

Project Assignment: Critical Review Presentation

Proposal Due: 5 p.m. 9/28/07

Paper Due: in class 11/20/07

Oral Presentations: Dec. 4, 6 and 11, 12:30-1:45 p.m.

The oral presentation should comprise a very short summary of the critical review paper. Each speaker will be allotted 10 min for the presentation, plus 5 min for questions and discussion.

Tuesday, December 4

Michelle Michalenko "Mechanisms and Measurements of Viscoelasticity in Bone Fibrils"

Timothy Rodts "A Review of 3D Woven Composites"

Michael Giordano "A Critical Review of Woven Materials and Their Meso-Scale Structure"

Julia Henkels "Processing Effects on the Mechanical Behavior of Melt Spun Polymer Fibers"

Zachary Kaltz "Fatigue Behavior Studies in Trabecular Bone"

Thursday, December 6

Charles Schenk "Brittle Failure of Steels by Environment Sensitive Fracture"

Craig Fryman "Variation of Mechanical Properties due to Structural Changes of Hydrogels for Use in Cartilage Repair or Replacement"

Timothy Conrad "A Brief Review of PEEK Carbon Fibers Composites for Use in Bone Compression Plates"

Paul Mikrut "The Micromechanical Nature of Failure in the Gigacycle Limit"

Yang Zhao "Wear of Dental Materials"

Tuesday, December 11

Edytka Christner "Mechanical Behavior of Permanent and Removable Epoxy Foams for the Encapsulation of Electronics"

Michael Lavery "Modeling the Effects of Stone-Wales Defects on the Structure and Mechanical Behavior of Carbon Nanotubes under Tensile Loading"

Constance Slaboch "Wear of Articular Cartilage leads to Osteoarthritis"

Nathaniel Hollingsworth "Effect of Composition and Constituent Orientation on Articular Cartilage Mechanical Behavior"