South Dakota School of Mines and Technology
MATH 225 – Calculus III  Spring 2011

Section 2  10:00 am  MWF CB 309
Section 4  3:00 pm  MWF McLaury 310

Professor:  Don Teets (donald.teets@sdsmt.edu)
Office:  McLaury 316F  (phone 355-3452)
Hours:  MWF 8:30-9:30 am, Th 2:00-2:50 pm, or by appointment.  Feel free to stop by my office at other times as well.  IF YOU’RE HAVING TROUBLE FINDING ME OUTSIDE OF CLASS, TALK TO ME JUST BEFORE OR AFTER CLASS.  I WILL FIND A TIME THAT WORKS FOR BOTH OF US!

Text:  Calculus (Rogawski) We will cover Chapters 14-17 with a few additions and some omissions.

Catalog course description
MATH 225 Calculus III (4-0) 4 credits.  Prerequisite: MATH 125 completed with a minimum grade of “C.”  A continuation of the study of calculus, including an introduction to vectors, vector calculus, partial derivatives, and multiple integrals.

Instructional Methods
This course will be conducted in a lecture / discussion format, with frequent opportunities for students to ask questions.

Computers in Math 225
Applied mathematics in the 21st century is almost certain to involve some use of computers.  In this course, we will use the programs Maple and Excel to make computationally difficult problems accessible.  However, you should not expect to use these tools on a daily basis—they will be used occasionally and only when appropriate.  Calculus cannot be applied to solve problems unless basic principles are well understood, and computers have little role in building that understanding.

Course goals
Course objectives and student learning outcomes can be accessed from the Department of Mathematics and Computer Science home page www.mcs.sdsmt.edu.  Choose the “Assessment” link on the left side of the page, then click the link “Math 225 Calculus III.”

Homework
Homework will be assigned almost every day.  Though I will generally not collect and grade homework, it will be difficult to succeed in this course without doing all or most of the assigned exercises.  I have posted a day-by-day schedule including daily problem assignments on the class web site.

Quizzes
We will probably have a few quizzes during the semester.  I will typically announce them a day or two in advance.  We will probably also have one or more computer-based quizzes (using Maple or Excel).  I anticipate having a fairly large quiz in the middle of Chapter 17 to break up the material.

Hour Exams
We will have three 100 point exams during the semester.  Tentative dates are listed on the course day-by-day schedule.  Arrangements for taking missed exams will be made on an individual basis, but only if the student provides at the earliest opportunity an adequate reason for missing the exam.

Final Exam
A comprehensive final exam worth 150 points will be given Thursday, May 5, 10:00 – 11:50 am.  (Under no circumstances will it be given early!)

Grading
Points earned on exams, quizzes, and other assignments will all carry the same weight.  Course grades will be determined according to the following percentage scale:

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<tr>
<th>Percentage</th>
<th>Grade</th>
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<tbody>
<tr>
<td>90-100</td>
<td>A</td>
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<tr>
<td>80-89</td>
<td>B</td>
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<td>70-79</td>
<td>C</td>
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<td>60-69</td>
<td>D</td>
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<tr>
<td>0-59</td>
<td>F</td>
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It is possible that this standard may be lowered, but it will not be raised.  Note that + or - grades are no longer possible.

Tentative Course Schedule
A tentative schedule is posted on the class web site, showing text sections to be covered each day, problem assignments, and tentative exam dates.  (Type Math 225 into the search box on the SDSMT home page, then follow the appropriate links.)
Attendance and Conduct
Students are expected to read and follow policies on Attendance, Conduct, and Academic Integrity in the SDSM&T Catalog. In particular, you should be aware that the penalty for cheating in any course at SDSMT “…shall be at the discretion of the instructor…” and “…may range from requiring the student to repeat the work in question to failure in the course.”

ADA Statement
Students with special needs or requiring special accommodations should contact the instructor and/or the campus ADA coordinator, Dr. Jolie McCoy, at 394-1924 at the earliest opportunity. In particular, students who have been granted special accommodations for exams MUST MAKE ARRANGEMENTS FOR EACH EXAM with the instructor. This must be done DURING THE WEEK PRECEDING EACH EXAM.

Freedom in Learning
Under Board of Regents and University policy student academic performance may be evaluated solely on an academic basis, not on opinions or conduct in matters unrelated to academic standards. Students should be free to take reasoned exception to the data or views offered in any course of study and to reserve judgment about matters of opinion, but they are responsible for learning the content of any course of study for which they are enrolled. Students who believe that an academic evaluation reflects prejudiced or capricious consideration of student opinions or conduct unrelated to academic standards should contact the dean of the college which offers the class to initiate a review of the evaluation.

General Education Goals
This course meets GenEd Goal #5: Students will understand and apply fundamental mathematical processes and reasoning.

Student learning outcomes: As a result of taking a course meeting this goal, students will:

1. Use mathematical symbols and mathematical structure to model and solve real world problems.
2. Demonstrate appropriate communication skills related to mathematical terms
3. Demonstrate the correct use of quantifiable measurements of real world situations