

## Math 1600A Course Outline

### 1. Course Information

#### Course Information

Math 1600A: Linear Algebra I (Fall 2022).

Lecture Section 001 (Franz): MWF 8:30-9:30, MC 110

Lecture Section 002: (Ghorbanpour): MWF 10:30-11:30, SEB 2200

Lecture Section 020: (Sadeghi): MWF 12:30-1:30, SSC 2028

The tutorials are 1h/week, either on Wednesdays or Thursdays. See the academic calendar for a list of times and rooms of the tutorial sections.

#### Prerequisites

One or more of Ontario Secondary School MCV4U, Math 1229A/B, Calc 1000A/B or Calc 1500A/B may be taken as a pre-or corequisite.

#### Antirequisites

Applied Mathematics 1411A/B, Applied Mathematics 2811B.

Unless you have either the requisites 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 Information

Instructors	Email@uwo.ca	Office	Phone ext.	Office Hours
Prof. Matthias Franz (Course Coordinator)	mfranz	MC 103D	86538	TBA
Prof. Asghar Ghorbanpour	aghorba	MC 135	86540	TBA
Prof. Sajad Sadeghi	ssadegh3	TBA	TBA	TBA

Office hours (twice per week, in person) will be announced on OWL during the first week. Before this, please contact your instructor via email (see below) if you have any question or concern.

**Students must contact the instructor of the lecture section they are enrolled in and use their Western (@uwo.ca) email addresses when contacting their instructor. The subject line of the email must indicate the kind of request and also contain the words “Math 1600”.**

**Help Centre:** The Mathematics Department runs free in-person and virtual help centres each week day during the semester, starting Monday September 19th. The in-person help centre is located in the Math-Physics Accelerator in PAB 48/49/26 (on the lower level of the Physics and Astronomy Building.) These help centres are staffed by graduate student teaching assistants and all first-year mathematics courses are supported. No appointments are necessary.

Information about the help centre and other departmental supports for students can be found at:

[https://www.uwo.ca/math/undergraduate/current\\_students/Help\\_Centre.html](https://www.uwo.ca/math/undergraduate/current_students/Help_Centre.html)

In addition to this help, our course staff will host some office hours in the Math-Physics accelerator, details TBA.

### **3. Course Syllabus, Schedule, Delivery Mode**

**Syllabus:** Properties and applications of vectors; matrix algebra; solving systems of linear equations; determinants; vector spaces; orthogonality; eigenvalues and eigenvectors.

Each student must be enrolled in a tutorial section.

#### **Contingency plan for an in-person class pivoting to 100% online learning**

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**

University of Western Ontario, Custom textbook: MATH 1600, ISBN: 9780176907532.

Alternatively, the ebook version of the book is available through the Western bookstore.

University of Western Ontario Custom eBook: MATH 1600 (365 Days/One Year Access), ISBN: 9780176907532

The textbook/ebook consists of selected sections of the book:

D. Poole, Linear Algebra: A Modern Introduction, 4th edition: 9780176907532.}

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.

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.

### **Technical Requirements**

In case of a switch to online learning, students are required to have stable internet connection, computer with working microphone and webcam and an up-to-date web browser like Firefox, Chrome or Safari, a document scanner or scanning app.

## **5. Methods of Evaluation**

The overall course grade will be calculated as listed below:

3 Quizzes	2% each, 6% in total
2 Midterm Tests	22% each, 44% in total
Final Exam	50%

The quizzes will either be in-person during the tutorials or online. Tentative dates (in case of in-person quizzes): September 21/22, October 19/20, November 23/24

Midterm 1: Thursday, October 6th, 7:00-8:30 PM, room TBA

Midterm 2: Thursday, November 10th, 7:00-8:30 PM, room TBA

Make-up exams: date, time and room TBA

Several online quizzes will be posted on Webwork. These quizzes will be provided only extra practice for students and will not effect students' course grades.

## **6. Student Absences**

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

**Quizzes:** If a student miss a quiz for a valid reason (medical or otherwise), the remaining quizzes will be reweighted. Students 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](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](https://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.pdf).

**Midterms:** Students who miss a midterm exam for a valid reason (medical or otherwise) write a make-up exam. They have to inform both their instructor and Academic counselling as soon as possible (that is, immediately after recovering from the illness and otherwise as soon as the reason for missing the exam is known to the student). In case of exam conflicts students must inform their instructor at least one week before of the exam.

**Final Exams:** 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).

## 6. 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/Academic Accommodation\\_disabilities.pdf](https://www.uwo.ca/univsec/pdf/academic_policies/appeals/Academic_Accommodation_disabilities.pdf).

## 7. 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](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 are permitted during quizzes, midterms and final exams.

**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](http://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf).

In case of a change to online learning, tests and examinations in this course may 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>.

## 8. Support Services

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.

Please contact the course instructor if you require lecture or printed material in an alternate format or if any other arrangements can make this course more accessible to you. You may also wish to contact Accessible Education at

[http://academicsupport.uwo.ca/accessible\\_education/index.html](http://academicsupport.uwo.ca/accessible_education/index.html)

if you have any questions regarding accommodations.

Learning-skills counsellors at the Student Development Centre (<https://learning.uwo.ca>) are ready to help you improve your learning skills. They offer presentations on strategies for improving time management, multiple-choice exam preparation/writing, textbook reading, and more. Individual support is offered throughout the Fall/Winter terms in the drop-in Learning Help Centre, and year-round through individual counselling.

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