

**Mathematics 1229A 550**  
**Methods of Matrix Algebra**

September – December 2022

**INSTRUCTOR:**

Dr. Marina Palaisti aka Dr. P aka Prof. P aka Marina

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Office: HUC A 215

Office hours: to be announced

*Note: Any email sent to the instructor must say Math 1229A.* Any email without this, and/or any email sent from other than a UWO email address, may be deleted unread.

**CLASS SCHEDULE:**

MWF 3:30pm – 4:30pm Eastern Time; V214

**TEXTBOOK:**

Custom Edition of *Elementary Linear Algebra* by S. Venit, W. Bishop, and J. Brown, published by Nelson Education Ltd., ISBN: 0176559299

**PREREQUISITES:**

One or more of Ontario Secondary School MCF3M, MCR3U, or equivalent.

**ANTIREQUISITES:**

Numerical and Mathematical Methods 1411A/B, Applied Mathematics 2811A/B, Mathematics 1600A/B, 2120A/B, 2155F/G, 2211A/B, the former 2155A/B.

**COURSE OUTLINE:**

Vectors in  $\mathbb{R}^m$ ; Equations of lines and planes; Linear Equations; Solution of Linear Systems; Matrix Algebra; Matrix Multiplication and Inverses; Determinants.

**COURSE WEB SITE:**

Various supplemental materials, such as required extra homework problems, solutions to the homework exercises etc., are posted on the course OWL web site. In addition, there are forums on

which students may post questions. Essential information will be posted on the Announcement thread of OWL or will be communicated via OWL messages. All students are expected to be aware of information, and make use of materials, posted on the course web site, as well as making sure they complete the Online quizzes within the given time frame.

### **WHAT IS EXPECTED OF THE STUDENT?**

Students should make a serious effort to understand all course material and do all the assigned homework. The student must assume responsibility for staying up to date with course content and for being aware of posted deadlines. It is up to the student to seek out help when needed. The student is responsible for being aware of all relevant information posted on the OWL web site, especially information posted on the Announcement thread.

**Please contact Dr. Palaisti if you require material in an alternate format or if any other arrangements can make this course more accessible to you. You may also wish to contact the [Accommodated Education Services](#) (AE) at 519-661-2147 for any specific question regarding an accommodation.**

### **EVALUATION OF STUDENT PERFORMANCE:**

Students will be assessed based on Online Quizzes, two Term Tests, and a Final Exam. The Term Test dates are:

**Friday October 21, 2022 and Friday November 18, 2022 in class**

The first test covers sections 1.1, 1.2, 1.3, extra chapter 1, and 2.1.

The second test covers 2.2, 2.3, 3.1, and 3.2.

The location and time of the Tests will be announced closer to the Test dates.

The Final Exam will be 3 hours long, covering all the course material. This exam will be scheduled by the Registrar's Office during the December Exam Period.

### ***Calculation of Final Grade:***

Each Term Test will count for 20%, the Final Exam will count for 40% and the Quizzes will count for 10%. The remaining 10% weight will be assigned to whichever of the 3 tests/exams is the student's best mark.

### **Notes:**

1. The Term Tests and Exam will have some multiple-choice questions and some written answer questions.
2. **NO notes, formulas sheets, calculators or other electronic devices or any other aids are allowed on tests and exams.**
3. See Absence / Missed Work policy on next page.

## **CLASS POLICIES:**

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All students are expected to engage in a professional and respectful manner. This includes all interactions with peers, as well as communication between TAs or your Professor. Failure to do so will result in academic discipline.

Recording of lectures or tutorials without the explicit consent of the Professor or TA is grounds for academic discipline.

**Course content created by a faculty member is considered the faculty member's intellectual property; it should not be distributed, shared in any public domain, or sold by a student or other third party without prior written consent of the faculty member.**

## **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.

## **STATEMENT ON ACADEMIC OFFENCES:**

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:

<https://huronatwestern.ca/about/policies-procedures/>

Tests, assignments and/or exams may be subject to submission for similarity review by software that will check for unusual coincidences in answer patterns that may indicate cheating.

## **ABSENCE / MISSED WORK:**

If you are unable to meet a course requirement due to illness or other serious circumstances, you must seek approval for the absence as soon as possible. Approval can be granted via the Dean's Office/Academic Counselling unit of your Home Faculty. For approval from Academic Counselling, you must provide valid medical or other supporting documentation *to your Dean's Office as soon as possible*. And in either case you must contact *your instructor immediately*, as soon as you know that you will be unable to complete the required work. It is the student's responsibility to make alternative arrangements with his or her instructor once the accommodation has been approved and the instructor has been informed.

If you miss the Final Exam, please contact your faculty's Academic Counselling Office as soon as you are able to do so. They will assess your eligibility to write the Special Exam (the name given by the university to a makeup Final Exam).

