

Math 2233.006 – Differential Equations

Spring 2011, MWF 12:30 – 1:20 pm

Instructor: Toshihisa Kubo

Office: MSCS 440

Office Hours: T.Th.: 9:30 – 11:00 am or by appointment

Phone: (405) 744-8049

E-mail: toskubo@math.okstate.edu

Textbook: *Elementary Differential Equations and Boundary Value Problems*, ninth edition, by William E. Boyce and Richard C. DiPrima

Prerequisites : Math 2153, Calculus II

Course Objectives: Students will learn the elementary theory of ordinary differential equations such as

- Linear and nonlinear ordinary differential equations
- First, second, and higher order ordinary differential equations
- Methods of solutions of ordinary differential equations
- Series solutions
- Laplace transforms
- Applications

Selected portions of Chapters 1– 6 will be covered.

Quizzes: There will be weekly quizzes mostly on Wednesday, worth 15 points each. The exact dates and the sections covered by the quizzes will be announced in class a week ahead of time. The lowest two quiz scores will be dropped, and there will be no makeup quizzes.

Suggested Problems: Suggested problems will be assigned in each class, but it will not be collected or graded. Nevertheless, it is extremely important that you work on these problems; the quizzes and exams will consist of similar problems.

Calculators: The TI-89, or other symbolic manipulating calculator is not permitted on quizzes and exams, but you can use other calculators such as the TI-83.

Grading Policy: There will be two midterms (100 points each) and one final exam (200 points). The total quiz score will be 150 points, giving a total of 550 possible points. Letter grades will be assigned as follows:

- At least 495pts: guaranteed A
- 440 – 494 pts: at least B
- 385 – 439 pts: at least C
- 330 – 384 pts: at least D
- 0 – 329 pts: probable F

Class Attendance: I will take an attendance in each class. If you don't miss more than 3 times then **10 points** will be added to your final score as a bonus.

Exams: The dates of the exams will depend on the rate at which we cover the material. The exam dates and the sections covered by the exams will be announced in class a week ahead of time. The tentative exam schedule is as follows:

Exam 1: Wednesday, February 16

Exam 2: Wednesday, March 30

Final Exam: Monday, May 2 (10:00 – 11:50 am)

Make-up Exam Policy: Make-up examinations will be given only for very serious and unavoidable conflicts, e.g., family emergency, and *only if* your request to take a make-up examination is approved by your instructor **in advance**. You are requested to bring your student ID.

MLRC (Mathematics Learning Resource Center):

The MLRC offers tutoring for Math 2233, Differential Equations, for free of charge.

- **Location:** CLB 420 (the 4th floor of the Classroom Building)
- **Phone:** 744-5818
- **Tutoring and Lab Hours:** TBA

Final note: The instructor will communicate any changes in this syllabus to you in class.

Math 2233 Suggested Problem Schedule

Section	Problems
1.1	
1.2	
1.3	
2.1	
2.2	
2.3	
2.4	
2.5	
2.6	
2.7	
2.8	
3.1	
3.2	
3.3	
3.4	
3.5	
3.6	
3.7	
3.8	
4.1	
4.2	
4.3	
4.4	
5.1	
5.2	
5.3	
5.4	
5.5	
5.6	

Continue to the next page.

6.1	
6.2	
6.3	
6.4	
6.5	



OKLAHOMA STATE UNIVERSITY SYLLABUS ATTACHMENT SPRING 2011

<http://osu.okstate.edu/acadaffr/aa/syllabusattachment-Spr.htm>

WE ARE VERY CONCERNED ABOUT YOUR SUCCESS AS A STUDENT AT OSU. THIS INFORMATION IS PROVIDED TO ANSWER QUESTIONS MOST OFTEN ASKED BY STUDENTS.

IMPORTANT DATES

Last day to add a class (without instructor permission)	1/18/11
Last day to drop a course with no grade and no fees charged for courses	1/18/11
Last day to withdraw completely from the University and receive a 100% refund	1/18/11
Last day to enroll (late fee charged beginning 1/7)	1/21/11
Last day to add a class (with instructor permission)	1/21/11
Last day to drop a course with an automatic "W" and receive a 50% refund	1/21/11
Last day to withdraw completely from the University and receive a 50% refund	1/21/11
Last day to post 6 week grades for 1000 & 2000 level courses	2/22/11
Last day to file diploma application	4/1/11
Last day to drop a class with an automatic "W"	4/08/11
Last day to withdraw completely from the University with an automatic "W"	4/08/11
Last day to withdraw completely from all OSU classes with an assigned "W" or "F"	4/22/11
Pre-Finals week	4/25 – 4/29/11
Final examinations	5/2 – 5/6/11

Note: For outreach, internet, and short course drop/add dates, see the **Short Courses** link on the Registrar's Academic Calendar webpage.

