

Department of Atmospheric Sciences

COURSE ANNOUNCEMENT – SEMESTER I – 2002–03

ATMOS 314: Tropical Meteorology

Call number: 00936

Instructor: Prof. Mingfang Ting, 202 Atmos. Sci. Bldg, 333-7105

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Room and Time: 109 Atmos. Sci. Bldg., 4:00–5:15 p.m. Tu Th

Credit: 4 hours or 1 unit

Prerequisites: Atmos 222 or consent of instructor

The tropics, roughly between 30°N and 30°S, accounts for half of the global surface area and is the source of all momentum and most of the heat in the atmosphere. Many of the tropical meteorological phenomena, such as hurricanes, El Niño, and monsoons, are getting worldwide attention from both scientists and the general public. This course introduces the basic synoptic and dynamic meteorology of the tropics and the unique characteristics of the tropical motion.

Course Content:

Special Features of Tropical Meteorology

Climatology of the Tropics

Monsoons

Instability of Tropical Flows

Easterly Waves and Tropical Cyclones

El Niño/Southern Oscillation

Intraseasonal Oscillation

Quasi-Biennial Oscillation

Texts: *Tropical Meteorology, Volumes I and II*, by G. C. Asnani, Noble Printers, 1993.
(Recommended)