



Introduction to Bioinformatics

For Non-Computer Science Majors
CS 295/595
(3 credits)

Course Description:

This course will introduce and use biological data sources available in the post *human genome project* era. Students will learn about practical knowledge of how to use the computer as a tool for biomedical research (no prior knowledge of computer programming or computer hardware is necessary). Topics will include basic programming concepts, Perl programming, available bioinformatics online resources, basic algorithms for alignment of genome sequences and other bioinformatics algorithms.

Prerequisites: University level courses in biology, mathematics and/or statistics, but no prior knowledge of computer programming or computer hardware is necessary. No consent of instructor required.

Materials: Articles and Text
Bioinformatics: Sequence and Genome Analysis by David W. Mount
Publisher: Cold Spring Harbor Laboratory; 2nd edition (July 2004)
ISBN: 0879697121 / 978-0879697129

Beginning Perl for Bioinformatics by James Tisdall
Publisher: O'Reilly Media, Inc.; 1 edition (October 15, 2001)
ISBN: 0596000804 / 978-0596000806

FALL 2008

1 Class/1 Lab per Week
Days/Times TBA
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