

# Math 649K Continuum Mechanics

## Spring 2023



**Topics:** Tensors, general principles in mechanics, applications to solid deformation and fluid flow

**Description:** This course begins with a general theoretical framework for deriving equations governing the mechanics of fluids and solids. Then, the course explores numerous examples of complex phenomena that can emerge from basic material properties. The topics have a wide variety of applications in engineering and natural sciences.

**Prerequisites:** Undergraduate-level linear algebra and differential equations

**Structure:** Homework sets and student-driven project

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