

Syllabus

Title: BIMM 185 Spring 2010 Advanced Bioinformatics Lab

Professor: Steven Briggs

Description: This is a one quarter lab course that requires the creation and application of a bioinformatics tool and the contribution to other tool development projects through peer review.

Required materials: Students should have access to a computer and the internet.

Course requirements: Weekly homework that culminates in an original, functional bioinformatics tool, and that contributes to the tool development of other students. Students may choose to emphasize creation or application of the tool but both elements are required. Performance of the tool must be measured against a benchmark and assessed by a beta-tester in a real-world application; results must be included in the final progress report. Software documentation is required. Software must run on the BIMM 185 server for evaluation.

Homework: Weekly written progress reports and peer review

Class participation: Weekly oral progress reports and peer review

Exams: No exams. Final progress reports are due, and submitted software must be running on the class server, by the last day of class. Software documentation is due at the time of the scheduled final exam.

Grades: Grades are the sum of credit for tool development and peer review

Tool development: 75% of the grade is based on tool development, including oral and written progress reports, software documentation, and performance of the submitted tool during the evaluation phase. Tools will be evaluated for their originality, technical sophistication, scale of effort, and for their application results from the benchmark and beta-testing phases.

Peer review: 25% of the grade is based on the quality of oral and written peer review given by the student. Quality is judged by the magnitude of positive impact that it has.