This is the syllabus for Math 315-Differential Equations, Section 001 for Fall 2012. Please read it carefully. You will be responsible for all information given in the syllabus, and for any modification to it that may be announced in class.

**Instructor:** Dr. Yelin Ou  
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Webpage: [http://www.tamu-commerce.edu/math/FACULTY/OU/](http://www.tamu-commerce.edu/math/FACULTY/OU/)  
Office hours: MF: 11:00am-12:00 pm, TR: 10:00am-11:00am, 5:00-6:00pm, and by appointment.

**Class schedule and room:** MWF 10:00am -10:50am, Binnion Hall 302

**Text:** *Differential Equations with Boundary-Value Problems*, 7th edition, by Zill and Cullen, 2009. Tentatively, chapters 1, 2, 3, 4 and 6 of the text will be covered. If time permits, some topics from chapters 5, 7, 8 and 12 will also be covered.

**Course Description:** First order differential equations, higher order differential equations, series solutions, the Laplace transformations, systems of first order linear equations, initial-value problems. Prerequisites: Math 314.

**Course Objectives:** Upon successful completion of this course, the students will be able to understand the fundamental concepts and theory of differential equations, and will have the skills to solve some differential equations for explicit solutions and approximation solutions, and will be able to set up mathematical models to solve some real-world problems using differential equations.

**Instruction:** Instruction will include lecture, demonstration and models, and some group work, based on time available.

**Attendance:** Attendance will be checked and it is your responsibility to sign the daily roll sheet. It is your benefit to attend the class.

**Tests:** There will be three midterm and a final exams for the course. The tentative schedules for the exams are:  
Test 1: Sept. 21, Friday 10:00am-10:50am.  
Test 2: Oct. 19, Friday 10:00am-10:50am.  
Test 3: Nov. 16, Friday 10:00am-10:50am.  
**Final exam:** The Final exam will be a comprehensive exam and is scheduled on **Dec. 10, 10:30am – 12:30pm.**
No makeup will be given for the tests. If you miss one test with evidence showing that you have an acceptable reason for that, the average of your other two test grades will be used as the grade of your missing test. This provision will only be applied to ONE exam, so students should make every effort to be present and well-prepared for all exams.

Homework & Quizzes: Homework will be assigned in every class period. You are strongly recommended to work out homework assignments on a regular basis since No one can learn mathematics without doing it! The assigned homework problems will be collected to grade in 4 times (Sept. 17, Oct. 15, Nov. 12, and Dec. 3). Some homework problems or their similar forms will be used as test questions. Pop quizzes are expected from time to time.

Course grades: The course grade consists of
Homework & Quizzes: 15%
Three tests: 60%
Final exam: 25%.
The letter grades will be assigned using the following scale:
A: 90-100%  B: 80-89%  C: 70-79%  D: 60-69%  F: 0-59%

Withdrawal Policy: Concerning the deadlines and consequences of withdrawals please check on: http://web.tamu-commerce.edu/admissions/registrar/academicCalendars/20122013academiccalendar.pdf

Basic Tenets of Common Decency: “All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment.” (Student’s Guide Handbook, Policies and Procedures, Conduct.) This means that rude and/or disruptive behavior will not be tolerated.

Academic Integrity: I have a NO TOLERANCE policy for cheating and if you are caught cheating you will fail this course. Cheating in this course includes the following:

- Giving or receiving answers during an exam or quiz.
- Viewing the exam or quiz answers of nearby classmates.
- Having notes/practice work available during quizzes or tests.
- Possession or access to test items before the test is given.
- Deception in getting an excused absence to obtain the undeserved opportunity to make-up work.
- Use of cell phones or text messaging technology during exams or quizzes. You may not use the calculator on your cell phones.
• Improper citations in written works, or using another person’s ideas and words as your own without giving proper credit.

• **Any** method, no matter how well rationalized or accepted, which improves a person’s grade by any means other than study and skillful performances on exams and/or other assignments.

Students found guilty of an act of academic dishonesty in this course will be subject to receiving an “F” in this course.

**Students with Disabilities:** The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

**Office of Student Disability Resources and Services/ Gee Library**
Room 132 . Phone (903) 886-5150 or (903) 886-5835, Fax (903) 468-8148, and Web: StudentDisabilityServices@tamu-commerce.edu

**Getting help:** A better way to learn math is to keep progress and leave no gaps in one’s study. So please get help as soon as you need it and do not wait until it is too late. You are welcome to come to me or go to Math Skills Center located in Binnion Hall 328 where you can find free tutors for help. The tutoring hours of Math Skills Center for the current semester are:

- **Monday and Wednesday, 8am – 8pm, Tuesday and Thursday, 8am – 6pm, and Friday, 8am – 3pm**
Homework
Section 1.1: 1-10, 12, 13, 24, 29, 52.
Section 1.2: 2, 7, 12, 15.
Section 2.2: 2, 6, 7, 12, 24, 27
Section 2.3: 4, 5, 9, 12, 25, 32
Section 2.4: 4, 5, 7, 8, 13, 16, 32.
Section 2.5: 6, 9, 12, 21.
Section 2.6: 2.
Chapter Review on page 81: 11, 12, 13, 14, 15, 16, 17, 19.
Section 3.1: 2, 3, 8, 11, 14.
Section 3.2: 3, 9.
Section 4.1: 3, 4, 9, 10, 13, 16, 17, 24, 25, 29, 30, 34, 35.
Section 4.2: 2, 3, 10, 11.
Section 4.3: 1, 4, 5, 6, 24, 29, 36.
Section 4.4: 2, 3, 8, 10, 31.
Section 4.6: 2, 9, 19, 20.
Section4.7: 5, 6, 19, 26
Section 4.8: 2, 3, 9, 14, 21.
Section 4.9: 3, 6, 11, 14
Section 6.1: 2, 3, 13, 18, 19.

To be continued