AOE 4065-4066 Class Syllabus, Design (Aircraft), Fall 2009- Spring 2010

T-Th 3:30-4:45, Randolph 331 (2H, 3L, 3C) + other times to meet w/teams

Instructor:	William H. Mason, 224-13 Randolph, whmason@vt.edu http://www.aoe.vt.edu/people/whmason.html
Office Hours:	Mason: 11-22 Mon., 10-11 Tues, 2-3, Wed., 1 – 2 Thurs. Also available by appointment
Course:	Current design procedures are applied to aerospace vehicles and systems. The two-course sequence (AOE 4065-4066) uses a progression of individual assignments, followed by team projects to develop aerospace system designs. Different projects are used each year, and typically include national design competitions and joint project with other Dept's, Teams, *e*.g., ME, etc.
Web site:	Course notes and considerable additional information is available on the class web site. This is the primary "text", and students are responsible for knowing what's available on this site: http://www.aoe.vt.edu/~mason/Mason_f/SD1.html
Text:	Dan Raymer's *Aircraft Design*: *A Conceptual Approach*, 4th Edition.
Other texts:	The key special "text" is Nathan Kirschbaum's *Aircraft Design and Layout Guide*. You will sign up for a copy and we will have copies made and you will purchase it through the department. Also, each team will have members doing a variety of tasks. Other books may be useful. *We assume you have kept the textbooks from your previous engineering classes*. With the advent of ebusiness on the web, it is not necessary to work through the bookstore (however, they have these) Roskam's eight volume series is available off the DARCorp web site, and Niu's book *Airframe Structural Design* is also good. See this url for links to these websites: http://www.aoe.vt.edu/~mason/Mason/ACiACDes.html. Other design books are listed on the class web site. Most of the relevant aircraft design texts will be on reserve in the library. *Jane's* is available in the library, and is a key data source.
Grades:	The grade is based on both individual and team efforts. The individual assignments will comprise 40% of the grade in AOE 4065, and 20% of the grade in AOE 4066. The team assignments will be given a common grade for all members. Then a peer review by team members and a faculty assessment will be used to adjust individual team member's grades above and below the baseline grade. (for teams with members from outside AOE, ALL team member reviews will contribute to the grade).
Design Lab:	Because of the emphasis on teamwork, 217A Randolph is dedicated to design activity. It is the student's responsibility to maintain the room and each team will have an individual designated to help maintain the computing system. Individual and team computer accounts will be available.
Honor Code:	The honor code is strictly enforced. Your work must be your own unless properly referenced. You are encouraged to make use of other materials. However, *all* sources of information, figures, and data you obtain must be properly cited. Failure to do so is plagiarism.