

Physics 313
Spring Quarter 2011
Course Syllabus

Instructor: Dr. Bob (Echols), rechols@calpoly.edu, 756-2656, www.calpoly.edu/~rechols

Office Hours: M, W, and F 9:40-10:30 a.m. and T 12-2:00 p.m. in my office, 25-212

Schedule: M, W, and F 11:10-12:00 noon in 53-202

Textbook: James R. Holton, An Introduction To Dynamic Meteorology, 4th Edition

Additional References: C. Donald Ahrens, Meteorology Today.
Wallace and Hobbs, Atmospheric Science
J. Pedlosky, Geophysical Fluid Dynamics.
D. Andrews, J. Holton, C. Leovy, Middle Atmosphere Dynamics.

Tentative Course Outline:

Our primary goal will be to use the conservation laws of momentum, energy and mass to begin understanding the large-scale motions found in our atmosphere. We will do this by covering most all the material in chapters one through four. Time permitting we will also discuss a topic from material in chapter 6 (Synoptic-Scale Motions), chapter 7 (Linear Waves), 11 (Tropical Dynamics) or 12 (Middle Atmosphere Dynamics).

Homework:

As you know working physics problems is critical to understanding the material. I encourage you to discuss solutions of problems with each other and myself but I expect that the homework you hand in to be individually prepared. In fact, I strongly recommend reworking a problem by yourself (if you did obtain assistance from me or another student) without looking at any previous work you have completed (or the text) to make sure every aspect of the problem is understood.

Exams and Quizzes:

We will be having two exams and a comprehensive final exam.

Grading:

Your final grade will be based on your overall performance in the class with the following approximate percentages: exams (20/25% each), homework (20%) and the final exam (40-30%).