

MAT 275: **Modern Differential Equations** Fall 2010 Syllabus

SLN:	78431	Instructor: Dr. Yun Kang
Place:	Poly CNTR 120	Office: WANNER Hall 340C
Time:	11:50 am-12:40 am (M W F)	Office Hours: 10:45am-11:30am; 1:00-3:00pm (Monday and Wednesday) or by appointments.
Phone:	480-727 – 5004 (office)	E-mail: yun.kang@asu.edu
Blackboard and WebWork		<u>We will use blackboard for distributing course related information (e.g., homework, review for exams, group project, class notes); We will also use online homework system WebWork</u>

Prerequisites: MAT 271, MAT266 or equivalent

Required Text: *Differential Equations, Computing and Modeling, Custom Edition for ASU* by C. Henry Edwards and David E. Penney, Pearson Custom Publishing.

Graphing Calculator: A graphing calculator is **NOT** required for this course. However, if you already have a graphing calculator, you may use it. Calculators with QWERTY keyboards or those that do symbolic algebra, such as the Casio FX2, Casio 9970Gs, TI-89, TI-92, or TI-*n*spire (CAS) **cannot** be used in class or during an exam.

Absences: Fall and Spring semesters: For classes that meet three days a week (MWF, for example), the maximum number of allowed absences is six (6). For classes that meet two days a week, the maximum number is four (4). For classes that meet on other schedules, the number of absences allowed should reflect a similar ratio (two weeks worth of class meetings). **Students who exceed the number of allowed absences will receive a grade of EN.**

Students Resources:

Tutor Center in Tempe: The [Math Tutor Center](#) (free of charge) in PSA 116 will be open M-Th 8:00 a.m. - 6:00 p.m., Fri. 8:00 a.m. - 4:00 p.m., and Sun. 1:00 pm - 6:00 p.m. Phone: (480) 965-9072

Math Tutor in Poly: CNTR Building, Lower Level. Phone: (480) 727-1452

Come in for help **before** it is too late, and several days **before** an exam day to strengthen your preparation. Please schedule an appointment to see me during office hours if you have any questions, concerns, or if you have a **disability** that will require accommodations in this class.

Note: The ASU Polytechnic campus liaison to the **Disability Resource Center** is Garret Westlake, and he can respond to questions and facilitate academic support services and accommodations on campus. Contact Garret Westlake at (480) 727-1039 or Garret.Westlake@asu.edu.

LECTURE AND ASSIGNED PROBLEMS

Week	Dates	Sections	Comments
1	08/20/10	Syllabus and Introduction	
2	08/23 – 08/27	Introduction to Matlab 1.1, 1.2	
3	08/30-09/03	1.3, 1.4, 1.5	
4	09/06 – 09/10	2.4, 2.5	09/06 Labor Day Observed
5	09/13 – 09/17	3.1, 3.2	
6	09/20 – 09/24	3.2, 3.3	
7	09/27 – 10/01	4.1, 3.4	Review Test 1 on 10/01
8	10/04 – 10/08	3.5, 3.6	Test 1 on 10/04
9	10/11 – 10/15	4.1, 5.1, 5.2	
10	10/18– 10/22	5.4, 5.5	
11	10/25 – 10/29	6.1, 6.2	
12	11/01 – 11/05	6.3, 6.4, 6.5	
13	11/08 – 11/12	7.1	Review Test 2 on 11/10 11/11 Veterans Day Observed
14	11/15 – 11/19	7.2, 7.3	Test 2 on 11/15
15	11/22 – 11/26	7.4	11/25-11/26 Thanksgiving Holiday Observed
16	11/29 – 12/03	7.5, 7.6	Group Project Presentation
17	12/06-12/10	Review, 12/08 is reading day.	Final Exam, 12/09 at 7:10pm – 9:00pm

University Policies and Procedures:

Course Add & Drop (in person & online):	08/25/10, Wednesday.
Course withdrawal (in person & online):	11/03/10, Wednesday.
Complete withdrawal (in person & online):	12/07/10, Tuesday.

Course Policies: Students are responsible for material covered in class whether or not it is in the text. Working regularly on assigned problems and attending class are essential to survival. Homework will be collected at the beginning of the class. **No late HW** will be accepted and **no make-up quizzes** will be given. Make-up exams are at the discretion of the instructor. In any case, **no make-up exam** will be given unless the student has notified the instructor before the test is given. Message may be left in the instructor's office (480-727-5004) or through email. You must make every reasonable effort to notify me before the exam is given and document your reason for missing the exam.

Homework: About 25% of course grade. Detailed assignments will be announced in Blackboard.

