MATH 2233 005, SPRING 2015, SYLLABUS

FACULTY: WEIPING LI
OFFICE: MS 526; PHONE#: 405-744-5852

WWW address: http://www.math.okstate.edu/∼wli/
Email: wli@math.okstate.edu

1. Basic Course Information

Prerequisites: Math 2155 (Calculus II)

Textbook and Content: *Elementary Differential Equations and Boundary Value Problems* (10th Edition) by William E. Boyce and Richard C. DiPrima, John Wiley and Sons, New York 2012, ISBN 978-0-470-45831-0.

Methods of solution of ordinary differential equations with applications. First order , second order and higher order equations, linear equations of higher order, series solutions, and Laplace transforms, nonlinear differential equations and stability.

Class Time: TR 2:00pm – 3:15pm. Start on Monday Jan. 13, 2015.

Class Room: CLB 103.

Office Hours: TR 12:30pm - 1:450pm. **BY APPOINTMENT**. Highly recommended to take full and consistent advantage on my office hours. Feel free to call/email/fax me at any time. Please do not hesitate to seek any appropriate out-of-class help from me in your efforts to master the subjects.

SYLLABUS ATTACHMENT:

2014–2015 University Catalog

http://registrar.okstate.edu/University-Catalog-PDF

Spring 2015 Academic Calendar

http://registrar.okstate.edu/Academic-Calendar

2. Exams, Quizzes and Grade

Your grade will be determined by the scores on the 3 fifty-minute tests, each of which is worth 100pts. Quizzes is worth 100pts and the final exams is worth 200pts.

A as 510-600; **B** as 450-509; **C** as 390-449; **D** as 330-389; **F** as 0-329.

The cutoff might be lower slightly at the end of the term, but this is not guaranteed. If you cannot take an hour test because of medical reason or other emergency, please notify me **IN ADVANCE** or hand in your **written proof** for excuse. Make-up exams will be scheduled ONLY in those cases with **proofs**.

Quizzes: Each quiz will be picked from your homework problems. No make-up quizzes will be given. Your two lowest quizzes will be dropped.

First Exam: February 5, 2015;

Second Exam: March 12, 2015;

Third Exam: April 16, 2015;

Final Exam: *Thursday, May 7, 2015 from 2:00pm –3:50pm at CLB 103.*

D2L: Stay up-to-dat with D2L. Copies of answers for quiz and homework update or modify and other course information will be posted on D2L. It is **YOUR RESPONSIBILITY** to read all materials posted for this course. You can access D2L at https://oc.okstate.edu/

2.1. **Attendancy Policy.** Attendance is not a part of your grade in the course, but it is **VERY HIGHLY RECOMMENDED**. You are responsible for all material covered in class and all assignments. Experience has shown a definite correlation between poor class attendance and low grades.

2.2. **Main Office.** Main office of Math Department 401 Ms, phone number: 405-744-5688. Fax number: 405-744-8275.

   MLSC website at https://www.math.okstate.edu/mlsc

2.3. **Homework.** Please **DO THE HOMEWORK**. The purpose of homework is to provide a way for you to practice and get feedback on what you are doing. I suggest that you first read each section and try the assigned problems on your own. Then discuss your solutions with others in the class. Finally re-read your solutions and make corrections as needed. *Practice makes perfect.* **Remember to use the tutors to help you learn. Not to do the homework for you**.

2.4. **General Comments.** To succeed in college, each student must take responsibility for his or her own learning. Thinking of attending college as your job. Just as you arrive at work on time and finish an assigned work on time, so should you attend class every day and finish all your daily homework.

(i) Please be advised that **Doing your homework on time is absolutely essential** for you to get better grade. Quiz and exam problems will be largely chosen from your homework problems.

(ii) On average you should expect to spend two hours studying outside of class for every hour in clas;s. Some student will require more. It is best to do this on a regular basis after *every class* if possible. The learning of mathematics is cumulative, and keeping up with the work is necessary in order to follow our class discussion. Our mind absorbs new ideas best in smaller, regular does.

