MATH 308 SYLLABUS – SPRING 2020

Course Title: Math 308: Differential Equations (Sections 519 and 525)

Term: Spring Term 2020

Meeting Times and Location:

- Section 519: MW 12:45 – 2:00 PM in Blocker 166
- Section 525: MW 4:10 – 5:25 PM in Chemistry Building 100

Course Description and Prerequisites: Ordinary differential equations, solutions in series, solutions using Laplace transforms, systems of differential equations. *Prerequisites:* MATH 221, MATH 251, or MATH 253, or concurrent enrollment; knowledge of computer algebra system.

Instructor Information:

- **Name:** Dr. Richard G. Lynch
- **Email:** rglynch@tamu.edu
- **Office:** BLOC 211C
- **Office Hours:** Posted inside eCampus at the start of the semester.

Required Materials:

- **Textbook:** *Elementary Differential Equations*, 11th edition by W.E. Boyce, R.C. DiPrima and D.B. Meade. I will communicate to you your buying options on the first day of class.
- **Edfinity Access:** Standard homework assignments will be completed inside the online homework platform, Edfinity. You will need to purchase access to course for a nominal fee. A link to the course will be provided to you at the beginning of the semester inside eCampus.
- **iClicker:** I may make use of clickers in class. **Please wait to purchase one or a subscription to the smartphone app** until I make a final decision.

Material Covered: The course will consist of the following material from the required text:

- Chapter 1 – Introduction
- Chapter 2 – First Order Differential Equations
- Chapter 3 – Second Order Linear Equations
- Chapter 5 – Series Solutions of Second Order Linear equations
- Chapter 6 – The Laplace Transform
- Chapter 7 – Systems of First Order Linear Equations

Select material from Chapter 8 (Numerical Methods) and Chapter 9 (Nonlinear Systems of Differential Equations and Stability) may also be covered if time allows.

Tentative Class Schedule: Please see https://www.math.tamu.edu/courses/math308/308currentsched.html. Note that this schedule is rather packed. I intend to go a little slower for certain sections, which will most likely leave at most a week for the material from Chapters 8 and 9.

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Grading Policy: Your course grade will be determined by homework, quizzes, Python labs, two midterms and a final exam. The percentage breakdown and grade cutoffs are as follows:

Percentage	Per Grade Category
15%	Homework
10%	Quizzes
5%	Python Labs
20%	Exam 1
20%	Exam 2
30%	Final Exam

Grade Cutoffs
90% ≤ A
80% ≤ B < 90%
70% ≤ C < 80%
60% ≤ D < 70%
F < 60%

- **Homework:** Homework assignments will be done mainly online inside Edfinity. Directions on how to access the Edfinity course and other important information will be provided to you inside eCampus after class sessions begin. Some handwritten homework may also be assigned. The assignments will be weighted proportionally (so for example, a 25 point assignment has more weight than a 15 point assignment) and will account for 15% of the total course grade.
- **Quizzes:** In-class quizzes will be given at least bi-weekly and will account for 10% of your grade. I will inform you ahead of time of when I intend to administer a quiz. Don't worry, no surprises!
- **Python Labs:** Some Python-based programming assignments will be given to make up 5% of your grade. Some experience with programming will help you greatly on these.
- **Midterm Exams:** Each student will take two in-class midterm exams, each being worth 20% of the total course grade. Please **bring your Texas A&M student ID** to each exam. **No calculators, notes, cheat sheets, etc. are allowed!** Only writing utensils are allowed. Tentatively, the two midterm exams will be administered in your usual lecture time and location on:
  - **Exam 1:** Wednesday, February 26.
  - **Exam 2:** Wednesday, April 8.

  I will announce the sections covered on each exam at least one week prior to these dates.
- **Final Exam:** The final exam will be **cumulative**, worth 30% of your course grade and is **required** for all students. It will take place in the usual room you have lecture in, but the date and times are as follows:
  - **Section 519:** Monday, May 1, 10:30 AM – 12:30 PM.
  - **Section 525:** Monday, May 1, 3:30 – 5:30 PM.

  Please be careful to make sure you go to the correct time slot. Again, **no calculators, notes, cheat sheets, etc. are allowed and please bring your Texas A&M student ID.**

Important Dates: Please keep in mind:

- April 14 is the last day to drop with no penalty (Q-drop).
- April 27 is the last day of regularly scheduled class for this class.
- May 1 is the date of the final exam. Again, please double-check the time.

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Extra Help and Preparation: There are a number of different resources for this course.

- **Me (Your Instructor)**: My primary duty is to help you successfully learn the material and I want to do everything I can to make this a reality. Please feel free to reach out to me whenever! I am only a few button clicks away. If you are struggling at all on the material, have questions, or need help with anything, please don't be afraid to stop during my office hours or contact me to setup an appointment. **You can absolutely confide in me and not feel embarrassed to ask questions.**
- **Help Sessions:** The Mathematics Department offers help sessions for students. These sessions are designed to help students with their homework problems and other questions. A schedule for help sessions can be found at: http://www.math.tamu.edu/courses/helpsessions.html.
- **Week-In-Reviews:** The Mathematics Department also offers Week-In-Reviews. Each session gives a concise overview of the material covered in the corresponding course during the prior week. A schedule can be found at: https://www.math.tamu.edu/courses/weekinreview.html.
- **Old Notes and Videos:** I plan to release my old completed notes and corresponding videos from when I taught MATH 308 during Summer 2019. These will be linked inside of eCampus.
- **Suggested Homework:** https://www.math.tamu.edu/courses/math308/308currenthw.html.
- **Academic Success Center:** This is a center at TAMU that offers tutoring for students. More information can be found at the link http://asc.tamu.edu/.

