MATH1710.160

Calculus I Fall 2018

Instructor: Dr. Huettenmueller Email: rhonda.huettenmueller@unt.edu

Office: GAB 411 Class Meets: MWF 8:00-8:50

Mondays: 10:15-12:45 and 2:00-3:00 WH 222

Fridays: 10:15-12:45 and Tuesday/Thursday recitation

Students unable to meet during these times

may request an appointment.

Textbook: Calculus, 8th Edition by James Stewart (delivered via WebAssign; see below) WebAssign is required. WebAssign can be accessed at webassign.net. The class key is

unt 4761 4788

The course content (online homework, help tools, the textbook, etc.) will be delivered in WebAssign. Students must register on WebAssign by the second class day of the semester. To get started, you can go to http://www.webassign.net/manual/WA_Student_Quick_Start.pdf. Temporary access expires on the 14th day of the semester, regardless of when you register. Students who do not purchase WebAssign by the end of the trial period may lose credit for work already submitted with the possibility of no refund. You can purchase an access code at the UNT Bookstore.

Course Description: 4 hours. Limits and continuity, derivatives and integrals; differentiation and integration of polynomial, rational, trigonometric, and algebraic functions, including slope, velocity, extrema, area, volume, and work.

Prerequisite(s): MATH1650 or both MATH1600 and MATH1610.

Teaching Assistants: James Gates and Thomas Calkin

Grading Assignment:

A: 90% and above; B: [80%, 90%); C: [70%, 80%); D: [60%, 70%);

F: [0%, 60%), 59% and below is an F

The student's grade is determined by his/her performance on the evaluation criteria and the grade assignments listed below.

Grading Scheme:

WebAssign Homework Average: 10%

Quiz Average: 10%

Each (of three) Tests: 20%

Final Exam: 20%

Recitation Class: Twice a week, you will meet with a teaching assistant (TA). Your TA will provide supplemental instruction, though on occasion, might introduce new material. You will also take your quizzes in recitation.

WebAssign Homework: On most problems, you will have five attempts. Due dates will not be extended for ANY reason. Do not send emails requesting an extension. The lowest two grades will be dropped.

Exams: There will be three mid-term exams and a comprehensive final exam. The tentative exam dates are Wednesday, 9/26; Wednesday, 10/24; Wednesday, 11/28.

Final Exam Date and Time: Monday, December 10, 8:00-10:00

Calculators: Note that there will be some tests and quizzes for which you are not permitted a calculator. If a calculator is permitted, you may use a scientific or basic graphing calculator (TI-83 and TI-84 are examples). A TI Nspire is not permitted and no calculator with CAS (such as the TI-89) is permitted.

Make-Up Policy: Make-up tests and quizzes will not be given. If you know in advance that you are unable to take a scheduled test, you may request to take it early. I require at least one week's notification, by email, of this request. A grade of 0 is given for any missed test. The final exam grade can replace one missed test grade. One quiz grade will be dropped.

Attendance: Attendance to lecture and to recitation is mandatory. Missing any portion of class may be counted as an absence. You are expected to arrive on time and to remain for the full class. This applies both to lecture and to recitation. If you come in late or leave early, you risk not being able to take a test or quiz. Students who make a habit of being disruptive by arriving late and/or leaving early also risk a report being submitted to the Dean of Students Office.

Students are responsible for all information given in class, regardless of his/her attendance. This includes knowing exam and quiz dates. If you miss a class, it is your responsibility to learn all of the important stuff you missed. Exchange contact information with several members of your class; so that you will have multiple sources to contact in case of a personal emergency.

I will not entertain any pleas for extra credit or offers to do extra work at the end of the semester.

Disability Accomodations:

The University of North Texas makes reasonable academic accommodation for students with disabilities. Students seeking accommodation must first register with the Office of Disability Access (ODA) to verify their eligibility. If a disability is verified, the ODA will provide you with an accommodation letter to be delivered to faculty to begin a private discussion regarding your specific needs in a course. You may request accommodations at any time, however, ODA notices of accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of accommodation for every semester and must meet with each faculty member prior to implementation in each class. For additional information see the Office of Disability Access website at http://www.unt.edu/oda. You may also contact them by phone at 940.565.4323. It is the responsibility of students with certified disabilities to provide the instructor with appropriate documentation from the Dean of Students Office.

Exam Etiquette:

- Place all papers, textbook, notes, etc. in a backpack or a book bag and close it securely.
- Handling of ANY electronic devices (unless medically necessary) during an exam will be construed as cheating (receiving unauthorized aid) and may result in a zero for that exam.
- Do not share any materials during an exam. This includes, but is not limited to pencils, erasers, calculators, etc.
- Have only the exam, pencil, and eraser out during an exam. Plenty of work–space is provided on the actual exam. You will not be permitted to have any scratch paper during an exam.

Drop Policy:

If the student is unable to complete this course, it is his/her responsibility to formally withdraw from the course. NOTE: Substantial changes were announced for Fall 2018. Prior to Tuesday, September 11th, students may drop a course from their student portal on my.unt.edu. From 9/11 to 11/5, students may drop a course by completing the Request to Drop form at https://registrar.unt.edu/sites/default/files/drop_request_fillable.pdf. The last date to withdraw from all of your classes is 11/21. If the student does not properly withdraw from the course but stops attending, s/he will receive a performance grade, usually an F. Students are responsible for all drop date deadlines. Information regarding the process can be found at https://registrar.unt.edu/registration/dropping-class.

