

MATH 1170
MATHEMATICS FOR LIFE SCIENTISTS
Fall Semester, 2008

Time and Place: MWF 9:40 a.m., ST 205
Computer Lab: Tuesdays as assigned in LCB 115
Instructor: Professor F. Adler
Office Hour: Fridays at 11, LCB 304
Offices: 304 LCB and 319 South Biology
Phone: 1-6848 and 5-6202
Web: <http://www.math.utah.edu/~adler/math1170/index.html>
email: adler@math.utah.edu
Lab TA: Sean Laverty, laverty@math.utah.edu
Text: F. R. Adler, *Modeling the Dynamics of Life: Second Edition*

The Course. Math 1170 is the first semester of a full year calculus sequence designed to teach the mathematics necessary to do biology in this quantitative age. The sequence is for students with little or no previous calculus. We will cover one section of the book per lecture. For additional background, try the texts used in Math 1100 (Varberg and Purcell or Thomas and Finney), or ask me.

Computer Labs. We will meet for one hour weekly for a computer lab in LCB 115. Lab assignments will be due week on the following Tuesday and will account for 15% of your grade. The material covered in labs will be fair game for tests.

Homework. Homework will be due weekly on Mondays, with selected problems from the current sections. The problems will be announced in class and included on the web page. Hand in assigned problems from the sections covered on the previous Friday through Wednesday.

Exams. There will be three mid-terms (each with three or four problems), weekly quizzes (5 questions each, plus extra credit), and a comprehensive final (five problems).

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| Midterm 1 (Chapter 1) | Wednesday, September 24 |
| Midterm 2 (Chapter 2) | Wednesday, October 29 |
| Midterm 3 (Chapter 3) | Friday, November 21 |
| Final Exam (Chapters 1-4) | Wednesday December 17, 8:00 a.m. – 10:00 p.m |

Grading. Grades will be weighted according to the following scheme. You can drop your lowest midterm or half the final, and your worst two quizzes.

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| Each midterm | 10% |
| Quizzes | 10% |
| Final Exam | 30% |
| Written homework | 15% |
| Computer lab write-ups | 15% |

ADA policy The University of Utah seeks to provide equal access to its programs, services and activities for people with disabilities. If you will need accommodations in this class, reasonable prior notice needs to be given to the Center for Disability Services, 162 Olpin Union, 1-6020. CDS will work with you and the instructor to make arrangements for accommodations.

Accommodations policy. The instructor does not grant content accommodation requests as the course content fulfills legitimate pedagogical goals

| Date | Sections covered | Homework Problems | Due |
|--------------|------------------|---|-------------------|
| August 25 | 1.1 | | |
| August 27 | 1.2 | 2, 6, 10, 14, 26, 30, 40, 42, 46, 54, 64 | Sept 3 |
| August 29 | 1.3 | 6, 10, 12, 18, 24, 26, 30, 36, 42, 46, 50 | Sept 8 |
| September 1 | Labor Day | | |
| September 3 | 1.4 | 10, 12, 18, 22, 30, 40, 42, 52, 54 | Sept 8 |
| September 5 | 1.5 | 8, 12, 14, 18, 22, 26, 30, 38, 58 | Sept 15 |
| September 8 | 1.6 | 6, 12, 14, 22, 30, 32, 38, 44, 46 | Sept 15 |
| September 10 | 1.7 | 6, 8, 16, 20, 24, 34, 44, 46, 56 | Sept 15 |
| September 12 | 1.8 | 2, 10, 32, 38, 42, 48, 52, 54 | Sept 22 |
| September 15 | 1.9 | 4, 12, 16, 20, 24, 34, 42, 46 | Sept 22 |
| September 17 | 1.10 | 2, 8, 24, 40 | Sept 22 |
| September 19 | 1.11 | 1, 5, 15, 16 | Sept 22 |
| September 22 | Review | | |
| September 24 | Midterm | | |
| September 26 | 2.1 | 6, 12, 18, 26, 30, 36, 38, 40 | Oct 6 |
| September 29 | 2.2 | 2, 10, 30, 34, 40, 42 | Oct 6 |
| October 1 | 2.3 | 2, 4, 12, 14, 30, 34, 38, 46 | Oct 6 |
| October 3 | 2.4 | 6, 8, 18, 22, 30, 34, 38 | Oct 20 |
| October 6 | 2.5 | 2, 4, 12, 14, 18, 34, 36, 38, 42 | Oct 20 |
| October 8 | 2.6 | 4, 10, 14, 18, 24, 28, 36 | Oct 20 |
| October 10 | 2.7 | 2, 10, 16, 24, 34, 38, 42 | Oct 27 |
| October 20 | 2.8 | 4, 8, 12, 20, 24, 28, 38 | Oct 27 |
| October 22 | 2.9 | 6, 12, 18, 22, 28, 36, 40 | Oct 27 |
| October 24 | 2.10 | 4, 8, 18, 32, 36 | Oct 27 |
| October 27 | Review | | |
| October 29 | Midterm | | |
| October 31 | 3.1 | 4, 8, 14, 24, 32, 38 | Nov 10 |
| November 3 | 3.2 | 6, 8, 10, 12, 14, 28, 30, 36 | Nov 10 |
| November 5 | 3.3 | 2, 4, 8, 10, 14, 16, 26, 28, 34, 46, 50 | Nov 10 |
| November 7 | 3.4 | 2, 8, 10, 12, 18, 26, 30, 34, 36, 38 | Nov 17 |
| November 10 | 3.5 | 4, 10, 16, 26, 36, 38, 40 | Nov 17 |
| November 12 | 3.6 | 6, 12, 20, 34, 38, 44 | Nov 17 |
| November 14 | 3.7 | 6, 12, 18, 24, 36, 38, 42 | Nov 19 |
| November 17 | 3.8 | 2, 6, 10, 24, 30 | Nov 19 |
| November 19 | Review | | |
| November 21 | Midterm | | |
| November 24 | 4.1 | 8, 10, 14, 18, 20, 24, 26 | Dec 1 |
| November 26 | 4.2 | 4, 14, 18, 24, 30, 32, 36 | Dec 1 |
| November 28 | T-day | | |
| December 1 | 4.3 | 2, 8, 12, 34, 38, 44 | Dec 8 |
| December 3 | 4.4 | 4, 6, 10, 14, 18, 22, 30, 34, 38 | Dec 8 |
| December 5 | 4.5 | 2, 8, 16, 22, 30, 40, 46, 48 | Dec 12 |
| December 8 | 4.6 | 4, 10, 16, 30, 32, 34 | Dec 12 |
| December 10 | 4.7 | 12, 16, 20, 28 | Dec 12 |
| December 12 | Review | | |
| December 17 | Final | | 8:00 - 10:00 a.m. |