

	<u>Date</u>	<u>Topic</u>	<u>Readings</u>	<u>Homework</u>
		<u>Fluid Dynamics</u>	<u>(HH = Holton and Hakim)</u>	
1	R 9/5	Introduction	Tritton 1	
2	T 9/10	Reynolds number, Poiseuille Flow	Tritton 2	
3	R 9/12	Flow past a cylinder	Tritton 3, 8	
4	T 9/17	Rayleigh number and convection	Tritton 4	
5	R 9/19	Flow kinematics, Boundary layers	Tritton 6, 10-13, HH 1	
6	T 9/24	Navier-Stokes equations	Tritton 5, HH 1	
7	R 9/26	Conservation of mass and constituents	HH 2.5, 2.8	HW1 due
8	T 10/1	Review		
9	R 10/3	1st Quiz		
		<u>GFD Fundamentals</u>		
10	T 10/8	Rotation, Weather charts, thermal wind	HH 2, 3.4	
11	R 10/10	Equations of state, 1st Law of Thermo	HH 2.6, Gill App. 3	
12	T 10/15	Second law of thermodynamics	HH 2.7, 2.9	Frontal Collapse
13	R 10/17	Vorticity, Potential vorticity	HH 4.1-4.4	
14	T 10/22	Turbulence	HH 8.1-8.3	HW2 due
15	R 10/24	Momentum fluxes, wave drag	HH 8.1	
16	T 10/29	Wave fundamentals	HH 5.1-5.2	
17	R 10/31	Review		
18	T 11/5	2nd Quiz		
		<u>Waves and Instabilities</u>		
19	R 11/7	Shallow and deep water waves	HH 5.3	
20	T 11/12	Internal gravity waves	HH 5.4, 5.5.2, 9.4	HW3 due
21	R 11/14	Rossby Adjustment	HH 4.5, 5.6	
22	T 11/19	Rossby waves	HH 5.7, 6	
23	R 11/21	Baroclinic instability	HH 7	
24	T 11/26	Inertial instability	HH 5.5.1	
	Nov 28-29	<i>Thanksgiving Break</i>		
25	T 12/3	Kelvin-Helmholtz and barotropic instabil	HH 11.1.3	HW4 due
26	R 12/5	Review		
27	T 12/10	3rd Quiz		