SPRING SEMESTER HOLIDAYS

Martin Luther King Day*	1/17/11
Spring Break	3/14 – 3/18/11

*University closed

DROPPING A COURSE AND WITHDRAWING FROM THE UNIVERSITY

Students often confuse these terms <http://osu.okstate.edu/acadaffr/DropAdd.htm>.

Dropping a Course (or courses) may occur during the first twelve weeks of the semester. This means, however, that you are still enrolled in at least one other OSU course. (Remedial courses cannot be dropped without written permission of the advisor.) *After the twelfth week (April 8, 2011), a course may be dropped by petition but only when verifiable extenuating circumstances can be demonstrated.* Verifiable extenuating circumstances must be reasons beyond your control, such as illness or accidental injury.

Poor performance in class is not an extenuating circumstance.

You must obtain a petition to drop a course after the deadline from your advisor and get the signature of your advisor and dean with a grade of "W" or "F" assigned by the instructor. The Late Drop Panel must then approve the petition.

Withdrawing from the university means that you are dropping *all* of your courses and **are no longer enrolled for the current semester.** This may occur until the Friday before pre-finals week (April 22, 2011). The withdrawal process is initiated in your dean's office. **CHECK THE IMPORTANT DATES SECTION FOR THE "DROP" AND "WITHDRAWAL" DEADLINES FOR THIS SEMESTER.**

ACADEMIC INTEGRITY POLICY

Oklahoma State University is committed to the maintenance of the highest standards of integrity and ethical conduct of its members. This level of ethical behavior and integrity will be maintained in this course. Participating in a behavior that violates academic integrity (e.g., unauthorized collaboration, plagiarism, multiple submissions, cheating on examinations, fabricating information, helping another person cheat, unauthorized advance access to examinations, altering or destroying the work of others, and fraudulently altering academic records) will result in your being sanctioned. Violations may subject you to disciplinary action including the following: receiving a failing grade on an assignment, examination or course, receiving a notation of a violation of academic integrity on your transcript, and being suspended from the University. You have the right to appeal the charge. Contact the Office of Academic Affairs, 101 Whitehurst, 405-744-5627, academicintegrity.okstate.edu.



CLASS ATTENDANCE IS IMPORTANT

Class attendance is a critical component of learning; therefore, you are expected to attend and participate fully in all scheduled class meetings. Many instructors consider attendance so essential that your grade may be affected by your absence. *SOME DEPARTMENTS AND PROFESSORS HAVE MANDATORY ATTENDANCE POLICIES.* If no written attendance policy is provided before the last day to add a class without instructor permission, no penalty may be assessed for class absences although you may not be permitted to make up certain in-class activities. If you are required to participate in official university-sponsored activities or military training you should receive an excused absence unless the written course attendance policy indicates otherwise. If you will be absent from class for sponsored activities, you must provide prior notification of the planned absence to the instructor. You may be required to submit assignments or take examinations before the planned absence.

If you must be absent from classes due to illness or other extenuating circumstances, it is your responsibility to notify instructors at the earliest possible time and determine if missed assignments can be submitted.

PRE-FINALS WEEK POLICY

Final examinations are scheduled at the end of each semester and are preceded by pre-finals week, which begins seven days prior to the first day of finals. During pre-finals week, all normal class activities will continue; however, no assignment, test, or examination accounting for more than 5% of the course grade may be given; and no activity or field trip may be scheduled that conflicts with another class. This excludes makeup and laboratory examinations, out-of-class assignments (or projects) made prior to pre-finals week, and independent study courses. No student or campus organization may hold meetings, banquets, receptions, or may sponsor or participate in any activity, program, or related function that requires student participation. Contact the Office of Academic Affairs, 405-744-5627, 101 Whitehurst.

FINAL EXAM OVERLOAD POLICY

In the event that you have three or more final exams scheduled for a single day, you are entitled to arrange with the faculty member instructing the highest numbered course (4 digit course number) or two highest, if you have four finals on one day, to re-schedule that examination(s) at a time of mutual convenience during final exam week. You may not reschedule common final exams unless you have common exams scheduled at the same time. You should submit this request in writing, with a copy of your class schedule, at least two weeks prior to the beginning of final exam week. The faculty member has one week prior to the beginning of final exam week to arrange a mutually convenient time for administration of the final exam, after which you take the request to the Office of Academic Affairs, 101 Whitehurst.

