## McGill University Department of Mathematics and Statistics MATH 251 Algebra 2, Winter 2018

**Instructors**. The instructor for this course is Jan Vonk

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Textbook. E. Goren, Algebra II. Available on MyCourses.

**Syllabus**. This course will cover the basics of Linear Algebra, which is the study of vector spaces and linear transformations, over a general base field. Some of the key topics in this course include:

- Vector spaces: Linear dependence, dimension, sums, dual spaces ...
- Linear transformations: Diagonalisation, Cayley-Hamilton, Jordan form, ...
- Linear equations, inner products, special operators, matrix groups, ...

**Lectures**. The class will be held at ENGMD 279, on Mondays, Wednesdays, and Fridays 9:35–10:25am, starting on Monday 8 January. Classes end on 16 April.

**Office Hours**. In addition to the lectures, the instructor will be available in BURN 1120 during the following times:

- Mondays 10:30 11:30am
- Fridays 10:30 11:30am

**Assessment**. Calculators and other electronic devices will not be permitted during the midterm and exam. Assessment for the course is based on the following:

- 1. **Assignments**: There will be 5 assignments during the semester, which will be posted on MyCourses. It is the student's responsibility to check MyCourses regularly for assignments to be completed.
- **2. Midterm**: There will be one midterm, held during class on 26 February. Please note that the midterm cannot be made up if missed for any reason.
- **3. Final Exam**: The final examination will be 3 hours long. There is no "additional work" option and the grade of incomplete will not be given. A supplemental exam will be available for students registered in a faculty that supports the concept.

Your course mark will be determined by the following formula:

20% Assignments + 20% Midterm + 60% Final Exam

Note that there is **no** 100% Final Exam option; The midterm, however is optional in the following sense: It counts for 20% of the grade but only if the grade obtained on the midterm exceeds the overall grade you obtain. Otherwise the midterm will not count and your grade will be determined by 20% Assignments + 80% Final Exam.

**Academic Integrity**. McGill University values academic integrity. Therefore all students must understand the meaning and consequences of cheating, plagiarism and other academic offences under the Code of Student Conduct and Disciplinary Procedures. (see http://www.mcgill.ca/integrity/ for more information)

Language Policy. Conformément à la Charte des Droits de l'Étudiant de l'Université McGill, chaque étudiant a le droit de soumettre en français ou en anglais tout travail écrit devant être noté (sauf dans le cas des cours dont l'un des objets est la maîtrise d'une langue). / In accord with McGill University's Charter of Students' Rights, students in this course have the right to submit in English or in French any written work that is to be graded.

Please note that in the event of extraordinary circumstances beyond the University's control, the content and/or evaluation scheme in this course is subject to change.