Instructors

• Professor James Olson
  – Pulp and paper centre rm 205
  – 604.822-5705
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• Ali Elahimehr (TA)
  – Alielahi@interchange.ubc.ca
  – Pulp and paper centre, rm 310
Textbook


Alternatively, the following full texts are also perfectly acceptable (although more expensive):

  - Or the 4th, 3rd editions are fine.
Class Schedule

• Where
  – Civil and Mechanical Eng. 1204

• When
  – Mon, Wed, Fri 9:00 - 10:00

• Laboratory
  – Wind tunnel and arranged with TA. We will schedule this later

• Pre-Requisite
  – Mech 380
Grading

• Undergrad
  – 50% Final Exam
  – 25% Midterm (s)
  – 25% laboratory

• Graduate students
  – 35% Final
  – 25% Midterm
  – 40% Laboratories and projects.

• Assignments to be done on your own ... Assigned as we go ... Most in Anderson.

• Note Sept 21 is last day to withdraw without a (W): Oct 15 is last day with a (W).
MECH 481: Aerodynamics of Aircraft

Topics

• Aerodynamic fundamentals (tool development)
  – Potential flow
  – Bernoulli / Continuity
  – Wind tunnels

• Airfoils
  – Circulation
  – Real airfoils
  – Thin Airfoil Theory
  – Vortex Panel Method

• Wings
  – Aspect ratio
  – Induced drag
  – Lifting Line Theory
  – Power and thrust

• Aircraft
  – Control and stability
  – High-lift devices
  – Common configurations
  – Ground Effect

• Special topics and review