INSTRUCTOR: Julie Dahl  
OFFICE: McLaury 302; phone: 355-3456, email: julie.dahl@sdsmt.edu  
OFFICE HOURS: 9:00–9:50 MTWF, 2:00–2:30 MTW  
TEXT: Calculus: Jon Rogawski  

Web access for this class is through D2L, which can be accessed at https://d2l.sdbor.edu
This section of Math 123 is a tablet PC course. A tablet PC is required for this class. Although we may not use the tablet in class every day, you will be required to submit homework using the tablet.

On D2L, you will find announcements, exam dates, lectures, assignments, reviews, etc. This course is delivered by in-class lecture and is not intended to be a distance course. Attendance is expected but not required; however, as noted below, homework is collected almost every day and late homework is not accepted. You will be submitting your daily homework assignments via the D2L site.

MATH 123 CALCULUS I (4-0) 4 credits. Prerequisite: MATH 115 with a minimum grade of “C” or appropriate mathematics placement or permission of instructor. Students who are initially placed into MATH 102 or below must complete MATH 102 and MATH 120 with grades of “C” or better before enrolling in MATH 123. Students who are placed in MATH 120 should consult their advisor to determine whether their placement score was sufficiently high to allow concurrent registration in MATH 123. The study of limits, continuity, derivatives, applications of the derivative, antiderivatives, the definite and indefinite integral, and the fundamental theorem of calculus.

Please note that the prerequisites as explained above in the catalog description of the course are incorrect. Math 115 as it appears in the description is not offered on this campus. It is offered at our sister institutions in the state, but not here. Our prerequisites are based on completion of College Algebra with a grade of C or better or a satisfactory score in the algebra portion or the placement exams. In addition, a trigonometry requirement must be met: again, either by a grade of C or better in a college trigonometry course, or a satisfactory score on the trigonometry portion of the placement exam. A student may be allowed to enroll in both Calculus I and Trigonometry if their placement score is satisfactory.

MATERIAL TO BE COVERED IN COURSE:
- Weeks 1-3 – tablet PC introduction, limits, continuity
- Weeks 3-6 - derivatives
- Weeks 6-10 - applications of derivatives
- Weeks 10-12 - integration
- Weeks 13-15 - applications of integration

The final exam is scheduled for Thursday, December 15,
from 3:00 until 4:50 PM

GRADING POLICIES:

Grades will be based on 4 exams, a mandatory comprehensive final exam, quizzes and homework. Homework is collected almost every day. One make-up exam per semester will be allowed only if the student has notified the instructor in advance of or on the day of the exam with a good reason for missing the test. One make-up quiz will be given at the end of the semester, which will replace the lowest quiz grade. There will be several computer (Maple) assignments during the semester, and if you choose to submit fewer than half of them, a penalty will be assessed as follows: the number of points assigned for all the computer assignments will be quadrupled. For example, if there are 3 Maple assignments worth a total of 25 points, and you only submit one of the three, earning a score of 6, you will be penalized. Those assignments are now worth 100 points, and instead of getting 6/25 for your computer score, you will get 6/100.

Because the total number of points can vary from semester to semester, depending on number of quizzes, points on the final, homework collected, etc., the following are approximations.

Tests One-Four - 12-15% each
Quizzes - 3-4% each
Homework - 6-7%
Final Exam - 23-26%

GRADING SCALE:

90 % - 100 % A
80 % - 90 % B
70 % - 80 % C
>60 % - 70 % D
0 % - 60 % F

HOMEWORK POLICY:

Homework must be saved as a Windows Journal file and submitted via D2L. Each assignment is worth 2 points (so will be assigned a score of 0, 1, or 2). The score on each assignment is based on level of completion of assignment. Five assignments will be thrown out for everyone.

No makeups
No late assignments
No excused homeworks

If you don’t submit an assignment, it’s one of the 5 dropped assignments.
Approximately 25 assignments will be collected.

BEHAVIOR IN CLASS, ELECTRONIC DEVICES POLICY, AND CHEATING: During lectures, minimize conversations with your classmates. If you consistently violate this policy,
you may be asked to exit the room.

The use of electronic devices such as cell phones, mp3 players, etc. in class is not acceptable. Turn them off before coming to class. **No text messaging in class.** No headphones. If you wish to use a laptop in this class for purposes of note taking, that’s great; however, it should be in tablet mode, with the lid rotated and down, and you are not allowed to use the computer to communicate with other students during class. No other use of any other electronic/computer media is allowed during class time. Note that according to “Policy Governing Academic Integrity” in the SDSM&T Undergraduate Catalog, the instructor of record for this course has discretion of how acts of academic dishonesty are penalized, subject to the appeal process, and that “Penalties may range from requiring the student to repeat the work in question to failure in the course.”

In addition, for this class, **if you cheat on an exam or assignment, you could fail the course.** **You will not receive any credit for that assignment, and your name may be turned in to the Dean of Students.** Working together and discussing homework is acceptable. **Copying someone else’s work is cheating.** For more information on this topic, see the college catalog for the policy governing academic integrity.

---

**Students with special needs or requiring special accommodations should contact the instructor, (Julie Dahl at 355-3456) and/or the campus ADA coordinator, Jolie McCoy, at 394-1924 at the earliest opportunity.**

---

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.
   **Assessment:** Students will
   • Identify, interpret, and correctly apply standard mathematics symbols to solve problems requiring the derivative. This will be demonstrated on quizzes, labs, homework, and/or exams.
   • Identify, interpret, and correctly apply standard mathematics symbols to solve problems requiring the integral. This will be demonstrated on quizzes, labs, homework, and/or exams.

2. Demonstrate appropriate communication skills related to mathematical terms
   **Assessment:** Students will
   • Correctly use functional notation of algebra, trigonometry, and calculus. This will be demonstrated on quizzes, labs, homework, and/or exams.

3. Demonstrate the correct use of quantifiable measurements of real world situations
   **Assessment:** Students will;
   • Apply their knowledge of the integral in applications such as area, volume, moments, work, arc length, and surface area. This will be demonstrated on quizzes, labs, homework, and/or exams.
   • Apply their knowledge of the derivative in applications such as related rates, linear approximations, Newton’s Method, curve sketching, optimization, velocity, and acceleration. This will be demonstrated on quizzes, labs, homework, and/or exams.

**Student Academic Freedom Rights** The School of Mines and the South Dakota Board of Regents have a longstanding commitment to protecting those freedoms of inquiry and learning
that are essential to the expansion of knowledge and the correction of error. This includes protections for student freedom in learning. In its relevant parts, Board of Regents policy, which applies to the School of Mines and to all other public universities, provides the following:

A. To secure student freedom in learning, faculty members in the classroom and in seminar should encourage free and orderly discussion, inquiry and expression of the course subject matter. Student performance may be evaluated solely on an academic basis, not on opinions or conduct in B. 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.

C. Each institution shall establish an academic appeals procedure to permit review of student allegations that an academic evaluation was tainted by prejudiced or capricious consideration of student opinions or conduct unrelated to academic standards. These procedures shall prohibit retaliation against persons who initiate appeals or who participate in the review of appeals.

D. Students are responsible for maintaining standards of academic performance established for each course in which they are enrolled.

For information about objectives and outcomes for this course and other courses in the Math department, go to the following page http://www.mcs.sdsmt.edu/view.php?p=3600

---

Note: the following are requirements for enrollment in Calculus II at SDSM&T:

a) a grade of C or better in Calculus I
b) a passing score on the Trigonometry placement exam or a grade of C or better in a college Trigonometry course.