

# Course Outline Form: MATH 1160 - Fall 2017

## General Information

### **MATH\*1160 Linear Algebra I F (3-0) [0.50]**

This course provides an introduction to linear algebra in Euclidean space. Topics covered include: N-dimensional vectors, dot product, matrices and matrix operations, systems of linear equations and Gaussian elimination, linear independence, subspaces, basis and dimension, matrix inverse, matrix rank and determinant, eigenvalues, eigenvectors and diagonalization, orthogonalization and projections, linear transformations. Some fundamental proofs and applications of these topics will be included.

Prerequisite(s): 4U Calculus and Vectors or 4U Advanced Functions

Restriction(s): [ENGG\\*1500](#), [MATH\\*2150](#), [MATH\\*2160](#)

**Academic Department (or campus):** Mathematics & Statistics

**Campus:** Guelph

**Semester Offering:** Fall 2107

### **Class Schedule and Location:**

LEC Tues, Thur  
02:30PM - 03:50PM  
MACN, Room 105

## Instructor Information

**Instructor Name:** Monica Gabriela Cojocar  
**Instructor Email:** [mcojocar@uoguelph.ca](mailto:mcojocar@uoguelph.ca)  
**Office location and office hours:** MACN 549

## GTA Information: N/A

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**Labs & Seminars:** N/A

**Course Assignments and Tests:**

For clarity, the below table refers to:

First lecture: Thursday, September 7, 2017

Week 1 of classes = Week of Sept. 11, 2017

Week 12 of classes = Week of Nov. 27, 2017

Reminder: Oct 9 and Oct 10 – NO CLASSES. Classes in these days are scheduled on Nov. 30 and Dec. 1, 2017, respectively, in Week 12.

Assigned work	Date	Location	Contribution to final mark
Quiz 1	Posted online on: Sat Sept. 16 (by 6 PM)	Online CourseLink 3 attempts 2hrs limited	10%
Quiz 2	Posted online on: Sat Sept. 30 (by 6 PM)	Online CourseLink 3 attempts 2hrs limited	10%
Quiz 3	Posted online on: Sat Oct. 14 (by 6 PM)	Online CourseLink 3 attempts 2hrs limited	10%
Quiz 4	Posted online on: Sat Oct 28 (by 6 PM)	Online CourseLink 3 attempts 2hrs limited	10%
Quiz 5	Posted online on: Sat Nov 11 (by 6 PM)	Online CourseLink 3 attempts 2hrs limited	10%
Test 1	Thu: Sept. 27, 2017	In Class, duration 50 min	12%
Test 2	Thu Oct 25, 2017	In Class, duration 50 min	12%
Test 3	Thu Nov. 15, 2017	In Class, duration 50 min	12%

EXAM Wed

02:30PM - 04:30PM (2017/12/06)

Room TBA Room TBA

**Tests total = 36% + Quizzes total (4 best out of 5) = 40% + Final exam weighting: 24%**

**NOTE:** If a Test is missed and student presents a case for academic consideration according to University guidelines (below), I may consider your 5-th Quiz as a replacement of the Test missed.

If a Test is missed with NO explanation as to the circumstances, I will consider the 5<sup>th</sup> Quiz for 50% of the missed Test.

Any other situations will be dealt with on a case-by-case basis in accordance with University policy (included below).

## **Course Resources**

**Required Texts: N/A**

**Recommended Texts:**

“Introduction to Linear Algebra with Applications”

By: Jim DeFranza & Daniel Gagliardi

***Instructor’s Notes will be provided via the Courselink site of the course.***

These are INTERACTIVE NOTES, i.e, students can bring them to class (in either electronic or paper form) and use them in the lectures. The instructor will use on a regular basis. They follow the recommended textbook.

## **Course Policies**

### **Email communication with Instructor:**

- Student emails will be replied to on a first-come basis. If multiple emails concern an issue for the entire class, the Instructor will email the class list and/or post relevant info on the Courselink site under “NEWS”.
- The Instructor will not answer emails during the weekend, unless in extreme/urgent circumstances.
- Help is available during Office Hours posted above, on a first-come basis.
- Other communication with the class will take place either by email to class, or by posting relevant brief messages, which will be visible to everyone under the “NEWS” header of the page.

ONLINE QUIZZES: This year we are taking advantage of the Online Quiz facility on Courselink.

## **Grading Policies**

All marked Tests will be returned to students within 7 calendar days in the OUTBOX assigned to the course.

OUTBOX INFO: BOXES # 170, in MACN 3rd floor, at the south end of the hallway

Solution and marking scheme for all Tests will be uploaded on the course Courselink after the test date.

Any grading concerns should be submitted in writing (on a separate page, stapled on the front page of the assignment or test) to the Instructor either at end of a class or at Instructor's office after solutions and marking scheme have been posted.

Online quizzes results will be released after quiz completion. Each Quiz can be completed over the course of 1 week after posting, within a maximum duration of 2 hrs for 2 attempts. Students who may need other durations should approach the Instructor by email before Quiz 1.

***For further grading procedures please refer to:***

<http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-grds.shtml>

***Please note that these policies are binding unless academic consideration is given to an individual student.***

## **University Policies**

### Recording of Materials

Presentations which are made in relation to course work—including lectures—cannot be recorded or copied without the permission of the presenter, whether the instructor, a classmate or guest lecturer. Material recorded with permission is restricted to use for that course unless further permission is granted.

### E-mail Communication

As per university regulations, all students are required to check their <mail.uoguelph.ca> e-mail account regularly: e-mail is the official route of communication between the University and its students.

### When You Cannot Meet a Course Requirement

When you find yourself unable to meet an in-course requirement because of illness or compassionate reasons, please advise the course instructor (or designated person, such as a teaching assistant) in

writing, with your name, id#, and e-mail contact. See the [undergraduate calendar for information on regulations and procedures for Academic Consideration](#).

### Drop Date

Courses that are one semester long must be dropped by the end of the fortieth class day; two-semester courses must be dropped by the last day of the add period in the second semester. The regulations and procedures for [Dropping Courses](#) are available in the Undergraduate Calendar.

### Copies of out-of-class assignments

Keep paper and/or other reliable back-up copies of all out-of-class assignments: you may be asked to resubmit work at any time.

### Accessibility

The University promotes the full participation of students who experience disabilities in their academic programs. To that end, the provision of academic accommodation is a shared responsibility between the University and the student.

When accommodations are needed, the student is required to first register with Student Accessibility Services (SAS). Documentation to substantiate the existence of a disability is required, however, interim accommodations may be possible while that process is underway.

Accommodations are available for both permanent and temporary disabilities. It should be noted that common illnesses such as a cold or the flu do not constitute a disability.

Use of the SAS Exam Centre requires students to book their exams at least 7 days in advance, and not later than the 40th Class Day.

More information: [www.uoguelph.ca/sas](http://www.uoguelph.ca/sas)

### Academic Misconduct

The University of Guelph is committed to upholding the highest standards of academic integrity and it is the responsibility of all members of the University community – faculty, staff, and students – to be aware of what constitutes academic misconduct and to do as much as possible to prevent academic offences from occurring. University of Guelph students have the responsibility of abiding by the University's policy on academic misconduct regardless of their location of study; faculty, staff and students have the responsibility of supporting an environment that discourages misconduct. Students need to remain aware that instructors have access to and the right to use electronic and other means of detection.

Please note: Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisor.

The [Academic Misconduct Policy](#) is detailed in the Undergraduate Calendar.

### Resources

The [Academic Calendars](#) are the source of information about the University of Guelph's procedures, policies and regulations which apply to undergraduate, graduate and diploma programs.