

University of Montana

## ScholarWorks at University of Montana

---

University of Montana Course Syllabi, 2011-2015

---

Fall 9-1-2015

### CSCI 172.30: Introduction to Computer Modeling

Brian R. Trethewey

*University of Montana, Missoula*, [brian.trethewey@umontana.edu](mailto:brian.trethewey@umontana.edu)

Follow this and additional works at: <https://scholarworks.umt.edu/syllabi2011-2015>

**Let us know how access to this document benefits you.**

---

#### Recommended Citation

Trethewey, Brian R., "CSCI 172.30: Introduction to Computer Modeling" (2015). *University of Montana Course Syllabi, 2011-2015*. 57.

<https://scholarworks.umt.edu/syllabi2011-2015/57>

This Syllabus is brought to you for free and open access by ScholarWorks at University of Montana. It has been accepted for inclusion in University of Montana Course Syllabi, 2011-2015 by an authorized administrator of ScholarWorks at University of Montana. For more information, please contact [scholarworks@mso.umt.edu](mailto:scholarworks@mso.umt.edu).

# Welcome to CSCI 172 - Introduction to Computer Modeling

## Instructor Information:

**Instructor:** Brian Trethewey

**Email:** [Brian.trethewey@umontana.edu](mailto:Brian.trethewey@umontana.edu) or brian.trethewey@mso.umt.edu

**Office:** Social Science 423 (First Door on the Right as you enter the Computer science Department)

**Office Hours:** Mon 11-12, 2-3 or by appointment

## Online Components:

Moodle ([umonline.umt.edu](http://umonline.umt.edu)) and

My IT Lab (<http://pearsonmylabandmastering.com/northamerica/myitlab/>)

## **My IT Lab – Registration Instructions:**

Go to: <http://www.pearsonmylabandmastering.com/northamerica/>

Click the “Student” button at the right side of the window or the “Get registered” link in the “Student>>” box” just below the picture.

Provide:

E-mail: specify your UM email address

Course ID: see your Moodle shell, below “MyITLab: Installation Instructions”

Access Code: found in an insert in your shrink-wrapped Textbook package

## Textbook:

We are using a Pearson Custom Program: CSCI 172 Introduction to Computer Modeling

ISBN: 798-1-269-29831-5 (Available in the UC Bookstore)

The shrink-wrapped package includes :

the textbook for our class – 6 chapters on Excel and 4 chapters on Access

your Pearson Student Access Code packet so you can register for MyITLab (online)

an Office 2013 24/7 trial subscription (no need to purchase Office 2013)

(We bundle the course materials that way to save you money.)

## Course Layout:

- The course is broken into chapters, one per week, with 3 **PearsonMyLabAndMastering** assignments in each chapter.
- On Monday the assignments for the next week will be posted: the Basic Skills exercise, the Grader Project, and the End-of-Chapter quiz, all of which are due on the following Monday at 11:59 Eastern time (9:59 Mountain time).
- The Basic Skills project (worth 0 points) is the simulation version of the “Hands On” exercises in the text: it is the easiest way to learn the material, in my opinion, because it asks you to do something and you can request a demonstration. It shows a simulation of a spreadsheet, and asks you to do certain operations. If you don’t know how to do the steps, click on “Learning Aids” and select “Watch”. A video will show you what to do. Then return to the simulation and do it by yourself. You can view the “Watch” video multiple times.
- The Grader Project is worth 100 points: it involves downloading an Excel (or Access) spreadsheet and a

Word document that describes how to complete the spreadsheet. When you have finished, you upload your modified file and it is graded. Once graded, you can return to the assignment, click the drop-down menu triangle just after the assignment, select “view submissions”, and select “marked-up report” to see what you did wrong. Correct all the steps in the spreadsheet, then resubmit it. You can do that repeatedly until the due date is reached. Your grade is the highest you achieved in that process. (Everyone should get an “A” on each Grader Project).

- The End-of-Chapter quiz (worth 0 points) is important because many of the midterm and final exam questions will be pulled from those End-of-Chapter quiz questions.
- Your grade for each week will be the highest grade you achieved for that week.
- We will have a midterm around the eighth week and a Final Exam during Finals Week.
- Monday lectures will probably involve simple modeling projects based on current homework skills.

### **My Fall 172\_30 Weekly Schedule:**

172_10	SS 344	M	10:10 – 11:00 PM
172_11	LA 206	M T	12:10 – 1:00 PM
172_12	LA 206	M T	1:10 – 2:00 PM

### **Lab Schedule: ALL LABS ARE IN Liberal Arts 206.**

Lab sections 31 and 32 are linked to section 172\_30.

**I strongly urge students to have a way to store their work, in case something goes wrong in the submission process. That could be a “flash drive”, an iDrive or the Cloud, emailing the files to yourself, or some other way. If you are using a lab computer and a virus strikes, your work will be lost when the computer’s memory reverts to its original state by overwriting the computer contents with a disk image of the virus-less state: it deletes everything you stored on that computer.**

**Course Description:** Problem solving and data modeling using computer productivity software. Our emphasis will be on using spreadsheets and databases as tools for performing data analysis and presentation of results. Simple modeling examples will be part of most Monday lectures, so you can get an idea of what to do in the current chapter.