(iii) Your study time **SHOULD** start with the book and your class notes with pencil in hand to work out the calculations. The homework problems are not identical to the book examples and can require considerable thoughts. Give each problem a serious effort before seeking help.

(iv) Ask for help whenever you feel you need it from your instructor, from your classmates and any other sources.

MATHEMATICS DEPARTMENT MODEL POLICY ON MISSED WORK

(A) A student shall be offered reasonable accommodation in the event that he or she misses a major assessment activity for a valid and documented reason.

(B) Appropriate documentation shall be provided by the student in a timely fashion to support his or her request for accommodation.

(C) Major assessment activities are those such that a zero on that activity could reasonably be foreseen to impact the students grade substantially; this category includes, but is not limited to, exams.

(D) Valid reasons include official University activities, activities associated with military service, illness, family emergencies, mandatory court appearances, and any other events of comparable gravity.

(E) Reasonable accommodation means that the student will be given the opportunity to earn a grade on the assessment activity that is based on criteria as similar as possible to those used to grade his or her classmates. This opportunity should normally be made available in a timely fashion.

3. COURSE TENTATIVE SCHEDULE (SUBJECT TO SLIGHT CHANGE) FOR MATH 2233

Week 1: 1.1-1.2; Week2: 1.3-1.4; Week 3: 2.1-2.3; Week 4: 2.4-2.6; Week 5: 2.7-2.8; Week 6: 3.1-3.3; Week 7:3.4-3.6; Week 8: 3.7; 4.1; Week 9: 4.2, 5.1-5.2; Week 11: 5.3-5.5; Week 12:5.6; Week13: 6.1-6.2; Week14: 6.3-6.4; Week15:6.5; Week16: Review for Final. (There are slightly shift due to the exams); Last Week: Final Exam.

4. HOMEWORK (SUBJECT TO SLIGHT CHANGE DURING THE CLASS)

§1.1: 1-15(odd),12,14; §1.2: 1-13(odd), 4, 6; §1.3: 1-27(odd);

§2.1: 1-25(odd), 30, 35, 36; §2.2: 1-19(odd), 2, 6, 8, 22, 31, 32, 36, 37;

§2.3: 1-19(odd); §2.4: 1-6,8,13,15-18, 22, 24, 25; §2.5: 1-21(odd);

§2.6: 1-17(odd), 20, 22, 25-30; §2.7: 1-3, 6,7,11,15,16,19; §2.8: 1-11(odd);

§3.1: 1-27(odd), 30,33,35,38,40; §3.2: 1-15(odd), 17,21-24;

§3.3: 1-13(odd), 12, 15, 17, 18, 21; §3.4: 1-25(odd);

§3.5: 1-15(odd), 20, 22,24-30(even); §3.6: 1-21(odd); §3.7: 1-17(odd), 29, 30;

§4.1: 1-15(odd); §4.2: 1,2,8,10, 11-15, 34-36; §4.3: 1-17(odd); §4.4: 1-17(odd);

§5.1: 1-3, 9-12,17-27(odd),28; §5.2: 1-5(odd), 15-17; §5.3: 2, 4, 5, 8, 10;

§5.4: 1-9(odd), 19, 20; §5.5: 1-9(odd); §5.6: 1-9(odd);

§6.1: 1-23(odd); §6.2: 1-25(odd), 28-34(even);

§6.3: 1-5(odd),7, 9, 13, 14, 16, 17, 20-26(even); §6.4: 1-9(odd);

§6.5: 1-3; §6.6: 4, 6, 9, 11, 12-15.

DEPARTMENT OF MATHEMATICS, OKLAHOMA STATE UNIVERSITY
STILLWATER, OKLAHOMA 74078-0613

E-mail address: wli@math.okstate.edu