

MATH 122 - Calculus for Biochemistry, Biology, and Life Sciences
Fall/Winter 2008-2009

Instructors:

Alan Ableson math122@mast.queensu.ca JEFF 505
Rachel Bennett bennetr@mast.queensu.ca JEFF 216

Coordinator: Maja-Lisa Thomson majathom@mast.queensu.ca JEFF 215

Course web site: <http://www.mast.queensu.ca/~math122/>

Description:

Primarily intended for students in Biology, Biochemistry and Life Sciences, this course covers differentiation and integration, Taylor polynomials, multivariable differential calculus, and applications of probability, statistics, and dynamical systems. Material will be presented in the context of biological examples from ecology, behaviour, physiology, evolutionary biology, and other areas of modern biology.

Textbook:

Modeling the Dynamics of Life, Second Edition - F. Adler

Mark Distribution:

On-line Proficiency Test: 4% (for completion)

6 Tests (3 each term) – 36% (6% each)

December Exam: 30%

April Exam: 30%

- If the exam mark in a term is higher than a **written** term test, the test mark will be replaced with the exam mark.
- If a student misses a test without a valid reason, the mark for the test will remain a zero, regardless of exam performance. See Rules and Regulations below.

Parts of the course

- **Lectures** will introduce the key ideas of the course, and will be used to work through introductory examples
- **Assignments**, along with solutions, will give you the chance to master the skills of the course
- **Tutorials** will be where tutors can provide additional examples, as well as the opportunity to get further clarification about the assignment problems.
- **Tests** are written during your tutorial times, 3 times per term. They will be based on the “Test Preparation Problems” from the Assignments.

Rules and Regulations

- All tests are mandatory, and can only be missed through pre-arrangement, or due to illness/family emergency. Notification by email is required within 7 days of the missed test in the case of illness/family emergency.
- Missed tests (with appropriate notification) will not be re-taken; the 6% for the test will be added to the exam for the current term. **Missed tests without a reason/notification will be given a grade of zero.**
- In the tests and exam, no resources can be used, except those provided explicitly in the test.
 - First violation on a test: zero on **two** tests, record with the Faculty.
 - Second violation on a test, or violation in the exam: zero for the course, communication with the Faculty.

Test Schedule

The three term tests will be during your tutorials in the following weeks, and will cover the designated assignments/class weeks.

Test	Week	Material
1	Sep 22-26 (Wk 3)	Weeks 1, 2
2	Oct 20-24 (Wk 7)	Weeks 3, 4, 5, 6
3	Nov 17-21 (Wk 11)	Weeks 7, 8, 9, 10