

MEEM5701 Intermediate Dynamics

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Text: Analytical Dynamics by Haim Baruh

<u>Week</u>	<u>Reading</u>	<u>Topic</u>
1	1.1-1.13	Basic Principles
2	1.1-1.8,2.1-2.5	Basic Principles, Moving coordinate frames
3	2.1-2.5	Moving coordinate frames, angular velocity
4	2.6-2.8	Angular Acceleration, moving frames
5	3.1-3.12	Dynamics of a System of Particles
6	6.1-6.6	Rigid Body Geometry, Moment of Inertia
7	7.1-7.6	Rigid Body Kinematics
8	7.1-7.6	Rigid Body Kinematics
9	8.1-8.12	Rigid Body Dynamics
10	8.1-8.12	Rigid Body Dynamics
11	4.1-4.5	Generalized coordinates, constraints, virtual work
12	4.6-4.10	Hamilton's Principle, Lagranges's Equations
13	4.6-4.10	Hamilton's Principle, Lagranges's Equations
14	5.1-5.13	Routh's method for ignorable coordinates, Hamilton's Principle
15	9.1-9.9	Kane's Equations

Grading:	Test 1	100
	Test 2	100
	Final	200
	<u>Homework</u>	<u>100</u>
	Total	500