ENG ME 302 Engineering Mechanics II   **Fall 2022**

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Text: James H. Williams, Jr., *Fundamentals of Applied Dynamics*,
    MIT Press, 2019, ISBN 9780262039710.

Week Beginning	Topics	Reading
9/5	Particle kinematics	Chs. 1, 2; Secs. 3-1, 3-2
9/12	Moving reference frames	Secs. 3-3 — 3-5
9/19	"	"
9/26	Momentum principles for particles	Ch. 4
10/3	"	"
10/10	Work and energy for particles	Secs. 5-1 — 5-3
10/17	Lagrange equations for particles	Secs. 5-4 — 5-7
10/24	"	"
10/31	Momentum principles for rigid bodies	6-1, 6-2
11/7	Dynamic properties of rigid bodies	6-3, 6-4
11/14	Rigid body dynamics	6–4
11/21	Lagrange equations for rigid bodies	6-5, 6-6
11/28	"	"
12/5	Mechanical vibrations	Secs. 8-1, 8-3
12/12	"	"

Grading: Two tests, each worth 25% of final grade;
           Final exam, worth 25% of final grade;
           Homework assignments, together worth 10% of final grade;
           Laboratory project, worth 15% of final grade.