Biology 404, CRN 31896, 3 Cr

Course: Computer Skills for Biologists

Course Instructor: Dr. James A. Foster

Dr. Foster will manage the course, will deliver the module on Perl programming, and will help students with their projects. Dr. Foster holds a Ph.D. in Computer Science, and taught in the CS Department for 15 years. He is now a Professor of Biology and Director of the IBEST Bioinformatics Core.

Guest Instructor: Dr. Celeste Brown

Dr. Brown will lead the UNIX module for the course. Dr. Brown holds a Ph.D in genomics and an M.S. in statistics, and is an Research Professor in Biology. She has extensive experience with applied bioinformatics, and is the IBEST Bioinformatics Coordinator.

Guest Instructor: Matt Settles

Mr. Settles will lead the R module for the course. Mr. Settles is a Ph.D. candidate in the Bioinformatics and Computational Biology program at the University of Idaho, and is currently the Director of the IBEST Sequencing Core. Mr. Settles has extensive experience with R development and with the statistical analysis of microarray and genomic data.

This course develops skills to *manage and analyze complicated datasets* such as those in molecular evolution, systematics, and genomics. Datasets in biology are growing explosively, so computer skills are vital for graduate studies and technical careers in the life sciences. This course will use demonstrations, exercises, and student projects to learn advanced Unix skills, programming (e.g. PERL and R), and data management.

Course is limited to the first 25 students who enroll. This course is explicitly designed to prepare students for *independent research* in biological sciences and will also be *helpful preparation* for Biol 404/504, Molecular Evolution; Biol 444, Genomics; and Biol 545, Principles of Systematic Biology.

Prerequisites: Stat 251 and Biology 210, or permission of instructor

Classes meet Mondays and Wednesdays from 2.00PM to 3:20PM in Life Sciences South 440 (the IBEST Classroom).

For more information, contact Dr. James A. Foster at foster@uidaho.edu

MW 2.00-3.30
LSS 440 (classroom)
25 student max
Fall 2010