

	Date	Topic	Readings	Homework
		<u>Fluid Dynamics</u>		
1	R 9/6	Introduction	Tritton 1	
2	T 9/11	Reynolds number, Poiseuille Flow	Tritton 2	
3	R 9/13	Flow past a cylinder	Tritton 3,8	
4	T 9/18	Rayleigh number and convection	Tritton 4	
5	R 9/20	Flow kinematics, Boundary layers	Tritton 6, 10-13	
6	T 9/25	Navier-Stokes equations	Tritton 5 Holton 2.1	HW1 due
	9/27-10/5	SPARC Meeting in Kyoto		
	10/8-10/9	UCAR Members Meeting Boulder		
7	R 10/11	Conservation of mass; Review	Holton 2.5 Gill 4.1-4.3	
8	T 10/16	1st Quiz		
		<u>GFD Fundamentals</u>		
9	R 10/18	Rotation, Weather charts, thermal wind	Holton 2.2-2.4, 3.4, 6.1 Gill 7.6-7.7	<i>Frontal Collapse</i>
10	T 10/23	Equations of state, 1st Law of Thermo	Gill App. 3	
11	R 10/25	Second law of thermodynamics	Gill 4.4-4.8 Holton 2.6	
12	T 10/30	Vorticity, Potential vorticity	Holton 2.7, 9.5.1	HW2 due
13	R 11/1	Turbulence	Holton 4	
14	T 11/6	Momentum fluxes, wave drag	Holton 5.1, 5.3.2-5.3.3	
15	R 11/8	Review		
16	T 11/13	2nd Quiz		
		<u>Waves and Instabilities</u>		
17	R 11/15	Wave fundamentals	Holton 7.1-7.2 Gill 5.1-5.2	
18	T 11/20	Shallow and deep water waves	Holton 7.3.2 Gill 5.3-5.6	HW3 due
	11/22-11/25	Thanksgiving Break		
19	T 11/27	Internal gravity waves	Holton 7.4-7.5, 9.4 Gill 6.1-6.6, 8.1-8.2	
20	R 11/29	Rosby Adjustment	Holton 7.6 Gill 7.1-7.5	
21	T 12/4	Rosby waves	Holton 6.1, 7.7 Gill 13.1-13.7	
22	R 12/6	Baroclinic instability; Inertial instability	Holton 8.4, 7.5.1	
23	T 12/11	Kelvin-Helmholtz, Barotropic instability		HW4 due
24	R 12/13	Review		
25	W 12/19	3rd Quiz 12:25-2:25		