

Course Outline
MATH 1600A - LINEAR ALGEBRA I
Distance Studies, Section 001
Summer 2022.

- **COURSE INFORMATION:**

- *Instructor:* Asghar Ghobanpour, Ph.D.
- *Email Address:* aghorba@uwo.ca
You MUST use your **Western (@uwo.ca) email** account and must include “**MATH 1600**” in the subject line of all emails to the instructor.
- *Office Hours:* The office hours will be held online through Zoom. You can find the Zoom Meeting ID on OWL. Please use the **sign up tool** to make an appointment for the available hours.
- *Course Delivery and Weekly Lab Sessions:* The course is designed as an online course and the content will be posted on the course OWL page. The weekly lab sessions are the synchronous component of the course. The students must attend the lab sessions. Part of the course grade will be calculated based on the activities and attendance in these lab sessions.
- *Academic Term Span:* The course runs from May 09 to July 29, 2022.

- **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.

SENATE POLICY ON PREREQUISITES: Prerequisite checking is the student's responsibility. 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.

- **TEXTBOOK:**

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

The custom ebook is available to purchase through the Western bookstore.

The textbook/ebook is selected sections of the book:

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

- **COURSE SYLLABUS:**

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

- **WHAT IS EXPECTED OF THE STUDENT:**

- Students are expected to read the appropriate sections and to complete practice problems assigned by the instructor. Additional reading and practice problems may be assigned.
- Students are required to become accustomed to course web page on OWL and know the structure in which the course materials and the requirements are organized on the website.
- Students are responsible for being aware of all relevant information posted on the OWL web site and must pay careful attention to the course schedule and deadlines.

- The student must assume responsibility of actively viewing and learning from course videos and completing all assessments implemented in the website including In-Unit questions, quizzes and online tests and exam.
- Students should log into the OWL regularly and complete all the course components and take advantage of all the tools, such as forums and sign-up tools, to communicate and facilitate their learning.
- Regular homework is an essential part of the course; it is the student's responsibility to keep up with the assigned homework and to seek additional help if and when it is needed.

- **EVALUATION OF STUDENT PERFORMANCE:**

The final grade of students will be calculated based on the following components:

1. **Lab sessions:** Attendance and lab activities – worth 10% of the course grade.
2. **Online Quizzes:** Weekly online quizzes on Webwork – worth 10% of the course grade.
3. **Midterm Test:** TBA – worth 20% of the course grade.
4. **Written Assignments:** Written assignments will be posted on gradescope.– worth 15% of the course grade.
5. **Final Exam:** Will be scheduled by the Registrar Office – worth 45% of final grade.

- No calculators or other electronic devices or any other aids are allowed on tests and exams.
- Tests and examinations in this course will be conducted using the remote proctoring service, such as Proctortrack. 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. More information about this remote proctoring service is available in the Online Proctoring Guidelines at the following link:
<https://www.uwo.ca/univsec/pdf/onlineproctorguidelines.pdf>

- **TECHNOLOGY REQUIREMENTS:** Math 1600 is an online course and therefore it is essential that each student has access to the technology that will be used to deliver the course, including:

- Computer or laptop able to run a recent version of web browser such as Chrome, Safari or Firefox.
- Working microphone and webcam
- Stable high-speed internet connection.
- Document Scanner device or App.

This is in addition to the usual math hardware you will need: pencil, paper, and (if you are human) an eraser.

- **ABSENCE and MISSED WORK:**

- *Quizzes & Assignments:* A student who needs a makeup for an Online Quiz should submit an SRA or an academic consideration and email the instructor as soon as possible. Then an extension will be provided for students to complete the quiz/assignment. You should, however, remember that the duration of SRA is for a maximum of 48 hours, which does not cover the whole period given to complete a quiz or an assignment. That is why, our course has the following SRA policy:

If you submit SRA at the due date of a quiz or assignment, you will be given 48 hours extension for this particular quiz or assignment.

In cases where an extension can not be granted, the weight of the quiz will be transferred to other quizzes and the weight of the assignment will be transferred to the other assignments.

- *Tests:* Students who have a direct conflict between a test and another academic requirement (i.e. test/class/lab/tutorial), and also students for whom a test conflicts with a religious holiday that requires an absence from the University or prohibits certain activities, should contact the Academic Counselling Office in their Faculty of Registration as soon as they become aware of the conflict and not later than 2 weeks before the test. Students who experience an extenuating circumstance (illness, injury or other extenuating circumstance) sufficiently significant to temporarily render them unable to write a test may submit a request for academic consideration through the following routes:

- (i) Submitting a Self-Reported Absence (SRA) form provided that the conditions for submission are met.
- (ii) For medical absences, submitting a Student Medical Certificate (SMC) signed by a licensed medical or mental health practitioner to the Academic Counselling office of their Faculty of Registration.
- (iii) Submitting appropriate documentation for non-medical absences to the Academic Counselling office in their Faculty of Registration.

Note that in all cases, students are required to contact their instructors within 24 hours of the end of the period covered, unless otherwise instructed in the course outline.

Students should also note that individual instructors are not permitted to receive documentation directly from a student, whether in support of an application for consideration on medical grounds, or for other reasons. All documentation required for absences that are not covered by the Self-Reported Absence Policy must be submitted to the Academic Counselling office of a student's Home Faculty.

