

## EGN 5424 or EEL 6935 APPLICATIONS of COMPLEX ANALYSIS – Fall 08 (August 14, 2008)

**This course is administered by Dr. Snider. Lectures are pre-taped, and delivered by web. Lectures are listed by the date they were originally given ("Jun 28" to "Aug 5").**

**Instructor:** Prof. Dave Snider, ENB 246A, 813-9744785, FAX: 813/974-5250 [snider@eng.usf.edu](mailto:snider@eng.usf.edu) . Office hours Mon 2-4, Wed 2-3

**Catalog Description:** Analytic functions, conformal mapping, residue theory, Laurent series, transforms. Applications to various problems in engineering and physics.

**Course Prerequisites:** MAP 2302 Differential Equations (solution methods for first order nonlinear and higher order linear equations)

**Text (REQUIRED):** *FUNDAMENTALS OF COMPLEX ANALYSIS*, 3rd edition, by E B Saff & A D Snider, Prentice Hall, 2003 (ISBN 0-13-907874-6)

**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.

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.*

**Be sure to read this long-winded syllabus entirely.** Then print it out and stick it in the back of your textbook for future reference.

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](http://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.usf.edu](http://my.usf.edu) as the semester progresses.*

### 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. 1. Lecture notes correlated with the lectures can be downloaded from <http://ee.eng.usf.edu/people/snider/5424/> . Print them out *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](http://www.smarttech.com/support/software/sb_win.asp).

**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](http://my.usf.edu) take precedence over anything that is stated in the lectures. Consult [my.usf.edu](http://my.usf.edu) weekly to stay abreast of assignments, test procedures, etc.**

2. Each student must email Prof. Snider by Aug 30 with the following data:

Last name: \_\_\_\_\_ First name: \_\_\_\_\_ Class: EGN 5424. I will not acknowledge these emails individually. You should receive an acknowledgement from me by Sept 2 that your address has been stored in my class email file; 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 attempt to use one box to request email for another 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. The first exam is based on chapters 1-3 (complex arithmetic, Laplace's equation). The midterm examination will cover chapter 7 and all lectures through "July 26". The final covers chapter 6. All exams are takehome tests and 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). You will submit your answers as directed by the "Announcements" at my.usf.edu. We will shortly respond with your score, a tabulation of your incorrect answers, and the correct answers for the parameters you used. Weights for each submission and "Accurate Calculations.pdf", which you should read before starting the tests, 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 either the email, syllabus signoff, or any exam are not submitted. Unless USF policy dictates otherwise, incomplete item(s) can be made up in a subsequent semester when EGN 5424 is offered, at no cost. **Retaking** 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 5424, Fall 2008, and agree to abide by its schedule and terms.**

(print name)

(sign name)