

# MATH 1710.120 – Calculus I

## Spring 2020

**Instructor:** Dr. Rhonda Huettenmueller

**Email:** [Rhonda.huettenmueller@unt.edu](mailto:Rhonda.huettenmueller@unt.edu) (do not use the messaging features in Canvas and WebAssign)

**Office/Office Hrs:** Mondays: 10:00-12:30; Wednesdays: 10:00-11:00, GAB 411 (early Monday afternoon time available for appointment)

**Course Meets:** MWF 9:00-9:50 in CURY 103

**Textbook:** *Calculus* 8<sup>th</sup> Edition by James Stewart (delivered via WebAssign; see below)

### WebAssign Required:

The course content (assignments, help tools, textbook, etc.) will be delivered in WebAssign, which can be accessed through Canvas. **Students must register in WebAssign by the 2<sup>nd</sup> class of semester.** To get started go to

[http://www.webassign.net/manual/WA\\_Student\\_Quick\\_Start.pdf](http://www.webassign.net/manual/WA_Student_Quick_Start.pdf). Temporary access is available. Temporary access expires on the 14<sup>th</sup> day of the course regardless of when you acquired it. Students who do not purchase WebAssign by the end of the temporary access period may lose credit for all work previously completed with the possibility of no refund.

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

**Prerequisite(s):** [MATH 1650](#); or both [MATH 1600](#) and [MATH 1610](#).

**Teaching Assistants:** Sarah McCall and Seth Harbin

**Attendance:** Attendance to lecture and to recitation is required.

### Grading Scheme:

Exams – 60% (3 exams)

WebAssign Homework – 10%

Quizzes – 10%

Final Exam – 20%

**Recitation Class:** Twice a week you will meet with a teaching assistant (TA). Your TA will provide supplemental instruction and can answer questions regarding homework. You will take quizzes in recitation. Also, the recitation instructor will conduct test reviews. While you take the tests in lecture, you will have them returned to you in recitation.

**Homework:** This course will use the WebAssign platform for the homework. When you log in you will be able to see due dates. You have 5 submissions for most questions. Your lowest two homework grades will be dropped. If you complete an assignment 24 hours before the due date, you will get a 5% (not 5 points) bonus. That is, if you got an 80%, then you would earn 84%. The system will grant a 72-hour extension but with a penalty of 50% off of the entire assignment. **Manual extensions will not be granted; do not send emails asking for extensions.**

**Exams:** There will be three midterm exams and a comprehensive final exam. The tests dates are Wednesdays: February 12, March 18, and April 15. If class is cancelled (for example for weather reasons) while a test is scheduled, assume that it will be on the first lecture back).

**Final Exam Date and Time: Wednesday, May 6, 8:00-10:00**

**Calculators:** TI-Nspires, TI 89's, TI 92's or any other utility with alphanumeric/CAS capabilities ARE NOT permitted. Scientific and basic graphing calculators (like a TI-83) are OK.

**Make-up Policy:** There are no make-up exams nor make-up quizzes. If you miss a quiz or exam, the grade is zero. You can use the final exam as one make-up test grade. If you know that you will not be able to take the test or quiz in advance, you may take a different version of the test or quiz early. I require at least one week's notice by e-mail. I will let you know, by e-mail, how to take it. I will drop the lowest quiz grade.

**Finality of Grades:** Grades are considered final as of Friday, May 1. That is, if there are any errors or other issues with grades, they will not be changed after May 1.

**START WORKING NOW:** The best way to ensure you pass this course is to work consistently throughout the semester. In mathematics courses topics always build one upon the other making it very difficult to catch up later if you fall behind. If you need to pass this course because it is your last semester, your financial aid depends on it, your scholarship depends on it, or your parent/guardian has threatened to harm you in some manner then do yourself a favor and start studying right away. **I will not entertain any pleas for extra credit or offers to do additional work at the end of the semester.**

**Disability Accommodations:** *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.

## **Summary of Key Dates – Spring 2020:**

### **January 13, Monday**

Classes begin.

### **January 20, Monday**

MLK day; no class (university closed)

### **January 27, Monday (5:00 p.m.)**

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

### **January 28, Tuesday**

Beginning this date a student may drop a course with a grade of W by completing the [Request to Drop Class](#) form and submitting it to the Registrar's Office.

