



# Biology 1450-001: Computer Lit for biology - Spring 2010

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Office Hours: WF 1:30-3pm or by appointment or when I'm there

M/W/F 10:00-11:00, LS B27

LAB: M 2:00-4:00, LS B27

<http://www.natureboy.com>

(There is a class calendar available on [www.natureboy.com](http://www.natureboy.com))

## Description of course content:

Basic computer skills and the utilization of biological resources on the Internet. Assignments are constructed to enable the student to acquire skills in the use of software programs on graphics, statistics, spreadsheets, and word processing as they apply to the biological sciences.

## Student Learning Outcomes:

The purpose of this class is to teach each student everything he or she needs to know about computers to get through the B.S. biology degree and into graduate school. Furthermore, each student should be able to sit down at any personal computer, regardless of its operating system, and carry out basic functions such as word processing, spreadsheets, email, www, and graphics.

## Required texts:

supplementary materials available at: <http://www.natureboy.com>

## Lecture Topics:

| week                   | topic   |
|------------------------|---|
| Jan 19                 | Introduction to Computers / Hierarchical File Systems |
| Jan 25                 | Operating Systems --- Windows                         |
| Feb 1                  | Operating Systems --- Macintosh/UNIX                  |
| Feb 8                  | Operating Systems --- UNIX (LAB -- UNIX)              |
| <b>Feb 12?</b>         | <b>TEST 1</b>   |
| Feb 15                 | Internet, HTTP, HTML (LAB -- HTML)                    |
| Feb 22                 | FTP / Biology web resources (LAB -- HTML)             |
| Mar 1                  | The Internet --- email / client software              |
| Mar 8                  | HTML tables and other stuff (LAB -- email)            |
| Mar 22                 | Images for the web                                    |
| Mar 29                 | Images (LAB -- rollovers)                             |
| Apr 5                  | Images (LAB -- image analysis)                        |
| <b>Apr 2?</b>          | <b>TEST 2</b>   |
| Apr 12                 | excel, t-tests, ANOVA (LAB -- excel)                  |
| Apr 19                 | SPSS t-tests, ANOVA                                   |
| Apr 26                 | correlations, graphing (LAB -- SPSS)                  |
| <b>Apr 30?</b>         | <b>Test 3</b>   |
|                        | Word and Powerpoint                                   |
| <b>May 10, 9:00 AM</b> | <b>FINAL EXAM, Website due</b>                        |

## Grading policy:

**Daily grades:** There will be four quizzes worth 25 points each for a total of 100 points. Each quiz will consist of five questions. Quizzes are given during the first 15 minutes of class. There are no makeups, so be on time. The remaining 100 points of the daily grade will be participation points based on daily lab assignments that will be uploaded.

**Exams:** There are three 100 point lecture exams for a total of 300 points, and a final exam worth 100 points. No make-up exams are scheduled. Throughout the semester you will be working on a website that will count as half of your final exam grade worth 100 points. The **website is due on May 10.**

## Grading Policy:

200 = daily grades & quizzes  
+400 = exams

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600 total points

### **Make-up Examination Policy:**

**Students are required to attend all examinations. Only valid, documented, excuses will be accepted for missing an examination.** Without a valid excuse for missing an examination, a student will be assigned a grade of 0% for that examination. A test that was missed for a legitimate reason will be replaced with the grade on the final exam. **SEE ME WITHIN ONE WEEK OF MISSING THE TEST TO QUALIFY!**

### **Attendance Policies:**

Students are very strongly encouraged to attend all classes. Students not attending class are unlikely to pass the course.

### **Important University Policies:**

**Drop policy:** If you choose to drop the course, you have to do so by April 2. However, I am not expecting you to drop. I am not going to remind you. If you fail to drop the course in time, it is your own fault, not mine. Students may drop or swap (adding and dropping a class concurrently) classes through self-service in MyMav from the beginning of the registration period through the late registration period. After the late registration period, students must see their academic advisor to drop a class or withdraw. Undeclared students must see an advisor in the University Advising Center. Drops can continue through a point two-thirds of the way through the term or session. It is the student's responsibility to officially withdraw if they do not plan to attend after registering. Students will not be automatically dropped for non-attendance. Repayment of certain types of financial aid administered through the University may be required as the result of dropping classes or withdrawing. Contact the Financial Aid Office for more information.

**Americans With Disabilities Act:** The University of Texas at Arlington is on record as being committed to both the spirit and letter of all federal equal opportunity legislation, including the Americans with Disabilities Act (ADA). All instructors at UT Arlington are required by law to provide "reasonable accommodations" to students with disabilities, so as not to discriminate on the basis of that disability. Any student requiring an accommodation for this course must provide the instructor with official documentation in the form of a letter certified by the staff in the Office for Students with Disabilities, University Hall 102. Only those students who have officially documented a need for an accommodation will have their request honored. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at [www.uta.edu/disability](http://www.uta.edu/disability) or by calling the Office for Students with Disabilities at (817) 272-3364.

**Academic Integrity:** It is the philosophy of The University of Texas at Arlington that academic dishonesty is a completely unacceptable mode of conduct and will not be tolerated in any form. All persons involved in academic dishonesty will be disciplined in accordance with University regulations and procedures. Discipline may include suspension or expulsion from the University. According to the UT System Regents' Rule 50101, §2.2, "Scholastic dishonesty includes but is not limited to cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts."

**Student Support Services Available:** The University of Texas at Arlington has established a variety of programs to help students meet the challenges of college life. Support to students includes advising, counseling, mentoring, tutoring, supplemental instruction, and writing assistance. For a complete list of academic support services, visit the Academic Assistance resource page of the Office of Student Success Programs, [www.uta.edu/uac/studentsuccess/academic-assistance](http://www.uta.edu/uac/studentsuccess/academic-assistance). To help students address personal, academic and career concerns, individual counseling is also available. For more information, students are encouraged to contact Counseling Services [www.counseling.uta.edu](http://www.counseling.uta.edu) at (817) 272-3671 or visit a counselor in 216 Davis Hall.

**Electronic communication policy:** The University of Texas at Arlington has adopted the University "MavMail" address as the sole official means of communication with students. MavMail is used to remind students of important deadlines, advertise events and activities, and permit the University to conduct official transactions exclusively by electronic means. For example, important information concerning registration, financial aid, payment of bills, and graduation are now sent to students through the MavMail system. All students are assigned a MavMail account. Students are responsible for checking their MavMail regularly. Information about activating and using MavMail is available at <http://www.uta.edu/oit/email/>. There is no additional charge to students for using this account, and it remains active even after they graduate from UT Arlington.