

# STUDENT SYLLABUS    MAP2480 BioCalculusLab    Spring 10

WEB PAGE: <http://www.math.fsu.edu/~bellenot/class/s10/biolab>

MEETING TIMES: All sections meet in 107 MCH on Tuesdays

§3 (9:30-10:45) Lu/Yu      §4 (11:00-12:15) Lu/Yu      §5 (12:30-1:45) Fletcher/Shen

§6 (2:00-3:15) Fletcher/Shen    §7 (3:35-4:50) Fletcher/Watts    §8 (5:15-6:30) Lu/Watts

Instructors: Patrick Fletcher and Yuanting Lu

Lab Teaching Assist: Yingyun Shen, Margaret Watts and Wengin Yu

Course Coordinator: Dr Steven Bellenot 644-7405

All offices hours are posted on the web site

Email(@math.fsu.edu): bellenot, pfletche, ylu, yshen, mwatts, wyu

**ELIGIBILITY:** Calculus I, MAC 2311 is a PREREQUISITE you must have a grade of C- or better in MAC 2311.

**TEXT:** There is no text to purchase (but you will need access to a Calculus textbook and a Precalculus textbook). There is no software to purchase (but you will need to download and install Scilab on your home computer). All biolab lessons are in on-line pdf files.

**SOFTWARE:** Scilab and perhaps MATLAB will be used in this course. Scilab and MATLAB are installed in 107 MCH and the following University Public Computer Labs: Oglesby Union (202 OGC), the Carothers Compter Lab (315 MCH) and the Strozier Library Basement Computer Lab. Lab hours are on-line at <http://us.fsu.edu>. We will also require you to download and install the free Scilab on your computer. There is also the free matlab clone Octave available for free download.

**COURSE OBJECTIVES:** This course is designed to introduce students to topics in computational and mathematical biology. Problems in biology, medicine and physiology are used to illustrate how computation and mathematics can improve and enhance their understanding. The purpose of the course is

- to improve the students's use of technology and computers
- to introduce students to topics in computational and mathematical biology
- to use techniques from Calculus 1 to analyze and solve problems in biology
- to introduce students to Scilab, Matlab and similar software

**ATTENDANCE:** Attendance and class participation will be factors in determining the final grade. No food or drinks are allowed in the classroom. Please turn off cell phones and keep them hidden during class.

**COMMUNICATION:** It is your responsibility to register for a (free) FSU computer account so that I can send you email, which you are expected to check regularly. If you prefer to read your email elsewhere then you can arrange to have messages forwarded, but you must still obtain an FSU account in the first instance. This class does not use Blackboard.

**GRADING:** There is an on-line schedule of due dates. There will be no tests and no final. Shortly before each lab, there will be an on-line prelab assignment due. The prelab is worth 35% of your grade. The bulk of your grade (55%) comes from in-lab problems that can only be done in 107 MCH. The final 10% is based on attendance and participation. Some participation will require turning hard copy typed reports. (You must staple multiple page projects. Both dog-eared paper and paper clips will earn a grade of zero.) The 90%, 80%, 70%, 60% scales are used for A, B, C, and D; plus and minus grades may be given. (For example, a 92.5% grade might be an A minus.)

**LATE WORK POLICY:** Generally late work is not accepted. There are no excused absences from prelabs or the participation scores and at most one excused absence from the lab. An unexcused absence will be

penalized. If an absence from the lab is excused, then the last lab grade will be used to replace the missing grade. Absences from labs due to family social events will not be excused. Acceptable medical excuses must state explicitly that the student should be excused from class. Since there are so many opportunities to complete a lab, any excuse must include all of them. Job conflicts will not be excused. The prelabs are available on-line, even if you are out of town. Every where is close to the internet.

COMPUTER ASSISTED INSTRUCTION: All prelab assignments are on-line by Thursday afternoon and are due by Monday 5 pm; every effort will be made to ensure these problems are always available this time period. However, the deadlines will not be changed, even if networks problems occur and the problems are not available. You get five attempts at the prelab, make sure you get at least one attempt several days before the due date. All computer labs must be done in room 107 MCH usually during the lab. Each lab is only available for one week. Students that don't finish the lab can (and are expected to) do so during one of the in-lab office hours for that week. There is no way to make-up a lab after Monday afternoon.

- Honor code: A copy of the University Academic Honor Code can be found in the current Student Handbook. You are bound by this in all of your academic work. It is based on the premise that each student has the responsibility 1) to uphold the highest standards of academic integrity in the student's own work, 2) to refuse to tolerate violations of academic integrity in the University community, and 3) to foster a high sense of integrity and social responsibility on the part of the University community. You have successfully completed many mathematics courses and know that on a "test" you may not give or receive any help from a person or written material except as specifically designed acceptable. Out of class you are encouraged to work together on assignments but plagiarizing of the work of others or study manuals is academically dishonest.
- ADA statement: Students with disabilities needing academic accommodations should: 1) register with and provide documentation to the Student Disability Resource Center (SDRC); 2) bring a letter to the instructor from SDRC indicating you need academic accommodations. This should be done within the first week of class. This and other class materials are available in alternative format upon request.