Syllabus

Math 320   Fall '22

Text: __A First Course in Differential Equations__ by Zill, 10th edition

Instructor: Jed Herman   Office: SCI D 287   eherman@uwsp.edu

Office Hours: M 3:00-4:50, W 3:00 – 3:50, Th 12:00 – 12:50
Office Hours will be available in person and can be made available via zoom on request

Class times & room: Section 01: MW(F*) 11:00 – 11:50 in Science A213
        *Most Friday classes will be online via Zoom for all students (see schedule)

Course Objectives:
• To solve Ordinary Differential Equations (ODEs) and use Laplace Transforms
• To model real applications using differential equations
• To learn how to effectively communicate mathematical ideas to others

Grading:
Grading will be based on an overall percentage score, using the following scale:
        90%+ A- or better   80%-89.9% B-, B or B+
        70%-79.9% C-, C or C+   60%-69.9% D-, D or D+
        <60% F
I reserve the right to adjust the final percentage +/- up to about 2%, based on my assessment of your effort and/or participation in the class and course in general.

To get your overall score, you will be graded on the following:
        Weekly Homework and Worksheets   20%
        Class Participation and Presentations   20%
        Exams (3*)   60%
        Final   20%
                                                                        100%*
*There are three exams in the schedule for this course, plus a final. Each is worth 20%; I will drop your lowest score of these four tests. That means you can bomb a (one) exam and not have it hurt your grade. It also means if you do okay on all three scheduled exams you can skip the final! Finals are a great way to summarize everything in a course – but Finals Week is simply too busy and stressful for it to be the great experience it should be.

Canvas Grading:
Canvas provides a useful location to submit assignments and record grades. It even has an automatic feature to "total" the assignments stored on it, producing some sort of mis-shapen "Grade" which students sometimes think is related to their course grade. It is not. **DO NOT LOOK AT THE CANVAS COURSE TOTAL AND EXPECT IT TO REFLECT YOUR ACTUAL COURSE GRADE**. When we get towards the end of the semester I will add a few columns to the Canvas grades which show where you stand.

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<u>Missing Class</u>
Although attendance is not taken for this course, you are expected to come to class every day. That said, things happen – people get sick, unexpected things happen. If you miss class, you should let me know what is going on (email is best, but in an emergency you can contact the [Dean of Students office](#), 715-346-2611).

Note: missing an exam or scheduled presentation day will only be allowed in exceptional circumstances and will require ACCEPTABLE DOCUMENTATION as to the reason for the absence.

Weekly Homework:
Mathematics requires thought, multiple attempts, and time in order to reach real mastery. Unfortunately, in-class exams do not offer enough time to try things out – so something else is needed. One part of this is weekly homework, generally due on Mondays. These will be graded partly on effort but also on the accuracy of the work and correctness of the answers.

Note: weekly assignments are broken into two parts: problems that are due (required) and problems that are recommended (not required). The required problem list is kept fairly short to allow for time spent readying Presentation problems (see later!). The recommended problems are exactly what their name suggests – you should consider looking at them and spending some time on them, but you do not have to finish them or turn in your work. Some recommended problems give additional practice on core methods; others explore important topics we are not able to focus on.

You will turn your homework in on Canvas – scan or take pictures of your work and upload it to the appropriate place. Please try to write clearly and in an organized manner – basically, *write it as if you wanted someone to read it*! For some people, that might mean doing the work on a scratch copy and then writing it out again; for others, that might mean typing it out. <u>Don't ignore these assignments</u> – they are a significant part of your grade!

Canvas discussion boards are also set up for each week, for students to post questions and/or answers to questions about the problems. One last bit: your work is <u>your</u> work. Working with others is good, but simply copying their work is not.

Worksheets:
There will be worksheets roughly every other week; these are generally more open-ended or holistic questions and are graded entirely on effort. They are also submitted on Canvas, in a manner similar to homework problems.

These are meant to make you think more deeply about the material and perhaps make some connections. They are generally easy assignments, but do not forget them!!

Class Participation:

There is definite value to having a knowledgeable instructor to explain material and guide a course, and to connect material by proving important theorems. But students learn more from DOING mathematics and talking about mathematics than from watching an instructor write on the board. ASK QUESTIONS!

Additionally, most Fridays will be primarily about students presenting material to the class. You should expect to present often – and you should ALSO get in the habit of asking questions and talking about the work of other students. Class Participation is worth 20% of your course grade – SO DO NOT BLOW IT OFF! The grade comes from three components:
- How often you present problems
- How correct and clear your presentation work is, and how well you answer any questions from the class (or me)
- How often you contribute to class discussion – either during lecture or during someone else's presentation – in a meaningful way

This is different from most (math) classes, where you are expected to listen to a professor lecture instead of participating. It may take some getting used to, but it does help develop a stronger mastery of the material.

Exams:

There will be three in-class exams and a final; they are marked on the calendar (see below). The in-class exams are scheduled for Wednesday October 12, Friday November 11, and Friday December 9. The final is scheduled for Monday, December 12 at 10:15 to 12:15.

Discussion Boards

There will be discussion boards on Canvas where you can post comments and questions and potentially answer the questions posted by others about the homework. Making a post with mathematical content (asking or answering a question, for example – more than "I agree" or "that seems wrong") can earn extra credit.

The boards will be monitored after the fact. That is, you will post directly to the board, and I will monitor (semi-weekly). Postings are never anonymous and must not contain inappropriate (foul, rude, hostile) language. Violation of this rule may constitute academic misconduct (see below).

Academic Misconduct Policy

I expect you to complete the coursework for this course. Failure to complete an assignment will result in zero points awarded for that assignment. Late assignments may lose points, at the discretion of the instructor. Also see the following link:
http://www.uwsp.edu/admin/stuaffairs/rights/rightsChap14.pdf

Student Rights and Responsibilities

All students are expected to know the UWSP student responsibilities found on the Dean of Students webpage. Information on Academic Concerns is available at https://www.uwsp.edu/dos/Pages/stu-academic.aspx. Information on Conduct Concerns and on Personal Concerns are also available on the Dean of Students site.

Inclusivity and Accommodations

It is my intent that all students from diverse backgrounds and perspectives be served by this course, that students' learning needs be addressed both in and out of class, and that the diversity brought by everyone in this class be viewed as a resource, strength, and benefit. It is my intent to present materials and activities that are respectful of diversity. I encourage you to make suggestions to this end. Please let me know ways to improve the effectiveness of the course for you personally, or for other students or student groups.

If you have experienced a bias incident (an act of conduct, speech, or expression to which a bias motive is evident as a contributing factor regardless of whether the act is criminal) at UWSP, you have the right to report it using this link. You may also contact the Dean of Students office directly at dos@uwsp.edu.

UWSP is committed to providing reasonable and appropriate **accommodations** to students with disabilities and temporary impairments. If you have a disability or acquire an impairment or injury during the semester and you need assistance, please contact the * Disability Resource Center as soon as possible, in room 108 of the Collins Classroom Center (CCC), at 715-346-3365, or at DATC@uwsp.edu. You may also want to visit their website, Disability Resource Center (DRC) - University of Wisconsin-Stevens Point (uwsp.edu).