ENG ME 302 Engineering Mechanics II **Spring 2010**

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Text: J. H. Williams, Jr., *Fundamentals of Applied Dynamics*, Wiley & Sons, 2006.

Week Beginning	Topics	Reading
1/11	Kinematics of moving reference frames	1.1–1.14, 2.1–2.3
1/18	"	3.1–3.2, 3.4–3.6
1/25	Kinematics of rigid bodies motion	3.3
2/1	Kinetics of rigid body motion	6.1–6.2
2/8	"	6.3–6.4
2/15	"	"
2/22	Work and energy	5.1–5.3
3/1	Generalized coordinates	5.4
3/8	Spring break	
3/15	Variational principles	5.4–5.7
3/22	Lagrange's equation for systems of particles	19.1–19.5
3/29	Lagrange's equation for systems of rigid bodies	6.4–6.6
4/5	"	"
4/12	Mechanical vibrations	8.1–8.2
4/19	"	8.3–8.5
4/26	"	8.3–8.5

Grading: Three tests, each worth 25% of final grade.
Homework assignments, together worth 25% of final grade.

Requirements for Homework Assignments

1. Do your homework on clean $8\frac{1}{2}'' \times 11''$ paper. Staple all sheets together.
2. Write carefully and neatly.
3. Buy a template for drawing circles and a scale. Draw all figures and diagrams with these instruments.
4. When practical, develop an algebraic result before substituting numerical values.
5. Homework assignments should be submitted in class on the due date. Late assignments will not be accepted.