

Fracture and Fatigue of Engineering Materials

MATSCEN 5763.70

Credit Hours:

1.50 - 1.50

Course Components: Lecture

Course Description:

This seven week course will provide a background in fracture and fatigue with a survey of material-specific mechanisms.

Prerequisites and Co-requisites:

Prereq: 3261, or Grad standing; or permission of instructor.

Course Goals / Objectives:

- Gain an understanding of linear elastic and elastic-plastic fracture mechanics, and apply this knowledge to the analysis and design of structural materials
- Consider damage tolerant and total lifetime approaches to fatigue failure. Concepts will be reinforced through case studies