PROGRAMMING FOR BIOLOGISTS
BIOL 6297, Fall 2014

Meeting Times:
Days: Monday and Wednesday
Time: 10 - 11:30 am
Location: SR2 201

Instructor and Contact Information:
Elizabeth Ostrowski, Ph.D
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Office: 221E SR2
Office Hours: After class on Monday and Wednesdays, or by appointment

Course Goals:

This course will introduce students with no prior background to computing. It will enable students to get their feet wet with computational analyses. We will learn about diverse tools to accomplish computational tasks, including shell scripts, UNIX one-liners, scripting languages (Python), and languages for data visualization and statistical analysis (R). This course is intended to provide students who have no prior programming experience with the basic skill set needed to undertake computational projects as part of their research training.

Course Grading:

Grades will be based upon the following:

10% Attendance
30% Class Participation (in-class exercises)
60% Quizzes/Homework

Attendance: To receive credit, you must arrive on time and stay until the end.

Class Participation: Most classes will involve working exercises and practice problems. To receive credit for participation, you must copy your answers to the in-class problems over to the designated directory on xanadu by the end of class.

Quizzes: We will have a short quiz at the start of each week, covering the previous week's topics. Quiz material will be very similar to the practice exercises of the preceding week. **Your worst quiz grade will be dropped.** For this reason, however, there will be NO make-ups for quizzes under any circumstances. Occasionally, we may do a homework assignment in lieu of a quiz.

Grading Scale:

A	93-100	B-	80-82	D+	67-69
A-	90-92	C+	77-79	D	63-66
B+	87-89	C	73-76	D-	60-62
B	83-86	C-	70-72	F	Below 60

Policy on Academic Dishonesty:

An important part of being a programmer is learning to solve problems, write correct code, logically step through a script, and to recognize mistakes and debug your own code. For this reason, I expect that you will do your own work. On homework assignments, you may discuss approaches with classmates as pseudocode (meaning, you may describe your general approach in plain English), but you are not permitted to provide any specific syntax to one another. You may not consult others, including experienced programmers, for help on homework assignments – rather, you should see me first if you are having difficulties. For in-class assignments and homework (only), you may use Google, online user forums, or any other online resource to help you solve the problems – in fact, doing so is strongly encouraged. Quizzes will be closed book / no online resources, unless otherwise specified.