1. Your **first homework assignment** is to make an appointment with me in the first two weeks of this semester. We will meet about 5 minutes. I will try to get to know about your mathematical background, your expectations/concerns about the courses, etc.
2. **General Homework.** Assignments will be due approximately weekly and will be assigned for every lecture. Homework will be a combination of problems from the textbook, handouts and WeBWorK online homework system. The detailed information will be announced through blackboard (<https://myasucourses.asu.edu/webapps/portal/frameset.jsp>). WeBWorK can be accessed at http://webwork2.asu.edu/webwork2/Kang_MAT_275_Fall_2010/. If you are not familiar with WeBWorK you should start by working out the Introduction set (the Introduction will not count towards the grade). **No late assignments will be accepted.** Due dates for WeBWorK, the problems from the textbook and handouts will be announced in class and listed on the blackboard. It is your responsibility to keep track of these information (even if you miss the class).
3. **MATLAB LABS :** Matlab labs are especially important because they are worth a big part of the grade which are including in the homework assignment and exams. MATLAB is installed on the computers in the computer labs. **You are not required to purchase MATLAB.** You can use MATLAB at home or at other computing sites through internet (Instructions are also posted on blackboard):
 - Go to this website: <https://citrix.asu.edu>
 - Download the proper Client version for your system.
 - Log in with your asurite and password.
 - On the left window you'll see a list of applications you can run, including Matlab.

Group Projects: Students should do the presentation in front of the class and hand in the written work before the due dates. These projects serve two purposes: applications of differential equations to real world problems; training students' team work skills, presentation skills and be able to judge other students' work. The group project is 15% of course grade.

Quizzes: Short quizzes (5-10 mins) will be given at the discretion of the instructor . This serves for two purposes: evaluate how you learn for each lecture and check your attendance of the class. There will be no makeup quizzes. You may drop your lowest quiz score. The rest will be averaged for about 5% of your course grade.

Exams: There will be two midterms and a final exam. Each midterm is 15% of course grade. The final is comprehensive and 25% of course grade. The tentative dates of exams are as follows:

Exams	Dates	Sections Covered
Exam 1 (Wk 8)	10/04/10 (tentative)	Chapter 1,2 and 3
Exam 2 (Wk 14)	11/15/10(tentative)	Chapter 4, 5 and 6
Final Exam	According to the ASU Finals Schedule	Cumulative, Includes Chapter 7

Final Exam: Comprehensive and will be given on **Wednesday, Dec 15, 9:50 - 11:40 AM** at a location that will be announced later.

Grading Scale and Criteria: A+ >95%, A 90-95%, B 80-89%, C 70-79%, D 60-69%, E <60%.

Point Allocation	
Two mid-term exams	15% X 2= 30%
Final Exam will be comprehensive.	25.00%
Group Projects	15.00%
Homework, Quizzes, Attendance and Performance in class	30.00%
Total	100.00%

Extra Credits: Extra credits can help you only if your final grade falls in the following intervals: [88,90), [78,80), [68,70), [58,60), i.e., the extra credits can push you up to a better grade when your original grade falls in the intervals mentioned above. Problems that can be considered as extra credits are at the discretion of the instructor. Extra credits may include solving the challenging questions proposed by the instructor, presenting the problems in the class, etc.

Academic Honesty: Anyone found cheating will not be permitted to withdraw and will receive a grade of **XE** for the course. Discussing solutions to homework problems with others is strongly encouraged, but submitting work as your own which is copied or paraphrased from someone else is not permitted. If you are doing things right, your written work will sometimes contain an idea from another source (person, book, other). When this happens, make sure that you have reflected on the idea so that you understand it for yourself. Then write the idea in your own words. Less than this will be considered cheating.

The grade of XE: A grade of **XE** is reserved for "failure for academic dishonesty." The XE grade may be petitioned after 1 year.

The grade of Incomplete: A grade of incomplete will be awarded only in the event that a documented emergency or illness prevents the student who is doing **acceptable work** from completing a **small** percentage of the course requirements. The student must provide written documentation and be passing the class at the time to receive an Incomplete. Make-up final exams will **NOT** be given for reasons of a non-refundable airline tickets, vacation plans, work schedules, weddings, family reunions, and other such activities. Students should consult the final exam schedule before making end-of-semester travel plans. The guidelines in the current general ASU catalog regarding a grade of incomplete will be strictly followed. *The Dean of the student's college must approve any exceptions to these rules.*

Classroom behavior: Under no circumstances should you allow your cell phone to ring during class. Any disruptive behavior, which includes ringing cell phones, listening to your mp3 player, text messaging, constant talking, eating food noisily, reading a newspaper will not be tolerated. If in my judgment you are disrupting class, I will ask you to leave and I may report you to the Dean of Students.

Note: This syllabus is tentative and should not be considered definitive. The instructor reserves the right to modify it (including the dates of the tests) to meet the needs of the class. It is the student responsibility to attend class regularly and to make note of any change. The Instructor also reserves the right to create class policies in regards to homework due date, late assignments, etc.