### **Learner Outcomes:**

- Create, manipulate, and format data in a spreadsheet.
- Create and use formulas, including conditional formulas.
- Use a spreadsheet to do basic descriptive statistics.
- Design and use charts to present data.
- Work with large tables.
- Design a spreadsheet to implement a computer model for a “real world” situation.
- Create database tables and queries.
- Understand the value and use of table relationships with regard to queries.

**I want to hear from you** if you find oversights, mistakes, or omissions in the syllabus or weekly Moodle notes or assignments, or if you can’t find information that you want to know about the course.

### **Moodle and MyLabAndMastering:**

**Moodle is the official website for this course.** Moodle has the course assignments, midterm, final exam, helpful explanations, course handouts, changes to assignments (if needed), and other helpful information.

**Some** of the required homework assignments are completed using Pearson's MyLabAndMastering, but Moodle may also have some assignments that don't use MyITLab, so check Moodle frequently.

**This course uses Microsoft Office 2013 (including Word, Excel and Access).** Because Office 2011 for the Macintosh (OS X) has a different "look and feel" than does Excel in Office 2013, the Pearson MyLabAndMasteryng simulations may not work in Office 2011. **Also**, Access is not available on the Mac.

### **Grading and Homework Policy (subject to changes):**

**We will use the typical 90-80-70 grading scale.**

No late work will be accepted without a good reason.

It's your responsibility to meet the deadlines.

If you are having problems or falling behind – talk to me about it!

We may have some extra credit assignments: it's hard to predict ahead of time whether or not you will need them.

**Midterm and Final Exams are required** and will be taken online and graded by Moodle.

The midterm and final will be like the Multiple Choice quiz found at the end of each chapter. The midterm exam and a final exam will test your general understanding of the course: terminology; how Excel formulas, functions, and charts work; the steps in making database tables, queries, reports and/or forms; and basic procedures in Windows-7 and Microsoft Office.

*Some Exam questions may be chosen from the quizzes.*

*Tests will be weighted the same as one weekly grader project*

Any modeling projects that are uploaded to Moodle for grading will be graded as follows:

level 4	level 3	level 2	level 1	level 0
Requirements were completed with 0 or 1 significant errors	2 or 3 significant errors	4 significant errors	5 significant errors	No submission or 6 significant errors
Max =100 points	Max = 80 points	Max = 60 points	Max = 40 points	0 points

Points represent the maximums for each level

### **CSCI-172 Prerequisites:**

Previous computer experience and successful completion of Math 095 (or equivalent score on Math Placement Test) **OR** Consent of instructor.

**Copying / Cheating / Collaborating:** You must do your own work. You may seek explanations and examples from other students, from teaching assistants, and from teachers. However, the end product must be the result of your individual efforts. Under no circumstances should you provide another student with

your work, or parts of your work, and you should not request or accept work from another student. The penalties for cheating are severe (see [http://life.umt.edu/VPSA/Student\\_Conduct.php](http://life.umt.edu/VPSA/Student_Conduct.php)) so don't get involved in it!

My view is that you need this Excel and Access knowledge for future classes and in job interviews: someone who doesn't know the material will be discovered almost immediately by those who do know it. Also – and maybe more importantly – you will acquire a confidence that can be acquired no other way: a confidence that you can figure out how to do any task asked of you in the work-a-day world. So, don't hurt your future: do the work now.

**Profanity and obscenity** will not be tolerated in class or on assignments.

**Academic Policies and Procedures:** <http://www.umt.edu/catalog/acad/acadpolicy/default.html> has information on drop/adds, incompletes, etc.

**If an incomplete is appropriate, obtain the request form from your instructor or the CS Department, fill it out, and return it to your instructor.**

**Also check with a Financial Aid advisor to determine the effect of an incomplete on your financial aid.**

Students with disabilities may request reasonable modifications by contacting me. The University of Montana assures equal access to instruction through collaboration between students with disabilities, instructors, and Disability Services for Students (DSS). “Reasonable” means the University permits no fundamental alterations of academic standards or retroactive modifications. For more information, please consult <http://www.umt.edu/disability>

**Important Dates:**

Monday, August 31	Autumn Semester Classes Begin
Monday, September 7	Labor Day – No Classes, Offices Closed
Wednesday, November 11	Veterans Day – No Classes, Offices Closed
Wednesday, November 25	Student Travel Day – No Classes
Thursday-Friday, November 26-27	Thanksgiving Break – No Classes, Offices Closed
Friday, December 11	Last Day of Regular Classes
Monday-Friday, December 14-18	Final Exams

See [http://events.umt.edu/?calendar\\_id=27&upcoming=upcoming&](http://events.umt.edu/?calendar_id=27&upcoming=upcoming&) for a more detailed list

**This Syllabus is subject to change or update at any time during the semester.**