

TO: The Engineering Faculty

FROM: The Faculty of the School of Mechanical Engineering

DATE: August 23, 2000

RE: ME 582 Course Description Changes

The Faculty of the School of Mechanical Engineering has approved the following editorial changes in course description effective Spring Semester 2001. This action is now submitted to the Engineering Faculty with a recommendation for approval.

FROM:

ME 582 Thermal Stress Analysis Sem. 1. Class 3, cr. 3 (el.). (Offered in alternate years.)

Prerequisite: ME 323, ME 315 or equivalent, ordinary differential equations, or consent of instructor.

Methods for determining the deformations and stresses due to temperature changes in materials. Fundamentals of thermoelasticity. Solutions to two-dimensional thermoelastic problems. Thermal stresses in beams and plates. Thermoelastic buckling. Introduction to thermoviscoelasticity, thermal fracture and fatigue. Applications to dissimilar materials such as ceramic coatings, glass-metal bonds, and composites. Professor Kokini.

TO:

ME 582 Thermal Stress Analysis Sem. 1. Class 3, cr. 3. (Offered in alternate years.)

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Methods for determining the deformations and stresses due to temperature changes in materials. Fundamentals of thermoelasticity. Solutions to two-dimensional thermoelastic problems. Thermal stresses in beams and plates. Thermoelastic buckling. Introduction to thermal fracture and fatigue. Applications to high-temperature materials in automotive structures, electronics, composites, and advanced materials. Professor Kokini.

REASON: The updated description more accurately describes the current content of the course. The changes are largely editorial with some slight changes in emphasis because of the evolution of the course. The elective course designation "(el.)" will also be deleted because it is inconsistent with the rest of the Undergraduate Catalog.

APPROVED FOR THE FACULTY
OF THE SCHOOLS OF ENGINEERING
BY THE COMMITTEE ON
FACULTY RELATIONS

CFR Minutes # 929

Date 10/11/00

Chairman CFR C. D. Suttar

E. Daniel Hirleman
E.D. Hirleman, Head
School of Mechanical Engineering