UUT 621E – "Advanced Problems in Compressible Flow"
Fall 2005
CRN 12633

Professor: Dr. K.B. Yüceil
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             Office hours: just stop by.

Text: The required text is Modern Compressible Flow, 3rd Edition, by J.D. Anderson.

             The books listed below will be useful for reference purposes, for alternative
             presentation of the material and, in some cases, for a more in-depth treatment
             than given in class.

             a)   Oosthuizen and Carscallen, Compressible Fluid Flow
             b)   Shapiro, A.H., The Dynamics and Thermodynamics of Compressible
                   Fluid Flow, Volumes I and II
             c)   Liepmann, H.W., and Roshko, A., Elements of Gas Dynamics
             d)   Pope and Goin, High Speed Wind Tunnel Testing
             e)   Michel A Saad, Compressible fluid flow, 2nd ed.

             Class notes plus suggested readings/note-taking from the various texts given
             under a) through e) above should be adequate. For assignments, tests, etc., you
             will need a copy of NACA 1135 (Equations, Tables, Charts for Compressible
             Flow, Ames Research Staff). There will, in addition, be 'hand-outs' on selected
             topics.

Classes, etc:

             Class meets T 14:00-17:00 in UUB 110
             • Homework assignments will typically be given out weekly and will be due
               the following week.

             • Tests: there will be
                   Two exams during the semester
                   Final exam (Friday, January 17, 2006, 10:00-13:00)
                   (You will be given at least two weeks notice for the exams)

             • Grading components:
                   a) Homework   15%
                   b) Exam 1   25%
                   c) Exam 2   25%
                   d) Final exam   35%
                        Total   100%

To be awarded an overall grade for the course, items b), c), and d) must be taken.

Course Web Page: http://www2.itu.edu.tr/~yuceil/teaching/uut_621e.html

The course web page will have Adobe PDF versions of the homework assignments for you to
download in addition to supplementary material required for some of the homework problems.