

MATH 2320

Student Course Document – Revised Spring 2011

1. **Course Title:** Differential Equations
2. **Prerequisite:** Calculus I and Calculus II (MATH 2414). A strong knowledge of the techniques of integration is essential.
ENGL 0305 or 0316 (developmental reading) or placement by testing
Corequisite: ENGL 0307 or 0326 (developmental writing) or placement by testing
3. **Credit:** Three (3) semester hours
4. **Materials Needed:**

Textbook: **A First Course In Differential Equations with Modeling Applications**, 8th edition, by Dennis G. Zill.
Workbook: **A First Course In Differential Equations with Modeling Applications (Student Solution Manual)**, 8th edition, by Dennis G. Zill.
5. **Purpose:**

To gain a basic knowledge of the theory, methods, and applications of differential equations. Such knowledge is extremely important in science and engineering.
6. **Major Course Objectives:**
 - 6.1 To develop skill in solving first-order and simple higher order ordinary differential equations
 - 6.2 To find solutions of linear differential equations by using the method of undetermined coefficients and the method of variation of parameters
 - 6.3 To find solutions of linear differential equations by using Laplace Transforms
 - 6.4 To develop skill in solving differential equations using power series
 - 6.5 To develop skill in solving differential equations using numerical methods
 - 6.6 To develop skill in solving systems of linear differential equations using Laplace Transforms, eigenvalue-eigenvector methods, and elimination
7. **General Course Outline:**

Textbook Chapters/Sections: 1.1, 2.2, 2.3, 2.4, 2.5, 4.1, 4.2, 4.3, 4.4, 4.6, 4.7, 4.8, 4.9, 6.1, 6.2, 7.1, 7.2, 7.3, 7.4, 7.6, 8.1, 8.2, 8.3, 9.1, 9.2. Sections 4.5 and 8.4 are optional.
8. **MyLoneStar:**

MyLoneStar gives students, faculty, and staff access to important academic information. It allows a student to register, search for courses, obtain financial aid information, pay tuition and fees, and view course grades. From www.lonestar.edu, click on MyLoneStar at the top right corner. Follow the instructions for securing your user name and password under the Self-Service Tools. Please contact the helpdesk at 1-866-614-5014 or send an email to ots@lonestar.edu for further assistance.

9. **Withdrawal Policy/Student Drop Limit:**

Students who enrolled in Texas public institutions of higher education as first-time college students during the Fall 2007 term or later are subject to section 51.907 of the Texas Education Code, which states that an institution of higher education may not permit a student to drop (withdraw with a grade of “W”) from more than six courses. This six-course limit includes courses that a transfer student has previously dropped at other Texas public institutions of higher education if they fall under the law.

Students should be sure they fully understand this drop limit before they drop a course. Please visit the admissions office or counseling/advising center for additional information and assistance.

10. **Academic Integrity:**

The Lone Star College System upholds the core values of learning: honesty, respect, fairness, and accountability. The system promotes the importance of personal and academic honesty. The system embraces the belief that all learners-students, faculty, staff and administrators-will act with integrity and honesty and must produce their own work and give appropriate credit to the work of others. Fabrication of sources, cheating, or unauthorized collaboration is not permitted on any work submitted within the system.

The consequences for academic dishonesty are determined by the professor and academic dean, or the professor and chief student services officer and can include but are not limited to:

1. Having additional class requirements imposed,
2. Receiving a grade of zero or “F” for an exam or assignment,
3. Receiving a grade of “F” for the course,
4. Being withdrawn from the course or program,
5. Being expelled from the college system.

11. **Division Counselor:**

Rhonda Cannon, Counselor for Math and Natural Sciences, is available in Winship 115G to assist you in meeting your academic, career, and personal goals. Confidential counseling services are available by appointment to help you overcome academic challenges, make a career choice, plan your transfer, and to gain self-understanding. To schedule an appointment call 281-618-5480 or email rhonda.cannon@lonestar.edu or stop by Winship 115G.

*** It is the responsibility of the student to drop a class by “W” day if he/she desires.**

*** Students with disabilities, who wish to request accommodations in this class, must notify the Disability Services Office as soon as possible so that the appropriate arrangements may be made. Students requesting accommodations must provide documentation of his/her disability to a Disability Services counselor. For more information, call or visit the Disability Services Office at A 104, (281) 618-5481.**