COURSE: MATH 1720.008 Calculus II Text Book: Calculus by Briggs and Cochran, first edition	CLASS MEETS: MW: 2:00-3:20pm in LANG 315 Final Exam: Wednesday, December 14, 1:30-3:30 pm
INSTRUCTOR: Dr. Steven Widmer Email: steven.widmer@unt.edu	Math Lab web site:www.math.unt.edu/mathlabThe UNT Math Lab is located in GAB 440
Office: GAB 423B Office Hours: MW 12:30am – 1:30am; TR 2:00pm – 3:00pm; and by appt	

COURSE DESCRIPTION AND PREREQUISITE: Differentiation and integration of exponential, logarithmic and transcendental functions; integration techniques; indeterminate forms; improper integrals; area and arc length in polar coordinates; infinite series; power series; Taylor's theorem. Prerequisite(s): MATH 1710. Satisfies the Mathematics requirement of the University Core Curriculum.

SECTIONS TO BE COVERED:

Chapter 7: all sections except possibly 7.1, Chapter 8: all sections except possibly 8.5-8.6 Chapter 9: all sections, Chapter 10: all sections, and Chapter 11: all sections except possibly 11.1

ATTENDANCE AND GRADING POLICY:

Average of Homework and Quizzes: 15% Three Tests : 60% (20% each) Final Exam : 25%

Attendance is required. No make-up quizzes or tests will be given.

Homework will be collected and quizzes will be given (almost) weekly. The grade of three randomly selected problems from the collected homework will earn you 50% of the quiz grade. If you miss a quiz, its score will be zero. Three lowest quiz scores will be dropped. There will be three tests. Roughly, the first test will cover sections 7.2-7.6, 8.1-8.3, the second 8.4, 8.7-8.8 and 9.1-9.4; and the last 9.4-9.6, 10.1-10.4, and 11.2. In addition, there will be a comprehensive final exam. You may replace your lowest test score with the final exam score if the latter is higher. If you miss a test, you may use the final exam score for this test. On some tests/exam you may be permitted to use a scientific or four function calculator but not calculators which can perform calculus operations.

Final grades online access: <u>www.my.unt.edu</u>

Student Evaluation of Teaching Effectiveness (SETE): is a requirement for all organized classes at UNT. This short survey will be made available to you at the end of the semester, providing you a chance to comment on how this class is taught.

It is the responsibility of students with certified disabilities to provide the instructor with appropriate documentation from the Office of Disability Accommodations (ODA).

NOTES:

Students are responsible for meeting all university deadlines (registration, fee payment, prerequisite verification, drop deadlines, etc). See the printed Schedule of Classes and/or University Catalog for policies and dates.

Electronic access for homework assistance is available at: www.math.unt.edu/mathlab/emathlab

Text: Calculus, by Briggs, and Cochran (First edition) Text adopted Fall 2011, Outline adopted Fall 20011.

Section	Approximated number of weeks per chapter	Topic/Comment
7.1*	2 1/2 weeks	Inverse FunctionsOptional
7.2		The Natural Logarithm and Exponential Functions
7.3		Logarithmic and Exponential Functions With Other Bases
7.4		Exponential Models
7.5		Inverse Trigonometric Functions
7.6		L'Hôpital's Rule and Growth Rates of Functions (<i>Indeterminate forms</i>)
8.1	4 weeks	Integration By Parts
8.2		Trigonometric Integrals
8.3		Trigonometric Substitutions
8.4		Partial Fractions
8.5*		Other Integration StrategiesOptional
8.6*		Numerical IntegrationOptional
8.7		Improper Integrals
8.8		Introduction to Differential Equations
9.1	4 weeks	Overview of Sequence and Series
9.2		Sequence and Infinite Series
9.3		Infinite Series
9.4		The Divergence and Integral Tests
9.5		The Ratio, Root, and Comparison Tests
9.6		Alternating Series
10.1	2 weeks	Approximating Functions with Polynomials (Taylor Polynomials)
10.2		Property of Power Series
10.3		Taylor Series
10.4		Working with Taylor Series
11.1*	1 1/2weeks	Parametric EquationsOptional
11.2		Polar Coordinates
11.3		Calculus in Polar Coordinates