



# STARK STATE COLLEGE

## GENERAL SYLLABUS

### Course Information

**Course Name:** Dynamics  
**Course Number:** MET223

### Required Materials

**Textbook(s):** Applied Mechanics for Engineering Technology, 8<sup>th</sup> ed., Keith Walker, Pearson Prentice Hall  
**Required Readings:** None  
**Additional Materials:** Scientific Calculator, Engineering or graph paper.

### Course Outline/Calendar

The date of coverage and order of coverage may be modified based on the faculty member and events beyond the control of faculty members that interfere with class times and teaching.

Week	Chapter/Topic/Lab
1	Chapter 1-Math Review (GLO 1,2,3,4)
2	Chapters 2,6-Vectors and Introduction to Mechanics
3,4	Chapter 10-Kinematics – Rectilinear Motion (GLO 2,3,4)
5	Chapter 2,6,10, and 11-Kinematics – Angular Motion (GLO 2,3,4), Test #1
6	Chapter 7-Friction (GLO 2,3,4)
7	Chapter 9-Mass Moment of Inertia (GLO 2,3,4)
8,9	Chapter 12-Plane Motion –Analytically (GLO 2,3,4)
10	Chapters 7,9,12-Software-Plane Motion – Numerically (GLO 2,3,4), Test #2
11	Chapter 13- Kinetics - Rectilinear Motion (GLO 2,3,4)
12	Chapter 13-Kinetics - Angular Motion (GLO 2,3,4)
13,14	Chapter 14-Work, Energy, Power (GLO 1,2,3,4)
15	Chapters 13,14, and 15-Intro to impulse and Momentum (GLO 2,3,4), Test #3
16	Finals Week