EGN 5421 or EEL 6935 ENGINEERING APPLICATIONS of VECTOR ANALYSIS – Fall 08 (August 14, 2008)

This course is administered by Dr. Snider. Lectures are pretaped, and delivered by web

Instructor: Prof. Dave Snider, ENB 246A, 813-974-4785, FAX: 813/974-5250 snider@eng.usf.edu
Office hours Mon 2-4, Wed 2-3.
Catalog Description: Vector methods of electromagnetism and fluid mechanics. Vector operators, line and flux integrals, potential and transport theorems, applications.
Course Prerequisites: solution methods for ordinary differential equations

Text (REQUIRED):   *Introduction to Vector Analysis*, 7th ed.   **Author:** H. Davis and A. D. Snider
Publisher: Quant Systems, Inc. (Hawkes Publishing), Charleston, SC **ISBN:** 0-697-16099-8
If the USF Bookstore is inconvenient, students can purchase the textbook by going to www.hawkeslearning.com/store and clicking on the "Products" button. Then, click the "Other Titles" link and select the "Introduction to Vector Analysis Textbook" link.

Welcome to my classes, USF students!

You're taking a "web-only" class from me. That means you won't see me live; you'll watch lectures I taped in the past, on the course materials. I will be available in my office for consultation a few hours per week, and I'll always answer your emails promptly.

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Think about this: you're taking a course from a professor whom you'll hardly ever see. So you
don't have much chance for an "A" unless you
(1) buy the textbook and
(2) follow the web procedures precisely.
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Be sure to read this long-winded syllabus entirely. Then print it out and stick it in the back of your textbook.

You may have misgivings about non-live lectures. Let me relate a few observations that I have made over the past three years with this process.

First of all, this procedure has proved quite successful - to my surprise. I was leery about it at first, but I soon found out that the average student performance on tests was actually slightly better than it had been before, when I was lecturing live. I think the reasons for this are as follows:
1. You will never need to miss a lecture due to illness, conflicting appointments, being out of town, or simply being tired. The lectures are at the APEX web site all semester long, 24/7.
2. You can re-watch any lecture, or part of a lecture, as many times as you need.
3. If you need to take a break (no student has ever fallen asleep during my lectures, of course!!!), you can stop the playback and resume when you return.

The lectures may be numbered, or dated according to the year they were taped, so you will have to figure out the right pace to get you through them during the time allotted in your current semester. If you can't do this, please drop my class and re-take MTH 101, paying particular attention to the lessons on ratio and proportion.

Consult your email and my.usf.edu frequently for updates from me on assignments, test dates, and procedures in general.
Don't take any administrative instructions that I give in the lectures seriously - they may be out of date. I will keep you informed about test procedures, etc. by email and my.usl.edu as the semester progresses.

Helpful Web sites: http://www.ee.surrey.ac.uk/Teaching/Courses/EFT/dynamics/html/dyn_index.html,
http://www.falstad.com/vector/index.html, http://www.geom.umn.edu/~thurman/calcIII/Lab23/welcome.html,
http://webphysics.davidson.edu/Applets/BField/curl.html

Requirements and Assessment:
1. Most communications between instructor and students are accessed by email or through https://my.usf.edu. The site contains class announcements, supplementary notes, old tests, etc. . Lecture notes correlated with the lectures can be downloaded from http://ee.eng.usf.edu/people/snider/5421/index.html . Print them out them *before* you watch the lecture and have them in front of you.
The lecture notes in the .xbk format are duplicates of those in the .pdf format, but they can be opened, if desired, using software from http://www.smarttech.com/support/software/sb_win.asp; click on " SMART Board software version 9.5."
The lectures can be viewed at http://apex.eng.usf.edu; click on my.coe, and contact APEX if you don't see these lectures listed in your file. They were taped in 2004, so procedures discussed in the lectures are out of date; any and all announcements posted on my.usf.edu or in email take precedence over anything that is stated in the lectures. Consult my.usf.edu weekly to stay abreast of assignments, test procedures, etc.

2. Each student must email Prof. Snider with the following data: Last name: _____   First name: _____   Class: EGN 5422, by August 30. I will not acknowledge these emails individually. Around Sept. 2 you will receive an acknowledgement, by email, from Dr. Snider that you are in his class email address list; if you do not receive this acknowledgement, email me again – until I acknowledge receipt. **Thereafter each student is liable for all email notices concerning the class from Prof. Snider.** Students who wish to use different email boxes should email this data from each box. Do not use one email box to request mail to a different box.

3. Each student must sign a copy of the last page of this syllabus as indicated below, and mail it (fax or scan are not acceptable) by Sept 2 to Prof. A D Snider, EE Dept., University of South Florida, 4202 East Fowler Avenue ENB 118, Tampa FL 33620. (Or hand-deliver it to my mailbox in the EE Department.) I will not acknowledge receipt of these syllabi individually. They can be regenerated later in the semester if a problem arises.

4. Homework problems will be recommended to the students, but not graded.

5. Your final grade will be assessed by averaging 2 tests: a takehome midterm (40%) and a takehome final (60%). The midterm examination covers the first 3 chapters and all lectures through "Oct 21." The takehome tests are heavily computational and will be computer graded with no partial credit, but you will be allowed three attempts at each test (with, however, different numerical parameters each time). Read the document "Accurate Calculations" at my.usf.edu before you start the tests. You will submit your answers by email to the TA or Dr. Snider (see my.usf.edu "ANNOUNCEMENTS"), who will shortly respond with your score, a tabulation of your incorrect answers, and the correct answers for the parameters you used. The weights for each attempt will be posted at my.usf.edu. Each attempt has a deadline. If you miss a deadline, your subsequent submission will also count as the missed submission. If you are satisfied with your score you may stop submitting at any time, and your last submission will count for the subsequent ones. The takehome tests will be available at my.usf.edu, and they contain more detailed instructions.
An "incomplete" grade will be awarded if the email, syllabus signoff, and both exams are not submitted. Unless USF policy dictates otherwise, incomplete item(s) can be made up in a subsequent semester when EGN 5421 is offered, at no cost. **Re**taking a graded test or re-viewing the lectures, however, requires reenrollment.

Please mail a copy of this page to Dr. Snider.

Academic Dishonesty - It is not acceptable to copy, plagiarize or otherwise make use of the work of others in completing homework, project, exam or other course assignments. The minimum penalty for doing so is an automatic zero on the assignment and an "F" in the course. **I have read the syllabus for EGN 5421, Fall 2008, and agree to abide by its schedule and terms.**

(print name)   (sign name)