Course Description
This course is designed for M.S.-level students. It covers the hierarchy of mathematical models for compressible flows and an introduction to finite difference, finite volume, and finite element methods for their computation.

Course Outline

Prerequisites
Basic knowledge of linear algebra and ODEs (CME 206 or equivalent).

Textbooks and Other Reading Materials
- Lecture notes and various reading materials.

Homeworks
Assigned in general on a weekly basis.
Exam

Two-day Take Home Final Exam.
Subject to the Stanford Honor Code.

Course Grade

Based 65% on the grades for the homework assignments.
Based 35% on the grade for the Take Home Final Exam.

In fairness to all, and in order to enable a timely posting of the solutions: homework assignments will be due on time or will not be graded; Take Home Final Exam is administered only once.

Instructor

Charbel Farhat, Department of Aeronautics and Astronautics
William F. Durand Building, Room 257, 496 Lomita Mall, Mailcode 4035
Telephone: (650) 723-3840; FAX: (650) 725-3525; e-mail: cfarhat@stanford.edu

Office Hours: 1.5 hours after each lecture and/or by appointment, Durand Building, Room 257

Teaching Assistant

Jonathan Ho
Department of Aeronautics and Astronautics
William F. Durand Building, TBD, 496 Lomita Mall, 94305
E-mail: jbho@stanford.edu

Office Hours: M 10:30 – 13:30, Tu 16:30 – 18:00, Th 15:00 – 16:30, Durand 216

Students with Documented Disabilities

Students who may need an academic accommodation based on the impact of a disability must initiate the request with the Student Disability Resource Center (SDRC) located within the Office of Accessible Education (OAE). SDRC staff will evaluate the request with required documentation, recommend reasonable accommodations, and prepare an Accommodation Letter for faculty dated in the current quarter in which the request is being made. Students should contact the SDRC as soon as possible since timely notice is needed to coordinate accommodations. The OAE is located at 563 Salvatierra Walk (phone: 723-1066).