

ENGR335 Fall 2009 Class Schedule

Due	Class #	Topic	Reading	Set #	Problems
	1	Introduction and Philosophy	1.1 - 1.5	0	handout
	2	Fluid Properties	2.1 - 2.8	1	2.2,5,13,33,45
Sept 4	3	Pressure	3.1 - 3.3	2	2.49,58, 3.1,4
	4	Hydrostatic Forces	3.4	3	3.6,10,15,42
	5	Hydrostatics, Buoyancy	3.5 - 3.6	4	3.49,59,65,86
Sept 11	6	Flow Fields	4.1 - 4.2	5	3.95,4.2,12
	-	Labor Day - No Class!	--	--	
	7	Fluid Acceleration	4.3 - 4.4	6	4.22,26,29,30
Sept 18	8	Bernoulli's Equation	4.5	7	4.51,63,103
	9	Pressure Fields	4.6 - 4.9	8	4.65,66,73,80
Sept 25	10	Flowrate	5.1	9	5.1,9,21
	-	EXAM #1	--	--	
	11	Control Volume Approach	5.2	10	5.19,32,33
	12	Continuity	5.3 - 5.5	11	5.39,55,59
Oct 2				12	5.75,78,80
	13	Fountain Experiment	--	13	5.91,handout
	14	Energy Equation	7.1 - 7.2	14	7.2,5,8
Oct 9	15	Energy Eqn. Applications	7.2, 7.4	15	7.16,26
	16	More Energy Eqn. Apps.	--	16	7.39,63,75
	17	Momentum Equation	6.1	17	6.1,16,17
Oct 16	18	Momentum Equation Apps.	6.2	18	6.39,86
	19	Momentum Equation Apps.	7.3	19	6.92,93,98,7.51
	20	Dimensional Analysis	8.1 - 8.4	20	8.1,2,3
Oct 23	21	Similitude, Model Studies	8.5 - 8.8	21	8.9,41,45
	22	Pipe Flow	10.1 - 10.2	22	10.1,2,7
Oct 30	23	Review	--	--	
	-	EXAM #2	--	--	
	24	Turbulent Pipe Flow	10.3	23	10.8,16,23
	25	Friction Losses	10.4	24	10.39,46,53,68
Nov 6	26	Fitting Losses	10.5	25	10.78,83

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	27	Pump and Pipe Systems	10.6	26	10.86,89,109,112
	28	Flow Measurements	13.1 - 2	27	13.4,6,8
Nov 13	29	More Flow Measurements	--	28	13.9,26,36
	30	Lab	--	29	handout
	31	Surface Resistance	9.1 - 9.3	30	9.5,20,24
Nov 20	32	Boundary Layers	9.4	31	9.37,40
	33	Turbulent Boundary Layers	9.5	32	9.41,61,72
	34	Lift and Drag	11.1 – 11.5	33	11.2,3,8
Nov 27	35	Vortex Shedding and Lift	11.3, 11.8	34	11.13,14,28
Dec 4	36	Terminal Velocity	11.6	35	11.36,45,handout
	37	Review, Hydraulic Radius, and Open Channel Flow	10.7. 15.1	36	10.115,116,117; 15.1,2
	-	EXAM #3	--	--	
	38	Open Channel Flow	15.2	37	15.4,11,22,29
Dec 11	39	Review			
Dec 18	-	FINAL EXAM	--	--	

Homework solutions will be available on the ENGR 335 Internet site (www.webs1.uidaho.edu/engr335-01/). I plan to update the solutions approximately once a week.

You may network with me or with each other as you work on your home work assignments – but please do your own work (not a copy of my work or someone else’s work). *Please do not look at a posted homework solution until after you have sent me your work.*

The due dates for each homework set (one week’s worth of homework is a homework set) are shown above. There is some flexibility with dates but I strongly recommend that you keep up with the above schedule. If you have a crisis that develops during the semester (sickness, death in family, ...) and cannot keep up then please get in touch with me. The deadline for all assignments and exams is Dec 21, 2009.