

Math 2320 Differential Equations

I. PROFESSOR CONTACT INFORMATION:

Professor:	Dr. Vinh Dang	Office Phone:	281-618-5684 (currently inaccessible)
Office:	WINSHIP 115 T(currently inaccessible)	Office Hours	MW: 11am-12:30pm. Tuesday: 11am-12pm. Thursday: 1- 2pm. Available via email or Lonestar webex.
E-mail:	vinh.x.dang@lonestar.edu (best way to reach me)		

II. WELCOME TO:

Term and Year:	Summer 2020
Course Title:	MATH 2320
Course Subject:	Differential Equations
Class Days & Times:	Online
Credit Hours:	Three (3) Semester Hours

COURSE OVERVIEW:

Linear equations, solutions in series, solutions using Laplace transforms, systems of differential equations and applications to problems in engineering and allied fields. The Student Will:

1. Identify homogeneous equations, homogeneous equations with constant coefficients, and exact and linear differential equations.
2. Solve ordinary differential equations and systems of equations using:
 - a) Direct integration
 - b) Separation of variables
 - c) Reduction of order
 - d) Methods of undetermined coefficients and variation of parameters
 - e) Series solutions
 - f) Operator methods for finding particular solutions
 - g) Laplace transform methods.
3. Determine particular solutions to differential equations with given boundary conditions or initial conditions.
4. Analyze real-world problems .

III. GETTING READY:

Prerequisites: Calculus II (Math 2414).
English 0305 or 0316 (developmental reading) or placement into college Level English by testing.
English 0307 or 0326 (developmental writing) or placement into college Level English by testing.

Required Materials:

1. **Online Textbook:** Fundamentals of Differential Equations and Boundary Value Problems

Author(s): Nagle, Saff, Snider, Pearson 7th Edition.

Note: Students are required to purchase a MyLabMath code ONLY.

2. **MyLabMath:** This online homework system is **required**. An eBook is also included. Please refer to the registration instruction on the class website on how to register. You must register by the end of the day on Thursday, July 16th.

MyLab Math homework system is required for this class. You may be dropped from the class if you fail to register and do your homework.

3. **Calculators:** scientific or graphing calculators.
4. **Positive learning attitudes:** take responsibility for your study, work hard, be patient, be perseverant, demonstrate professionalism and treat people with respect.

Course Websites:

<http://apps.lonestar.edu/blogs/vindang/summer-2020/differential-equations-math-2320-section-1701/>

(Syllabus, calendar, and other useful resources.)

IV. INSTRUCTOR GUIDELINES AND POLICIES:

FINAL GRADE CALCULATION:

MyLabMathHomework	20%
4Tests	80% (4 tests @ 20% each)

GRADING POLICY:

90 – 100: A; 80–89.9: B; 70 –79.9: C; 60 – 69.9: D; 59.9or Below: F.

HOMEWORK:

- The homework is assigned using MyLabMath to provide you with valuable online resources and immediate feedback. The due date for each homework assignment is posted on MyLabMath and on the class calendar. You are responsible for knowing which assignment is due when and complete the assignment before the due date. You must complete each homework assignment by the due date. Otherwise, you will receive a zero. **There will be no extensions or make-up to any of the homework assignments under ANY circumstance. This is absolutely non-negotiable.** For example, if you wait until the due day to work on the assignments and the mylab system is closed for maintenance on that day, you will NOT get an extension.

- I do understand that unforeseeable events can occur; hence, your lowest 3 homework scores will be dropped when grade is calculated.
- The only way to learn mathematics is to DO mathematics. The homework is designed to help you understand the essential material and develop your problem solving skills. Therefore, the key to keep up with the fast pace of the course and to do well in exams is to constantly practice solving homework problems and understand all the steps, concepts, definitions and results involved in their solutions.
- **I reserve the right to drop you if you have 4 or more zero homework assignments.**

EXAMS POLICY FOR MATH 1314:

- Tests(Exams) are posted online on MyLabMath. You must complete the tests by the deadline. Each test has time limit. You have two attempts for each test and only your best score of the two is counted towards your grade.
- No make-up tests will be given under any circumstances. You must take the tests before the deadline.

