MATHEMATICS 181: Elementary Calculus I (section 017)
Fall 2009 Semester
8:00 – 9:45 a.m. Tuesdays and Thursdays TBE-B172

Instructor: Dr. Robinette
Office: CDC 920 (Central Desert Complex building 9, room 920)
Office Hours: 8:30 – 11:00 a.m. Mondays & 8:30 – 10:00 a.m. Wednesdays
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Prerequisite: Grade of C or better in Precalculus (Math 127 or 128 at UNLV) or ACT score at least 28 or SAT score at least 630.

Text: Essential Calculus: Early Transcendentals by J. Stewart

Notes: Available from my website: http://faculty.unlv.edu/robinette/robinette.html

WebAssign: You are required to use webassign. There are four webassign pretests, 25 webassign homework assignments, and five webassign tests. The five tests account for the equivalent of one in-class exam. The pretests and homework assignments factor into your participation in the course and will be used if your course grade is a borderline case.

Pretests: To test your prerequisite skills, take the FOUR pretests on webassign. These are due by 5 p.m. on Tuesday, September 1. (You are allowed three submissions for each pretest.)

Exams: There will be three in-class exams, worth 100 points each. The dates of these exams are September 17, October 27, and December 1. No make-up exams will be given under any circumstances. Failure to take an exam during the scheduled class time will result in a score of zero for that exam.

Tests: There will be five webassign tests, worth 20 points each, for a total of 100 points called your WebAssign Test Score. The due dates for these are September 15, October 13, October 27, November 17, and December 1. (You are allowed two submissions for each test.) No make-up tests will be given under any circumstances. Failure to complete a test during the scheduled webassign timeframe will result in a score of zero for that test.

Homework: The problems that you should work after each lecture are on the assignment list. In addition to these, you are expected to do the webassign homework assignments. (You are allowed five submissions for each webassign assignment.) Pay attention to DUE DATES and time zone of webassign!!

Final Exam: The final exam, worth 100 points, is an in-class comprehensive exam and will be given on Thursday, December 10, 2009 from 8:00 – 10:00 a.m. in our classroom TBE-B172.

Grading: There are a total of 400 points available in this course coming from your final exam score and your top three scores from Exam 1, Exam 2, Exam 3, and WebAssign Test Score. Final grades for the course are based on the following percentage scale:

A: [90, 100]  C: [66, 72]  B+: [84, 90]  D+: [60, 66]  B: [78, 84]  D: [50, 60]  C+: [72, 78]  F: [0, 50]

Grades of A-, B-, C-, and D- may be given in borderline cases, where class attendance and class participation will be determining factors.

Attendance: You are expected to attend class regularly. You are responsible for all the material presented and all announcements made on days you are absent.

Students from Math 095-182 are required to attend a mandatory presentation regarding the online evaluations, tutor clinic and other tutoring options offered. The presentation dates will be listed on the following website at www.unlv.edu/math/math_clinic.html and students will be able to sign up for these presentations by email at mathclinic@unlv.edu.

The Disability Resource Center (DRC) coordinates all academic accommodations for students with documented disabilities. The DRC is the official office to review and house disability documentation for students, and to provide them with an official Academic Accommodation Plan to present to the faculty if an accommodation is warranted. The DRC strongly encourages faculty to provide accommodations only if and when they are in receipt of said plan. Faculty should not provide students accommodations without being in receipt of this plan.

UNLV complies with the provisions set forth in Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, offering reasonable accommodations to qualified students with documented disabilities. If you have a documented disability that may require accommodations, you will need to contact the DRC for the coordination of services. The DRC is located in the Student Services Complex (SSC), Room 137, and the contact numbers are: VOICE (702) 895-0866, TTY (702) 895-0852, FAX (702) 895-0651. For additional information, please visit: http://studentlife.unlv.edu/disability/.

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Aug. 25 1.1 Functions and their representations
Aug. 27 1.2 A catalog of essential functions
Sept. 1 1.3 The limit of a function
1.4 Calculating limits
Sept. 3 1.4 Calculating limits
1.5 Continuity
Sept. 8 1.6 Limits involving infinity
2.1 Derivatives and rates of change
Sept. 10 2.1 Derivatives and rates of change
2.2 The derivative as a function
Sept. 15 Review
TEST 1 (WebAssign) (covers Chapter 1) Due 5:00 p. m.
Sept. 17 EXAM 1 (In-class) (covers 1.1 – 1.6, 2.1, and 2.2)
Sept. 22 2.3 Basic differentiation formulas
Sept. 24 2.4 The product and quotient rules
Sept. 29 2.5 The chain rule
Oct. 1 2.6 Implicit differentiation
Oct. 6 2.7 Related rates
Oct. 8 2.8 Linear approximations and differentials
3.1 Exponential functions
Oct. 13 3.1 Exponential functions
3.2 Inverse functions and logarithms
Oct. 15 3.3 Derivatives of logarithmic and exponential functions
3.5 Inverse trigonometric functions
TEST 2 (WebAssign) (covers Chapter 2) Due 5:00 p. m.
Oct. 20 3.5 Inverse trigonometric functions
3.7 Indeterminate forms and L’Hospital’s Rule
Oct. 22 3.7 Indeterminate forms and L’Hospital’s Rule
Review
Oct. 27 EXAM 2 (In-class) (covers 2.3 – 2.8, 3.1 – 3.3, 3.5, and 3.7)
TEST 3 (WebAssign) (covers Chapter 3) Due 5:00 p. m.
Oct. 29 4.1 Maximum and minimum values
4.2 The Mean Value Theorem
4.3 Derivatives and shapes of graphs
Nov. 3 4.3 Derivatives and shapes of graphs
4.4 Curve sketching
Nov. 5 4.5 Optimization problems
4.6 Newton’s Method
Nov. 10 4.6 Newton’s Method
4.7 Antiderivatives
Nov. 12 5.1 Areas and distances
5.2 The definite integral
Nov. 17 5.2 The definite integral
5.3 Evaluating definite integrals
TEST 4 (WebAssign) (covers Chapter 4) Due 5:00 p. m.
Nov. 19 5.4 The Fundamental Theorem of Calculus
5.5 The substitution rule
Nov. 24 5.5 The substitution rule
Review
Nov. 26 Thanksgiving Recess – No classes
Dec. 1 EXAM 3 (In-class) (covers 4.1 – 4.7 and 5.1 – 5.5)
TEST 5 (WebAssign) (covers Chapter 5) Due 5:00 p. m.
Dec. 3 Review
Dec. 10 Thursday FINAL EXAM 8:00 – 10:00 a. m.