CSCI 172.03C: Introduction to Computer Modeling

Daniel R. Lande

University of Montana, Missoula

Follow this and additional works at: https://scholarworks.umt.edu/syllabi

Let us know how access to this document benefits you.

Recommended Citation

https://scholarworks.umt.edu/syllabi/4041

This Syllabus is brought to you for free and open access by the Course Syllabi at ScholarWorks at University of Montana. It has been accepted for inclusion in Syllabi by an authorized administrator of ScholarWorks at University of Montana. For more information, please contact scholarworks@mso.umt.edu.
Textbook:
There are two choices for the textbook. PLEASE ONLY CHOOSE ONE!

Paper Hard Copy Textbook Option

Important Note: This is a custom textbook bundle. It includes the required MyITLab subscription. PLEASE PURCHASE FROM THE UM BOOKSTORE ONLY!

Electronic Textbook Option

MyITLab Course ID
- MyITLab requires a unique Course ID to register as a student in our class. Our Course ID is gallagher18115 (CSCI 172-03C Sp16 - Lande).

Course Description
Problem solving and data modeling using computer productivity software. Emphasis on using spreadsheets and databases for data analysis. Formal presentation of results.

Course Overview
This class focuses on using the computer as a modeling tool for analysis of data sets. The software applications we will be using for data modeling are spreadsheets and databases. We will utilize the spreadsheet Microsoft Excel and the database Microsoft Access to implement data modeling. These are the most common spreadsheet and desktop database applications in use today. The 2013 version of MS Excel and MS Access are needed to complete activities for this course (available on computers in student classrooms and labs and for students at [http://www.umt.edu/it/services/software/support_faq/365-pro-plus.php](http://www.umt.edu/it/services/software/support_faq/365-pro-plus.php).

The course uses a textbook authored by Poatsy & Grauer and published by Pearson Prentice-Hall. It is bundled with the online simulation software package MyITLab. This application provides electronic exercises using a simulation of the MS Office productivity suite. All students are welcome to utilize the computing labs and classrooms available on campus.
Both an electronic copy and printed copy of the textbook bundle are available for the course. MyITLab is an important component of the printed textbook bundle. There are lots of versions of this particular textbook. Be sure to purchase the version with the MyITLab bundle. The ISBN listed will accurately identify this bundle.

Course Outcomes

Upon completing this course, a student will be able to:

- Create, manipulate, and format data in a spreadsheet.
- Create and use formulas, including conditional formulas.
- Use a spreadsheet to do basic descriptive statistics.
- Design models for visualizing data including charts.
- Work with large tables.
- Design a spreadsheet to implement a computer model.
- Work with database tables and queries.
- Understand how table relationships are used.

Evaluation & Grading

Your grade for the course will be based on:

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Component</th>
</tr>
</thead>
<tbody>
<tr>
<td>25%</td>
<td>Homework Activities</td>
</tr>
<tr>
<td>30%</td>
<td>Assessment Activities</td>
</tr>
<tr>
<td>25%</td>
<td>Unit Projects</td>
</tr>
<tr>
<td>20%</td>
<td>Final Exam</td>
</tr>
</tbody>
</table>

I will follow the standard +/- grading scale.

Final Exam

The final exam will be taken online through Moodle. It is currently scheduled for Monday, May 9 at 3:20pm – 5:20pm. At my discretion, I may allow the class to choose the day of the week they will take the final on based on a classroom vote.

Late Assignment Policy

- All class materials are to be completed on the assigned date and time. Late assignments will be NOT accepted without appropriate justification and only at the discretion of the instructor. Rescheduling of a quiz or exam will be approved at the discretion of the instructor and only in extraordinary situations.

Additional class policies and information:

- If you miss a class, you and you alone are responsible for the material covered. This includes handouts, schedule changes, and lecture notes. Do not expect me to reiterate a class period that you missed. I’ll try to keep Moodle updated with materials from class.

- All students must practice academic honesty. Academic misconduct is subject to an academic penalty by the course instructor and/or a disciplinary sanction by the University. All students
need to be familiar with the Student Conduct Code. The Code is available for review online at http://www.umt.edu/vpsa/policies/student_conduct.php

- **Never share any of the Grader Project files you download from MyITLab.** This course will be utilizing the MyITLab integrity checking tool. If files are shared an Integrity Violation will be reported by MyITLab to your Instructor. For this class, it will be considered plagiarism and a violation of the Student Conduct Code. Both students will receive a 0 for that Grader Project. Further violation will result in more serious consequences.

- Key dates for various autumn term activities/deadlines, including adding and dropping a course, can be accessed at: http://www.umt.edu/provost/academiccalendar/

- University Policy for dropping courses or requesting grading/credit status changes can be found in the catalog: http://www.umt.edu/catalog/academics/academic-policy-procedure2.php. Students should become familiar with all academic policies

- Students with disabilities will receive reasonable modifications in this course. Your responsibilities are to request them from me with sufficient advance notice and to be prepared to provide verification of disability and its impact from Disability Services for Students. Please speak with me after class or during my office hours to discuss the details. For more information, visit the Disability Services for Students website at http://www.umt.edu/dss/.

- **Note:** Instructor reserves the right to modify syllabi and assignments as needed based on faculty, student, and/or environmental circumstances. If changes are made to the syllabus, amended copies will be dated and made available to the class.

*Questions? Email daniel.lande@umontana.edu*