MATH 122 - Linear Algebra I
Section 001

Fall 2022

General information

Instructor:	Martin Frankland
Email:	Martin.Frankland@uregina.ca
Office:	CW 307.17
Office hours:	Tuesday 5-6 PM, Wednesday 5-6 PM, or by appointment.
	Office hours are held both in person and on Zoom (link is posted on UR Courses).
Lectures:	MWF 11:30 AM - 12:20 PM in Classroom Building 125.
Tutorials:	Fridays 1:30 - 2:20 PM in Classroom Building 112.
Textbook:	W. Keith Nicholson, *Linear Algebra with Applications*, version 2021-A. Open textbook available for free at:
	`https://lyryx.com/linear-algebra-applications/`
Prerequisite:	Precalculus 30, Mathematics B30 and C30, or Math 102.
UR Courses:	`https://urcourses.uregina.ca/`
	This site will contain announcements, additional course material, and solutions to selected problems. The site is updated throughout the semester, so please check back regularly.

Course outline

Linear algebra is the study of linear equations and their solutions. It has many applications within mathematics and to the sciences. MATH 122 is an introduction to linear algebra, which covers the following topics.

- Systems of linear equations.

- Matrices and matrix algebra.

- Determinants and invertible matrices.

- Eigenvalues and diagonalization.

- Vector geometry: lines, planes, and projections.

Tutoring services

- Math and Stats Tutoring:
  `https://www.uregina.ca/science/mathstat/undergrad/resources/tutor-info.html`

- Student Success Centre:
  `https://www.uregina.ca/student/ssc/tutoring/math-stats-tutoring/`

- Global Learning Centre:
  `https://www.uregina.ca/international/global-learning-centre/glc-services-programs.html`

- Campion College Math/Stats Help Centre:
  `https://campioncollege.ca/student-services/math-stats-tutoring/`

Grading scheme

- Homework: 10%

- Midterms (2): 40%

- Final Exam: 50%

Course delivery

The course is taught **in person**. Lectures, tutorials, and exams all take place on campus.
Office hours will be offered both in person and on Zoom.

Exams

- Midterm 1: **Wednesday September 28**, in the lecture.

- Midterm 2: **Friday November 4**, in the tutorial.

- Final Exam: **Saturday December 10**, 9:00 AM - 12:00 PM.

Details for each exam will be confirmed.

The Final Exam covers the entire semester, with emphasis on later sections.

All exams will be **closed book**. Only a single two-sided crib sheet will be allowed.

Calculators or electronic devices (cell phones, iPads, etc.) are **not allowed** on exams.

Homework

Homework will be assigned more or less weekly and submitted online on WeBWorK.

Late homework will not be accepted.

The **lowest homework score** will be dropped.

Missed course work

Information about missed course work can be found in the *Academic Regulations*, section "Deferral of Final Exams or Course Work", available at:

`https://www.uregina.ca/student/registrar/resources-for-students/academic-calendars-and-schedule/undergraduate-calendar/sections.html`

See in particular the sections "Grounds for Deferral" and "Supporting Documentation".

Illness: If you are unable to meet a course requirement due to prolonged illness or other serious circumstances, please contact me as soon as possible. In that case, you should fill out the *Self-Declaration of Illness* and submit it to me. The form is available at:

`https://www.uregina.ca/student/registrar/assets/docs/pdf/forms/UofR-Self_Declaration_of_Illness_Form.pdf`

More information is available at:

`https://www.uregina.ca/hr/hsw/COVID-19-Resources/Reporting-Procedures-if-a-student-is-ill/`

Homework: If you miss a homework assignment for any reason, it will count as the lowest assignment being dropped. There will be no make-up homework.

Midterm: If you miss a midterm for any reason (illness, etc.), the weight of the exam will be transferred to the Final Exam. There will be no make-up midterm.

Final: You will need to submit the form *Deferral of term work and/or final exam*, available at:

`https://www.uregina.ca/student/registrar/assets/docs/pdf/forms/deferral_form.pdf`

For more information, please consult the *Academic Regulations*, section "Deferral of Final Exam", or contact the Science Academic Hub:

`https://www.uregina.ca/science/student/`

Academic integrity

Working on practice problems with your peers is allowed. However, each student must write exams and homework **on their own**. Handing in suspiciously similar solutions will be considered an instance of cheating.

Handing in any material copied from the internet, a program, or another source will likewise be considered cheating.

Scholastic offences are taken seriously and will not be tolerated. For more information, please consult the *Student Code of Conduct and Right to Appeal*, section "Academic Misconduct", available at:

https://www.uregina.ca/student/registrar/resources-for-students/academic-calendars-and-schedule/undergraduate-calendar/sections.html

as well as the *Faculty of Science Student Handbook*, section "Academic Integrity", available at:

https://www.uregina.ca/science/assets/docs/pdf/programpdf/new-student-manual.pdf

Accessibility

Any student with special needs who may need accommodation should contact the Centre for Student Accessibility at:

https://www.uregina.ca/student/accessibility/

After I receive the letter from the Centre for Student Accessibility, please contact me to discuss the accommodation.