

UNIVERSITY OF REGINA  
DEPARTMENT OF MATHEMATICS AND STATISTICS  
Mathematics 122–001: Linear Algebra I  
Winter 2012 Course Outline

## Instructor

Lecturer: Dr Robert Bailey

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Office hours: **Tuesday, Wednesday 2.00–4.00pm**, or by appointment.

## Course webpage

[www.math.uregina.ca/~bailey/Math122/](http://www.math.uregina.ca/~bailey/Math122/)

You are strongly advised to check the course webpage regularly, as announcements, assignments, solutions and other material will be posted there.

## Prerequisites

The prerequisites for this course are Math B30 with a grade of 70% or higher, or a successful completion of a university-level mathematics or statistics class.

## Classes

Classes will be **Monday, Wednesday, Friday, 10.30–11.20**, Classroom Building CL130, starting on January 6th.

## Recommended textbook

*Elementary Linear Algebra: First Canadian Edition*, by Venit, Bishop and Brown.

This textbook is recommended rather than required, so it’s entirely up to you whether you choose to buy it. There are many, many other books on linear algebra which might also be useful: look under QA184 in the library for a selection. (Anything with a title such as ‘Introduction to Linear Algebra’ will cover this material, though be warned it may cover topics in a different order, or use slightly different notation or terminology, etc.)

## Course overview

The course will be an introduction to linear algebra, with an emphasis on calculations. Topics include vectors, systems of linear equations, matrices, inverses, determinants, orthogonality, linear transformations, eigenvalues and eigenvectors. We'll cover most of chapters 1–8 of the textbook.

## Assessment

The course will be assessed by assignments (20%), two midterm tests (15% each), and a final exam (50%).

## Assignments

There will be six assignments (i.e. one every two weeks), which will be due in class on Fridays. These will count for 20% of your final grade. You are welcome (and encouraged) to work with other students on your assignments; *however*, each student must submit their own unique paper. Late assignments will not be accepted.

For those students who successfully submit all assignments, the best five will be counted.

## Midterms

There will be two midterm tests, which will take place *in class* on **February 10** and **March 9**. The tests will last for 45 minutes, and will be **closed-book** tests. There will be no opportunity to take the tests at alternative times.

## Final examination

This will be on **Saturday April 14, 9.00am–12.00 noon**; the location of the exam will be announced later.

## Supplemental Instruction

Supplemental Instruction (SI) is available for this course. This offers free out-of-class study groups to help you succeed in this class. There will be three one-hour weekly sessions and you may choose to go to one, two, or all three sessions. The sessions are held in CW308 (College West), times TBA.

This is a good opportunity for extra practice and help with the course material, and is not to be wasted. It's there for your benefit! Further information can be obtained from the Faculty of Science web site ([www.uregina.ca/science](http://www.uregina.ca/science)), where you can find a short video.

## **Other information**

### **Missed assignments and tests**

If an assignment or a test is missed for a legitimate reason, you need to inform the instructor as soon as possible. The term mark will be pro-rated.

### **Calculators**

None of the test or exam questions will require you to use a calculator. However, it must meet the guidelines described in the department's calculator policy:

[www.math.uregina.ca/current/calcpolicy.php](http://www.math.uregina.ca/current/calcpolicy.php).

(In a nutshell, this means no cellphones, smartphones, translators, netbooks, laptops, iPads or e-readers.) The use of other types of calculator may be considered to be grounds for academic misconduct. If you're not sure whether your calculator is permitted or not, please bring it to my office hours *before the test you want to use it*, and I'll take a look at it.

### **Withdrawal date**

The last date to withdraw from this class is **March 15**. If you are considering dropping the class, please come and talk to me first!

### **Accommodations**

Any student in this course who, because of a disability, may have a need for accommodations, please come and discuss this with me as soon as possible, as well as contacting the Centre for Student Accessibility at 585-4631.

*R. F. Bailey, 15 December 2011*