

**CHEM 4800:** Advanced Topics in Biochemistry

**Lectures:** MWF 11:00-11:50 am, Olin 103

**Instructor:** Professor Bruce E. Bowler

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**Text:** *Bioinformatics*, David W. Mount, Cold Spring Harbor Laboratory Press, 2001.

### Topics Covered

<b>Topic</b>	<b>Chapter</b>
Databases	2
Pairwise Alignment Algorithms	3
Multiple Sequence Alignment	4
Predicting RNA Secondary Structure	5
Database Searching for Similar Sequences	7
Protein Classification and Structure Prediction	9

**Exams:** There will be a midterm, worth 200 points as well as a final exam worth 300 points which will cover all the material presented in the course.

**Midterm:** Friday, April 23, 2004

**Final Exam:** Tuesday, June 1, 2004  
10:00 a.m. – 11:45 a.m.

**Homework assignments:** There will be three homework assignments each worth 100 points, assigned as follows:

Homework set #1: assigned 4/9/04; due 4/16/04

Homework set #2: assigned 4/30/04; due 5/7/04

Homework set #3: assigned 5/21/04; due 5/28/04