Comp 167: Computational Biology

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Note: email Mike at least 3 hours in advance if you plan to come to his office hour– if no one emails he will not be there.

Class webpage: www.cs.tufts.edu/comp/167  
It is your responsibility to check the class webpage at least weekly for any announcements and updates.  
The section of the class webpage where homework assignments are posted is password protected. Password will be given in class.  
www.cs.tufts.edu/comp/167/private

Course Textbook: The textbook for this class is Marketa Zvelebil and Jeremy O. Baum, Understanding Bioinformatics Garland Science (Taylor and Francis Group), 2008.

About this class: This class serves a dual purpose. It is for students who are interested in taking a computational approach to molecular biology, in order to understand genomic data, and to study disease. It is also for
Computer science students who wish to do some very applied machine learning on interesting datasets; no biology background is assumed—we will teach what you need. What we don’t teach is how to program: so if you are coming from the more biological end of things, be warned you will need to be able to answer mathematical/algorithmic questions, and you will need to be able to write programs (in the language of your choice).

**Prerequisites:** Comp15 or the equivalent, i.e. Comfort and familiarity with some programming language. No prior biological background is assumed. Knowledge of algorithms (Comp160) is helpful but not required.

**Grading:** Grading is based on class attendance/participation, 5 hw assignments, a short (5 page) ethics paper, a couple of short in-class mini-assignment exercises, and a group final project.

**Collaboration Policy:** It is fine to consult your classmates, TAs, written or online sources as you work on your project, paper and homework assignments. It is even fine to look at and even use publicly available code packages and tools. However, you need to acknowledge everyone you talk to (including classmates) and cite every paper, dataset, webpage or code package that you either look at for ideas, or use directly in your work. Every HW problem also requires a piece where you write text. While you are welcome to talk to others about ideas, when it comes time to write up the HW, that should be your own individual work. Note that every HW problem includes the submission of a text file: Alongside the requested information/explanation, this is a good place for all your acknowledgements and citations.

Syllabus statement about accommodations for students with disabilities

Tufts University values the diversity of our students, staff, and faculty, recognizing the important contribution each student makes to our unique community. Tufts is committed to providing equal access and support to all qualified students through the provision of reasonable accommodations so that each student may fully participate in the Tufts experience. If you have a disability that requires reasonable accommodations, please contact the Student Accessibility Services office at Accessibility@tufts.edu or 617-627-4539 to make an appointment with an SAS representative to determine appropriate accommodations. Please be aware that accommodations cannot be enacted retroactively, making timeliness a critical aspect for their provision.