A makeup will be held for the final exam. Only students with a Recommendation for Special Exam from their Dean's Office will be allowed to write a makeup for the Final Exam. Any student who misses a portion of the Class Work component of the grade for any legitimate reason should contact your instructor as soon as possible. Supporting documentation may be required. In the case of

missed Class Work due to a documented prolonged or recurring absence or other legitimate conflict, your instructor will decide whether to accommodate by rescheduling or by reweighting that component of the grade.

Students who are in emotional/mental distress should refer to

**Huron Wellness Services:** <https://huronatwestern.ca/wellness-services/counselling-support> and [huronwellness@huron.uwo.ca](mailto:huronwellness@huron.uwo.ca)

**I hope you enjoy the course and let's all have some FUN-WITH-MATH! ☺**

## **Appendix to Course Outlines: Academic Policies & Regulations Fall/Winter 2022**

### **Pandemic Contingency**

Huron will continue to follow the guidance of public health and government officials. It is anticipated that there will be no further disruptions to in-person instruction. This is subject to change.

### **Student Code of Conduct**

Membership in the community of Huron University College and Western University implies acceptance by every student of the principle of respect for the rights, responsibilities, dignity and well-being of others and a readiness to support an environment conducive to the intellectual and personal growth of all who study, work and live within it. Upon registration, students assume the responsibilities that such registration entails. While in the physical or online classroom, students are expected to behave in a manner that supports the learning environment of others. Please review the Student Code of Conduct at:

<https://huronatwestern.ca/sites/default/files/Res%20Life/Student%20Code%20of%20Conduct%20-%20Revised%20September%202019.pdf>.

### **Prerequisite and Antirequisite Information**

Students are responsible for ensuring that they have successfully completed all course prerequisites and that they have not completed any course antirequisites. 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.

### **Attendance Regulations for Examinations**

A student is entitled to be examined in courses in which registration is maintained, subject to the following limitations:

- 1) A student may be debarred from writing the final examination for failure to maintain satisfactory academic standing throughout the year.
- 2) Any student who, in the opinion of the instructor, is absent too frequently from class or laboratory periods in any course will be reported to the Dean of the Faculty offering the course (after due warning has been given). On the recommendation of the Department concerned, and with the permission of the Dean of that Faculty, the student will be debarred from taking the regular examination in the course. The Dean of the Faculty offering the course will communicate that decision to the Dean of the Faculty of registration.

Review the policy on Attendance Regulations for Examinations here: [Academic Calendar - Western University \(uwo.ca\)](#)

### **Statement on Academic Offences**

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 website: [Academic Calendar - Western University \(uwo.ca\)](http://www.uwo.ca/academic_calendar) . The appeals process is also outlined in this policy as well as more generally at the following website:

[https://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/appealsundergrad.pdf](https://www.uwo.ca/univsec/pdf/academic_policies/appeals/appealsundergrad.pdf).

### **Turnitin.com**

All required papers may be subject to submission for textual similarity review to the commercial plagiarism detection software under license to the University for the detection of plagiarism. All papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between The University of Western Ontario and Turnitin.com (<http://www.turnitin.com>).

### **Statement on Use of Electronic Devices**

It is not appropriate to use electronic devices (such as, but not limited to, laptops, tablets, cell phones) in the classroom for non-classroom activities. Such activity is disruptive and distracting to other students and to the instructor, and can inhibit learning. Students are expected to respect the classroom environment and to refrain from inappropriate use of technology and other electronic devices in class.

### **Statement on Use of Personal Response Systems (“Clickers”)**

Personal Response Systems (“clickers”) may be used in some classes. If clickers are to be used in a class, it is the responsibility of the student to ensure that the device is activated and functional. Students must see their instructor if they have any concerns about whether the clicker is malfunctioning. Students must use only their own clicker. If clicker records are used to compute a portion of the course grade:

- the use of somebody else’s clicker in class constitutes a scholastic offence
- the possession of a clicker belonging to another student will be interpreted as an attempt to commit a scholastic offence.

### **Academic Consideration for Missed Work**

All students pursuing academic consideration, regardless of type, must contact their instructors no less than 24 hours following the end of the period of absence to clarify how they will be expected to fulfill the academic responsibilities missed during their absence. **Students are reminded that they should consider carefully the implications of postponing tests or midterm exams or delaying submission of work, and are encouraged to make appropriate decisions based on their specific circumstances.**

Students who have conditions for which academic accommodation is appropriate, such as disabilities or ongoing or chronic health conditions, should work with Accessible Education Services to determine appropriate forms of accommodation. Further details concerning policies and procedures may be found at: <http://academicsupport.uwo.ca/>.

