MATH 151 Algebra 2014 (1/3)

## Course Outline

This document gives information that you will find *essential* to progressing well in the course. Make sure that you read and understand what it says. Additional information and any changes will be announced in lectures and on the course homepage.

## Course Homepage

### http://msor.victoria.ac.nz/Courses/MATH151\_2014T1

This will provide announcements, assignments, copies of handouts, tutorial and helpdesk times, and other useful information.

#### Course Administrator

Dr Steven Archer Cotton 363, 463-5233 extn. 8316, sarcher@msor.vuw.ac.nz

Dr Archer deals with all day-to-day organization and enquiries about the course. He is the person to contact if you have a missing assignment or similar problem.

#### Lecturers

Dr. Alex Usvyatsov (weeks 1-5), Cotton 427, 463-9543, alexus@msor.vuw.ac.nz Prof. Rob Goldblatt, (weeks 6-11) Cotton 438, 463-5660, rob@msor.vuw.ac.nz Prof Goldblatt is also the Coordinator, with overall responsibility for the course.

## Core Skills Inquiry

During Week 1 you will take a multi-choice on-line survey designed to check whether you already have the core skills that are vital for success in university mathematics. Taking this Inquiry survey is **compulsory** and if you fail to do so you will be deemed to have withdrawn.

The Core Skills Inquiry will take at most 50 minutes and can be done online any time up to **Thursday 6 March at 12 noon** by logging in to the Blackboard system at https://blackboard.vuw.ac.nz and selecting MATH 151.

Students identified through the Inquiry survey as lacking some core skills will be notified by email by the end of Week 1, and will be required to attend a series of Core Skills Tutorials.

### **Trimester Dates**

Teaching in Trimester 1 runs from 3 March to 6 June, during which the course will have 30 lectures, 11 tutorials, 10 weekly assignments, and a midterm test. The final examination period is from 13 June to 2 July.

Withdrawal date: You can withdraw from the course during the first two weeks, up until Friday 14 March, and have your fees refunded or transferred to another course. For more details see http://www.victoria.ac.nz/students/study/withdrawals-refunds

### **Lectures Times**

Tuesday 2:10-3pm, Wednesday and Friday 4:10-5pm, in Kirk KKLT303.

Lectures are important: they provide the content that you must learn to pass the course.

#### Midterm Test

This will be held on Tuesday 6 May at 2-3pm in KKLT303, during the lecture hour.

#### **Final Examination**

A three-hour exam will be held during the examination period, at a time to be advised.

#### **Tutorials**

Tutorials will start on Monday 10 March (Week 2). By the end of Week 1 you are required to sign up for a tutorial at https://signups.victoria.ac.nz

Tutorial times and locations are listed on the Course Homepage. There are nine of them available from Monday to Thursday.

Tutorials provide practice with exercises related to the current assignment. They are very important, and you are welcome to attend more than one tutorial.

## Helpdesk

These are help sessions that you can drop in to if you have questions. Times will be posted on the page http://msor.victoria.ac.nz/Main/MathHelpDesk

# Weekly Assignments

Assignments will be posted on the course homepage on Friday at the end of each week , with paper copies also available from the Hand-Out Boxes outside the School Office, near Steven Archer's office.

Completed assignments are due in **by 1pm** on the Friday a week later. The first assignment will be available on Friday 7 March, and be due on Friday 14 March at 1pm.

Submit your assignments by posting them in **your correct box** for MATH 151 in the third floor corridor of the Cotton building, just through the glass doors of the lift lobby. The correct box for you is the one whose label corresponds to your family name. *Ensure that your name and student ID number is written on the assignment.* 

You can collect your marked assignment the following week from the School Office (Cotton 358), during the times listed at the webpage at

http://msor.victoria.ac.nz/Main/MarkedAssignments

This webpage will tell you when a particular assignment is ready for pick up.

Late assignments, and assignments posted in the wrong box, will not be marked.

## **Mandatory Course Requirements**

As well as obtaining an adequate grade, to pass the course you must do the following:

• Complete the Core Skills Inquiry survey by Thursday 6 March 12 noon, and any required follow-up.

- Sign up for a tutorial, at https://signups.victoria.ac.nz, by Friday 7 March 2pm.
- Hand in on time a genuine attempt at all of the weekly assignments.
- Sit the midterm test on Tuesday 6 May, 2–3pm.
- Sit the final examination and obtain at least 40% for it.

