Carleton University, School of Mathematics and Statistics
Math 1102A • Algebra I
Course Outline • Fall and Winter Terms 2019/2020

TIME OF LECTURES: Tues Thurs 2:35 – 3:55

INSTRUCTOR:

Brandon Fodden *brandon.fodden@carleton.ca*
Office: 4356 HP Twitter: *@math_brandon*
Office hours: Mon Wed 12:30 – 2:00

TUTORIAL: Thurs 11:35 – 12:55 **ROOM:** various

PREREQUISITES: Ontario Grade 12 Mathematics: Advanced Functions, and
Ontario Grade 12 Mathematics: Calculus and Vectors
with grades of at least 75% in each; or
MATH 0005 and MATH 0006 with grades of at least B in each;
or equivalents; or permission of the School

REFERENCES: *A First Course in Linear Algebra* by Robert A. Beezer
Linear Algebra Done Right (3rd edition) by Sheldon Axler
  (the above book is available free from a school computer)
Linear Algebra Done Wrong (latest edition) by Sergei Treil

GRADING SCHEME:

Assignments (best 14 of 18)	20%
Fall midterm	10%
Midyear exam	20%
Winter midterm	10%
Final exam	40%

Topics: Properties of numbers, modular arithmetic. Vector spaces, matrix algebra, linear dependence, bases, linear transformations, inner products, eigenvalues, diagonalization; emphasis on proofs and theory.

Pregnancy or religious obligation: Write me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, see the Student Guide.

Students with disabilities requiring academic accommodations in this course must register with the Paul Menton Centre for Students with Disabilities (PMC) for a formal evaluation of disability-related needs. Documented disabilities include but are not limited to mobility/physical impairments, specific Learning Disabilities (LD), psychiatric/psychological disabilities, sensory disabilities, Attention Deficit Hyperactivity Disorder (ADHD), and chronic medical conditions. Registered PMC students are required to contact the PMC every term to have a Letter of Accommodation sent to the Instructor by their Coordinator. In addition, students are expected to confirm their need for accommodation with the Instructor no later than two weeks before the first assignment is due or the first in-class test/midterm. If you require accommodations only for formally scheduled exam(s) in this course, you must request accommodations by the official accommodation deadline published on the PMC website.

COMMENTS:

- Assignments will generally be posted on Tuesdays, and are due in the following Tuesday class.

- The fall midterm is an 80 minute test held **in the tutorial** on **Thursday October 31**.

- The midyear exam is a two hour test held during the December exam break, to be scheduled by the University. The date, time, and location will be announced in at some point during the fall term.

- The winter midterm is an 80 minute test held **in the tutorial** on **Thursday February 27**.

- The final exam is a three hour closed book test to be scheduled by the University. The date, time, and location will be announced in at some point during the winter term.

- Tests must be written at the scheduled time; no provision is made for make-up tests or quizzes.

- Assignments and tests must submitted in a legible form. Be sure to explain what you are doing and use sentences!

- A basic (non-scientific) calculator may be used on the tests and exam, but is not required.

- Plagiarism and cheating will not be tolerated and can lead to severe penalties – consult the undergraduate calendar.

- You are expected to attend all lectures. If you miss a lecture, it is your responsibility to understand all material from that lecture, and to get any handouts or information given. It is best to avoid missing class, if possible.

- Student or professor materials created for this course (including any posted notes, tutorials, assignments, quizzes, and tests) remain the intellectual property of the author(s). They are intended for personal use and may not be reproduced or redistributed without prior written consent of the author(s).

EXTRA HELP:

There is help available for this course. It is up to you to seek any help you may need. Please do not hesitate to take advantage of the help being offered – that's why it's there! Here is a summary of the help available:

- Class tutorial (see front of sheet)

- My office hours (see front of sheet), or email

- MS-LAP[1]

- Math 1102 Problem Solving Sessions in the MTC (time to be announced)

- Math Tutorial Centre in 3422 HP; see http://www.carleton.ca/math/math-tutorial-centre/ for the schedule

- Your classmates

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[1]The Math & Stats Learning Assistance Program is a free of charge program that helps students in achieving their goals. It provides learning support and solutions to homework questions through assistance videos. These services are available on cuLearn. MS-LAP gives students tools to succeed while explaining step-by-step particular problem strategies and associated theory. The program is for anyone who wants to deepen their understanding at their own pace, and in the comfort and privacy of their home.