

Up
Announcements
Assignments
Notes

MECH 481: Aerodynamics of Aircraft, Spring 2016

<i>Instructor</i>	Ali Vakil
<i>Times</i>	Mon 17:00-19:00 Wed 17:00-18:00
<i>Office Hours</i>	BY APPT.
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Synopsis: Low speed aerodynamics of airfoils, wings, wind tunnels.

Topics Covered

- 1. Review of Vector Fields and Vector Integral Calculus (One-Two weeks)**
- 2. Review of Dimensional Analysis and Control Volume Approach (One week)**
- 3. Special Form of Governing Equations (Two Weeks)**
- 4. Potential Flow Approximation (Two Weeks)**
- 5. Complex Variables and Conformal Transformation (Two Weeks)**
- 6. General Thin Airfoil Theory (Two Weeks)**
- 7. Flow over Infinite Wings (One Week)**
- 8. Flow over Finite Wings (One-Two Week)**
- 9. Viscous Flow and Boundary Layer Theory (One Week)**
- 10. Advanced Topics (Time Permitting)**

Grading: There will be 6-8 homework assignments (30%). There will be one exam (40%) and two projects for the remaining 30%.

This site was last updated 12/29/15