

AE 302 Aerodynamics II

Introduction to Performance and Compressible Aerodynamics

8/29/2005

Course Requirements

- Homework - 10%
 - Used primarily as an aid for your learning
 - Group work strongly encouraged particularly for the larger programming projects.
- Mid-term Exams - 3 at 20% each
 - Closed book, one cheat sheet, individual effort
- Final - 30%
 - Open book, comprehensive, individual effort

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Learning Outcomes

1. To provide you with an introduction to the methods of flight performance prediction.
2. Introduce the theory and application of compressible gas dynamics – particular for shock and expansion waves.
3. To relate gas dynamics to aircraft aerodynamics and supersonic flight performance.
4. Introduction to the theory of viscous Boundary Layers and the impact on flow behavior.

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