

# Differential Equations

Math 331-003  
3 Credit Hours  
Time: TR 11:10-12:30 - KTH 3055

Dr. Spraker - Office COHH 3110, Phone: Home 782-6018 Cell (270)320-3629

John.Spraker@wku.edu People.wku.edu/john.spraker/home.html

Office hours:

MW 11:20-12:25, 3:00-4:00 F 11:20-12:25

TTH 12:35-2:00 Other times by appointment or capture.

Drop Date: Nov. 4

Textbook: Fundamentals of Differential Equations, 9th Edition by Nagle, Saff, and Snider with MyMathlab.

Welcome to differential equations! This course is for mathematics majors and minors, and carries Math 137 (with a C or better) as a prerequisite. Differential equations is one of the most applicable fields in mathematics. Many jobs in government or industry require some understanding of the topics in this course. Much of what we will do is applied calculus. We will examine equations involving a function and its derivatives. Such equations model many situations in the real world.

Course Outline in Sections:

1.1	4.2	7.5
1.2	4.3	8.2
2.2	4.4	8.3
2.3	4.5	8.4
2.4	4.6	8.5
1.3	5.2	8.6
1.4	5.4	
3.4	7.2	
2.5	7.3	
4.1	7.4	

## Classroom Procedures:

All of our homework will be online using MyMathlab. You do not need to purchase a hard copy of the text since the ebook is included with MyMathlab. Before purchasing anything read the information below concerning Day One Access.

## Textbook and Materials-Day One Access:

This course participates in The WKU Store's Day One Access program. This program is designed to provide immediate access to required materials for all students at prices cheaper than any other option.

Required materials will be delivered to you automatically by enrolling in this course unless you choose to opt-out. By participating in this program, The WKU Store will bill your Student Billing account, and you will see a charge appear under this Term along with Tuition and Fees ("Account Summary by Term" under the Student Services tab) labelled as either "The WKU Store Purchases" or "Day One Access" after the Add/Drop period. For more information on this program or to opt-out of participation, go to our information page,

<http://www.wkustore.com/t-day-one-access.aspx>.

The best way to succeed in this class is to keep up! Read the text and do the homework. Do not wait to cram before exams. That is a recipe for disaster in a math class. Be sure to make use of my office hours. They are your time, not mine! If I did not enjoy speaking with students, I would not teach for a living. Feel free to make use of my office hours.

We will have three in-class exams and a comprehensive final. Any exam other than the final may be taken early, but almost never late. Contact me before the exam if you believe that a make-up is warranted.

**Schedule:** Exam I: Thurs. Sept. 26

Exam II: Thurs Oct. 24

Exam III: Thurs. Nov. 14

Final Exam: Monday. Dec. 9, 8:00-10:00

**Grading Policy:** Exams- 60% Homework- 20% Final Exam- 20%

## Ogden Student Course Attendance Statement

The faculty and staff of Ogden College of Science and Engineering are committed to providing you with learning experiences and opportunities. You must assume ownership of your education and be an active participant in the classroom and laboratory to take advantage of these opportunities. Active participation requires you to attend. Scientific studies have shown that attendance during scheduled classroom and laboratory meetings is directly correlated to your performance on assignments and exams and the potential to earn higher grades. Additionally, if you do not regularly attend class, you are missing important information about course topics, due dates, and assignment details that are crucial to your success in the course. Therefore, as a student enrolled in an Ogden course, you are expected to attend every class meeting and to inform your instructor regarding the reasons for any

absences as soon as practical. Your instructor may incorporate class attendance/participation as part of the grading criteria.

- ## The Learning Center (TLC)

Should you require academic assistance with your WKU courses, The Learning Center (located in the Downing Student Union, 2141) provides free supplemental education programs for all currently enrolled WKU students. The Learning Center at Downing Student Union offers certified, one-on-one tutoring in over 200 subjects and eight academic skill areas by appointment or walk in. Online tutoring is offered to distance learners. TLC is also a quiet study area (with side rooms designated for peer-to-peer tutoring) and a computer lab to complete academic coursework. Please call TLC in the Downing Student Union at (270) 745-5065 for more information or to schedule a tutoring appointment. [www.wku.edu/tlc](http://www.wku.edu/tlc)

## Libraries:

1. WKU Libraries has subject specialist faculty members who work with every department and program on campus.
2. Students can make an appointment with the subject specialist faculty librarian any time they have a paper or project.
3. As your own personal librarian, the subject specialist library faculty member will sit down with students, help them get started with their research, make sure the students know how to use the online resources, etc.

## Students with disabilities:

In compliance with University policy, students with disabilities who require academic and/or auxiliary accommodations for this course must contact the Student Accessibility Resource Center located in Downing Student Union, Room 1074. SARC can be reached by phone number at 270-745-5004 [270-745-3030 TTY] or via email at [sarc.connect@wku.edu](mailto:sarc.connect@wku.edu). Please do not request accommodations directly from the professor or instructor without a faculty notification letter (FNL) from The Student Accessibility Resource Center.

## Other Policies:

Western Kentucky University (WKU) is committed to supporting faculty, staff and students by upholding WKU's Title IX Sexual Misconduct/Assault Policy (#0.2070) at <https://wku.edu/eoo/documents/titleix/wkutitleixpolicyandgrievanceprocedure.pdf>

and

Discrimination and Harassment Policy (#0.2040) at [https://wku.edu/policies/hr\\_policies/2040\\_discrimination\\_harassment\\_policy.pdf](https://wku.edu/policies/hr_policies/2040_discrimination_harassment_policy.pdf).

Under these policies, discrimination, harassment and/or sexual misconduct based on sex/gender are prohibited. If you experience an incident of sex/gender-based discrimination, harassment and/or sexual misconduct, you are encouraged to report it to the Title IX Coordinator, Andrea Anderson, 270-745-5398 or Title IX Investigators, Michael Crowe, 270-745-5429 or Joshua Hayes, 270-745-5121.

Please note that while you may report an incident of sex/gender based discrimination, harassment and/or sexual misconduct to a faculty member, WKU faculty are "Responsible Employees" of the University and MUST report what you share to WKU's Title IX Coordinator or Title IX Investigator. If

**you would like to speak with someone who may be able to afford you confidentiality, you may contact WKU's Counseling and Testing Center at 270-745-3159.**