

# INTRODUCTION TO BIOINFORMATICS

## CGEN 6699

### SUMMER, 2009

#### Course Director

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#### Course Faculty

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## COURSE DESCRIPTION

**Introduction to Bioinformatics** (CGEN 6699) is a graduate course of the University of North Texas Health Science Center at Fort Worth. The course will be taught by an adjunct faculty member from the **Department of Cell Biology & Genetics**, who is an expert in this field. This course is intended to provide students with an introduction to the use of bioinformatics in the biological sciences. Basic bioinformatics principles and techniques will be taught that will include introduction to and use of publically available bioinformatics websites and tools. The intensive 5 day course will involve didactic instruction in the morning, and problem solving labs in the afternoon. Students will be encouraged to bring specific bioinformatics questions and problems to class, so that they can work on solutions, which will be shared with the class.

# COURSE GOALS

Provide an introduction to broadly applicable bioinformatics tools for a wide variety of biological problems that students will encounter in their graduate and scientific careers.

# RESOURCES

## SUGGESTED TEXTBOOKS

Textbooks are not required for the course. Students wanting to learn more on this subject are encouraged to consult the following textbooks:

*Discovering Genomics, Proteomics, and Bioinformatics, 2<sup>nd</sup> Edition.* Campbell & Heyer, 2007. ISB: 0-8053-8219-4

*Introduction to Bioinformatics: A Theoretical and Practical Approach.* Krawetz SA and Womble DD (Eds), 2003. Humana Press, Totowa, NJ.

*Beginning Perl for Bioinformatics.* J. Tisdall. O'Reilly, 2001.

The Course Director and Instructor will make themselves available for questions while the course is in session. It is strongly recommended that students who have difficulty understanding the classroom material take advantage of the afternoon sessions to discuss problem areas.

# POLICY ON ATTENDANCE

**Attendance is required at all lectures and labs.** Students may miss a required session only with an excused absence from the Course Director. Grading for the course will be Pass/Fail. An unexcused absence will result in a failing grade

# ASSESSMENT

**Student grades for the course will be determined by:**

- Course attendance and participation

# STUDENT RESPONSIBILITIES

## **EVALUATION OF THE COURSE AND INSTRUCTORS**

At the end of the course Academic Information Services will conduct an evaluation of the course and instructors according to the institution policy. Academic Information Services will conduct the evaluations, analyze the data, and generate the evaluation reports. The results of these evaluations are valuable for assessing the strengths and weaknesses of the course.

## **COMPLIANCE WITH COLLEGE POLICIES**

All policies of the UNTHSC/Texas College of Osteopathic Medicine will be observed in this course. The **Introduction to Bioinformatics** course is operated in accordance with the policies and procedures of the academic programs of the UNTHSC/Graduate School of Biomedical Sciences. You are responsible for reading and understanding the contents of this syllabus. Any questions regarding this document should be directed to the Course Director for clarification.

## **DISCLAIMER**

The provisions contained in this syllabus do not constitute a contract between the student and the College. These provisions may be changed at any time for any reason at the discretion of the course director. When necessary, in the view of the College, appropriate notice of such change will be given to the student.