Finality of Grades

You have until one week after the exams and quizzes are returned to the class to bring to my attention issues regarding exam or quiz grades. After this time, the recorded grades are considered final. Regarding grades for online homework, you have until 6:00 p.m. on Friday, December 7 to bring these issues to my attention (you can do so by e-mail). After this deadline, the recorded grades are considered final. This includes disputed results on WebAssign problems, disputed results on tests and quizzes, miscalculated grades for tests and quizzes, and mis-recorded grades on tests and quizzes.

Progress Reports

Students needing progress reports completed/signed for athletics, scholarships and/or any other organization must attend office hours to get them completed. I will not fill out progress reports before or after class.

AUGUST 27, MONDAY

Classes begin.

AUGUST 31, FRIDAY

Last day to add/swap a class. Cannot swap up to a higher level class, only down.

SEPTEMBER 3, MONDAY

Labor Day – No Classes, University Closed

SEPTEMBER 11, TUESDAY

Beginning this date a student may drop a class with a grade of "W".

NOVEMBER 5, MONDAY

Last day to drop with a "W".

NOVEMBER 12, MONDAY

Beginning this date a student may request a grade of "I", incomplete, a non-punitive grade given only if a student (1) is passing, (2) has justifiable reason why the work cannot be completed on schedule; and (3) arranges with the instructor to complete the work.

NOVEMBER 21, WEDNESDAY

Last day to withdraw from the semester.

NOVEMBER 22, THURSDAY – NOVEMBER 25, SUNDAY

Thanksgiving – University closed.

DECEMBER 1, SATURDAY – DECEMBER 7, FRIDAY

Pre-final week. Friday, December 7, is Reading Day – no classes

DECEMBER 8, SATURDAY – DECEMBER 14, FRIDAY

Final examinations. Terms ends.

DECEMBER 14, FRIDAY – DECEMBER 15, SATURDAY

Commencement.

Fall 2018 MATH1710 (Tentative Calendar, subject to change)

08/27/18 Introduction	8/28/18 Trig Quiz Trig Review	08/29/18 1.4 **See below for titles of sections	8/30/18 Review nonlinear inequalities and absolute value inequalities	08/31/18 1.5
09/03/18 Labor Day	9/4/18 Finish 1.5	09/05/18 Begin 1.6	09/06/18	09/07/18 Finish 1.6
09/10/18 Begin 1.8	9/11/18 Quiz 1	09/12/18 Finish 1.8	9/13/18	09/14/18 1.7
09/17/18 Finish 1.7, begin 2.1	Finish 2.1 Quiz 2	09/19/18 Finish 2.1, begin 2.2		09/21/18 Finish 2.2, begin 2.3
09/24/18 Finish 2.3, begin 2.4	09/25/18	09/26/18 Test 1	9/27/18 Finish 2.4	09/28/18 2.5
10/01/18 Finish 2.5, begin 2.6	10/2/18 Probject #1 (Counts as a Quiz)	10/03/18 Finish 2.6, begin 2.7	10/4/18 Finish 2.7	10/05/18 2.8
10/08/18 Finish 2.8	10/9/18 Quiz 3	10/10/18 2.9	10/11/18 Finish 2.9	10/12/18 3.1
10/15/18 Finish 3.1, begin 3.2	10/16/18 Quiz 4	10/17/18 Finish 3.2	10/18/18	10/19/18 3.3
10/22/18 3.4	10/23/18	10/24/18 Test 2	10/25/18 Finish 3.4	10/26/18 3.5
10/29/18 Finish 3.5, begin 3.7	10/30/18 Quiz 5	10/31/18 Finish 3.7	11/1/18 Cover 3.8	11/02/18 3.9
11/05/18 4.1	11/6/18 Finish 4.1	11/07/18 4.2	11/08/18	11/09/18 Finish 4.2, begin 4.3
11/12/18 Finish 4.3	11/13/18 Project #2 (counts as quiz)	11/14/18 4.4	11/15/18 Finish 4.4	11/16/18 4.5
11/19/18 Finish 4.5	11/20/18	11/21/18 Begin 5.1	Thanksgiving	11/23/18 No school
11/26/18 Finish 5.1, begin 5.2	11/27/18	11/28/18 Test 3	11/29/18 Finish 5.2	11/30/18 5.3

12/03/18 Finish 5.3, begin 5.5	12/05/18 Finish 5.5	12/07/18	
12/10/18 8:00 Class Final Exam 8:00-10:00	12/12/18 9:00 Class Final Exam 8:00-10:00		

Functions and Limits

- 1.4 Tangent and Velocity Problems
- 1.5 The Limit of a Function
- 1.6 Calculating Using Limit Laws
- 1.8 Continuity
- 1.7 The Precise Definition of a Limit

Derivatives

- 2.1 Derivatives and Rates of Change
- 2.2 The Derivative as a Function
- 2.3 Differentiation Formulas
- 2.4 Derivatives of Trigonometric Functions
- 2.5 The Chain Rule
- 2.6 Implicit Differentiation
- 2.7 Rates of Change in the Natural and Social Sciences
- 2.8 Related Rates
- 2.9 Linear Approximation and Differentials

Applications of Differentiation

- 3.1 Maximum and Minimum Values
- 3.2 The Mean Value Theorem
- 3.3 How Derivatives Affect the Shape of a Graph
- 3.4 Limits at Infinity / Horizontal Asymptotes
- 3.5 Summary of Curve Sketching
- 3.7 Optimization
- 3.8 Newton's Method
 - o Antiderivatives

Integration

- 4.1 Areas and Distances
- 4.2 The Definite Integral
- 4.3 Fundamental Theorem of Calculus
- 4.4 Indefinite Integrals and the Net Change Theorem
- 4.5 The Substitution Rule

Applications of Integration

- 5.1 Areas Between Curves
- 5.2 Volumes
- 5.3 Volumes by Cylindrical Shells
- 5.5 Average Value of a Function