

200 Level Undergraduate Courses

201. Materials Science. Lecture 3 hours; 3 credits. Principles of materials science with emphasis on the relationship between structure and properties and their control through composition and processing. Metals, polymers, Ceramics and composite materials are considered. (offered fall)

203. Mechanical Engineering Laboratory I - Materials Science. Laboratory 2 hours; 1 credit. Corequisites: ME 201 and C S 150. This laboratory involves experiments demonstrating lecture material covered in the ME 201 course. (offered fall)

204. Engineering Mechanics I - Statics. Lecture 3 hours; 3 credits. Prerequisites: MATH 211, PHYS 231 N7 ME 111 Introduction to mechanical engineering problems and their solutions through the study of statics of particles and rigid bodies. Emphasis will be placed on the relationship of the static loads with the mechanical properties of the materials being considered. Introduction to the concepts of stress and strain and internal forces as applied to static bodies. (offered fall, spring)

205. Dynamics. Lecture 3 hours; 3 credits. Prerequisite: ME 204. Corequisite MATH 212. Introduction to engineering problems and their solutions through a study of the dynamics of particles and rigid bodies. General force systems are studied including friction. (offered fall, spring, summer)

220. Engineering Mechanics II - Solid Mechanics. Lecture 3 hours; 3 credits. Prerequisite: ME 204. Introduction to the concepts of stress and strain and their relation to each other. Forces and deflections of rods subject to axial loads, twisting of shafts and tubes subject to applied torque, and bending of beams. (offered fall, spring, summer)

225. Mechanical Engineering Laboratory II - Solid Mechanics. Laboratory 2 hours; 1 credit. Prerequisite: C S 150. Corequisite: ME 220. Mechanical behavior of rods, shafts, tubes, and beams under loading is examined. Introduction to strain gages and data reduction, including statistical treatment of data. Topics parallel lecture work in ME 220. (offered fall, spring)

230. Computer-Aided Engineering Graphics. Lecture 1 hour; laboratory 2 hours; 2 credits. Prerequisite: C S 150. A modern treatment of the basic principles of engineering graphics and computer-aided drafting including orthographic projection, isometric drawing, dimensioning/tolerancing, sectioning and descriptive geometry, with a major emphasis on drafting using computer software in the microcomputer laboratory. (offered fall, spring)

295, 296. Topics in Mechanical Engineering. Lectures variable; 1-3 credits each semester. Department chair permission required.