# Ordinary Differential Equations
## MTH 3325 Section 02

Instructor: Tracy Weyand

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Webpage(s): http://sites.baylor.edu/tracy_weyand/
        http://www.baylor.edu/canvas/

Office Location: Sid Richardson 347

Office Phone Number: (254) 710-6058

Office Hours: Monday 2:30-4:00 pm
        Tuesday 1:00-2:30 pm
        Wednesday 10:00-11:00 am
        or by appointment

**Class Schedule:** TR 11:00 am - 12:15 pm, SDRICH 210

**Course Description:** Differential equations of first order, linear equations of order two and higher, introduction to power series methods, elements of the Laplace Transform, some facts from linear algebra and systems of differential equations.

**Prerequisite:** A grade of C or above in MTH 2321 or concurrent enrollment.

## Materials

**Required:** *Fundamentals of Differential Equations* by R. Kent Nagle, Edward B. Saff, and Arthur David Snider, Eighth Edition (2011), ISBN 0321747739

## Assessments

Homework will be collected about once a week at the beginning of class. Assignments and due dates will be posted on Canvas. Quizzes will also be given regularly. They will be given at the beginning of class and extra time will not be given if you arrive late.

Throughout the semester I will also assign small projects. These will be individual projects and you will be given at least a week to complete them.

There will be three exams and one final exam for this course. **Calculators are not allowed during any exams.** The dates for the exams are as follows:

| Exam 1 | February 12 |
|---|---|
| Exam 2 | March 19 |
| Exam 3 | April 23 |
| Final Exam | May 6, 4:30-6:30 pm |

## Attendance and Grading Policies

**Attendance and Make-up Policy:** The University attendance policy states that a student who misses more than 25% of the scheduled class periods **for any reason** cannot pass the course. If you miss more than 25% of the classes (which is 8 for a TR class this semester), the grade is automatically an "F". If you miss class, you are responsible for finding out what material you missed and learning it. To find out what material you missed, please contact another student in the course.

Make-up exams will only be permitted if the absence was due to one of the following: sickness, University representation, a family emergency, and limited other extreme circumstances (at my discretion). **You must inform me of the absence within 24 hours of the class period you missed or I retain the right to deny the make-up.** If you know about it ahead of time (as in the case of University representation), you must notify me before the absence.

**Documentation is required before any make-up will be given.** Please obtain a doctor's note if the missed class is due to illness. For a family emergency, submit an excuse from the Chaplain's Office or make certain that the Chaplain's Office notifies me of the reason for the absence.

If you miss a quiz due to a reason listed above and provide proper documentation, I will excuse you from it and compute your final quiz grade out of one less (maximum of one waived quiz). If you know you are going to be absent, please turn in your homework ahead of time. Late homework will only be accepted in extreme circumstances.

**Grades:** Since making mistakes is part of the learning process, I will drop your lowest homework and quiz grade. Projects will count as a quiz grade. The following weights and distribution will be used when assigning your final grade:

| Assessment | Weight |
|---|---|
| Homework | 6 % |
| Quizzes | 10 % |
| Exams | 18 % each |
| Final Exam | 30 % |

| Grade Distribution | | | |
|---|---|---|---|
| 100 - 91 A | 88 - 87 B+ | 78 - 77 C+ | 68 - 67 D+ |
| 90 - 89 A- | 86 - 81 B | 76 - 71 C | 66 - 61 D |
| | 80 - 79 B- | 70 - 69 C- | 60 - 59 D- |
| | | | 58 - 0 F |

# Course Policies

**Honor Code:** *Baylor University students, staff, and faculty shall act in academic matters with the utmost honest and integrity.* This means that I have the responsibility to (1) clarify my expectations so you know what I consider to be academic misconduct, (2) report any violations to the Office of Academic Integrity, and (3) enforce consequences. A brief summary is listed below.

- You may discuss homework and projects with others and get assistance from sources other than myself (such as the Math Lab). However, the final work you are turning in should be your own and not directly copied from something/someone else (including internet sources). Feel free to check your work with a TI-89 or math computer program. **However, you will not receive full credit unless all work is shown in detail.**

- Quizzes and exams must be completed on your own without discussing it with anyone; I am the only person you should ask for clarifications. No books, notes, or electronic devices (**including calculators and cell phones**) will be allowed out during an assessment.

There may occasionally be exceptions to these rules and if there are, they will be listed on the top of the assignment, quiz, etc. When in doubt, it is best to ask me or don't do it. Consequences will depend on the severity of the offense and may result in failure of the course. It is a student's responsibility to be familiar with the Honor Code; please see http://www.baylor.edu/honorcode for details.

**ADA Policy:** Any student who needs academic accommodations related to a documented disability should inform me immediately at the beginning of the semester. You are responsible for obtaining appropriate documentation and information regarding accommodations from the Baylor University Office of Access and Learning Accommodation (OALA). The OALA phone number is (254) 710-3605, and the office is in the Paul L. Foster Success Center - Sid Richardson, Room 190.

**Dropping a Course:** January 28 is the last day to drop the class without it appearing on your transcript. If you drop the class between January 28 and March 30, a "W" (withdrawal) will appear on your transcript. You cannot withdraw from the course after March 30.

## Expectations and Assistance

**Course Preparation:** You should anticipate to study and work on homework/projects for at least 4 hours after each class. **This means you should be spending at least 8 hours a week on this course**, not including class time or preparation for exams. Since this course will build on itself, it will be extremely difficult to earn an acceptable grade without keeping up. You need to master the previous material before coming to the next class or you will find class difficult to follow and participate in. Consistent class attendance and preparation will facilitate the ability to meet your grade expectations.

In addition to your homework, a set of practice problems will be available on Canvas. It is highly recommended that you complete these problems in addition to the collected homework as extra practice to make sure you have mastered each topic.

**Getting Help:** Many students struggle academically in at least one or two courses during any given semester. If this occurs, consider the campus resources that are available to you.

- Please come to my office hours for extra assistance and clarification outside of class.

- The Math Lab is usually reserved for 1000-level courses, but you may be able to receive assistance there if they are not too busy. The Math Lab is located in Sid Richardson 326 and is open 6-8 pm Monday through Thursday as well as 3-5 pm on Monday, Tuesday, Wednesday, and Friday.

- The math department has a list of private tutors on their webpage.

**List of Sections to be Covered (Tentative):**

| | |
|---|---|
| Chapter 1 | Sections 1-2 |
| Chapter 2 | Sections 1-6 |
| Chapter 3 | Sections 1-2 |
| Chapter 4 | Sections 1-6 |
| Chapter 6 | Sections 1-4 |
| Chapter 7 | Sections 1-9 |
| Chapter 8 | Sections 1-6 |

**Important Dates:**

| | | | |
|---|---|---|---|
| January 19 | Martin Luther King, Jr. Day | April 3-6 | Easter Holiday |
| January 21 | Last day to register or add | April 14 | Diadeloso |
| January 28 | Last day to drop | May 1 | Last day of class |
| March 7-15 | Spring Break | May 6-11 | Final Exams |
| March 30 | Last day to withdraw | | |