CALCULUS I
M 171 - SECTION 05 – Fall 2012

INSTRUCTOR  Tien Chih
Office: Corbin 364
Phone: 243-4486
Email: tien.chih@umontana.edu

OFFICE HOURS  MLC: Monday 1:10-2:00, Wednesday 11:10-12:00. Corbin 365: Thursday 2:00-3:00. Also by appointment.

I encourage all students to email me (at the above address) regarding any issues with the class, or to set up a meeting time if the above office hours are not convenient. Office Hours are subject to change over the course of the semester. If you drop by my office there’s a reasonable chance I’ll be there and if I have a moment, I am happy to help with any concerns you may have.

COURSE COODINATOR  Kelly McKinnie
Email: kelly.mckinnie@mso.umt.edu

TEXT  Calculus, 5th edition (Hughes-Hallett)

PREREQUISITES  M 122 (Trigonometry) or M 151 (Pre-calculus). If you are unsure about whether or not you have sufficient prerequisites for this course, please speak to me.

CALCULATORS  Calculators are sometimes useful and sometimes not. While Calculators are very helpful in performing computations, they are not a substitute for a conceptual understanding of the material. It is important that you do not rely too heavily on them and can perform operations yourself. Calculators will be prohibited from quizzes and exams.

CONTENT  Topics include limits, continuous functions, Intermediate Value Theorem, tangents, linear approximation, inverse functions, implicit differentiation, extreme values and Mean Value Theorem, anti-derivatives, definite integrals, and Fundamental Theorem of Calculus.

LEARNING GOALS  Upon successful completion of this course students should be able:
1. Understand the concepts of limit and continuity
2. Understand the concept of derivative (limit definition, geometric interpretation via tangent lines, interpretation as a rate of change)
3. Be able to compute derivatives (including derivatives of functions defined implicitly)
4. Understand the relationship between the derivative and the graph of the function.
5. Understand the definition and the basic properties of the definite integral.

ASSIGNMENTS  Homework: Each week, roughly 10 problems from the textbook will be assigned. These problems will be collected every week. Out of these, I will select a few problems, which students may present on the board on problem days for extra credit. This is to encourage students to demonstrate their solutions to problems, and to get feedback from myself and from your fellow classmates. In addition to these problems, some problems will be assigned via WeB WorK. These will tend to be routine problems and will be graded largely on completion.

Exams: Exams will be given as indicated on the syllabus schedule. When extenuating circumstances prevent a student from taking an exam at the scheduled time, the student must contact the instructor PRIOR to the time of the exam to announce their absence. Brief and occasional absences are excused only for reasons of illness, injury, family emergency, or a University sponsored activity. Arrangements for a make-up exam must occur within 1 week.
of the scheduled exam date. Failure to do so will result in a score of 0 for the exam.

**Quizzes:** A short quiz will be given each week, unless a test coincides. **THERE WILL BE NO MAKE-UP QUIZZES GIVEN.** Quizzes will consist of material covered in class, on homework, and from the textbook. The lowest two quiz scores will be dropped.

**Differentiation Skills Test:** This test will be given for the first time in class on October 15th. A score of 80% or greater is required to pass the test. You can take the test as many times as necessary, but you must pass this test by December 7th to pass the course. If you pass on your first attempt, you will receive a bonus 2% on the Final Exam.

**Final Exam:** There is a mandatory common final with all Calculus I sections held Wednesday, December 12th. There are to be no exceptions to this, so adjust your travel plans accordingly.

**GRADING SCALE**

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 Exams</td>
<td>45%</td>
</tr>
<tr>
<td>Homework</td>
<td>10%</td>
</tr>
<tr>
<td>Quizzes (lowest 2 dropped)</td>
<td>20%</td>
</tr>
<tr>
<td>Comprehensive Final Exam</td>
<td>25%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>100%</strong></td>
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**CELL PHONE POLICY**

Cells phones are not to be used at all during class. All phones are to be placed in a backpack or bag, not in the laps of students or on the desks. Your class participation depends on your full attention for the entire class period. If you have a situation that necessitates checking your phone during class (such as a sick child at home) get this approved at the beginning of class.

**STUDENT CONDUCT CODE**

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, which is available for review online at [http://life.umt.edu/vpsa/student_conduct.php](http://life.umt.edu/vpsa/student_conduct.php)

In this class, you are encouraged to work together on homework and any in-class activities. However, unless otherwise stated, the work you turn in must be your own. This means that after discussing a problem, you should each write it up in your own words.

**CLASSROOM AND TESTING ACCOMMODATIONS**

Please set up an appointment to meet with me to discuss reasonable modifications. 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](http://www.umt.edu/disability).

**MATH LEARNING CENTER**

The Math Learning Center is located in the basement of the Math Building. The Math Learning Center offers free walk-in assistance to students. It is not a one-on-one tutoring center.

Monday through Thursday: 10am-4pm

You can also get help in the evenings at Math at Mansfield, located in the library.

Monday through Thursday 6:30-9pm
**IMPORTANT DATES**  
September 17\(^{th}\): Last day to Register, Change credits, Drop Classes with refund, Change Grading Option.  

October 29\(^{th}\): Last day to withdraw with “W” without petition.  

November 30\(^{th}\): Last day to withdraw from semester.  

December 7\(^{th}\): Last day of instruction.  

**EXAM DATES**  
September 21\(^{st}\)  
October 19\(^{th}\)  
November 16\(^{th}\)  
December 12\(^{th}\) (FINAL EXAM)  

All dates tentative other than December 12\(^{th}\).