

**GE 202 DYNAMICS COURSE SYLLABUS**

**First Semester 1428/1429 H**

**Textbook: Engineering Mechanics, Vol. 2, Dynamics, Fifth Edition, SI Version  
by J.L. Meriam and L.G. Kraige, 2003**

<b>Topic</b>	<b>Article</b>	<b>Lecture</b>	<b>Tutorial</b>	<b>Homework</b>	<b>Week</b>
<b>INTRODUCTION</b>	1/1-7			Revise	
<i>Vector Operations</i>	Appendix C/7			Appendix C	<b>1</b>
<b>KINEMATICS OF PARTICLES</b>					<b>3.5</b>
Rectilinear Motion	2/1,2	2.31	2.35	2.23, 2.33	
Plane Curvilinear Motion	2/3				
# x-y coordinates	2/4	2.92	2.83	2.78, 2.226	
# n-t coordinates	2/5	2.114	2.128	2.120	
# r-θ coordinates	2/6	2.138	2.140	2.142, 2.154	
Relative Motion	2/8	2.190	2.199	2.200, 2.202	
Constrained Motion	2/9	2.208	2.210	2.211	
<i>Summary and Quiz</i>		F.E. Sample		Sample Problems	
<b>KINEMATICS OF RIGID BODIES</b>					<b>3</b>
Rotation	5/1,2	5.13	5.3	5.5	
Relative Velocity	5/4	5.79	5.69	5.74, 5.76	
Instantaneous Centers	5/5	5.92	5.91	5.93, 5.94	
Relative Acceleration	5/6	5.141	5.137	5.129, 5.134	
Rotating Axes	5/7	5.151	S 5.16	5.153	
<i>Summary and Quiz</i>		F.E. Sample		Sample Problems	
<b>KINETICS OF PARTICLES</b>					<b>3</b>
Newton's Second Law	3/1,2				
Equation of Motion	3/3				
# Rectilinear motion	3/4	3.28	3.12	3.7, 3.27	
# Curvilinear motion	3/5	3.84	3.64	3.73, 3.79	
Work and Energy	3/6,7	3.117	3.143	3.121, 3.149	
Impulse and Momentum	3/8				
# Linear	3/9	3.185	3.203	3.193	
# Angular	3/10	3.222	3.223	3.221	
Impact	3/12	3.348	3.247	3.248	
<i>Summary and Quiz</i>		F.E. Sample		Sample Problems	
<b>KINETICS OF RIGID BODIES</b>					<b>4.5</b>
Equations of Motion	6/1,2				
# Translation	6/3	6.15	6.4	6.5	
# Rotation	6/4	6.42	6.56	6.55	
# General Motion	6/5	6.77, 6.90	S6.7, 6.95	6.103	
Work and Energy	6/6	6.122	6.127	6.128, 6.215	
Impulse and Momentum	6/8	6.174	6.173	6.179	
<i>Summary and Quiz</i>		F.E. Sample		Sample Problems	

**MIDTERM EXAMS: I- Sunday, 1/11 /1428 H ( 11/ 11 / 2007 G), 7:00 PM**

**II- Sunday, 29/11 /1428 H ( 9/ 12 / 2007 G), 7:00 PM**

<b>TWO MID TERM EXAMS</b>	<b>40%</b>
<b>QUIZES &amp; HOMEWORK</b>	<b>10%</b>
<b>FINAL EXAM</b>	<b>50%</b>

Please note that excuses for the exams must be submitted *within a week of the exam date*. Late documents will not be accepted. **Those students who are absent more than 25% will not be allowed to take the Final Exam. Any excuse for attending the lecture will not be accepted.**