

	Date	Topic	Readings	Homework
		<u>Fluid Dynamics</u>	(HH = Holton and Hakim)	
1	R 9/7	Introduction	Tritton 1	
2	T 9/12	Reynolds number, Poiseuille Flow	Tritton 2	
3	R 9/14	Flow past a cylinder	Tritton 3, 8	
4	T 9/19	Rayleigh number and convection	Tritton 4	
5	R 9/21	Flow kinematics, Boundary layers	Tritton 6, 10-13, HH 1	
6	T 9/26	Navier-Stokes equations	Tritton 5, HH 1	
7	R 9/28	Conservation of mass and constituents	HH 2.5, 2.8	HW1 due
8	T 10/3	Review		
9	R 10/5	1st Quiz		
		<u>GFD Fundamentals</u>		
10	T 10/10	Rotation, Weather charts, thermal wind	HH 2, 3.4	
11	R 10/12	Equations of state, 1st Law of Thermo	HH 2.6, Gill App. 3	
12	T 10/17	Second law of thermodynamics	HH 2.7, 2.9	Frontal Collapse
13	R 10/19	Vorticity, Potential vorticity	HH 4.1-4.4	
14	T 10/24	Turbulence	HH 8.1-8.3	HW2 due
15	R 10/26	Momentum fluxes, wave drag	HH 8.1	
16	T 10/31	Review		
17	R 11/2	2nd Quiz		
		<u>Waves and Instabilities</u>		
18	T 11/7	Wave fundamentals	HH 5.1-5.2	
19	R 11/9	Shallow and deep water waves	HH 5.3	
20	T 11/14	Internal gravity waves	HH 5.4, 5.5.2, 9.4	HW3 due
21	R 11/16	Rossby Adjustment	HH 4.5, 5.6	
22	T 11/21	Rossby waves	HH 5.7, 6	
	<i>Nov 23-26</i>	<i>Thanksgiving Break</i>		
23	T 11/28	Baroclinic instability	HH 7	
24	R 11/30	Inertial instability	HH 5.5.1	
25	T 12/5	Kelvin-Helmholtz and barotropic instabil	HH 11.1.3	HW4 due
26	R 12/7	Review		
27	T 12/12	3rd Quiz		