EN221: Foundations of Continuum Mechanics

Instructor:

Prof. V. B. Shenoy
604 Barus and Holley
Phone: 863-1475 E-mail: Vivek_Shenoy@brown.edu
Office Hours: Tuesday 3:30-5:00 or by appointment

Grader:

Viswanath Chinthapenta
Phone: 573-4579
Viswanath_Chinthapenta@brown.edu

Course Web-site:

http://www.engin.brown.edu/Courses/Engn2210/

Textbooks (Required):

2. R. W. Ogden Non-Linear Elastic Deformations, Dover (1997). Chapters 1-4 and parts of the rest of the book will be covered.

Supplementary Reading:


Main Topics:

1. Tensor theory, Integral theorems applied to tensor fields
2. Kinematics of motion and deformation
3. Balance laws and field equations
4. Constitutive equations

Grading:

Homework (10 Sets) – 60 % (Homework sets are due in class on Wednesdays. No late homework sets will be accepted)

Final Exam – 40 % (details to be announced in November)