

Math 225, Section 1 - Fall 2020 Syllabus

Professor:	Dr. Andy Felt	Office: home
Office Hours:	MTRF 10:00 – 10:50 a.m. or by arrangement On Zoom	email: afelt@uwsp.edu

Class Meetings: M, T, W, R, F, 12:00–12:50, Zoom.

Text: *Calculus: Early Transcendentals*, 8th ed., by James Stewart, ISBN 978-1-285-74155-0, available from UWSP Text Rental.

Calculators and Computers: A calculator will not be necessary in this course, but you may find one useful. You will need a computer (laptop or desktop) with a webcam and microphone, and enough internet bandwidth to stream videos.

Prerequisites: Math 118 and 119; or suitable placement score

Course Structure: This course will be delivered entirely online through the course management system Canvas. You can login to Canvas at the UWSP main web page.

Fundamental Skills to be Learned:

- Recognizing real life situations where mathematical models apply.
- Translating the real life situations into mathematical models.
- Solving the mathematical model.
- Interpreting the solution in the context of the real life situation.

Grading:

Homework Assignments	20%	This percentage gets you	⇒	at least this grade
Online Quizzes	10%		⇒	A,
Class Participation	3%		⇒	A–,
4 Exams (including final)	67%		⇒	B+,
			⇒	B, etc.

Homework: Assignments should have the following format:

- Name, section, assignment, date on first page
- Uploaded to Canvas as a single pdf document

The grade for each assignment will include 20% based on accuracy and quality of written communication. Examples on this topic are given in Assignment 0. *No late homework is accepted for any reason.* Usually, there will be a class day between the day homework is assigned and the day it is due. Assignments are due at the beginning of class on the day they are due. The lowest three homework scores will be dropped.

Online Quizzes: These are to be completed in Canvas after reading the corresponding section in the text. You will get 30 minutes to complete the quiz, with two tries, the grade from the *latest* try counting. The quiz will not be available after the due date. The lowest two quiz grades will be dropped.

Exams: Exams will test your ability to solve problems and understand concepts from lecture and the book. Exams will be open-book and open-note, but you may not use help from any live source, including the internet or people connected in any manner. Exams must be **ONLY** your own work. You must join the Zoom call during your exam and leave your camera on.

Help: Everybody needs help at some point. The key is to *get help right away* when you need it. Here are some ways to get help:

- ask a question in class;
- ask me during office hours;
- ask me in an email;
- The Tutoring and Learning Center has a couple kinds of free tutoring available. Check the link in Canvas.

Disability Accommodations: Reasonable accommodations are available for students who have a documented disability. Please notify the instructor during the first week of class of any accommodations needed for the course. All accommodations must be approved through Disability Services, located at 609 Learning Resources Center or <https://www.uwsp.edu/datc/Pages/default.aspx>.

General Course Policies:

- Everyone becomes ill sometimes. When illness or other emergencies require absence from class, I expect you to contact me immediately, preferably by email. I expect you to try to keep up with what is being taught by following in your book and doing the homework.
- **Academic Dishonesty:** You may discuss homework assignments with each other, and you may seek help from the instructor and tutor. However, we want you to become an independent problem solver. Therefore, you must limit the amount of outside help you receive. You must not copy any part of another person's work, and you must not share any part of your work with others. If there is *any* doubt about the amount of help given or received, you should immediately consult with the instructor before submitting the assignment. Please see <https://www.uwsp.edu/dos/Pages/Student-Conduct.aspx> to read about your rights and responsibilities as a student, and Chapter 14 (at that page) to read about Wisconsin's academic misconduct code.
- The course materials and recordings are the property of the instructor, and may not be copied or recorded (including audio and video recording) without the instructor's permission. Students may not copy or share course materials, answers, or recordings outside of class, including posting on internet sites or selling to commercial entities. Students are also prohibited from providing or selling their personal notes to anyone else or being paid for taking notes by any person or commercial firm without the instructors express written permission. Unauthorized use of these copyrighted lecture materials and recordings constitutes copyright infringement.

Tentative Calendar

Week of	Approximate Coverage
3 Sep.	2.1 Tangent and velocity 2.2 Limits
8 Sep.	2.3 Basic limit laws 2.5 Continuity
14 Sep.	2.6 Limits at infinity 2.7 Derivatives and rates of change 2.8 Derivative as a function
21 Sep.	3.1 Derivatives of polynomials, exponentials 3.2 Product, quotient rules
28 Sep.	3.3 Derivatives of trig functions 3.4 Chain rule Exam I
5 Oct.	3.5 Implicit differentiation 3.6 Derivatives of log functions 3.8 Exponential models
12 Oct.	3.9 Related Rates 3.10 Linear approximations

Week of	Approximate Coverage
19 Oct.	3.11 Hyperbolic functions 4.1 Maximum, minimum values 4.2 Mean value theorem
26 Oct.	4.3 The shape of a graph 4.4 L'Hôpital's rule Exam II
2 Nov.	4.7 Optimization 4.8 Newton's method 4.9 Antiderivatives
9 Nov.	5.1 Areas and distances 5.2 The definite integral
16 Nov.	5.3 The fundamental theorem of calculus 5.4 Indefinite integrals and the net change theorem 5.5 Substitution
23 Nov.	6.1 Areas between curves
30 Nov.	6.2 Volumes 6.3 Volumes by cylindrical shells Exam III
7 Dec.	6.4 Work 6.5 Average value of a function
Finals	Wednesday, 16 Dec. Final Exam 14:45–16:45