LIS 9731 DATABASE MANAGEMENT SYSTEMS

Term: Summer 2019
Instructor: Charlotte McClellan
Email: charlotte.mcclellan@uwo.ca
Class time: Monday 1:30-2:30pm. Location: FNB 3010
Office: FNB 2060B. Phone: 661-2111 ext. 88485
Office Hours: Friday 1:00pm – 3:00pm

Course Description

Data modelling and database structures and their application to information retrieval and processing. Analysis of data requirements and implementation of systems using a relational DBMS. Mounting a database on the Web. Programming or scripting for database applications.

Course-Level Learning Outcomes

Upon successful completion of readings, assignments, and class participation, students will be able to:

- Understand data modelling and database structures and their application to information retrieval and processing (Program-Level Learning Outcome 6).
- Analyze data requirements and implementation of systems by means of a relational database management system (Program-Level Learning Outcome 6, 8).
- Understand the concepts of Web access to databases and have the basic skills of mounting a database on the Web (Program-Level Learning Outcome 4, 6).

Recommended Reading (on reserve in Graduate Library)

QA76.9.D3E325 2018
http://alpha.lib.uwo.ca/record=b7038179~S20

QA76.9.D26R62 2016
http://alpha.lib.uwo.ca/record=b6677837~S20

QA76.9.DS528 2016
http://alpha.lib.uwo.ca/record=b6677834~S20
Course Outline

<table>
<thead>
<tr>
<th>WEEK</th>
<th>DATE</th>
<th>TOPIC</th>
<th>ASSIGNMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>May 6</td>
<td>Introduction to the course</td>
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<tr>
<td>2</td>
<td>May 13</td>
<td>Entity Relationship Modeling</td>
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<td></td>
<td>May 20</td>
<td>Holiday, no class</td>
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<tr>
<td>3</td>
<td>May 27</td>
<td>Database Normalization</td>
<td>Assignment 1 due</td>
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<td>4</td>
<td>June 3</td>
<td>Entity Integrity</td>
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<tr>
<td>5</td>
<td>June 10</td>
<td>Queries in Access</td>
<td>Assignment 2 due</td>
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<tr>
<td>6</td>
<td>June 17</td>
<td>SQL</td>
<td></td>
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<tr>
<td>7</td>
<td>June 24</td>
<td>Access Forms</td>
<td></td>
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<tr>
<td>8</td>
<td>July 1</td>
<td>Research week, no class</td>
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<tr>
<td>9</td>
<td>July 8</td>
<td>Access Reports</td>
<td>Assignment 3 due</td>
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<td>10</td>
<td>July 15</td>
<td>Web database</td>
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<tr>
<td>11</td>
<td>July 29</td>
<td>Project demonstration</td>
<td>Project due</td>
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ASSIGNMENT STRUCTURE & EVALUATION

The following assignments are due throughout the term:

- **Three written assignments**  
  - **ASSIGNMENT 1** (20 %)  
    - *Create a database and discuss your design decisions*
    - *Assignment 1 is due before class on May 27*
  
  - **ASSIGNMENT 2** (20 %)  
    - *Normalize a database and discuss your decisions*
    - *Assignment 2 is due before class on June 10.*
• **ASSIGNMENT 3 (20 %)**
  - *Develop queries using Assignment 2 database*
  - *Assignment 2 is due before class on July 8.*

• **Final Project**
  o **Project (30 %)**
    - *Develop a Microsoft Access database system including menu, queries, forms and reports*
    - *Due before class on July 29.*
  o **Demonstration (5 %)**
    - *Done in class on July 29*

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<thead>
<tr>
<th>Content</th>
<th>Grade</th>
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<tbody>
<tr>
<td>Assignment 1</td>
<td>20%</td>
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<tr>
<td>Assignment 2</td>
<td>20%</td>
</tr>
<tr>
<td>Assignment 3</td>
<td>20%</td>
</tr>
<tr>
<td>Project demonstration</td>
<td>5%</td>
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<tr>
<td>Project implementation and project report</td>
<td>30%</td>
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<tr>
<td>Class participation</td>
<td>5%</td>
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Your mid-term mark will be based on your marks for Assignments 1 and 2

Late assignments will be assessed a penalty of 5 marks out of 100 for each day that it is late. Since all assignments are due on Monday, if an assignment is handed in on Tuesday, the penalty will be 5 marks out of 100, Wed will be 10 out of 100, etc.
Statement on Academic Offences

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following Web site: http://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_grad.pdf

Additionally,

A) If written work will be assigned in the course and plagiarism-checking software might be used, the following statement to this effect must be included in the course outline:

“All required papers may be subject to submission for textual similarity review to the commercial plagiarism-detection software under license to the University for the detection of plagiarism. All papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between The University of Western Ontario and Turnitin.com (http://www.turnitin.com).”

B) If computer-marked multiple-choice tests and/or exams will be given, and software might be used to check for unusual coincidences in answer patterns that may indicate cheating, the following statement must be added to course outlines:

“Computer-marked multiple-choice tests and/or exams may be subject to submission for similarity review by software that will check for unusual coincidences in answer patterns that may indicate cheating.”

Support Services

Students who are in emotional/mental distress should refer to Mental Health@Western http://www.uwo.ca/uwocom/mentalhealth/ for a complete list of options about how to obtain help.

Attendance at Classes

As there are generally no formal written examinations in the MLIS program, attendance at and participation in classes is an essential part of the learning experience and provides part of the basis for academic assessment of a student’s knowledge. Students should therefore notify the instructor if they need to be absent from class due to inclement weather, conference attendance, serious illness, family emergencies or co-op or other job interviews. If the situation involves more than one absence, particularly in more than one course, the student should contact FIMS Graduate Student Services at 519-661-2111 Ext. 88494 or e-mail bborman@uwo.ca. Attendance requirements also include punctual arrival at classes. Late arrivals are discourteous, disruptive and unprofessional.
Missing a class, or repeated late arrivals of 10 minutes or more, may require the student to complete a special assignment to verify coverage of the course material.