ASSIGNMENT SHEET ME451 INTRODUCTION TO AERODYNAMICS

Week	Торіс	Reading	Problems
1.	Properties	1.1-1.3, 1.5-1.9	1.7.1
	Kinematics	2.1-2.8	2.3.2, 2.4.3, 2.6.3, 2.7.3
	QUIZ 0		
2.	Kinematics, contd.	2.9-2.16	2.8.3,2.9.1,2.10.3,2.12.2,2.13.6
3.	Dynamics	3.1-3.7	3.2.2,3.2.4,3.4.1,3.7.2
	QUIZ 1		
4.	Flow about a body	4.1-4.6	4.2.2,4.4.3,4.5.1,4.6.1
5-6.	Flow about a body, contd.	4.6-4.10	4.8.1
	Airfoil theory	5.1-5.3	5.3.1
	QUIZ 2		
7.	Airfoil theory	5.4-5.7	5.5.1
8.	Finite wing	6.1-6.6	6.3.1,6.5.1
9.	Compressible fluids	7.1-7.5,8.1-8.8	7.2.1,7.3.1,8.4.1,8.8.1
	and governing equations		
	QUIZ 3		
10-11.	One-dimensional flows	9.1-9.9	9.2.1,9.3.2,9.3.4,9.6.1,9.9.1
12.	Compressible flows	10.1-10.5	10.2.2,10.3.1,10.4.1,10.4.3
13-14.	Shock relations	10.6-10.10	10.4.4,10.5.1,10.6.1,10.7.2
			10.8.1,10.8.5,10.10.1
15.	Final Examination		
Grading:	Homework 18%		
	4 Quizzes (2+15x3=47%)		
	Final 35%		

TEXT: KUETHE/CHOW, <u>Foundations of Aerodynamics</u>, 5th Ed., J. Wiley

ME 451 INTRODUCTION TO AERODYNAMICS

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Office Hours: by appointment

Prerequisite: undergraduate fluid mechanics and thermodynamics I

Homework problems will be assigned every week (see the problems handout sheet). These are intended to help broaden and solidify your understanding of the subject matter, and to give you practice in putting your understanding of the material into words. It is, therefore, essential that you do as many of them as you can. However, only those that are assigned in the class should actually be handed in. From each set of homework problems collected, one problem will be chosen at random and graded. *Late homework will not be accepted*.

There will be *no* makeup for missed quizzes. Unexcused quizzes will earn 0 points. The grade for an excused quiz will be based on the final exam grade.

Statement on academic integrity:

Academic Integrity is the cornerstone of higher education and is central to the ideals of this course and the university. Cheating is strictly prohibited and devalues the degree that you are working on. As a member of the NJIT community, it is your responsibility to protect your educational investment by knowing and following the academic code of integrity policy that is found at: http://www5.njit.edu/policies/sites/policies/files/academic-integrity-code.pdf.

Please note that it is my professional obligation and responsibility to report any academic misconduct to the Dean of Students Office. Any student found in violation of the code by cheating, plagiarizing or using any online software inappropriately will result in disciplinary action. This may include a failing grade of F, and/or suspension or dismissal from the university. If you have any questions about the code of Academic Integrity, please contact the Dean of Students Office at dos@njit.edu"