Introduction to Databases and Web Applications – Winter 2020

Course Description

A practical introduction to databases and Web app development. Databases: terminology and applications; creating, querying and updating databases; the entity-relationship model for database design. Web documents and applications: static and interactive documents; Web servers and dynamic server-generated content; Web application development and interface with databases.

Required background

Some experience with programming in an imperative language such as Python, Java or C. This course may not be taken after - or concurrently with - any C- or D-level CSC course.

Course Information and Schedule

- Instructor: A. Attarwala
- Lecture: Mondays 9 am to 11 am in SY 110
- Tutorials: Check Online Schedule
- Email: MYFIRSYNAME.MYLASTNAME@utoronto.ca
- Class website: Quercus. (If the course website is not up yet on Quercus, it should be available soon sometime in the first week)

Text Books

- For a course like this, no single textbook will represent the course expectations well. However, what I will do is provide you weekly reading material (some of which will be mandatory) from other universities, and other places from the web. This material will supplement well with what is taught in the class.

Lecture Notes

- Lecture notes will be available on Blackboard. You are EXPECTED to read the assigned readings before coming to lecture.

Grading Scheme and Policies

Assignments	26%	(There are total of 3 Assignments. See schedule below)
Practical	4%	Practical Marks will be given at end of semester.
MidtermExam	24%	(In class time on 10th February)
Final Exam	46%	TBD

Assignment	Weight	Due Date
Assignment1	6%	February 2nd @11:59pm
Assignment2	8%	March 11th @11:59pm
Assignment3	12%	March 30th @11:59pm

Assignments

There are three assignments. You may be asked to work in pairs in some of these assignments. Please check the assignment handout for more details on whether working in pair is permitted or not; other details such as the exact due date will also be mentioned on the assignment handout. DO NOT EMAIL YOUR ASSIGNMENTS TO US. We will use MARKUS for the submission of all assignments. ALL ASSIGNMENTS WILL MARKED ON UTSC LAB MACHINES. IT IS IMPORTANT BEFORE SUBMITTING YOUR ASSIGNMENT, TO MAKE SURE THAT YOUR ASSIGNMENT COMPILES AND EXECUTES ON THE UTSC LAB MACHINES. A STRICT silent policy takes effect 12 hours before an ASSIGNMENT or EXAM is due. This means no question about the assignment will be answered by the instructor or the TA whether it is asked on the bulletin board, by email or in person. I will make sure to follow the due dates mentioned in the course syllabus, however, if the due dates on the assignment handout differ from this course syllabus handout, the due dates on the assignment handout will supersede.

Re-marks

If a piece of work has been mismarked or if you believe the rubric used to evaluate the work is not appropriate, you may request a remark. For a re-mark to succeed, you must clearly and concisely express what you believe was mis-marked or unfairly marked. To request a remark, set up an appointment with the instructor and the TA that has marked your assignment/exam. PLEASE DO NOT USE THE DISCUSSION BOARD REQUESTING FOR REMARKS. Be prepared for the entire work to be re-evaluated and for the mark to be adjusted up *or* down after the re-evaluation. Remark request MUST be made in three regular days after the mark is made available. No remark request will be accepted after three regular days.

Tutorials

During tutorials, attendance is mandatory, and on some occasions, the TA will take attendance and assign you small in lab exercises. Tutorials are a great way for you to get some hands-on practice at programming. There is no labs/tutorial scheduled in the first week. All tutorials begin from the 2nd week of the semester. We will award the tutorial marks based on attendance. However, in some tutorials, TA's may also assign you small component, and on successfully completing this component, you will be assigned full credit for that lab. So it is important that you attend these tutorials and not skip them!

Final Exam

There is a 2hrs (or maybe 3hrs) final exam. The final exam is comprehensive, and you must obtain a mark of at least 40% to pass the course; otherwise, a grade of no higher than 47% will be assigned.

Late policy

There are no grace days; all due dates are firm. In case of illness, please have a doctor complete an official U of T medical certificate. For other emergencies, be prepared for us to request some documentation.

If you submit an assignment late or miss a midterm test due to illness or personal issue, first contact the instructor as soon as possible. Then, please follow the procedure described at `https://www.utsc.utoronto.ca/aacc/petitions`. For coursework petitions, a *Petition Form for Term Work* form needs to be filled and given to the course instructor. This will not be accepted if submitted two days after the due date.

Plagiarism and cheating will <u>not</u> be tolerated. These are serious academic offences with severe consequences that you should be aware of; for details, please read the information in *Chapter 6: Academic Regulations* available at `http://www.utsc.utoronto.ca/aacc/academic-integrity` . You can also visit `http://www.utsc.utoronto.ca/aacc/academic-integrity`. If you any questions about cheating or plagiarism, ask your instructor.

Accessibility Needs

The University of Toronto is committed to accessibility. If you require accommodations for a disability, or have any accessibility concerns about the course, the classroom or course materials, please contact Accessibility Services as soon as possible: `disability.services@utoronto.ca` or `http://www.utsc.utoronto.ca/~ability/`.

Rough Semester Plan

Please check on Blackboard for the actual weekly schedule. Changes to the schedule will be announced in class as well. The main topics that we will cover in this course are:

- Databases: Terminology and applications, Creating, querying and updating databases, The E-R model for database design
- Web Applications: Static and Interactive Documents, Web servers and dynamic server-generated content; Web application development and integration with databases.