Week (Monday)	Topics	Reading (Munson 8th edition) **Munson, Young & Okiishi** **Fundamentals of Fluid Mechanics**
01/18/21	Properties of Fluids & Flows, Dimensions, Units, Ideal Gases	Chapter 1 skim it; Chapter 2 to section 2.6
	Pressure, Hydrostatic equilibrium **Class starts Wed; Discussions on 1/25; OH on 2/1**	**Lectures 1 and 2 Statics**
01/25/21	Hydrostatic equilibrium	Chapter 2 to section 2.7 - 2.8
	Multi-density fluids	**Lectures 3 - 5 Statics**
02/01/21	Thermodynamics, Pressure in Ideal Gases	Chapter 2 section 2..9 - 2.11
	Isentropic Flows, Barometers	**Lectures 6 - 8 Statics**
02/08/21	Forces & Torques on Submerged Plates	Chapter 2 sections 2.12 - end
	Buoyancy, Archimedes, Gauss	**Lectures 9 - 11 Statics**
02/15/21	Suction Cups, Atlantis, Archimedes and Forces on Plates	
	Conservation Laws and Euler's Equation **NO CLASS MONDAY - PRESIDENTS DAY**	**Lectures 12 -13 Statics, Euler, Vorticity**
02/22/21	**Mid-Term 1 on Friday**	Chapter 3
	Streamlines, streaklines, particle paths	**Lectures 14 - 15 Streamlines**
03/01/21	Bernoulli Equation, Wings, Stagnation Points	Chapter 4 section 4.1
	Applications of Bernoulli	**Lectures 16 - 18 Bernouii, C. V.**
03/08/21	Bernoulli applied to Potential Flow, Barotropic Flow, Rotating Flow	Chapter 4 section 4.2 - end
	Control Volumes	**Lectures 19 - 21 C. V.**
03/15/21	Control Volumes	
	moving frames	**Lectures 22 - 24 C. V.**
03/22/21	**SPRING BREAK!!!**	
03/29/21	Control Volumes rockets, wind turbines	Chapter 5
	Sources/sinks, irreversibility, Navier-Stokes equation, laminar vs turbulent	**Lectures 25 - 27 pt sources/sinks, viscosity**
04/05/21	Dimensional analysis	Chapter 6
	boundary layers	**Lectures 28 - 30 Dimensional Analysis**
04/12/21	**Mid-term 2 on Friday**	Chapter 8
	Navier-Stokes Equation's exact solutions	**Lectures 31 - 32 Exact Solutions**
04/19/21	Pipe, channel, and Couette flows, Laval Nozzle, pt vortices	Chapter 7
		Lectures 33 - 35 Solutions, Compressible
04/26/21	**Last Class Friday**	Chapter 11 sections 11.1 - 11.7
	turbulence theory and practice	**Lectures 36 - 38 Turbulence - Special Topics**
05/03/21	**DEAD WEEK**	
	Voluntary Review	
05/10/21	**FINAL EXAM WEEK**	
	Final on 5/11/21 Tuesday 3~6PM	