SYLLABUS
BINF 634: Bioinformatics Programming
Monday 4:30-7:10pm
OB, Room 304B
3 credits
Instructor: Prof. John Grefenstette
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Prerequisites: Graduate standing, molecular biology (e.g., BIOL 482), and computer programming (e.g., IT 198 or CS 112) or permission of instructor.

Course Description:
Introduction to Perl language. Data representation, control structures, file input/output, subroutines, regular expressions, debugging, web programming, interface to relational databases. An emphasis on bioinformatics applications including DNA sequence analysis, parsing FASTA and GenBank files, processing BLAST output files. SQL or equivalent query language.

Course Textbooks and Materials:
Required:
- Beginning Perl for Bioinformatics by Tisdall
- Programming Perl (3rd Edition) by Wall, Christiansen, and Orwant

Course Requirements
There will be weekly reading assignments from the course textbook and other materials. Homework assignments may include mathematical analysis, programming assignments, and use of software tools. There will be two mid-term exams and a final exam.

Grading:
- Programming assignments (50%)
- Two Mid-term Exams (10% each)
- Final Exam (20%)
- Quizzes (10%)

Grading Criteria:
- A: 90-100
- B: 80-89
- C: 70-79
- F: 0-69

Honor Code:
I take honor code violations very seriously. Programming assignments must be your work. Each assignment will specify whether you may use code from other sources. Any material you take from another source must be acknowledged within the program documentation. Violations of the honor code will be referred to the Honor Council.