

**SYLLABUS & HOMEWORK FOR DIFFERENTIAL EQUATIONS  
MATH 231 SECTION 005, SPRING 2010**

**Professor:** Fernando Schwartz, Aconda Court 401C

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**Lectures:** Tuesdays & Thursdays 2:10-3:25pm, HBB 136

**Office Hours:** Tuesdays & Thursdays 3:45-4:45, or by appointment.

**Text:** *Fundamentals of Differential Equations*, by Nagel, Saff and Snider, 7th Edition.

**Course evaluation:** Your grade depends on the amount of points obtained throughout the semester, out of a maximum of 560. Letter grades will be assigned only at the end of the semester, once the final has been graded.

There will be 3 exams, each worth up to 100 pts, and a final, worth up to 200 pts. Homework is collected at the beginning of each class. Your homework score is the average of all but the worst assignment grade, and it is worth up to 60 pts.

If you find that circumstances will cause you to miss an exam, you **must** notify me **prior** to the exam. Besides email, you can leave a message for me at the departmental office, 974-2461.

**Special Accommodations:** Any student who feels that s/he may need an accommodation based on the impact of a disability should contact me privately to discuss your specific needs. Please contact the Office of Disability Services at (865) 974-6087 to coordinate reasonable accommodations for students with documented disabilities.

DAILY COVERAGE AND HOMEWORK

Lesson	Topic(s)	Section(s)	Page / Homework
1	background, solutions and IVP	1.1, 1.2	5 / 1-17 14 / 1,3,5,9,10,15,16,18,19,20,22, 23,25,26,27,29
2	direction fields	1.3	22 / 1,3,4,5,7,9abcde
3	introduction, separable equations	2.1, 2.2	46 / 1,3,5,7,9,11,17,18,19,21,25,27b, 29,31abc,34
4	linear equations	2.3	54 / 1,3,5,7,10,11,13,15,17,18,19,20, 23,25a,28,32,39(noon)
5	exact equations, integrating factors	2.4 & 2.5	65 / 1,3,5,6,9,11,15,17,21,23,24,29,32, 33abd
6	substitutions, modelling	2.6 & 3.1	79 / 21,22,26 82 / 1,3,4,6,7,13,17,21,26,31,34
7	compartmental analysis	3.2	104 / 1,2,5,7,11,12,13,14
8	heating and cooling	3.3	113 / 1,2,5,7,11,12,13,14
9	newtonian mechanics	3.4	121 / 1,3,7,9,21,25abc
10	<b>Exam 1 - Tuesday 2/16</b>		