MATH 225 Syllabus Fall 2010

Text: Differential Equations, Computing and Modeling, Fourth Edition, by C. Henry Edwards and David Penney, Pearson Education, 2008.

Section A: (Dupuis Hall Auditorium, Slot 15)
Section B: (Walter Light Hall, Room 205, Slot 14)

Instructor: Patrick Reynolds **Office**: Jeffery Hall OLS 228
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Tutorials: The tutorials will be in odd numbered weeks on Tuesdays at 17:30-18:20: Tutorial Section A: Stirling 412B (tutor: Andrew Brennan), Tutorial Section B: Stirling B (tutor: Erik Jensen), Tutorial Section C Stirling A (tutor: Valdemar Tsanov).

Schedule:

Week	**Dates**	**Sections**
1	Sep. 13–17	Read 1.2 and Theorem 1 on Page 24 1.4 Separable Equations and Applications
2	Sep. 20–24	1.5 Linear First-Order Equations **Tuesday Quiz 1 (Sep. 21)**
3	Sep. 27–Oct. 1	3.1 Second-Order Linear Equations 3.2 General Solutions of Linear Equations (half)
4	Oct. 4 – 8	Finish 3.2 3.3 Homogeneous Equations with Constant Coefficients **Tuesday Quiz 2 (Oct. 5)**
5	Oct. 12–15	3.4 Mechanical Vibrations 3.5 Inhomogeneous Equations and Undetermined Coefficients
6	Oct. 18–22	3.6 Forced Oscillations and Resonance Start Laplace Transform **Tuesday Quiz 3 (Oct. 19)**
7	Oct. 25–29	7.1 Laplace Transforms and Inverse Transforms
8	Nov. 1–5	7.2 Transformation of Initial Value

		Problems 7.3 Translation and Partial Fractions **Tuesday Quiz 4 (Nov. 2)**
9	Nov. 8–12	7.4 Derivatives, Integrals, and Products of Transforms 7.5 Periodic and Piecewise Continuous Input Functions (half)
10	Nov. 15–19	5.1 Matrices and Linear Systems **Tuesday Quiz 5 (Nov. 16)**
11	Nov. 22–26	5.2 The Eigenvalue Method for Homogeneous Systems
12	Nov. 29 – Dec. 3	5.3 Second-Order Systems and Mechanical Applications **Tuesday Quiz 6 (Nov. 30)**

Final Exam: The final exam will take place in December and will cover the whole course. It will count for at least 50% of your final grade. The date for the exam has not been announced; it could be as late as December 22. Please do not make travel plans that might conflict with the final exam.

You will be allowed to take into the final exam one 8.5″ x 11″ sheet of notes (both sides).

Web Page: http://www.mast.queensu.ca/~math225/

Homework: A list of practice problems will be given each week to prepare you for the quizzes. The homework will be given in class and posted on the course web page.

Quizzes: There will be 6 quizzes, held on the following Tuesdays: September 21, October 5, October 19, November 2, November 16, and November 30. Quizzes will start promptly at 17:30 and last 30 minutes. The best five scores will count towards your final grade; thus each quiz will count for between 6% and 10% of your final grade (see below). It is quite important for you to write all six quizzes.

No notes or aids other than calculators may be used on the quizzes.

There will be no makeup quizzes. If you miss a quiz because of exceptional circumstances that are beyond your control and which could not have been foreseen, special arrangements may be made provided that the circumstances can be satisfactorily documented.

If a religious observance recognized by the University Registrar or a field trip arranged by your Department coincides with a quiz, a quiz may be dropped without penalty. However, exemptions cannot be made for athletic events.

The quizzes will be written in TBA (students whose last name begins with a letter in the interval A – K) or TBA (students whose last name begins with a letter in the interval L – Z). These assignments are independent of tutorial rooms.

Calculators: The CASIO FX 991 series calculator or equivalent non-programmable calculator will be allowed for quizzes and the final exam.

Grades

Quizzes	50 %	or	Quizzes	30 %
Final Exam	50 %		Final Exam	70 %

whichever produces the higher grade.

Academic Dishonesty: The Department of Mathematics and Statistics expects its students to comply fully with Queen's University policies on academic dishonesty. http://www.queensu.ca/secretariat/senate/policies/acaddish.html

Cell Phones and Laptops: Please do not use cell phones or laptop computers during class as they are very disruptive to other students.