Syllabus for Math 3305, Ordinary Differential Equations, Fall 2023

**Class information**
Class time: MWF 1:25–2:20PM
Room: Ratliff Building South 2024

**Instructor information**
Name: Prof. Joseph Vandehey
E-mail: jvandehey@uttyler.edu (NOT jvandehey@patriots.uttyler.edu)
Book: *Differential Equations: From Calculus to Dynamical Systems*, second edition by Virginia W. Noonburg
Office Hours: 1:30-4:30 PM Thursdays

We will use Canvas in this course. Homework assignments, grades, study guides, and even this syllabus will all be posted to Canvas.

1. **Course description**

Study of ordinary differential equations. Emphasis is given to equations of the first order, linear equations, and solution by series.

2. **Grading**

<table>
<thead>
<tr>
<th>Class item</th>
<th>Percent of total grade</th>
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<tbody>
<tr>
<td>Homework</td>
<td>5%</td>
</tr>
<tr>
<td>Quizzes</td>
<td>20%</td>
</tr>
<tr>
<td>Midterms</td>
<td>45%</td>
</tr>
<tr>
<td>Final</td>
<td>30%</td>
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</tbody>
</table>

On quizzes and tests, the final answer is often worth far less than any other part of the problem. I care about good mathematical process over anything else. Always, always show your work. Because showing your work is important, I will mark down for extremely messy work or for bad notation.

As I recognize that life is sometimes hectic, the lowest homework grade and lowest quiz grade will be dropped. Exam scores will not be dropped or replaced.

At the end of the semester, your final letter grade will be determined roughly as follows:

<table>
<thead>
<tr>
<th>Grade Criteria</th>
<th>Grade</th>
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<tbody>
<tr>
<td>90% or higher</td>
<td>A</td>
</tr>
<tr>
<td>Between 80% and 90%</td>
<td>B</td>
</tr>
<tr>
<td>Between 70% and 80%</td>
<td>C</td>
</tr>
<tr>
<td>Between 60% and 70%</td>
<td>D</td>
</tr>
<tr>
<td>60% or lower</td>
<td>F</td>
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</table>

Any deviations from the above rubric will only be to your benefit.

3. **Homework**

There will be a homework assignment due every Friday (and generally assigned a week prior). Your grade will be out of one point and based solely on effort. You are not required to have completed every problem. Homework questions will mostly come from odd numbered problems and the answers will be available to you at the back of your textbook. As such, in order to receive full credit, you must show your work. Sometimes additional questions outside the textbook will be given. To incentivize good homework practices, I will often borrow homework problems for quizzes and tests.

In the case of a pre-arranged excused absence (e.g., for a sporting event), I would still like you to turn in homework. For all other excused absences (e.g., a sudden illness), you do not need to turn in homework, and the score will be dropped.

The most recent material covered in a given homework will be the material covered on the Monday of the week the homework is due.

Also, all homework can be turned in virtually on Canvas.
4. Quizzes

Quizzes will be given every Friday at the end of class, unless there is an exam that week. They will generally last for twenty minutes. There will not be any make-up quizzes. If you have an excused absence, then the score will simply be dropped: it will have no impact on your grade.

The most recent material covered in a given quiz will be the material covered on the Monday of the week of the quiz. The first quiz will be given August 25th and will cover material from the syllabus and review topics from calculus.

5. Midterms

There will be three midterms during this semester.

<table>
<thead>
<tr>
<th>Exam 1</th>
<th>Exam 2</th>
<th>Exam 3</th>
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</thead>
<tbody>
<tr>
<td>Friday September 15, Week 4</td>
<td>Friday October 13, Week 8</td>
<td>Friday November 10, Week 12</td>
</tr>
</tbody>
</table>

Midterms will be held in class and last the full class period. If you are late to class, you will not be granted additional time to complete your midterm. Midterms are not cumulative and will only cover material discussed in class since the previous midterm. The cut-off date for new material for a given midterm will generally be the Friday the week before the midterm: material from the week of the midterm will not appear on the exam.

6. Final

Our final will likely be Monday, December 4th from 12:30 to 2:30 PM.

The final will consist of two parts. The first part will be essentially a fourth midterm over the material you have not yet been tested on. The second part will be a review of the material learned throughout the semester. The two parts will be of similar length and point total.

7. Additional comments

- Exceptions to the above rules will be made in the case of extreme circumstances (death in the family, severe illness, etc.).
- Cheating is strictly prohibited and carries severe consequences, up to and including expulsion from the university.
- If you believe I have graded an exam in error, come see me at the end of the class in which I handed it back. Leaving class with the exam means you accept the grade you have been given.
- Monday, September 1 is this semester’s Census Date, the deadline for all registrations, schedule changes, and section changes.
- Important campus-wide policies concerning Students’ Rights and Responsibilities, Grade Replacement/Forgiveness, State-Mandated Course Drop Policy, Disability Services, Student Absence due to Religious Observance, Student Absence for University-Sponsored Events and Activities, Social Security and FERPA Statement can be found on the course Canvas page.
- I frown upon the use of erasers on tests. They make me sad.

If you think your work is wrong, cross it out. Do not erase! I can’t give partial credit for work that has been erased and I can no longer read.

This syllabus is a general guideline for the course. Deviations may be necessary as the semester progresses.