Math 3433-201 Differential Equations Spring 2023

Contact Information:

Instructor: Dr. Guy Bernard
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Office Hours: MWF 9:00am-10:00am, TR 10:00am-11:00am
             or by appointment.

Important Notices (please read carefully)

- Should a student need to quarantine because of having acquired the Covid-19 virus (or to having been exposed to an infected person with this virus), he or she should advise me of their situation and the number of days they will be absent from class. Then, such students will have to follow the lectures by reading my online class notes. They will need to e-mail me PDF files of their homework assignments by their due dates.   If such a student misses an in-class test, arrangements will be made on a case-by-case basis. In most cases, the final exam will be substituted for the missed test. (see Evaluation 2).
- Should a student be unable to take the Final Exam at the scheduled date (due to Covid-19 or any other illness), he or she will need to contact me before the final exam and contact the Office of Students Rights and Responsibilities to request an absence letter to obtain a differed final exam. This office will require documentation before agreeing to write such a letter. Office of Students Rights and Responsibilities Director: Mr. Dail Neely phone: (940) 397-7500.

Class Details:

Lectures: MWF 10:00am-10:50am in Bolin 109.
Text: A First Course in Differential Equations with Modeling Applications by Dennis G. Zill, 11th edition.
Class Notes: posted on D2L
Homework Solutions: posted on D2L after being handed in.
Calculator: Any graphing calculator. (I will not make use of it in class)

Course Description:
Methods of solving linear and non-linear D.E. will be covered. The spring-mass system, the Beam Equation. Growth and decay as well as logistic models will be covered as many others.

Course Outline:
The following chapters will be covered:

- Chapter 1 Introduction to Differential Equations (D.E.)
- Chapter 2 First-Order D.E. (except 2.6)
- Chapter 3 Modeling with First-Order D.E.
- Chapter 4 Higher-Order D.E. (except 4.5, 4.8, 4.10)
- Chapter 5 Modeling with Higher-Order D.E. (except 5.3)

Homework, Tests, and Final Exam:

- There will be 11 homework assignments during the semester.
- The homework assignments will cover the entire course material.
- Late assignments will not accepted.
- There will be 3 tests during the semester.
- The final exam will be comprehensive and compulsory.
- All tests and the final exam will be closed book exams.
- Calculators will be permitted during all exams.
- Make-up tests will be granted only in exceptional situations and Only when the student has made the request (for a make-up test) several days before the date of the class-scheduled test.

Test Dates:

- Test No.1 Monday February 20, 2023 (subject to change)
- Test No.2 Monday April 3, 2023 (subject to change)
- Test No.3 Monday May 1, 2023 (subject to change)
- Final Exam Wednesday May 10, 2023 10:30am-12:30pm.

Grading:
The course grade for each student will be the better of the two following evaluations:

Evaluation 1

- Homework   5%
- Test No.1   20%
- Test No.2   20%
- Test No.3   20%
- Final Exam   35%

Evaluation 2

- Homework   6%
- Best Test   22%
- 2nd Best Test   22%
- Worst Test   0%
- Final Exam   50%

Letter Grade:
In this course, the course letter grades will correspond to the following course grades:

- A   85% and above
- B   75% to 84%
- C   65% to 74%
- D   55% to 64%
- F   below 55%.

Grade Appeal Procedure:

If you wish to appeal your final course grade, the following link describes the appeal process (to the Dean of the College).

[Grade Appeal Checklist]

Important Date:

Last date to withdraw from the course with the grade of W: 4:00pm Monday March 27, 2023.

Attendance Policy:

Students should attend all lectures. Attendance will be taken, but due to the pandemic, no penalties will be imposed for absences.

Disabilities Statement:

Students who need special accommodations should inform the instructor and contact the Disability Support Services Office: room 168 Clark Student Center Phone: (940) 397-4140.

Academic Dishonesty:

The sanction for academic dishonesty on tests or the final exam will be the assignment of the grade of ZERO on the given test where the dishonesty has occurred. This may lead to the failing of the class should the students' course grade fall below the required passing grade. The following link describes the appeal process (to the chair of the Mathematics Department) for an Academic dishonesty sanction from your instructor.

[Academic Honesty Checklist](#)

Student Handbook:

Students should refer to the current MSU Student Handbook and Activities Calendar for university policies on academic dishonesty, class attendance, student rights and activities. Please refer to the website [student handbook 2020-2021](#)

Campus Carry:

Effective August 1, 2016, the Campus Carry law (Senate Bill 11) allows those licensed individuals to carry a concealed handgun in buildings on public university campuses, except in locations the University establishes as prohibited. The new Constitutional Carry law does not change this process. Concealed carry still requires a License to Carry permit, and openly carrying handguns is not allowed on college campuses. For more information visit [Campus Carry](#).

Active Shooter:

The safety and security of our campus is the responsibility of everyone in our community. Each of us has an obligation to be prepared to appropriately respond to threats to our campus, such as an active aggressor. Please review the information provided by MSU Police Department regarding the options and strategies we can all use to stay safe during difficult situations. For more information, visit

[Safety / Emergency Procedures](#)

Students are encouraged to watch the video entitled "Run, Hide. Fight" which may be electronically accessed via the University Police department's webpage: [*"Run. Hide. Fight."*](#)