HOW TO EMAIL YOUR PROFESSOR:

View an Email to a Professor as a Professional Interaction:

- Begin your email by addressing your professor by title and last name, and end your email with a closing and your signature. (For example, begin by “Dear/Hi Dr. Dang” or Professor Dang. End by ”Sincerely, Your Name” or “Thanks, Your Name.”)
- Be clear and concise. Use correct spelling and proper grammar.
- Always use an informative subject line. Write a few words indicating the purpose of your message. Do not leave the subject line blank.
- Specify who you are and specify which class you are taking before diving into the specifics.
- Before composing an email to your professor, check the syllabus. Class policies, such as office hours, assignment details, policies on missed classes and exams, etc. are addressed in the syllabus. If something is still not clear, then by all means ask your question --- but first attempt to answer the question yourself and only write if you need further clarification.
- Do not make demands. Explain your circumstances and your needs, and ask politely for accommodation.
- Do not use your email to vent, rant, or whine. If you have a complaint, or are not happy about something, explain yourself calmly and ask if anything can be done. You may very well be frustrated about a situation, but sending an angry email will not help things. In situations like this, it is also often more helpful to talk to the professor in person rather than send an email -- particularly since tone and intent can often be misinterpreted in emails.

- Be respectful, and consider whether anything you have written might sound rude or offensive to your professor.
- Allow time for a response. Allow 24-48 hours for a professor to reply -- possibly more if it is a weekend or holiday.

BEHAVIOR:

I have zero tolerance for inappropriate and/or disrespectful behaviors, language and/or profanity during online discussions, my office hours or in email-communication. Students who engage in such behaviors will be removed from the class room or dropped from the class, depending on the circumstances. I will also remove any individual from the lectures/ discussions and/or the course who is deemed by me and/or others to be disrupting the educational process. In serious circumstances, students might be referred to the appropriate LSC offices which could result in disciplinary actions or dismissal from the college.

RESPONSIBILITIES:

1. Successful students follow instructions. The syllabus and class calendar are the primary sources of instructions in any college course; so successful students read them carefully and refer to them regularly.
2. Successful students, those that get A's, B's, and C's, use their time wisely. The standard formula for college coursework is that every hour of class time will result in two to three hours of homework, so a three unit class will do an average of six or more hours of homework (doing homework, reading textbook, studying notes) per week. As a result, successful students plan their time wisely so that they keep up with assignments.'
3. Successful students take time to do the homework and do it on time. Mathematics can be a lot of fun when you understand what is being explained. When you are not keeping up with the class, it becomes more difficult to follow the instructor's explanation and to read the book.
4. Successful students seek assistance when needed. Go to your professor's office hours and virtual office hours, go to the MAC, form study groups and work on problems and learn the material together.
5. Successful students are neat, accurate and well organized. They always attempt to do quality work on all exercises.
6. Successful students are perseverant. An interesting characteristic of learning mathematics is that at one moment you may feel totally confused, and then suddenly the light bulb goes on and you understand the material! Some mathematical concepts take time to digest and you might find that after a few days of working some of the exercises, they finally start to make sense.
7. Successful students prepare carefully for the exams. In math courses, you show proficiency by taking exams. Study for the exams by reviewing class notes, slides, videos, examples in the book, questions and problems from your homework assignments, and review sheets.

8. Tell yourself what you have learned. As you learn new concepts, point out to yourself what you have learned so that your confidence in your mathematical ability will increase. Each mathematical concept you understand becomes another tool that you can use.

DROPPING THE CLASS:

It is my desire that no students drop the course. However, circumstances may arise which might cause you to consider that as a possibility. If so, I encourage you to talk with me. It may be that there are options available that are unknown to you. In any case, however, except for inordinately unusual circumstances or non-attendance or having multiple zero homework assignments, I will not initiate dropping a student from the course. You, the student, are responsible for ensuring that:

- (a) You are properly enrolled in the course and, should you decide to,
- (b) You are properly withdrawn from the course.

Link to [LSC Syllabus Policies](#) for information on
FERPA
Title IX
Academic Integrity
Academic Appeals
ADA 504/508
Emergency Procedures (and LoneStarCollegeAlert)
Concealed Carry / Campus Carry



Link to [NH Math Syllabus Information and Resources](#) on

Mathematics Department
Math Achievement Center and Tutoring
Division Counselor
OTS HelpDesk
Student Course Documents
Online Videos
Student Support Material
Math Faculty Websites
Sexual Assault Prevention