Late Work Policy and Excused Absences: No late work is accepted for unexcused absences per Section 7.4 of the University Student Rules Policy. Attendance is not required (although, highly encouraged for ensured success), but full participation in the course assignments is mandatory and a lack of participation may affect your grade. For excused absences, refer to Student Rule 7 at https://student-rules.tamu.edu/rule07/. Excuses for absences during an exam or quiz must be substantiated by appropriate documentation. Remember, falsification of documentation for an excused absence is a violation of the Honor Code.

Make-up Policy: Students may be excused from turning in an assignment for the reasons stated in Section 7.1 (http://studentrules.tamu.edu/rule7.htm) or other reason deemed appropriate by me (the instructor). To be excused you (the student) must notify me in writing (acknowledged e-mail message is acceptable) prior to the date of absence if such notification is feasible. In cases where advance notification is not feasible (e.g. accident, or emergency) the student must provide notification by the end of the second working day after the absence. This notification should include an explanation of why notice could not be sent prior to the class. For approved excuses for missed assignments, an appropriate modified due date will be set by me (the instructor).

Communication Strategy: There are several ways you can communicate with fellow classmates and myself.

- **Email:** Email, via rglynch@tamu.edu, is the best way to contact me on an individual basis. You may also click the link inside eCampus or Edfinity. I will do my best to respond as quickly as possible. When you do email me, be sure to put MATH 308 in the subject line.
- **Office Hours and Appointments:** Please visit me during office hours if you need help with anything! I am also available by appointment and am also willing to chat online, through services such as eCampus, Google Hangouts, Skype, Zoom, etc. Please email me to schedule an appointment.
- **Start a GroupMe (or similar):** I strongly encourage you to make friends with other students taking MATH 308 and create study groups. Many of my former students have used GroupMe to discuss the

material. Note that working on assignments together is perfectly fine and highly encouraged, but work should ultimately be your own. See **Academic Integrity Statement** and **Scholastic Dishonesty** below.

- **"I need help!" Discussion Forum:** In eCampus there will be a discussion forum titled "I need help!" Use this forum to ask your classmates questions about work in the class or to clear up any confusion regarding class material or assignments. The discussion forum does not accept math syntax, but it does accept uploaded files, so if there are math symbols, you can upload a picture or file containing the mathematical notation. Note that I will not actively respond to posts in this forum and if you need a more urgent response, please email me.

Netiquette: When participating the online forums, please be sure to do so in a responsible and respectful way that is consistent with good academic and professional practice. To learn about polite online behavior, or "netiquette", check the following link: http://albion.com/netiquette/corerules.html. Violation of netiquette will result in your withdrawal from the class.

Students with Disability: Texas A&M University is committed to providing equitable access to learning opportunities for all students. If you experience barriers to your education due to a disability or think you may have a disability, please contact Disability Resources in the Student Services Building or at (979) 845-1637 or visit http://disability.tamu.edu. Disabilities may include, but are not limited to attentional, learning, mental health, sensory, physical, or chronic health conditions. All students are encouraged to discuss their disability related needs with Disability Resources and their instructors as soon as possible.

Academic Integrity Statement: Abide by the **AGGIE CODE OF HONOR**:

"An Aggie does not lie, cheat, or steal or tolerate those who do"

at all times. Upon accepting admission to Texas A&M University, a student immediately assumes a commitment to uphold the Honor Code, to accept responsibility for learning, and to follow the philosophy and rules of the Honor System. Students will be required to state their commitment on all course assignments. Ignorance of the rules does not exclude any member of the TAMU community from the requirements or the processes of the Honor System. Failure to abide to the Aggie honor code may result in anything from receiving a zero on an assignment to expulsion. For additional information, please visit: http://aggiehonor.tamu.edu/ and http://aggiehonor.tamu.edu/Rules-and-Procedures/Rules/Honor-System-Rules.

Scholastic Dishonesty: Copying work done by others, either in class or out of class, looking on other students' papers during exams or quizzes, having possession of unapproved information in your calculator, and/or having someone else do your work for you are all acts of scholastic dishonesty. These acts, and other acts that can be classified as scholastic dishonesty, will be prosecuted to the full extent allowed by University policy. Punishment can range from a zero on the assignment/quiz/exam to expulsion from the university. In any case of scholastic dishonesty, the student forfeits their right to Q-drop the class. In this class, collaboration on assignments, either in class or out of class, is forbidden unless permission to do so is granted by the instructor.

Title IX and Statement on Limits to Confidentiality: Texas A&M University and the College of Science are committed to fostering a learning environment that is safe and productive for all. University policies and federal and state laws provide guidance for achieving such an environment. Although class materials are generally considered confidential pursuant to student record policies and laws, University employees — including instructors — cannot maintain confidentiality when it conflicts with their responsibility to report certain issues that jeopardize the health and safety of our community. As the instructor, I must report (per Texas A&M System Regulation 08.01.01) the following information to other University offices if you share it with me, even if you do not want the disclosed information to be shared: Allegations of sexual assault, sexual discrimination, or sexual harassment when they involve TAMU students, faculty, or staff, or third parties visiting campus. These reports may trigger contact from a campus official who will want to talk with you about the incident that you have shared. In many cases, it will be your decision whether or not you wish to speak with that individual. If you would like to talk about these events in a more confidential setting, you are encouraged to make an appointment with the Counseling and Psychological Services (https://caps.tamu.edu/). Students and faculty can report non-emergency behavior that causes them to be concerned at http://tellsomebody.tamu.edu.