

Department of Computer Science
Concordia University

COMP 6821 Bioinformatics Databases and Systems
Course Outline
Winter 2008

Course Objectives

The principal objectives of the course are to survey the needs of bioinformatics for data management, knowledge management, and computational support; to provide in-depth description of an example of each kind of database and system; and to introduce advanced database technology and software technology relevant to the needs of bioinformatics.

Information Resources

The following two books are in Webster Library Reserve:

Bioinformatics : managing scientific data, edited by Zoe Lacroix and Terence Critchlow, San Francisco, CA : Morgan Kaufmann Publishers, c2003. QH 324.2 B55 2003

Bioinformatics: Databases and Systems, edited by Stan Letovsky. Kluwer Academic Press, Boston, 1999. QH 441.2 B55 1999

IBM Systems Journal, volume 40, no. 2, 2001.

Selected journal and conference articles. Selected web sites. Selected software systems, databases systems, their documentation, and implementations.

Evaluation

There will be five assignments each worth 20% of the total mark. Each assignment will be a review and critique of an existing database or system, or a discussion of some issue for bioinformatics databases and systems.

An assignment will be due each 2–3 weeks.