

MATH 1720.120 – Calculus II

Spring 2020

Instructor: Thomas Calkin

Email: ThomasCalkin@my.unt.edu

Office/Office Hrs: GAB 442B / MWF 2:00 pm – 3:00 pm, R 11:30 am -12:30 pm

Course Meets: MWF 1:00 – 1:50 pm in LIFE A204

Textbook: *Calculus* 8th 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 via www.webassign.net. You will need the following **class key:** unt 0188 1748

Students must register in WebAssign by the 2nd class of semester. To get started go to http://www.webassign.net/manual/WA_Student_Quick_Start.pdf. Temporary access is available. Temporary access expires on the 14th 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: 3 hours. 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](#).

Teaching Assistant(s):

Section 121 & 122: Mr. Tekendra Bhatt - tekendrabhatt@my.unt.edu

Section 123: Mr. Md Suzan Ahamed - mdsuzanahamed@my.unt.edu

Grading Scheme:

Exams – 50% (3 exams, drop lowest)

WebAssign Homework – 15%

Quizzes/Activities– 15%

Final Exam – 20%

Recitation Class: Twice a week you will meet with a teaching assistant (TA). Your TA will provide supplemental instruction by working additional example problems, answering homework questions, and reviewing for exams. In addition, each week the TA will administer a short quiz or activity covering the material from the previous week.

Homework: This course will use the WebAssign platform for most of the homework. When you log in you will be able to see due dates. You have 5 submissions for most questions. Your lowest 5 homework grades will be dropped. If you miss a homework assignment it will count as one of your dropped scores. **Manual extensions will not be granted; do not**

send emails asking for extensions.

Exams: There will be 3 midterm exams and a comprehensive final exam. The lowest midterm exam score will be dropped. This is intended to cover emergencies which may arise. You may ask me to explain exam problems. However, all decisions regarding the amount of partial credit awarded from an incorrect solution are final.

Final Exam Date and Time: Saturday May 2nd 10:30 am – 12:30 pm in LIFE A204

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: Make up exams will not be given for any reason after the scheduled date and time. I drop an exam grade to cover emergency circumstances which may arise unexpectedly. An exam may be taken prior to the scheduled date if you have a conflict with another obligation and can provide documentation. I require notification a week in advance for this accommodation.

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 Accommodation (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 Accommodation 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.

Course Calendar - 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 Introduction 6.1 Inverse functions	1/14	1/15 6.1 cont'd 6.2* Natural logarithm (blue)	1/16	1/17 6.2 cont'd 6.3* Natural exponential (blue)
1/20 MLK day	1/21	1/22 6.4* General logs and exponentials	1/23	1/24 6.5 Exponential growth/decay

1/27 6.6 Inverse trig functions	1/28	1/29 6.6 cont'd	1/30	1/31 6.8 Indeterminate forms & L'Hopital's rule
2/3 6.8 cont'd 6.7 Hyperbolic functions (if time permits)	2/4	2/5 7.1 Integration by parts	2/6	2/7 Exam 1 (Chapter 6)
2/10 7.1 cont'd 7.2 Trig integrals	2/11	2/12 7.2 Cont'd	2/13	2/14 7.3 Trig substitution
2/17 7.3 cont'd 7.4 Partial Fractions	2/18	2/19` 7.4 cont'd	2/20	2/21 7.7 Approximate integration
2/24 7.7 cont'd 7.8 Improper integrals	2/25	2/26 7.8 cont'd	2/27	2/28 11.1 Sequences
3/2 11.1 cont'd 11.2 Series	3/3	3/4 Exam 2 (Chapter 7)	3/5	3/6 11.2 cont'd
3/9 Spring Break	3/10 Spring Break	3/11 Spring Break	3/12 Spring Break	3/13 Spring Break
3/16 11.3 Integral test	3/17	3/18 11.3 cont'd 11.4 Comparison tests	3/19	3/20 11.4 cont'd
3/23 11.5 Alternating series	3/24	3/25 11.6 Absolute and conditional convergence/ root & ratio tests	3/26	3/27 11.6 cont'd

3/30 11.8 Power series	3/31	4/1 11.9 Power series representation	4/2	4/3 11.9 cont'd
4/6 11.10 Taylor Series	4/7	4/8 11.10 cont'd	4/9	4/10 11.11 Applications of Taylor series
4/13 10.1 Parametric equations	4/14	4/15 10.2 Calculus w/ parametric equations	4/16	4/17 Exam 3 (Chapter 11)
4/20 10.3 Polar Coordinates	4/21	4/22 10.3 cont'd	4/23	4/24 10.4 Areas in Polar
4/27 10.4 cont'd	4/28	4/29 Wrap up/ Review	4/30	5/1 Reading Day