SYLLABUS GEOF327
Spring 2017

Book: J. R. Holton: An introduction to Dynamical Meteorology. 4th edition

Chapter. 10
With the following exceptions
10.7 and 10.8

Chapter. 11
With the following exceptions
11.5

Additional material on
Rossby wave handout: Barotropic Model
ENSO handout: The Delayed Action Oscillator and Recharge Oscillator Models
Hadley cell handout: Held and Hou model
Monsoon handout: Mean monsoon and monsoon location
Madden Julian Oscillation
Mid-latitude Ocean Atmosphere interaction

Articles:
Hoskins, B. J. and P. J. Valdes, 1990: On the Existence of Storm-Tracks. Journal of the Atmospheric Sciences, 47, 1854-1864.
Frankignoul, C., 1985: Sea-Surface Temperature Anomalies, Planetary-Waves, and Air-Sea Feedback in the Middle Latitudes. Reviews of Geophysics, 23, 357-390.
Kushnir, Y., W. A. Robinson, I. Blade, N. M. J. Hall, S. Peng, and R. Sutton, 2002: Atmospheric GCM response to extratropical SST anomalies: Synthesis and evaluation. Journal of Climate, 15, 2233-2256.
Zhang, C. D., 2005: Madden-Julian oscillation. Reviews of Geophysics, 43.
Feldstein and Lee (1996): Mechanisms of Zonal Index Variability In a Aquaplanet GCM. *Journal of Atm. Science Vol. 53, No 23.*
Jin and Hoskins (1995) The direct response to tropical heating in a baroclinic atmosphere. *Journal of Atm. Science Vol. 52, No 3.*
Lu et al. (2006): Expansion of the Hadley cell under global warming. *Geophys. Res. Lett., 34, L06805, doi:10.1029/2006GL028443.*
Johanson and Fu (2009): Hadley Cell Widening: Model Simulations versus Observations. *J. of Climate Vol. 22, DOI: 10.1175/2008JCLI2620.1*
Boos and Kuang (2010): Dominant control of the South Asian monsoon by orographic insulation versus plateau heating. Nature, *Vol 46. doi:10.1038*
Knpof et al (2008): Sensitivity of the Indian Monsoon to Human Activities. Advances in Atm.