

MATH 2120B

Intermediate Linear Algebra

1 Course Information

Title: Intermediate Linear Algebra

Number: MATH 2120B

Term: Winter 2023

Times and Location: Tuesday 2:30–4:30 and Thursday 2:30–3:30 in TC-343

Prerequisites: Mathematics 1600A/B and one of Mathematics 2120A/B, Mathematics 2124A/B, Mathematics 2151A/B, Mathematics 2155F/G, Mathematics 3150A/B, Applied Mathematics 2811A/B, or Computer Science 2214A/B.

Unless you have either the prerequisites for this course or written special permission from your Dean to enroll in it, you may be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisites.

2 Instructor

Instructor: Prof. Chris Hall

Office Hours: MWF 12:30–1:30 in UCC-37

Email: chall69@uwo.ca

- Students must use their Western (uwo.ca) email addresses when contacting the instructor.
- Indicate the course (MATH 2120B) in your email.

3 Course Syllabus, Schedule, Delivery Mode

Course Content: A rigorous development of lines and planes in \mathbb{R}^n ; linear transformations and abstract vector spaces. Determinants and an introduction to diagonalization and its applications including the characteristic polynomials, eigenvalues and eigenvectors.

Key Dates:

January 9, 2023	Classes begin
February 18–26, 2023	Reading Week
April 10, 2023	Classes end
April 13–30, 2022	Exam period

COVID-19 Contingency plan: In the event of a COVID-19 resurgence during the course that necessitates the course delivery moving away from face-to-face interaction, affected course content will be delivered entirely online, either synchronously (i.e., at the times indicated in the timetable) or asynchronously (e.g., posted on OWL for students to view at their convenience). The grading scheme will not change. Any remaining assessments will also be conducted online as determined by the course instructor.

4 Course Materials

Textbook: Friedberg, Insel, Spence, Linear Algebra, Edition 4 (Prentice Hall) or Edition 5 (Pearson).

OWL statement: Students are responsible for checking the course OWL site (<http://owl.uwo.ca>) on a regular basis for news and updates. This is the primary method by which information will be disseminated to all students in the class.

All course material will be posted to OWL (<http://owl.uwo.ca>).

If students need assistance with the course OWL site, they can seek support on the OWL Help page. Alternatively, they can contact the Western Technology Services Helpdesk. They can be contacted by phone at 519-661-3800 or ext. 83800.

5 Methods of Evaluation

Breakdown:

Assignments (5)	10%	(Due: Jan 27, Feb 10, Mar 3, Mar 17, Mar 31)
Quizzes (5)	15%	(Feb 2, Feb 16, Mar 9, Mar 23, Apr 6)
Midterm Test	35%	(Feb 14 from 7:00 to 9:00pm)
Final Exam	40%	Time and Location TBD

Assignments: Problem sets will be posted to OWL. Solutions must be submitted using www.gradescope.ca unless otherwise indicated. The lowest assignment score will be dropped, thus each remaining assignment will be worth 2%.

Assignments must be completed individually and without reference to online resources (as if it were an exam). Failure to do so may be regarded as a Scholastic Offence.

Quizzes: They will take place during tutorials. The lowest quiz score will be dropped, thus each remaining quiz will be worth 3.75%.

6 Student Absences

If you are unable to meet a course requirement due to illness or other serious circumstances, please follow the procedures below.

Assessments worth less than 10% of the overall course grade: Late homework will be accepted 72 hours after the original deadline, and a 10% penalty will be imposed per day. There are no makeup quizzes. If you receive an accommodation for the day of a quiz, then the weight of that quiz will be moved to the final.

Assessments worth more than 10% of the overall course grade: For work totalling 10% or more of the final course grade, you must provide valid medical or supporting documentation to the Academic Counselling Office of your Faculty of Registration as soon as possible. For further information, please consult the University's medical illness policy at

https://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_medical.pdf

The Student Medical Certificate is available at

https://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.pdf

Those with a suitable accommodation for the midterm will be allowed to write the makeup (scheduled for 5–7pm on February 28).

Absences from Final Examination: If you miss the Final Exam, please contact the Academic Counselling office of your Faculty of Registration as soon as you are able to do so. They will assess your eligibility to write the Special Examination (the name given by the University to a makeup Final Exam).

You may also be eligible to write the Special Exam if you are in a “Multiple Exam Situation” (e.g., more than 2 exams in 23-hour period, more than 3 exams in a 47-hour period).

Note: Missed work can only be excused through one of the mechanisms above. Being asked not to attend an in-person course requirement due to potential COVID-19 symptoms is not sufficient on its own.

7 Accommodation and Accessibility

Religious Accommodation: When a course requirement conflicts with a religious holiday that requires an absence from the University or prohibits certain activities, students should request accommodation for their absence in writing at least two weeks prior to the holiday to the course instructor and/or the Academic Counselling office of their Faculty of Registration. Please consult University’s list of recognized religious holidays (updated annually) at:

<https://multiculturalcalendar.com/ecal/index.php?s=c-univwo>

Accommodation Policies: Students with disabilities are encouraged to contact Accessible Education, which provides recommendations for accommodation based on medical documentation or psychological and cognitive testing. The policy on Academic Accommodation for Students with Disabilities can be found at:

https://www.uwo.ca/univsec/pdf/academic_policies/appeals/AcademicAccommodation_disabilities.pdf

8 Academic Policies

The website for Registrarial Services is <http://www.registrar.uwo.ca>

In accordance with policy, https://www.uwo.ca/univsec/pdf/policies_procedures/section1/mapp113.pdf the centrally administered e-mail account provided to students will be considered the individual’s official university e-mail address. It is the responsibility of the account holder to ensure that e-mail received from the University at their official university address is attended to in a timely manner.

No electronic devices will be allowed any the exam.

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following Web site: http://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf

Remote Proctoring: In the event of health lock-down, tests and examinations in this course will be conducted using a remote proctoring service. By taking this course, you are consenting to the use of this software and acknowledge that you will be required to provide personal information (including some biometric data) and the session will be recorded. Completion of this course will require you to have a reliable internet connection and a device that meets the technical requirements for this service. More information about this remote proctoring service, including technical requirements, is available on Western’s Remote Proctoring website at: <https://remoteproctoring.uwo.ca>.

9 Support Services

Please visit the Science & Basic Medical Sciences Academic Counselling webpage for information on adding or dropping courses, academic considerations for absences, appeals, exam conflicts, and many other academic related matters: <https://www.uwo.ca/sci/counselling/>.

Students who are in emotional/mental distress should refer to Mental Health@Western (<https://uwo.ca/health/>) for a complete list of options about how to obtain help.

Western is committed to reducing incidents of gender-based and sexual violence and providing compassionate support to anyone who has gone through these traumatic events. If you have experienced sexual or gender-based violence (either recently or in the past), you will find information about support services for survivors, including emergency contacts at https://www.uwo.ca/health/student_support/survivor_

[support/get-help.html](#). To connect with a case manager or set up an appointment, please contact support@uwo.ca.

You may also wish to contact Accessible Education at http://academicsupport.uwo.ca/accessible_education/index.html if you have any questions regarding accommodations.

Additional student-run support services are offered by the USC, <https://westernusc.ca/services/>.