

## EGEN 335

Fall 2017

Dr. Cahoor

Day	Date	Topic	Textbook Reading	Work-on-Your-Own Study Problems	Videos of Worked Textbook Problems	Quiz	HW Due 5:00 p.m.
Mon	8/28/2017	Fluid Properties	1.1 - 1.10	1.46, 1.85, 1.111, 1.130	1.81, 1.86		
Wed	8/30/2017	Pressure	2.1, 2.2, 2.3	2.10, 2.13, 2.21	2.15		
Fri	9/1/2017	Manometry	2.4, 2.5, 2.6, 2.7	2.34, 2.46	2.35, 2.38	Quiz 1	
Mon	9/4/2017	Labor Day Holiday					HW 1
Wed	9/6/2017	Fluid Statics	2.8	2.82, 2.86, 2.88	2.89, 2.94		
Friday	9/8/2017	Fluid Statics	2.10	2.109, 2.116, 2.128, 2.131	2.122	Quiz 2	
Mon	9/11/2017	Buoyancy/Stability	2.11	2.144, 2.146, 2.148	2.138		HW 2
Wed	9/13/2017	Pressure Variation in a Moving Fluid	2.12	2.152, 2.156, 2.159	2.157, 2.160		
Friday	9/15/2017	Kinematics - Velocity and Acceleration Fields	4.1, 4.2, 4.3	4.6, 4.10, 4.30, 4.39, 4.55	4.12, 4.42, 4.54	Quiz 3	
Mon	9/18/2017	Reynolds Transport Theorem	4.4	4.59, 4.60, 4.63, 4.66, 4.68	4.62, 4.67		HW 3
Wed	9/20/2017	Conservation of Mass - the Continuity Equation	5.1	5.12, 5.22, 5.26, 5.30	5.11, 5.15, 5.27		
Friday	9/22/2017	Conservation of Mass - the Continuity Equation				Quiz 4	
Mon	9/25/2017	Newton's 2nd Law along a Streamline (Bernoulli)	3.1, 3.2	3.8, 3.33	3.3		HW 4
Wed	9/27/2017	Newton's 2nd Law across a Streamline	3.3, 3.4	3.13, 3.14			
Friday	9/29/2017	Stagnation Pressure/ Applications of Bernoulli's	3.5	3.21, 3.28, 3.36	3.27, 3.59		
Mon	10/2/2017	Applications of Bernoulli's Equation	3.6, 3.7, 3.8	3.82, 3.102, 3.112	3.88, 3.101	Quiz 5	
Tue	10/3/2017	HW Due on a Tuesday					HW 5
Wed	10/4/2017	Exam I					
Friday	10/6/2017	Newton's 2nd Law - Linear Momentum	5.2	5.38, 5.43	5.39, 5.40		
Mon	10/9/2017	Applications of Linear Momentum		5.62, 5.65, 5.67	5.54, 5.73		
Wed	10/11/2017	Newton's 2nd Law - Moment of Momentum		5.70, 5.74	5.89		
Friday	10/13/2017	Applications of Moment of Momentum		5.83, 5.86, 5.88		Quiz 6	
Mon	10/16/2017	1st Law of Thermodynamics - The Energy Equation	5.3	5.102, 5.116	5.102		HW 6
Wed	10/18/2017	Applications of the Energy Equation		5.122, 5.124, 5.128, 5.129	5.123, 5.125		
Friday	10/20/2017	Fluid Element Kinematics	6.1	6.5, 6.7, 6.9	6.8	Quiz 7	
Mon	10/23/2017	Conservation of Mass	6.2	6.12, 6.17, 6.20	6.12, 6.19		HW 7
Wed	10/25/2017	Conservation of Linear Momentum	6.3	6.22, 6.23	6.24, 6.25		
Friday	10/27/2017	Inviscid Flow	6.4	6.27, 6.36	6.37, 6.35	Quiz 8	
Mon	10/30/2017	Plane Potential Flows - Analytic Solutions	6.5, 6.6, 6.7	6.39, 6.43, 6.51	6.42, 6.58, 6.59		HW 8
Wed	11/1/2017	Plane Potential Flows - Numeric Solutions		6.55, 6.59, 6.63			
Friday	11/3/2017	Viscous Flow - Navier Stokes	6.8, 6.9	6.79, 6.86, 6.90	6.80, 6.91, 6.97		
Mon	11/6/2017	Dimensional Analysis	7.1 - 7.7	7.9, 7.18, 7.43	7.39		
Wed	11/8/2017	Modeling and Similitude	7.8 - 7.9	7.56, 7.61	7.60	Quiz 9	
Thur	11/9/2017	HW Due on a Thursday					HW 9
Friday	11/10/2017	Veteran's Day Holiday					
Mon	11/13/2017	Pipe Flow - Turbulent	8.1 - 8.5	8.3, 8.21, 8.29	8.18, 8.31		
Wed	11/15/2017	Pipe Flow - with Pumps		8.52, 8.71, 8.93	8.57, 8.66	Quiz 10	
Thur	11/16/2017	HW Due on a Thursday					HW 10
Friday	11/17/2017	Exam II					
Mon	11/20/2017	General Lift and Drag	9.1	9.1, 9.5			
Wed	11/22/2017	Thanksgiving Holiday					
Friday	11/24/2017	Thanksgiving Holiday					
Mon	11/27/2017	Boundary Layers	9.2	9.13, 9.20, 9.27			
Wed	11/29/2017	Drag, Lift and Magnus	9.3, 9.4	9.49, 9.56, 9.64, 9.103			
Friday	12/1/2017	Compressible Flow Thermo/Stagnation	11.1, 11.2	11.2, 11.12	11.2, 11.9, 11.12	Quiz 11	
Mon	12/4/2017	Compressible Flow Ma, c, Shock Waves	11.3 - 11.5	11.18, 11.32	11.18, 11.24, 11.29, 11.32		HW 11
Wed	12/6/2017	Compressible Flow Isentropic Flow	11.6	11.36	11.36, 11.41		
Friday	12/8/2017	Compressible Flow 1-D Variable Area	11.7	11.49, 11.50	11.54		
	12/12/2017	Tuesday Final Exam	4:00 - 5:50				