MAT247 – Algebra II, Spring 2017
Florian Herzig

Textbook:
Friedberg, Insel and Spence, *Linear Algebra*, 4th edition, Prentice Hall.

Course Webpage:
The website for this course is

$$\texttt{http://www.math.toronto.edu/\~{}herzig/247-s17.html}.$$

Blackboard will mainly be used for homeworks and grades.

Topics:
The main topics covered by this course are the following:
I. Diagonalization, eigenvectors and eigenvalues.
        Chapter 5: sections 5.1–5.2 and 5.4
II. Inner product spaces and linear transformations on them.
        Chapter 6: sections 6.1–6.6
III. Jordan canonical form and rational canonical form.
        Chapter 7: sections 7.1–7.4
IV. As time permits, we will discuss the structure of bilinear forms and give
a brief introduction to matrix groups.
        Chapter 6: sections 6.8 and 6.11

Lectures:
Tue 10–11 (BA 1160) and Thu 11–1 (PB B150)

Tutorials:
Information will be posted shortly.

Marking Scheme:
Your final grade will be determined in one of the following two ways, whichever
gives you the higher mark:

	#1	#2
Homework	13.3%	20%
Term test	26.7%	40%
Final	60%	40%
Total	100%	100%

Term Test:

The term test will take place on **Thu, February 16th**, 11:10–13:00. No aids will be allowed. More details about the test will be provided as the time approaches.

Note: There will be **no** makeup term test! If you miss the term term and you do not provide a valid reason (e.g., a doctor's note) within one week of the test, the test grade will be counted as 0. If you provide a valid reason within one week, the marking scheme will be adjusted appropriately.

Final Exam:

The final exam will take place during the examination period, and will be three hours long. It will cover all the material presented in lectures and tutorials. No aids will be allowed. More details about the test will be provided as the time approaches.

Homework:

There will be weekly homework assignments, which you must submit by the due date. We intend to use the Crowdmark system for the submission of homeworks (to be confirmed). These assignments will be given throughout the course which will cover the recent material discussed in lectures. **No late assignments will be accepted.** You can discuss homework with classmates, but you have to write up the solutions yourself, in your own words. **Update Feb 28:** The lowest homework will be dropped.

Code of Behaviour / Plagiarism:

Students should become familiar with and are expected to adhere to the Code of Behaviour on Academic Matters which can be found at

`http://www.governingcouncil.utoronto.ca/policies/behaveac.htm`.

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