Syllabus

MA 238-02 (Spring, 2012)
Applied Differential Equations
Monday, Wednesday, Friday 11:30am – 12:25pm, Shelby Center 121

Instructor

- Dongsheng Wu
- 201J Shelby Center
- 256-824-6676
- Email: dongsheng.wu@uah.edu
- URL: http://webpages.uah.edu/~dw0001/MA238_Spring12.htm
- Office Hours: Monday, Tuesday, Wednesday 1:30pm – 3:30pm, or by appointment.

Textbook

Ordinary Differential Equations, by Kenneth Howell. www.uah.edu/howell/DEtext (This is also available in the University Bookstore.)

Tentative Coverage

We plan to essentially cover the following chapters:

- Part I: Chapter 1, 2 (Basics)
- Part II: Chapter 3 – 6 and 8 – 10 (First Order Equations)
- Part III: Chapter 11 – 14 and 16 – 23 (Higher Order Equations)
- Part IV: Chapter 24 - 29 (Laplace Transform Methods)

Prerequisites

MA 172 (Calculus B) and MA 201 (Calculus C).

Course Goals

- A basic understanding of the special language, notation, and point of view of ordinary differential equations (ODEs), and of the importance of differential equations in the modeling of many physical laws and processes
- The ability to solve basic differential equations
- A basic understanding of differential equations from contrasting but complementary points of view: algebraic, graphical, numerical, and procedural
- Reinforcement of the concepts and techniques learned in calculus
A basic understanding of some classical problems and processes
An improved ability to read, write, speak, and think in mathematical terms

Grade Determination

- Weekly Quizzes: 20%
- Mid-Term Exams: 45% (15% for each mid-term exam)
- Final Exam: 35%

Test Dates

- Weekly Quizzes: On Fridays without an exam (starting from the second one)
- Three Mid-Term Exams: Tentatively Scheduled on Fridays: February 10, March 16 and April 20.
- Final Exam: 11:30am-2:00pm, Wednesday, May 02, 2012.

Grading Scale (%)

A. 90-100, B. 80-89, C. 70-79, D. 60-69, F. 0-59

Policies

No make-up quizzes will be given. Instead, I will drop the two lowest quiz scores. No make-up exams will be given except for documented cases of illness or emergency.

Accommodation for Students with Disabilities

Any student with a disability that will require special attention or accommodation should inform the instructor as soon as possible, preferably within the first week of class.

Student Behavior

Students are expected to behave in a courteous and respectful manner towards their fellow students. You should strive to be on time for class, and refrain from talking or doing any other activity that could be disruptive to the class. Turn off your cell phone! Ringing cell phones are always a distraction.

Grievance Procedure

Any problems that you encounter should be brought to the attention of your instructor. If you do not feel comfortable talking to me, or if you are not satisfied with my decision, you may appeal through the administrative chain given below: 1. Math Department Senior Staff Assistant: Ms. Tami Lang, 258 Shelby Center. 2. Math
Department Chair: Dr. Jia Li, 258 Shelby Center. 3. Associate Dean of the College of Science: Dr. Daniel Rochowiak, 207 Materials Science Building.

See the Student Handbook for more information about the grievance procedure.

**Academic Misconduct**

All acts of dishonesty in any work constitute academic misconduct. This includes, but is not limited to cheating, plagiarism, fabrication of information, misrepresentation, and abetting any of the above. Academic misconduct will not be tolerated and may result in a failing grade in the course. Consult the Student Handbook for further description of Academic misconduct and penalties.

**UAlert Emergency Notification System**

UAHuntsville has implemented the UAlert emergency notification system. UAlert allows you to receive time-sensitive emergency messages in the form of e-mail, voice mail, and text messages.

Everyone who has a UAHuntsville e-mail address will receive emergency alerts to their campus e-mail address. In order to also receive text and voice message alerts, you are asked to provide up-to-date phone contact information. Participation in UAlert text and voice messaging is optional, but enrollment is strongly encouraged. You can’t be reached through UAlert unless you participate. The information you supply is considered confidential and will not be shared or used for purposes other than emergency notification.

To review your UAlert account, add or update phone and alternate e-mail addresses, and set the priority for your contact methods, please visit the UAlert web site: http://ualert.uah.edu.