If a serious problem (usually illness) prevents you from sitting the midterm test, or causes you to miss more than one assignment, then discuss it with Steven Archer as soon as possible. Obtain a medical certificate where appropriate.

#### Assessment

The final grade will be based on the maximum of the following:

- (i) The mark from the final exam; or,
- (ii) 75% of the mark of the final exam, plus 25% of the mark of the terms test; or
- (iii) 75% of the mark of the final exam, plus 15% of the mark of the midterm test plus 10% for assignments.

For assignments you will receive one mark for each satisfactory attempt handed in on time, up to a maximum of 10 (an assignment will generally be regarded as satisfactory if you get at least 8 out of 20).

If a serious problem (usually illness) prevents you from sitting the final exam, or seriously impairs your performance in it, then contact your Faculty Office as soon as possible. You may be eligible for an aegrotat pass. In the event of such an aegrotat application, assessment will be made on the basis of the weekly assignments and the midterm test. So you are strongly advised to complete all assignments.

## Workload

Although the workload will vary from week to week, you should expect to spend approximately 10 hours per week on the course, including attending the lectures and tutorial, reviewing lecture notes and reading the textbook, and completing the weekly assignment.

### Textbook

A First Course in Linear Algebra, 3rd Edition, by David Easdown.

The course will follow this book closely, and you are expected to have your own copy.

### No Calculators in Exams

Calculators, table books or formula sheets will **not** be allowed in the midterm test or the final examination. The questions will provide appropriate arithmetical data that will allow you to answer them without a calculator.

## Class Representative

Your class representative is available if you come across problems and for any reason the issue cannot be resolved directly with staff. If you would like to talk about a concern you have, please email your class rep and a meeting can be arranged. The name of the class rep will be put on the Course Homepage.

## Course Content and Learning Objectives

The course is an introduction to linear algebra and some other algebraic systems. It aims to give you an understanding of:

- the nature of *vectors* and their algebraic properties and geometrical behaviour:
- the manipulation of matrices and determinants, and their various uses;
- methods of solution of systems of linear equations;
- the arithmetic and algebra of complex numbers and polynomials.

You will also learn to reason logically about algebraic concepts and to present written solutions to mathematical problems that provide appropriate explanation and justification.

#### Information about the School

The School of Mathematics, Statistics and Operations Research (SMSOR) is located in the Cotton Building on the Kelburn Campus.

- $\bullet$  The School Office is in CO358, on the 3rd floor of the Cotton Building. The office is open from  $8.30 \mathrm{am}\text{-}5.00 \mathrm{pm}$
- The School website is http://msor.victoria.ac.nz
- Hand in boxes for assignments are on level 3 of the Cotton Building
- Assignments can only be collected from the office at certain times, listed on the Marked assignments page: http://msor.victoria.ac.nz/Main/MarkedAssignments
- There is a noticeboard opposite the School Office where students seeking and offering private tuition in mathematics and statistics can put requests and advertisements.

## Academic integrity and plagiarism

Academic integrity means that university staff and students, in their teaching and learning are expected to treat others honestly, fairly and with respect at all times. It is not acceptable to mistreat academic, intellectual or creative work that has been done by other people by representing it as your own original work. Academic integrity is important because it is the core value on which the University's learning, teaching and research activities are based. Victoria University's reputation for academic integrity adds value to your qualification. The University defines plagiarism as presenting someone else's work as if it were your own, whether you mean to or not. "Someone else's work" means anything that is not your own idea. Even if it is presented in your own style, you must acknowledge your sources fully and appropriately. This includes:

- Material from books, journals or any other printed source
- The work of other students or staff
- Information from the internet
- Software programs and other electronic material
- $\bullet\,$  Designs and ideas
- The organisation or structuring of any such material.

Find out more about plagiarism, how to avoid it and penalties, on the University's website: http://www.victoria.ac.nz/students/study/exams/integrity-plagiarism

# Where to find more detailed information

Find key dates, explanations of grades and other useful information at http://www.victoria.ac.nz/home/study. Find out about academic progress and restricted enrolment at http://www.victoria.ac.nz/home/study/academic-progress. The University's statutes and policies are available at http://www.victoria.ac.nz/home/about/policy, except qualification statutes, which are available via the Calendar webpage at http://www.victoria.ac.nz/home/study/calendar.aspx Further information about the University's academic processes can be found on the website of the Academic Office at http://www.victoria.ac.nz/about/governance/dvc-academic.