

Syllabus

Math 320

Spring '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 3:00-3:50, T 2:00 – 3:50, F 12:00 – 12:50 (zoom only)

Class times & room: Section 01: MW(F*) 11:00 – 11:50 in Science A210

*Most Friday classes will be online via Zoom for all students (see schedule)

Face Coverings

You know this already, but...

At all UW-Stevens Point campus locations, the wearing of face coverings is mandatory in all buildings, including classrooms, laboratories, studios, and other instructional spaces. Any student with a condition that impacts their use of a face covering should contact the [Disability and Assistive Technology Center](#) to discuss accommodations in classes. Please note that unless everyone is wearing a face covering, in-person classes cannot take place. This is university policy and not up to the discretion of individual instructors. Failure to adhere to this requirement could result in formal withdrawal from the course.

This policy may change, but follow it until otherwise directed.

Other Guidance

- Please monitor your own health each day using [this screening tool](#). If you are not feeling well or believe you have been exposed to COVID-19, do not come to class; email your instructor and contact Student Health Service (715-346-4646).
- As with any type of absence, students are expected to communicate their need to be absent (email me!) and complete the course requirements (see later about this).
- Wash your hands or use appropriate hand sanitizer regularly and avoid touching your face. Basically, use good hygiene!
- Please maintain these same healthy practices outside the classroom.
- Consider getting a vaccine(s) if you have not already done so. The vaccine will not make you immune to COVID-19, but it will reduce your risk significantly.

Course Objectives:

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

Syllabus page 2

Math 320

Spring '22

Missing Class

This is an interactive class (more on this later). We come to class to discuss new methods and do work, solving problems and getting lost and then getting unlost. Even with masks and social distancing, ideas can be shared and sticking points can become unstuck.

That said, people do get sick (please look at the daily [screening tool](#)) and emergencies can 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) – and you are still expected to do the daily work for the class (more on this later).

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.

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	<u>20%</u>
	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! (It would then be your lowest grade, so it would be dropped). 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.

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.

Weekly Homework (continued)

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 reading 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. Don't ignore these assignments – 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 your work. Working with others is good, but simply copying their work is not.

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.

Syllabus page 4

Math 320

Spring '22

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.

Discussion Boards

There will be discussion boards on Canvas where you can post comments and questions and potentially answer the questions posted by others. There will also be discussion boards available for you to post comments or questions. 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

You have certain rights and responsibilities. For more information, see the following link: <http://www.uwsp.edu/admin/stuaffairs/rights/rightsCommBillRights.pdf>

Disabilities

Information concerning accommodations made as per Section 504 of the Rehabilitation Act or the Americans with Disabilities Act can be found at <http://www.uwsp.edu/admin/stuaffairs/rights/rightsADAPolicyInfo.pdf>

In particular, to request any accommodations of this type, relevant to this class, you should discuss the matter with the Disability Services Office. Information and contact information may be found at <http://www.uwsp.edu/special/disability/>