AOSC 610: Dynamics of Atmosphere and Ocean-I

Instructor    Sumant Nigam, CSS 3419; nigam@umd.edu  301 405 5381

Room & Time  CSS Bldg., Room 2428; 9:00-9:50am (M,W,F)
             Extended meeting times (up to 10:30) when make-up lectures needed

Course Objective  AOSC 610 is the first of a two-semester course sequence on
Dynamics of the Atmosphere and Oceans. It is a core course of the graduate program,
and seeks to introduce the basic dynamical and thermodynamical principles governing
geophysical flows. Quantitative analysis and rigor characterize the course, with the
development of mathematical analysis skills being a sought outcome.

Your coordinates and interests
Please send me an email with your contact information; include “AOSC 610” in the title
line. Mention current research interests, name of your advisor, degree sought, and a list
of other courses being taken this semester. Let me know if you are auditing the course.

Course format
   Home work assignments                                      25%
   2 Mid-term exams (at approx. 4 week intervals)              40%
   Final Exam                                                 35%

Books
   ▪ An Introduction to Dynamic Meteorology — James R. Holton

   ▪ Introduction to Geophysical Fluid Dynamics —
     Benoit Cushman-Roisin; Chapters 1-5, 8; Prentice Hall, 1994;
     ISBN 0133533018