INFORMATION TECHNOLOGY

Student Email - OSU uses your OKSTATE.EDU email address for electronic correspondence. If you do not use the OSU email system you must redirect your okstate.edu email using the Orange-Key System (www.okey.okstate.edu). Failure to maintain an accurate email address may result in missed or lost university communications. For email assistance contact the IT Helpdesk at 405-744-HELP (4357).

Computer Labs - A complete description of computer labs and hours of operations are available at their website: home.okstate.edu/ITDlabs. Lab information is also available by calling the Information Technology Help Desk, 405-744-HELP (4357).

LIBRARY HOURS

Edmon Low Library (405-744-5029)

Digital Library Toll Free: (1-877-744-9161)

Monday-Thursday	7:30 a.m.-2:00 a.m.
Friday	7:30 a.m.-10:00 p.m.
Saturday	9:00 a.m.-10:00 p.m.
Sunday	9:00 a.m.-2:00 a.m.

*Hours will vary during University holidays.

*Contact the following for information on hours of operation:

Architecture Library	405-744-6047
Curriculum Materials Library	405-744-6310
Veterinary Medicine Library	405-744-6655

Library web address: www.library.okstate.edu

GENERAL EXPECTATIONS OF STUDENTS

By enrolling at Oklahoma State University, you accept responsibility for complying with all University policies and contracts, and for local, state and federal laws on- or off-campus that relate to the University's mission. **The Student Rights and Responsibilities Governing Student Behavior** document explains the standards of behavior expected of you, processes in place for enforcing the rules, and the University's response to violations - <http://www.okstate.edu/ucs/SCEA/>. In general, the University

expects you to respect the rights of others and authority, represent yourself truthfully and accurately at all times, respect private and public property, and take responsibility for your own actions and the actions of your guests. Call 405-744-5470 for more information.

WHERE TO GO FOR HELP

Instructor - If you have questions regarding your class, talk to your instructor. Faculty members usually include their office hours and/or phone number in the class syllabus. If you cannot locate this information, set a time to meet with your instructor by speaking with him/her prior to or immediately following your class session or check with the departmental office on when the instructor may be available.

Academic Advisor - All students will benefit by conferring with an advisor on a regular basis. If you do not know your advisor, or are unhappy with your advisor, talk to the Student Services Director for your college.

Academic911.okstate.edu - Your online resource for academic and personal success, sponsored by Student Affairs.

Mathematics Learning Resource Center (4th Floor Classroom Building) Tutors are available to answer questions for classes ranging from Beginning Algebra through Calculus II. Tutoring for Differential Equations and Linear Algebra is offered at specific times. Go to www.math.okstate.edu/mlrc or call 405-744-5818.

Writing Center (104 Morrill Hall) The Writing Center helps writers throughout the composing process; you should plan to visit early and often throughout the semester, not just the day before an assignment is due. Tutors will work with you to improve your brainstorming, organizational, and composing techniques. Call 405-744-6671 or go to english.okstate.edu/writing.

Tutoring (214 Student Union) University Academic Services offers free individual tutoring for a variety of courses. Call 405-744-5333. www.okstate.edu/ucs/tutoring.html lists other tutoring services.

University Counseling Services (001 Cordell) Professional counselors offer confidential personal and/or career counseling. Call 405-744-5472 or 405-744-7007 or <http://okstate.edu/ucs/>.

Office of Student Disability Services (015 University Health Services) - According to the Americans with Disabilities Act, each student with a disability is responsible for notifying the University of his/her disability and requesting accommodations. If you think you have a qualified disability and need classroom accommodations, contact the Office of Student Disability Services. Please advise the instructor of your disability as soon as possible to ensure timely implementation of appropriate accommodations. Faculty have an obligation to respond when they receive official notice of a disability but are under no obligation to provide retroactive accommodations. To receive services, you must submit appropriate documentation and complete an intake process during which the existence of a qualified disability is verified and reasonable accommodations are identified. Call 405-744-7116 or go to <http://sds.okstate.edu/>.

Office of Affirmative Action (408 Whitehurst) Oklahoma State University policy prohibits discrimination based upon gender, race, color, ethnicity, age, religion, national origin, veteran's status, disability, or sexual orientation. If you believe that you are being discriminated against, you may discuss your concerns and file informal or formal complaints with Mackenzie Wilfong, J.D., 405-744-5371.

SEEK ANSWERS TO YOUR QUESTIONS

The OSU faculty and staff want you to be successful in your educational pursuits. If you have questions or concerns, seek help **EARLY**. We are here to assist you.