

**Welcome to MATH 3341.03 - Ordinary Differential Equations  
At The University of Texas in the Rio Grande Valley, Fall 2017**

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**Instructor:** Dr. Josef Sifuentes  
**Email:** josef.sifuentes@utrgv.edu  
**Please include MATH3341 in the subject line  
and your full name somewhere in the text.**  
**Office:** MAGC 3.614  
**Office hours:** Tuesday, Thursday 4:00 – 5:00 pm **or by appointment**,  
office hours may change, notification will be made by email.  
**Class Time** Tuesday and Thursday 9:25 – 10:40 am  
**Class Location** MAGC 1.320

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### Calendar

<b>Monday</b>	<b>Aug. 28</b>	Classes at UTRGV begin
<b>Tuesday</b>	<b>Aug. 29</b>	First day of MATH 3341 (You pumped or what?!)
<b>Wednesday</b>	<b>Sep. 13</b>	Census day (Last day to Drop without it appearing on the transcript)
<b>Thursday</b>	<b>Sep. 28</b>	<b>First Midterm Exam</b>
<b>Thursday</b>	<b>Nov 2</b>	<b>Second Midterm Exam</b>
<b>Wednesday</b>	<b>Nov. 15</b>	Drop / Withdrawal Deadline
<b>Wednesday</b>	<b>Nov. 18 – Dec. 8</b>	<b>Online Course Evaluations Open</b>
<b>Thursday-Friday</b>	<b>Nov. 23 – 24</b>	Thanksgiving Break
<b>TBD</b>	<b>Sometime Dec. 8-14</b>	<b>Final Exam</b>

**Course Description:** This course studies first-order and linear second-order differential equations, Laplace transforms, power series solutions, and first order linear systems. Applications of these topics will be emphasized.

### Required Text:

- *Elementary Differential Equations* by William Trench Available for **FREE** at  
[http://ramanujan.math.trinity.edu/wtrench/texts/TRENCH\\_DIFF\\_EQNS\\_I.PDF](http://ramanujan.math.trinity.edu/wtrench/texts/TRENCH_DIFF_EQNS_I.PDF)

**Prerequisite:** Calculus II (MATH 2414 or MATH 2488)

**Class Objectives:** The successful student will understand the mathematics necessary for analyzing and solving ordinary differential equations (ODE's) and their applications to other scientific and engineering fields. That student will be able to classify ODE's and understand the behavior of their solutions. They will be able to solve certain classes of ODE's, as well as apply numerical methods for approximating solutions when exact solutions are not possible or feasible. Furthermore, a major learning outcome is the ability to interpret and effectively communicate ODE models and their solutions in the context of relevant applications.

**Grading policy:** The grade cutoffs **may** be adjusted to reflect the mean of the final averages. The lower bound of the cutoffs will not be curved upward. **Federal Laws protecting student privacy prevents discussing grades over unsecured email or telephone.**

Homework	20%	$90\% \leq A$
Midterm 1	25%	$80\% \leq B < 90\%$
Midterm 2	25%	$70\% \leq C < 80\%$
Final Exam	30%	$60\% \leq D < 70\%$
		F < 60%

**Homework:** Homework assignments will be posted weekly to Blackboard and due at the beginning of class on the due date. Homework submitted past class time is not generally accepted and is at the discretion of the instructor. Working with others on the homework assignments is **strongly encouraged**, however all homework assignments **must be written up and understood independently**. This means that I encourage working together to understand the material and homework assignments, but you should be independently writing your own assignments. Viewing past homework or homework solutions is **not allowed**.

**Exams:** There will be two midterms and an epic comprehensive final exam. Viewing past exams is **not allowed**.

**Attendance and Making up Work** Students are expected to attend all scheduled classes and may be dropped from the course for excessive absences. UTRGV's attendance policy excuses students from attending class if they are participating in officially sponsored university activities, such as athletics; for observance of religious holy days; or for military service. Students should contact the instructor in advance of the excused absence and arrange to make up missed work or examinations. If an emergency precludes advance notice, please notify me as soon as possible. If you are ill or injured, please submit a note from a health care professional excusing you from work or school. It is your responsibility to schedule a make-up exam, which can only be given if written evidence of an excused absence is provided in a timely manner.

**STUDENTS WITH DISABILITIES:** Students with a documented disability (physical, psychological, learning, or other disability which affects academic performance) who would like to receive academic accommodations should contact Student Accessibility Services (SAS) as soon as possible to schedule an appointment to initiate services. Accommodations can be arranged through SAS at any time, but are not retroactive. Students who suffer a broken bone, severe injury or undergo surgery during the semester are eligible for temporary services. Brownsville Campus: Student Accessibility Services is located in Cortez Hall Room 129 and can be contacted by phone at (956) 882-7374 (Voice) or via email at [ability@utrgv.edu](mailto:ability@utrgv.edu). Edinburg Campus: Student Accessibility Services is located in 108 University Center and can be contacted by phone at (956) 665-7005 (Voice), (956) 665-3840 (Fax), or via email at [ability@utrgv.edu](mailto:ability@utrgv.edu).

**MANDATORY COURSE EVALUATION PERIOD:** Students are required to complete an ONLINE evaluation of this course, accessed through your UTRGV account (<http://my.utrgv.edu>); you will be contacted through email with further instructions. Students who complete their evaluations will have priority access to their grades. Online evaluations will be available Nov. 15 – Dec. 6.

**SCHOLASTIC INTEGRITY:** As members of a community dedicated to Honesty, Integrity and Respect, students are reminded that those who engage in scholastic dishonesty are subject

to disciplinary penalties, including the possibility of failure in the course and expulsion from the University. Scholastic dishonesty includes but is not limited to: cheating, plagiarism (including self-plagiarism), and collusion; submission for credit of any work or materials that are attributable in whole or in part to another person; taking an examination for another person; any act designed to give unfair advantage to a student; or the attempt to commit such acts. Since scholastic dishonesty harms the individual, all students and the integrity of the University, policies on scholastic dishonesty will be strictly enforced (Board of Regents Rules and Regulations and UTRGV Academic Integrity Guidelines). All scholastic dishonesty incidents will be reported to the Dean of Students.

**SEXUAL HARASSMENT, DISCRIMINATION, and VIOLENCE:** In accordance with UT System regulations, your instructor is a “Responsible Employee” for reporting purposes under Title IX regulations and so must report any instance, occurring during a student’s time in college, of sexual assault, stalking, dating violence, domestic violence, or sexual harassment about which she/he becomes aware during this course through writing, discussion, or personal disclosure. More information can be found at [www.utrgv.edu/equity](http://www.utrgv.edu/equity), including confidential resources available on campus. The faculty and staff of UTRGV actively strive to provide a learning, working, and living environment that promotes personal integrity, civility, and mutual respect that is free from sexual misconduct and discrimination.

**COURSE DROPS:** According to UTRGV policy, students may drop any class without penalty earning a grade of DR until the official drop date. Following that date, students must be assigned a letter grade and can no longer drop the class. Students considering dropping the class should be aware of the “3-peat rule” and the “6-drop” rule so they can recognize how dropped classes may affect their academic success. The 6-drop rule refers to Texas law that dictates that undergraduate students may not drop more than six courses during their undergraduate career. Courses dropped at other Texas public higher education institutions will count toward the six-course drop limit. The 3-peat rule refers to additional fees charged to students who take the same class for the third time.

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