MATH 251 Ordinary and Partial Differential Equations  
Spring 2012, section 3, Syllabus

Course web for this section: www.math.psu.edu/shen_w/251/

Course Description: Ordinary and Partial Differential Equations (4:4:0). First- and second-order equations; series solutions; Laplace transform solutions; higher order equations; Fourier series; second-order partial differential equations.

Prerequisite: Math 141, or equivalent courses.


Instructor: Wen Shen, associate professor of Mathematics.  
(223A McAllister, shen_w@math.psu.edu)

Office Hours: Monday 11-11:50am, Thursday 1:30-2:20pm, + appointments

Home work: Home work will be assigned weekly, and will be collected on Wednesdays. You are expected to complete all the assigned problems, although only selected problems will be graded. Late home work will NOT be accepted. I will make no exceptions for this rule. In compensation, the worst 2 homework grades will be dropped.

Quizzes: Quizzes will be given in class throughout the semester, normally on Fridays. A quiz usually takes 10-15 minutes. Notes, books, cell phones, calculators or similar items are not allowed in quizzes. Quizzes will be graded. There will be no make-up or conflict quizzes. I will make no exceptions for this rule so please don’t ask for it. In compensation, the worst 2 quiz grades will be dropped.

Attendance and Class Participation: Full class attendance is required, therefore will be checked every class. If you miss more than 5 classes without a valid reason, it will be taken into account for your final grades.

Examinations: Two 75-minute midterm examinations, given on February 16 and April 3, 6:30 - 7:45 pm, and a comprehensive final examination given during the final examination period. The final examination period will begin on Monday, April 30 and end on Friday, May 4. Students should not make plans to leave University Park before Saturday, May 5, 2012.

Grading Policy: Grades will be assigned on the basis of 450 points distributed as follows: midterm I=100, midterm 2=100, homework/quiz=100, final=150. Total=450 point.

Final grades will be assigned as follows:  
A=405-450, A-=390-404, B+=375-389, B=360-374, B-=345-359,  

Conflict and Makeup Examinations: For each midterm exam, there is a conflict exam session, from 5:05 to 6:20 pm on the same day as the regularly scheduled exam. Students with schedule conflicts may sign up to take the conflict exam, in person, with their respective instructors, at least two class days prior to the exam. A student will not be allowed to take the conflict exam without having so signed up with his/her instructor first. In addition, a makeup exam will be given about a week after the regularly scheduled exam. Students who have a valid documented reason, such as a class conflict or illness, during both
the conflict and regular examination times are permitted to schedule a makeup examination with no penalty. To sign up to take a makeup exam, please see your instructor, in person. Students must be prepared to verify the reason for taking the makeup by providing the proper document(s) upon request. **Personal business such as travel, employment, weddings, graduations, or attendance at public events such as concerts, sporting events, and Greek Rush events are not valid excuses. Nor is forgetting the date, time or room of an examination a valid excuse.** Students who do not have an approved reason for missing the examination are permitted to schedule to take the makeup, but **25 points will be deducted** from their score. Students who have taken either the regularly scheduled examination or conflict examination are not permitted to take the makeup examination. The makeup examinations are given from 6:30 to 7:45 pm.

**Course Coordinator:** The department coordinator for Math 251 during the spring 2012 semester is Zachary Tseng. You can reach him by sending an email to tseng@math.psu.edu

**Questions, Problems, or Comments:** If you have questions or concerns about the course, please consult your instructor first. If further guidance is needed, you may contact the course coordinator.

**Course outline:** (subject to modifications)
- Ch 1: 1.1, 1.2, 1.3
- Ch 2: 2.1, 2.2, 2.3, 2.4, 2.5, 2.6
- Ch 3: 3.1, 3.2, 3.3, 3.4, 3.5, 3.7, 3.8
- Ch 4: 4.1, 4.2
- Ch 6: 6.1, 6.2, 6.3, 6.4, 6.5
- Ch 7: 7.1, 7.2, 7.3, 7.5, 7.6, 7.8
- Ch 9: 9.1, 9.2, 9.3, 9.5
- Ch 10: 10.1, 10.2, 10.3, 10.4, 10.5, 10.6, 10.7, 10.8

**ACADEMIC INTEGRITY STATEMENT:** All Penn State policies regarding ethics and honorable behavior apply to this course. For more information see: [http://www.science.psu.edu/academic/Integrity/index.html](http://www.science.psu.edu/academic/Integrity/index.html)