- *Absences from Final Examinations:* 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).

If a student fails to write a scheduled Special Examination, the date of the next Special Examination (if granted) normally will be the scheduled date for the final exam the next time this course is offered. The maximum course load for that term will be reduced by the credit of the course(s) for which the final examination has been deferred. See the Academic Calendar for details (under Special Examinations).

For the policy on Academic Consideration for Student Absences – Undergraduate Students in First Entry Programs, see:

[https:](https://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_illness.pdf)

[//www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_illness.pdf](https://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_illness.pdf)

and for the Student Medical Certificate (SMC), see:

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

• ACCOMMODATION AND ACCESSIBILITY

- **Accommodation Policies:** Students with disabilities work with Accessible Education (formerly SSD) which provides recommendations for accommodation based on medical documentation or psychological and cognitive testing. The Academic Accommodation for Students with Disabilities policy can be found at:

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

- **Academic Consideration for Student Absence** Students will have up to two (2) opportunities during the regular academic year to use an on-line portal to self-report an absence during the semester, provided the following conditions are met: the absence is no more than 48 hours in duration, and the assessment for which consideration is being sought is worth 30% or less of the student's final grade. Students are not able to use the self-reporting option in the following circumstances:

- * for exams scheduled by the Office of the Registrar (e.g., December and April exams)
- * absence of a duration greater than 48 hours,
- * assessments worth more than 30% of the student's final grade,
- * if a student has already used the self-reporting portal twice during the academic year

If the conditions for a Self-Reported Absence are not met, students will need to provide a Student Medical Certificate if the absence is medical, or provide appropriate documentation if there are compassionate grounds for the absence in question. Students are encouraged to contact their Faculty academic counselling office to obtain more information about the relevant documentation.

Students should also note that individual instructors are not permitted to receive documentation directly from a student, whether in support of an application for consideration on medical grounds, or for other reasons. **All documentation required for absences that are not covered by the Self-Reported Absence Policy must be submitted to the Academic Counselling office of a student's Home Faculty.**

For policy on Academic Consideration for Student Absences - Undergraduate Students in First Entry Programs, see:

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

and for the Student Medical Certificate (SMC), see:

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

- **Religious Accommodation** Students should consult the University's list of recognized religious holidays, and should give reasonable notice in writing, prior to the holiday, to the Instructor and an Academic Counsellor if their course requirements will be affected by a religious observance. Additional information is given in the Western Multicultural Calendar:

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

You may also be eligible to write the Special Exam if you are in a "Multiple Exam Situation" (see http://www.registrar.uwo.ca/examinations/exam_schedule.html).

If a student fails to write a scheduled Special Examination, the date of the next Special Examination (if granted) normally will be the scheduled date for the final exam the next time this course is offered. The maximum course load for that term will be reduced by the credit of the course(s) for which the final examination has been deferred. See Academic Calendar for details (under Special Examinations).

- **Academic Policies**

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

In accordance with policy, <http://www.uwo.ca/its/identity/activatenonstudent.html>, 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 his/her official university address is attended to in a timely manner.

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, all remaining 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.

All of the remote learning sessions for this course will be recorded. The data captured during these recordings may include your image, voice recordings, chat logs and personal identifiers (name displayed on the screen). The recordings will be used for educational purposes related to this course, including evaluations. The recordings may be disclosed to other individuals participating in the course for their private or group study purposes. Please contact the instructor if you have any concerns related to session recordings.

Participants in this course are not permitted to record the sessions, except where recording is an approved accommodation, or the participant has the prior written permission of the instructor.

- **Scholastic offenses** 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.

Tests and examinations in this course will be conducted using the remote proctoring service, such as Proctortrack. 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. More information about this remote proctoring service is available in the Online Proctoring Guidelines at the following link:

<https://www.uwo.ca/univsec/pdf/onlineproctorguidelines.pdf>

Completion of this course will require you to have a reliable internet connection and a device that meets the technical requirements for this service. Information about the technical requirements are available at the following link:

<https://www.proctortrack.com/tech-requirements/>

Proctortrack will require you to provide personal information (including some biometric data). The session will be recorded. By taking this course, you are consenting to the use of this software. More information about remote proctoring is available in the Online Proctoring Guidelines at the following link: <https://www.uwo.ca/univsec/pdf/onlineproctorguidelines.pdf>

Completion of this course will require you to have a reliable internet connection and a device that meets the system and technical requirements for both Zoom and Proctortrack. Information about the system and technical requirements are available at the following links:

<https://www.proctortrack.com/tech-requirements/>

<https://support.zoom.us/hc/en-us>

Please note that Zoom servers are located outside Canada. If you would prefer to use only your first name or a nickname to login to Zoom, please provide this information to the instructor in advance of the test or examination.

- **SUPPORT SERVICES**

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

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 Student Accessibility Services (SAS) at (519) 661-2147 if you have any questions regarding accommodations.

Western University is committed to a thriving campus as we deliver our courses in the mixed model of both virtual and face-to-face formats. We encourage you to check out the Digital Student Experience website to manage your academics and well-being: <https://www.uwo.ca/se/digital/>.

Learning-skills counsellors at the Student Development Centre (<http://www.sdc.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.

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

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