CSCI 2141 – Intro to Database Systems

Course Syllabus

Instructor Information

Instructor: Dr. Kirstie Hawkey
E-mail: hawkey@cs.dal.ca
Office: 225
Office Hours: Mon/Fri: 10:30-12:30
Class Time: M/W/F: 9:35-10:25
Room #: 127
Course Homepage: web.cs.dal.ca/~hawkey/2141
Course Mail List: all-cs2141@cs.dal.ca

Course Description

This course introduces students to the concepts of database management systems and database design.

Topics include:

- Database (DB) components
- DB design using entity-relationship (relational, object oriented)
- SQL
- Transactional properties and techniques to support them

The concepts will be reinforced using one or more database management systems.

Prerequisites

Prerequisites: CSCI 1100
Exclusions: CSCI 2140
Cross-listings: INFX 2640

Required Texts and Resources

There is no required text for the course; however students who like to refer to a textbook could choose one of the following:

Recommended texts (any edition is fine):
- A first course in Database systems
  Ullman and Widom
  Prentice-Hall

- Database Management Systems
  Ramakrishnan and Gehrke
  McGraw-Hill
Furthermore, a course archive of additional material available online will be developed by the instructor and students (please share your resources!)

The primary source of communication will be in class. Attendance in class is expected; if you must miss a class, arrange with a fellow student to obtain any notes. Additional communications will be posted to the course email list, which comprises the instructor's and students' CS email accounts. It is the student's responsibility to check their CS email account on a regular basis. If you do not know how to access your CS email account please contact the CS help desk or read the following FAQ located at: http://www.ug.cs.dal.ca/studentservices/faq/technical_services/email/email.php

**Important Dates**
- Midterm Exam: February 18, 2013
- Final Exam: TBA in the period of April 11-26, 2013
- Final Withdrawal Date without academic penalty: February 4, 2013
- Final Withdrawal Date with academic penalty: March 8, 2013
- Deadlines:
  - Assignments: January 23, February 6, February 20, March 13, March 27, April 3;
  - Project: April 8;

**Evaluation**

<table>
<thead>
<tr>
<th>Evaluation</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pop Quizzes (top 5 of 6)</td>
<td>15</td>
</tr>
<tr>
<td>Assignments (top 5 of 6)</td>
<td>15</td>
</tr>
<tr>
<td>Project</td>
<td>10</td>
</tr>
<tr>
<td>Mid-Term</td>
<td>20</td>
</tr>
<tr>
<td>Cumulative Final</td>
<td>40</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

**Pop quizzes:** Students are expected to attend the lectures and participate in discussion of the materials and in-class exercises. There will be 6 pop quizzes during class time to evaluate students’ comprehension of the material. These will be worth 3 points each, with the top 5 counting towards the final mark.

**Assignments:** Assignments are for learning and may be submitted individually or in groups of up to 3 students if you find that it helps to work through solutions together. Assignments will be marked for completeness (50%) and correctness of a subset of the assigned questions. Submissions are due at the beginning of class and
are to be submitted electronically to the TA (details to follow). Solutions will be posted on-line after the class, so no late submissions are permitted. There will be 6 assignments during the semester, the top 5 of which will be counted towards the final mark.

**Project:** An individual project will be due at the end of the semester. The project will require you to design and implement a database as the backend to a website.

**Examinations:** The mid-term and final exam will evaluate students understanding of the concepts discussed in class and their ability to apply that understanding. The final exam will be cumulative.

**Midterm and Final Exam Requirements**
- Photo ID is required
- Closed book. No dictionaries, notes, calculators, cell phones, PDAs, talking slide rulers, or other electronic aids allowed.

**Late Policy**
- All submissions are due at the beginning of class on their due date.
- Late submissions will not be accepted.
Academic Integrity

At Dalhousie University, we respect the values of academic integrity: honesty, trust, fairness, responsibility and respect. As a student, adherence to the values of academic integrity and related policies is a requirement of being part of the academic community at Dalhousie University.

What does academic integrity mean?
Academic integrity means being honest in the fulfillment of your academic responsibilities thus establishing mutual trust. Fairness is essential to the interactions of the academic community and is achieved through respect for the opinions and ideas of others. “Violations of intellectual honesty are offensive to the entire academic community, not just to the individual faculty member and students in whose class an offence occurs.” (see Intellectual Honesty section of University Calendar)

How can you achieve academic integrity?
- Make sure you understand Dalhousie’s policies on academic integrity.
- Give appropriate credit to the sources used in your assignment such as written or oral work, computer codes/programs, artistic or architectural works, scientific projects, performances, web page designs, graphical representations, diagrams, videos, and images.
- Use RefWorks to keep track of your research and edit and format bibliographies in the citation style required by the instructor http://www.library.dal.ca/How/RefWorks
- Do not download the work of another from the Internet and submit it as your own.
- Do not submit work that has been completed through collaboration or previously submitted for another assignment without permission from your instructor.
- Do not write an examination or test for someone else.
- Do not falsify data or lab results.

These examples should be considered only as a guide and not an exhaustive list.

What will happen if an allegation of an academic offence is made against you?
1. I am required to report a suspected offence. The full process is outlined in the Discipline flow chart, which can be found at: http://academicintegrity.dal.ca/Files/AcademicDisciplineProcess.pdf and includes the following:
2. Each Faculty has an Academic Integrity Officer (AIO) who receives allegations from instructors.
3. The AIO decides whether to proceed with the allegation and you will be notified of the process.
4. If the case proceeds, you will receive an INC (incomplete) grade until the matter is resolved.
5. If you are found guilty of an academic offence, a penalty will be assigned ranging from a warning to a suspension or expulsion from the University and can include a notation on your transcript, failure of the assignment or failure of the course. All penalties are academic in nature.

Where can you turn for help?
- If you are ever unsure about ANYTHING, contact myself.
- The Academic Integrity website http://academicintegrity.dal.ca has links to policies, definitions, online tutorials, tips on citing and paraphrasing.
- The Writing Center provides assistance with proofreading, writing styles, citations.
- Dalhousie Libraries have workshops, tutorials, citation guides, Assignment Calculator, RefWorks, etc.
- The Dalhousie Student Advocacy Service assists students with academic appeals and student discipline procedures.
- The Senate Office provides links to a list of Academic Integrity Officers, discipline flow chart, and Senate Discipline Committee.

1 Based on the sample statement provided at http://academicintegrity.dal.ca.