

Introduction to Compressible Flow
Final Examination Study Topics and Comments

Exam: Wednesday, March 19, 2003 – 1:30-3:30PM – Same Room

Through the course of the quarter we have covered the following topics:

- Introduction, Governing Equations ✓
- Quasi-One Dimensional Flow ✓
- Normal and Oblique Shock Waves, Shock Polar ✓
- Prandtl-Meyer Expansions ✓, Wave Interactions ✓
- Acoustic Theory ✓
- Unsteady Shock and Expansion Waves, Contact Discontinuities ✓
- Riemann Invariants, Characteristics, Method of Characteristics ✓
- Axisymmetric and Rotational MOC ✓
- Nozzle Design ✓
- Potential Equations ✓
- Similarity Laws ✓

A green ✓ implies that we covered this topic on the mid term. It will not be explicitly tested on the final but may be an enabling technology for questions on the final. You'll need to know it.

A red ✓ implies that we did not cover this topic on the mid term and it may be on the final.

A purple ✓ implies that while this topic was not covered on the mid term it was covered at a later time and will not be included on the final exam, except perhaps as an extra credit question (I've not yet decided to include one).

Although I had not originally intended for wave interactions to be included in the final exam it will be because of performance on the re-exam. I would like to give everyone the chance to demonstrate that they learned the topics.

Good Luck on the Exam!!!