### **March 9, Monday – March 15, Sunday**

Spring Break; no class

### **March 30, Monday**

Last day to drop a course

### **April 6, 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.

### **April 17, Friday**

Last day to withdraw (drop all classes) from the semester.

### **May 1, Friday**

Reading day; no class

### **May 2, Saturday – May 8, Friday**

Final examinations. Terms ends.

## SPRING 2020

*I reserve the right to change this schedule as necessary throughout the semester. You are still responsible for being aware of any changes I announce in class even if you were not present.*

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
1/13  S1.4 The Tangent  and Velocity  Problems	1/14	1/15  S1.5 The Limit of a  Function	1/16	1/17  S1.6 Calculating  Limits Using the  Limit Laws Last day to add or swap a class
1/20  University Closed Martin Luther King Day	1/21  MATH LAB OPENS for the semester	1/22  Finish 1.6  Begin S1.8 Continuity	1/23	1/24  Finish  S1.8 Continuity
1/27  S1.7 The Precise  Definition of a  Limit  <b>CENSUS DATE</b>  12 <sup>th</sup> class day	1/28  Beginning this date a student may drop a course with a grade of W through the Registrar's Office	1/29  Finish 1.7  S2.1 Derivatives  and Rates of  Change	1/30	1/31  S1.7 The Precise  Definition of a  Limit
2/3  S1.7 The Precise  Definition of a  Limit	2/4	2/5  S2.3  Differentiation  Formulas	2/6	2/7  S2.4 Derivatives of  Trigonometric  Functions

2/10 Finish 2.4	2/11	2/12 Test 1	2/13	2/14 S2.5 The Chain  Rule
2/17 S2.5 The Chain  Rule	2/18	2/19 Finish 2.6  S2.7 Rates of  Change in the  Natural and Social  Sciences	2/20	2/21 Finish 2.7  S2.8 Related Rates  Last day for change in pass/no pass status
2/24 Finish 2.8	2/25	2/26 S2.9 Linear  Approximations  and Differentials  Begin 3.1	2/27	2/28 Finish  S3.1 Maximum and  Minimum Values
3/2 S3.2 The Mean  Value Theorem	3/3	3/4 S3.3 How  Derivatives Affect  the Shape of a  Graph	3/5	3/6 Finish 3.3  S3.4 Limits at  Infinity; Horizontal  Asymptotes  Mid-semester
3/9 SPRING BREAK University closed only on this date	3/10 SPRING BREAK	3/11 SPRING BREAK	3/12 SPRING BREAK	3/13 SPRING BREAK
3/16 Finish 3.4	3/17	3/18 Test 2	3/19 S3.8 Newton's  Method	3/20 S3.5 Summary of  Curve Sketching

3/23 S3.7 Optimization Problems	3/24	3/25 Finish 3.7	3/26	3/27 S3.9 Antiderivatives
3/30 S4.1 Areas and Distances  Last day for a student to drop a course	3/31	4/1 S4.2 The Definite Integral	4/2	4/3 S4.3 The Fundamental Theorem of Calculus
4/6 Finish 4.3 Beginning this date a student who qualifies may request a grade of "I"	4/7	4/8 S4.4 Indefinite Integral and the Net Change	4/9	4/10 S4.5 The Substitution Rule
4/13 Finish 4.5 S5.1 Areas Between Curves	4/14	4/15 Test 3	4/16	4/17 Finish 5.1  Last day to withdraw (drop all classes). Grades of W are assigned
4/20 S5.2 Volumes	4/21	4/22 Finish 5.2 S5.3 Volumes by Cylindrical Shells	4/23	4/24 Finish 5.3
4/27 S5.5 Average Value of a Functions	4/28	4/29 Answer final exam review Questions	4/30 PRE-FINALS DAY MATH LAB CLOSES for the semester	5/1 READING DAY – no classes
5/4 FINALS WEEK	5/5  FINALS WEEK	5/6 #200 Final Exam 8:00-10:00  FINALS WEEK	5/7  FINALS WEEK	5/8  FINALS WEEK TERM ENDS