Introduction to Modern Biomedical Databases (BIPG540/740)

Summary: The course will last 5 weeks during the Summer I session. Students will learn extensively about relational databases as an alternative to textual databases. Topics include design and implementation of custom databases, modification of pre-existing databases, and database management. Students will become well versed in SQL, including database construction, modification, and query design. Use of relational databases as an analytical tool will be emphasized.

Instruction: The course is taught by Alexei Fedorov.

Course director: Dr. Alexei Fedorov, Dept. of Medicine, Vice Director BPG Program, Director of Bioinformatics Lab, (419) 383-5270, alexei.fedorov@utoledo.edu.

Format: One credit hour course in a distance learning format (video lectures/labs) with the ability to meet lecturers every week. Each day will consist of a lecture followed by a computer lab session to reinforce the lecture's topic.

Office hours: Every Tuesday and Thursday from 9 AM to 10 AM in the office of Dr. Fedorov (Room 0012 at Ruppert Center, HSC; tel: 419-383-5270). Also students may contact remotely via Skype (Afedorov_lab) every Tuesday from 8 PM to 9 PM.

Homework time policy: Each homework must be returned in ten days by noon. (For example, for a Tuesday class this homework must be returned via e-mail next Friday by 12 pm.) Absolutely NO excuse for a late homework return (automatic F). Each lecture/lab will be available on the web in advance for at least one week, thus, ≥ 17 days will be allocated for the homework.

Grading principles:
- Homework   40%
- LABs+ activity   10%
- Mid-term Exam   20%
- Final Project   30%

Course will be graded S/U. A satisfactory grade will require completion of all lab assignments and not more than one missed day (lecture+lab)

No prerequisites are required. Please contact course director with any further inquiries (Dr. Alexei Fedorov, 419-383-5270, Alexei.Fedorov@utoledo.edu).