

AS200B Introduction to the Dynamics of the Earth System Fall 2014

MS 7121, Mon/Wed 10:30am–11:50am

Prof. Alex Hall (alexhall@atmos.ucla.edu), MS 7955

Office hours by appointment

Optional text: Hartmann, Dennis L., *Global Physical Climatology*

On reserve at Boelter Science & Engineering Library

Monday 10/6 Lecture 1: Introduction to the Earth System (Hartmann, 1)

Wednesday 10/8 Lecture 2: Global and Meridional Energy Balance (Hartmann, 2)

Monday 10/13 Lecture 3: Radiation and the Atmosphere's Vertical Temperature profile (Hartmann, 3)

Wednesday 10/15 Lecture 4: Surface Processes (Hartmann, 4)

Monday 10/20 Lecture 5: Planetary Boundary Layer

Wednesday 10/22 Lecture 5 (cont)

Monday 10/27 Exam 1

Wednesday 10/29 Lecture 6: Atmospheric Circulation -- Structure (Hartmann, 6)

Monday 11/3 Lecture 7: Atmospheric Circulation -- Hydrologic Cycle (Hartmann, 5)

Wednesday 11/5 Lecture 8: Ocean Circulation (Hartmann, 7)

Monday 11/10 Lecture 9: ENSO and teleconnections

Wednesday 11/12 Lecture 10: Paleoclimate (Hartmann, 8)

Monday 11/17 Lecture 10 (cont.)

Wednesday 11/19 Exam 2

Monday 11/24 Lecture 11: Climate Sensitivity (Hartmann, 9)

Wednesday 11/26 Lecture 12: Observed Climate Change (Hartmann, 11)

Monday 12/1 Lecture 13: The Carbon Cycle

Wednesday 12/3 Lecture 14: Climate and Climate Change Modeling (Hartmann, 10)

Monday 12/8 Lecture 14 (cont)

Wednesday 12/10 Exam 3

Grading

Exam 1 33%

Exam 2 33%

Exam 3 33%