### **Policy on Academic Consideration for a Medical/ Non-Medical Absence**

- (a) **Consideration on Medical Grounds for assignments worth *less than 10%* of final grade: Consult Instructor Directly and Contact Academic Advising**

When seeking consideration on **medical grounds** for assignments worth *less than 10%* of the final course grade, the student should contact the instructor directly. The student need only share broad outlines of the medical situation. The instructor **may** require the student to submit documentation to the academic advisors, in which case she or he will advise the student and inform the academic advisors to expect documentation. If documentation is requested, the student will need to complete and submit the [Student Medical Certificate](#). The instructor may **not** collect medical documentation. The advisors will contact the instructor when the medical documentation is received, and will outline the severity and duration of the medical challenge as expressed on the Student Medical Certificate and in any other supporting documentation. The student will be informed that the instructor has been notified of the presence of medical documentation, and will be instructed to work as quickly as possible with the instructor on an agreement for accommodation.

**b) Medical Grounds for assignments worth 10% or more of final grade: Go Directly to Academic Advising**

University Senate policy, which can be found at [Academic Calendar - Western University \(uwo.ca\)](#) requires that all student requests for accommodation on medical grounds for assignments worth 10% or more of the final grade be made directly to the academic advising office of the home faculty (for Huron students, the “home faculty” is Huron), with supporting documentation in the form (minimally) of the Senate-approved Student Medical Certificate found at:

[https://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/medicalform.pdf](https://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.pdf).

The documentation is submitted in confidence and will not be shown to instructors. The advisors will contact the instructor when the medical documentation is received, and will outline the severity and duration of the medical challenge as expressed on the Student Medical Certificate and in any other supporting documentation. The student will be informed that the instructor has been notified of the presence of medical documentation, and will be instructed to work as quickly as possible with the instructor on an agreement for accommodation. The instructor will not normally deny accommodation where appropriate medical documentation is in place and where the duration it describes aligns with the due date(s) of assignment(s). Before denying a request for accommodation on medical grounds, the instructor will consult with the Dean. The instructor’s decision is appealable to the Dean.

**c) Consideration on Non-Medical Grounds: Consult Huron Support Services/Academic Advising, or email [huronsss@uwo.ca](mailto:huronsss@uwo.ca).**

Students seeking academic consideration for a **non-medical** absence (e.g. varsity sports, religious, compassionate, or bereavement) will be required to provide appropriate documentation. All consideration requests must include a completed [Consideration Request Form](#). Late penalties may apply at the discretion of the instructor.

Please review the full policy on Academic Consideration for medical and non-medical absence at: [accommodation medical.pdf \(uwo.ca\)](#). Consult [Huron Academic Advising](#) at [huronsss@uwo.ca](mailto:huronsss@uwo.ca) for any further questions or information.

**Support Services**

For advice on course selections, degree requirements, and for assistance with requests for medical accommodation, students should email an Academic Advisor in Huron’s Student Support Services at

[huronsss@uwo.ca](mailto:huronsss@uwo.ca). An outline of the range of services offered is found on the Huron website at: <https://huronatwestern.ca/student-life/student-services/>.

Department Chairs, Program Directors and Coordinators are also able to answer questions about individual programs. Contact information can be found on the Huron website at: <https://huronatwestern.ca/contact/faculty-staff-directory/>.

If you think that you are too far behind to catch up or that your workload is not manageable, you should consult your Academic Advisor. If you are considering reducing your workload by dropping one or more courses, this must be done by the appropriate deadlines. Please refer to the Advising website, <https://huronatwestern.ca/student-life/student-services/academic-advising/> or review the list of official Sessional Dates on the Academic Calendar, available here: <http://www.westerncalendar.uwo.ca/SessionalDates.cfm>.

You should consult with the course instructor and the Academic Advisor who can help you consider alternatives to dropping one or more courses. Note that dropping a course may affect OSAP and/or Scholarship/Bursary eligibility.

Huron Student Support Services: <https://huronatwestern.ca/student-life/student-services/> Office of the Registrar: <https://registrar.uwo.ca/>  
 Student Quick Reference Guide: <https://huronatwestern.ca/student-life/student-services/#1> Academic Support & Engagement: <http://academicsupport.uwo.ca/>  
 Huron University College Student Council: <https://huronatwestern.ca/student-life/beyond-classroom/hucsc/>  
 Western USC: <http://westernusc.ca/your-services/#studentservices>

### **Wellness and Health Supports at Huron and Western**

University students may encounter setbacks from time to time that can impact academic performance. Huron offers a variety of services that are here to support your success and wellbeing. All Huron staff and faculty have received training on responding to disclosures of Gender-Based Sexual Violence (GBSV); students should know that the Community Safety Office is a resource for survivors, providing support and, if desired, guidance while referring them to the further supports that they may require. Please visit <https://huronatwestern.ca/student-life-campus/student-services/wellness-safety> for more information or contact staff directly:

Wellness Services:

[huronwellness@huron.uwo.ca](mailto:huronwellness@huron.uwo.ca) Community

Safety Office: [safety@huron.uwo.ca](mailto:safety@huron.uwo.ca)

Additional supports for Health and Wellness may be found and accessed at Western through, <https://www.uwo.ca/health/>.

Western Calendar - Policy Pages -

[Academic Calendar - Western University \(uwo.ca\)](#)