

UNIVERSITY OF CALIFORNIA, BERKELEY

Department of Mechanical Engineering

ME 286: Theory of Plasticity

Fall Semester 2018: MWF 2:00-3:00, 3119 Etcheverry Hall

Instructor: J. Casey (jimcasey@berkeley.edu)

Office Hours: MWF 3:00-4:00 in 6125 Etcheverry Hall

OUTLINE OF COURSE

0. Introduction

1. Classical theory of plasticity, stress space and strain space formulations

2. Finitely deforming elastic-plastic materials, Lagrangian representation

3. Rigid-plastic materials, Lagrangian and Eulerian representations

4. Elastic-plastic materials, Eulerian representation

5. Thermoplasticity