

COURSE OUTLINE
Mathematics 2300.03B (01) Mathematical Modelling I
Winter 2013

1. Instructor: Jason I. Brown.

Office: Room 204, Chase Building, TR 11:30 – 13:00

Telephone: 494-7063

Email: brown@mathstat.dal.ca (preferred method of contact)

2. Textbook

Giordano, F.R., Weir, M.D., Horton, S.B. and Fox, W.P., *A First Course in Mathematical Modeling* (4th ed.), Brooks/Cole, 2009.

You should regularly visit the class WebCT site at

www.mathstat.dal.ca/~brown/math2300

You will need to have access to the program Maple. There are many computers on campus that have Maple installed. There is a lab in Chase 007 that has PCs with Maple on them; you will need a Novell account to access them (you can get one by visiting the help desk in the basement of the Killam library). You may also wish to buy a student version of Maple for your own computer (Maple runs on Windows, Linux and Mac operating systems); you can do so online at www.maplesoft.com.

3. Lectures:

TR 1:05 – 2:25 in LSC-PSYCHOLOGY P5263.

4. Assessment:

Assignments	30%
Midterm Test (Thursday, February 19, 2013, in class)	30%
Final Examination (scheduled by the Registrar)	40%

For test and exams, you may use a calculator, but it must NOT have wireless or text capabilities; the use of a prohibited calculator will be considered cheating.

If you are unable to attend class on a day that an assignment, you must email me to make arrangements to submit your assignment. Failure to do so may result in a grade of 0 for the assignment.

If you are sick, DO NOT COME TO CLASS, but make sure you email me on the day you are away. YOU ARE EXPECTED TO CHECK THE CLASS WEBSITE (www.mathstat.dal.ca/~brown/math2600) REGULARLY, especially when away sick. If you are sick, arrangements will be made to a make-up for the midterm exam

and/or final exam; DO NOT COME TO WRITE AN EXAM IF YOU ARE SICK (in fact, if you write an exam while sick, your grade will stand, regardless of whether you bring a doctor's note).

Grade equivalents: A+: [90, 100]; A: [85, 90); A-: [80, 85); B+: [75, 80); B: [70, 75); B-: [65, 70); C+: [62, 65); C: [58, 62); C-: [55, 58); D: [50, 55); F: [0, 50).

5. Accessibility: Students with permanent or temporary disabilities who need classroom or exam accommodations are asked to contact Student Accessibility Services by phoning 494-2836, or by dropping in at the Killam Library, Room G 28.

6. Syllabus:

Modeling Change
Proportionality and Geometrically Similarity
Model Fitting
Experimental Modeling
Simulation Modeling
Dimensional Analysis and Similitude
Fixed Points and Fractals