

MATHEMATICS 2R3 COURSE OUTLINE FALL 2016

ERIC T. SAWYER

Lectures:

MoTh 9:30am - 10:20am and *Tu* 10:30am - 11:20am in HH 302.

Tutorial:

#1 We 4:30pm - 5:20pm and *#2 Tu* 9:30am - 10:20am in HH 305, *Leader:* Aaron Crighton

Texts:

Anton and Rorres is recommended for purchase. Treil presents an alternative that emphasizes rigorous proof, analysis, geometry and probability. My lecture notes will appear on the course website and will be modified as the term progresses, but will not be as informative as either of the texts above, and will not have nearly as many exercises and applications. Assignments will be taken from Anton and Rorres.

- (1) "Elementary Linear Algebra", H. Anton and C. Rorres, 11th edition, Wiley.
- (2) "Lecture Notes in Linear Algebra", E. Sawyer, available on the course website, Avenue to Learn.
- (3) "Linear Algebra done wrong", S. Treil, Brown University, January 2015.

Content:

A rough description of the course content relative to the books above is this.

- (1) All of Chapters 4 and 8, and the first halves of Chapters 6 and 7 of Anton and Rorres.
- (2) All of the lecture notes.
- (3) Some of Chapters 1, 4, 5, 6 and 7 of Triel.

Tentative Evaluation:

- (1) (a) the four highest assignment marks out of six assignments due Thursday September 22, October 6, 27, November 10, 24 and December 6; **10%**
(b) one 50 minute midterm test, **tentatively** scheduled for Monday October 24 during class time; **20%**
(c) two 25 minute optional quizzes, **tentatively** scheduled for Thursday September 29 and Thursday November 17 during class time; **10%** each
(d) a $2\frac{1}{2}$ hour final exam scheduled by the registrar; the **remaining %**.
- (2) Because the two lowest assignment marks out of six are dropped, no relief will be awarded for missed assignments. Because the two quizzes are optional, no relief will be awarded for missed quizzes.

- (3) If documentation for missing the midterm test is provided in accordance with university rules, see <http://registrar.mcmaster.ca/CALENDAR/2013-14/pg2246.html>, the evaluation weight of the midterm test will be added to that of the final exam.
- (4) The optional quizzes will be written tentatively during the final 25 minutes of class time. At the end of the class, the student may choose to hand in the quiz for marking, and in this case the quiz grade will count 10% toward the final grade in the course. Or, at the end of the class, the student may choose to *not* hand in the quiz for marking, and in this case the evaluation weight of the quiz will be added to that of the final exam.

Homework:

Weekly homework will be assigned in class and/or on the course website, and some of it will appear on the assignments to be handed in. It is however important that you do *all* the assigned homework to help you understand the course.

Course website:

Assignment questions and solutions along with partial lecture notes and other information will be posted in a timely manner on the Math 2R3 website on Avenue to Learn.

Office: HH311A

Phone: ext 23407

Email: sawyer@mcmaster.ca

Calculators:

No calculators or other aids will be necessary or permitted on the midterm test or the final exam.

Senate Policy Statement:

You are reminded of the "Statement of Academic Ethics" and the "Senate Resolutions on Academic Dishonesty" as found in the Senate Policy Statements distributed at registration and available in the Senate Office.

Important Message:

The instructor and university reserve the right to modify elements of the course during the term. The university may change the dates and deadlines for any or all courses in extreme circumstances. If either type of modification becomes necessary, reasonable notice and communication with the students will be given with explanation and the opportunity to comment on changes. It is the responsibility of the student to check their McMaster email and course websites weekly during the term and to note any changes.