INSTRUCTOR  Matt Roscoe  
Office: Math 213  
Phone: (406) 243-6689 or (406) 203-2112  
Email: matt.roscoe@umontana.edu  

WEBPAGE  https://moodle.umt.edu/  

OUTCOMES  Upon completion of this course, a student will be able to:  

1. Explain the modeling process;  
2. Apply technology for graphing, computing, organizing, and investigating;  
3. Identify and solve problems involving continuous and discrete models;  
4. Identify and solve problems using simulation;  
5. Evaluate models using goodness of fit measures.  


GRADING  30% Technology Exercises  
20% Readings  
30% Modeling Projects  
20% Final Exam
GRADE SCALE

Let $S$ be your final score in the course then,

- $93 \leq S < 100 \Rightarrow A$
- $90 \leq S < 93 \Rightarrow A-$
- $87 \leq S < 90 \Rightarrow B+$
- $83 \leq S < 87 \Rightarrow B$
- $80 \leq S < 83 \Rightarrow B-$
- $75 \leq S < 80 \Rightarrow C+$
- $70 \leq S < 75 \Rightarrow C$
- $65 \leq S < 70 \Rightarrow C-$
- $62 \leq S < 65 \Rightarrow D+$
- $58 \leq S < 62 \Rightarrow D$
- $55 \leq S < 58 \Rightarrow D-$
- $0 \leq S < 55 \Rightarrow F$

TECHNOLOGY EXERCISES

Generally, every week over the semester I will present the class with an exercise that will provide a basis for mathematical investigation aided by a particular technology. Each of these investigations will provide you the opportunity to learn how to use technology in the classroom to facilitate the construction of mathematical content knowledge. Exercises will generally be due one week after their introduction. Each student’s collection of technology exercises will serve as a resource for the final exam.

READINGS

Each Monday of the semester you will be provided with a reading. Readings are meant to complement the active learning carried out in both the technology exercises and modeling projects by providing the student with an opportunity to reflect upon teaching and learning of mathematics with technology. Each student will be asked to complete an annotated bibliography for each reading due one week after the reading has been assigned. Each student’s collection of annotated bibliographies will serve as a resource for the final exam.

MODELING PROJECTS

There will be three modeling projects in the course. These projects will provide you the opportunity to apply your mathematical instincts to empirical settings to gain understanding and/or improve decision-making. Each project will be announced in class and will be due three to four weeks later.

FINAL EXAM

There will be a final exam in the course to assess student progress towards the course’s learning outcomes. Students will be allowed to use any self-authored materials (i.e. reading reflections, technology exercises, modeling projects) as resources for the completion of the exam.
HONESTY 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://life.umt.edu/vpsa/student_conduct.php.

ACCOMMODATION The University of Montana assures equal access to instruction through collaboration between students with disabilities, instructors and Disability Services for Students (DSS). If you think that you may have a disability adversely affecting you academic performance, and you have not already registered with DSS, please contact DSS in Lommassen 154. I will work with you and DSS to provide an appropriate accommodation.

IMPORTANT DATES September 21 - Last day to drop a course or change the grading option via CyberBear.

November 2 - Last day to drop/add a course, change sections, change your grading option from Credit/No Credit to a letter grade (or vice versa), or change credit in a variable credit course. After this date a student is allowed to make these changes only by petition.

December 12 - Last day to petition to drop/add a course, change sections, change you grading option from Credit/No Credit to a letter grade (or vice versa), or change credit in a variable credit course. Petitions require signature and recommendation of instructor. Grounds for recommending late drops and changes of grading options are detailed in the university catalog.

December 15 - Final Exam held in M306 from 8:00-10:00AM
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<th>Monday</th>
<th>Wednesday</th>
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<tr>
<td>Sep 4 Labor Day</td>
<td>Sep 6</td>
<td>Sep 8 Statistics</td>
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<td>Sep 11 Statistics</td>
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<td>Sep 15 Statistics</td>
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<td>Sep 18 Probability</td>
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<td>Sep 22 Probability</td>
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<td>Sep 25 Probability</td>
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<td>Oct 2 Geometry</td>
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<td>Oct 16 Geometry</td>
<td>Oct 18 MEA/MFT</td>
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<td>Oct 30 Algebra</td>
<td>Nov 1 Algebra</td>
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<td>Nov 10 Veteran’s Day</td>
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<td>Nov 13 Algebra</td>
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<td>Nov 20 Functions</td>
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<td>Nov 27 Functions</td>
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<td>Dec 13 Study Day</td>
<td>Dec 15 Final</td>
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Final Exam
Friday, December 15, 8:00-10:00AM