

MATH 1210-01 CALCULUS  
SPRING 2010

Instructor: COSTEL IONITA  
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Time: 9:00-9:50 MTWThF  
Place: NIB 135  
Office Hours: 10:00-11:00 MTWThF, 1:00-3:00 MW, or by appointment  
Text: Calculus, Concepts and Contexts, 4<sup>th</sup> edition;  
by James Stewart

1. OBJECTIVES: All classes in mathematics at Dixie College support the general education goal of the college. Within the limitations imposed by the nature of mathematics (i.e. the dependency on prior learning and the need for content fluency) each class will:

- Require students to perform mathematical processes including fractions, percentages, decimals, proportions/ratios, algebraic equations and/or calculus techniques.
- Provide students with application problems that use a variety of methods including arithmetical, algebraic and geometric methods.
- Challenge students to make inferences from mathematical models that include formulas, graphs and tables.
- Provide students with real-life applications that use a variety of mathematical functions.

Upon successful completion of MATH 1210, a student will demonstrate through testing the ability to:

1. Define and evaluate limits.
2. Define and identify continuity and differentiability.
3. Apply limits to graphing techniques.
4. Define the derivative.
5. Use formulas for differentiation.
6. Use the derivative to find tangents to curves.
7. Apply the derivative in problems involving extrema and related rates.
8. Define the definite integral.
9. Use L'Hospital's Rule to evaluate limits.
10. Perform integration by various techniques (parts, substitution, and partial fractions).
11. Perform numerical integration.
12. Approximate area under curves.

**DMAIL: Important class and college information will be sent to your Dmail email account. This information includes your DSC bill, financial aid/scholarship notices, notification of dropped classes, reminders of important dates and events, and other information critical to your success in this class and at DSC. All DSC students are automatically assigned a Dmail email account. If you don't know your user name and password, go to [www.dixie.edu](http://www.dixie.edu) and select "Dmail," for complete instructions. You will be held responsible for information sent to your Dmail email, so please check it often.**

**IMPORTANT DATES** Go to: <http://new.dixie.edu/reg/?page=spring2010>

**CLASS ATTENDANCE AND PARTICIPATION:** It is your responsibility to attend class although it is not required. Be willing to be involved in the class as an active participant. ASK questions, contribute toward solutions, and be interested in the class activities.

**GETTING HELP:** Use the office hours! I do not plan anything during those times so if you do not stop by I am getting very bored. Use them as much as you can. That's why I am here.

**HOMEWORK:** Keep in mind that math is a skill that can only be learned and mastered by doing it yourself with lots of practice. Do not attempt to do a whole chapter's assignment at one sitting. A minimum of two hours spent studying outside of class for each hour in class is usually required for college courses.

**GRADING:** There are five tests that will makeup 70% of your grade. The final exam will be comprehensive and makeup 15% of your grade. There will be homework assignments that will makeup 15% of your grade. All tests count toward your grade. The lowest test score can be replaced by the percent on the final exam. Make-up exams as a general rule will not be given.

GRADING SCALE: A (90-100%), B+ (87-89%), B (83-86%), B- (80-82%), C+ (75-79%), C (70-74%), C- (65-69%), D+ (64-60%), D (55-59%), D- (50-54%), F (0-50%).

Monday	Tuesday	Wednesday	Thursday	Friday
01/11 1.1:1-11odd,15, 25-31odd	01/12 1.1:39,43,45 47,49,53,55	01/13 1.2:3,5,9,17,19,20	01/14 1.3:1,3,5,7,13,21,29,31 40,41,43,51,53,63,64	01/15 1.5:1,2,3,4,7,11,19,21,24 29,31,35
01/18 <b>NO SCHOOL</b>	01/19 1.6:3-11odd,21,25 35-41,49,51	01/20 1.7:1-19odd,27,42	01/21 Review TrueFalse Quiz	01/22 Review 3,5,17,19,24,25,26
01/25 <b>TEST 1</b>	01/26 2.1:1,3,5,7	01/27 2.2:3,5,15,17,21,31	01/28 2.3:3-23odd,27 29,31,37,38,49	01/29 2.4:3,15-18,27-35odd 41,43,51,55
02/01 2.5:3,15-39odd,53	02/02 2.6:3-9odd,16-21 23-39odd	02/03 2.7:3-9odd,14 19-29odd,41,42,43,45,47	02/04 2.8:1-11odd,15,19,23,25 26,27,28,29,31	02/05 Review: 1-17odd TrueFalse Quiz
02/08 Review 21-25odd,39,43,45	02/09 <b>TEST 2</b>	02/10 3.1:3-33odd,41,45 47-55,65,69,71	02/11 3.2:1-31odd	02/12 3.2:41-47odd,51,53
02/15 <b>NO SCHOOL</b>	02/16 3.3:1-27odd	02/17 3.3:28,29,31,37,39 41,43,45,49	02/18 3.4:1-43odd	02/19 3.4:49,51,55,61,65 67,79,81,86
02/22 3.5:3-27odd,41,43	02/23 3.6:1-9odd	02/24 3.6:17,19,21,37,39	02/25 3.7:3-23odd,33-43odd,47	02/26 3.8:1,7,9,10,14
03/01 3.8: 15,20,29,30,31	03/02 3.9: 5,7,9,25,29	03/03 Review: 1-39odd	03/04 Review:40,45,63,65,67,77	03/05 <b>TEST 3</b>
03/08 <b>NO SCHOOL</b>	03/09 <b>NO SCHOOL</b>	03/10 <b>NO SCHOOL</b>	03/11 <b>NO SCHOOL</b>	03/12 <b>NO SCHOOL</b>
03/15 4.1:1-15odd	03/16 4.1:20,22,26,29,30	03/17 4.2:1,3,5,23-43odd 47,53,57	03/18 4.2: cont'd	03/19 4.3:6,7-15odd,21-33odd 59,63,65
03/22 4.5:1-45odd	03/23 4.5:cont'd	03/24 4.6:3,5,9,11,12,14	03/25 4.6:15,23,25,26,38,57	03/26 4.7:5,11,17,19,21
03/29 4.8:1-35odd	03/30 4.8:41,43,49	03/31 Review: 1,7,15,25 27-33odd,39,47,53,55	04/01 Review TrueFalse Quiz	04/02 <b>TEST 4</b>
04/05 5.1:3,5,17,21	04/06 5.2:17,19,21,23,25 31-43odd,51	04/07 5.3:1-31odd 43-49odd,59,61	04/08 5.4:3,7-17odd,21,23	04/09 5.5:1-61odd
04/12 5.5:cont'd	04/13 5.6:1-29odd	04/14 5.6:cont'd	04/15 5.7:1-13odd	04/16 5.7:21,29,31
04/19 5.10:1-33odd	04/20 5.10:43,51,61	04/21 Review 1-33odd	04/22 Review: 8,39,41,55,57,59 TrueFalse Quiz	04/23 <b>TEST 5</b>
04/26 Final Review	04/27 Final Review	04/28 Final Review	04/29 Final Review	04/30 <b>NO CLASS</b>

**FINAL EXAM on FRIDAY, April 30, 10 am to Noon.**