CSCI 265 - Database Systems Spring 2016

Instructor: Thyago Mota Classes: MWF 2:35pm – 3:45pm Email: motat@moravian.deu Office Hours: MW 10-11:30am

Office: PPHAC 220 (or by appointment)

Office Phone: (610) 861-1403

Course Description

Databases are core components of many computing systems. This course introduces students to numerous theoretical and practical concepts surrounding database systems. We will focus on relational databases, relational algebra, SQL, and querying databases from within a programming environment.

Course Goals

Upon completion of this course, a successful student will be able to:

- construct database queries using SQL;
- recognize the mathematical foundations of relational database systems;
- write programs to interact with database systems; and
- interact with multiple different database systems.

Textbook

Ullman, J. and Widom, J. A First Course in Database Systems. Third Edition. Pearson.

Reading assignments will be given as we go. You are expected to complete the reading before class to facilitate class discussion.

Course Resources

Supplementary material, including this syllabus, the class schedule, power point slides, papers to read, and assignments will be made available through Canvas (canvas.moravian.edu). Make sure you are enrolled in our course on Canvas and email me ASAP if you are not.

Grading Policy

Homework (30%) – individual activities handed out periodically (roughly one every other week) throughout the semester.

Programming Assignments (20%) - there will also be assignments through which you will explore how computer programs can interact with databases; these can be done in groups of two students.

Exams (30%) – two midterm exams will be given during the semester: Exam I on February 26th and Exam II on April 15th; you may only re-schedule a test for college-approved absences or documented illness; in either case, you must contact me before the beginning of the exam.

Final Exam (15%) - the final exam will be cumulative and will be given in-class on May 3rd at 11:30am; any change to the final exam schedule must be approved by both me and the dean of students.

Participation (5%) – attendance in class and active participation during class activities, such as short quizzes.

Final grades will be calculated on the standard scale using pluses and minuses.

Late Work

I will accept work beyond its due data with a 20% penalty per day, unless because of illness, family trauma, or a documented excuse (e.g., participation on a competition). In all cases you are required to contact the instructor prior to the deadline.

Special Accommodations

Students who wish to request accommodations in this class for a disability should contact the Academic Support Center, located on the first floor of Monocacy Hall (extension 1401). Accommodations cannot be provided until authorization is received from the Academic Support Center.

Academic Honest Policy

Please read and understand the College's Academic Honesty Policy (which you can find online in the Student Handbook). As stated in the policy, "all work that students submit or present as part of course assignments or requirements must be their original work unless expressly permitted by the instructor." Also, "When students use the specific thoughts, ideas, writings, or expression of others, they must accompany each instance of use with some form of attribution to the source." This applies to using code downloaded from the Internet. In this case, students must properly cite the part of the code that was used adding an appropriate comment such as, "this part of the code was downloaded from URL."

This syllabus is subject to change.