSW Exchange (for inbound students)

School Contact Information

For assistance with enrolment, class registration, progression checks and other administrative matters, please see [the Nucleus: Student Hub](#). They are located inside the Library – first right as you enter the main library entrance. You can also contact them via <http://unsw.to/webforms> or reserve a place in the face-to-face queue using the UniVerse app.

For course administration matters, please contact the Course Coordinator.

Questions about the this course should normally be asked during the scheduled class so that everyone can benefit from the answer and discussion.