Mathematics 2310
Applied differential equations I.
Spring 2017

Instructor. Hakima Bessaih, Ross Hall 210, bessaih@uwyo.edu

URL: http://www.uwyo.edu/bessaih/

Office Hours: TR 11:00am-12:00pm W 3:00-4:00pm and by appointment.

Class time & room. TR 9:35-10:50am in EN 2110.


Course Description. Differential Equations arise naturally in physics and engineering and many other areas. We will focus in this course on how to solve them explicitly and numerically. We will sometimes use the software package Maple for visualization in class.

Prerequisites. Grade C or better in Math 2205.

Tentative list of topics.

- Chapter 1: Introduction (Sect 1.1-1.3).
- Chapter 2: First Order Differential Equations (Sect 2.1-2.9)
- Chapter 3: Second Order Linear Equations (Sect 3.1-3.9)
- Chapter 4: High Order Linear Equations (Sect 4.1-4.2)
- Chapter 6: The Laplace Transform (Sect 6.1-6.6)

Grading Policy.

- Final exam: The final exam takes place on 09-May-2017, 10:15am-12:15pm. The final exam counts for 30% of the final grade.
- **Midterms:** There will be two midterms exams tentatively scheduled for the **21-February-2017** and **30-March-2017**. Each midterm will count for **20%** of the final grade.

- **Homework:** There will approximately weekly homework assignments. Most of the assignment will be performed online through WebWork: http://webwork.uwyo.edu/webwork2/Math-2310-03-bessaih/
  
  Every other week (or every week) homework problems will be assigned where you will be asked to write down complete solutions to problems. They will be downloaded from the course homepage: http://www.uwyo.edu/bessaih/. Homework problems are due on the assigned days prior to the lecture. No late homework will be graded. Homework counts for **30%** of the final grade (**10%** for the Webwork and **20%** for the classical homework).

- **Attendance/Participation:** I strongly recommend class attendance and participation and I will use this activity in determining borderline grades.

- **Make-up exams:** There will be **No** make-up exams for unexcused absences. In case that you are unable to attend an exam, you need to provide me with a University excused absence. Note that it is required to discuss any special arrangement prior to the absence. Make-ups for the exams will be given only in extraordinary cases.

- **Grading scheme for the final grades:** Grade A: 90-100, Grade B+: 85-89, Grade B: 80-84, Grade C+: 75-79, Grade C: 70-74, Grade D+: 65-69, Grade D: 60-64, Grade F: <60.

- **Disability statement:** If you have a physical, learning, or psychological disability and require accommodations, please let me know as soon as possible. You will need to register with, and provide documentation of your disability to, University Disability Support Services (UDSS) in SEO, room 330 Knight Hall, 766-6189, TTY: 766-3073.

- **Supplemental Instruction:** (SI) SI is a series of out-of-class study sessions led by a student who has successfully taken the class before. It’s a great way to practice the material and work with other students to learn the content. SI will be offered in this class again this spring, and will be led by Reggie. SI sessions will start the second week of classes at a day and time to be determined. The current schedule, worksheets, and other resources are found on the SI WyoGroup for Math 2310 found by going to the link tiny.cc/math2310si. Joining the course also will subscribe you to announcements and updates regarding SI for this course.

The information in this syllabus is subject to change. If there are changes, they will be announced repeatedly in class.