

MAA 4402/ MAT5907      Instructor: Nick Cogan  
Complex Variables      Office: LOV 002-E  
Office hours: MWF: 11-12      Phone: 644-7196  
MTWRF: 9:30-10:50      E-mail: cogan@math.fsu.edu  
LOV 106      Website: www.math.fsu.edu/~cogan/

**Text :** Complex Variables and Applications-eth Edition, by Brown and Churchill

**Course Content:** Overview of complex numbers, complex functions and function of complex variables; Calculus of complex functions (differentiation and integration); Theory of Residues. In general we will follow the book chapters 1-7

**Prerequisite:** MAC2313 (Calculus 3) with C- or better

**Course Objective:** The purpose of this course is to introduce students to the basic concepts of the theory of calculus over the complex numbers. This includes the geometry of elementary complex functions, complex path integrals and Cauchy's theorem, and applications of the Residue Theorem, including the evaluation of the real definite integrals using complex methods.

**Expectations:** You are expected to attend class and participate in discussions. A student absent from class bears the full responsibility for all subject matter and procedural information discussed in class. Homework problems will be assigned daily. The assignments will not be collected, but will be used as the basis for the 'quizzes'. A running list of problems will be listed on the course website (I really promise!)

**Exams (quizzes):** There will be quizzes given each week (that makes 6). Typically the quiz will be on Friday; however July 3rd is a holiday, so we will have the quiz on Thursday. Each quiz will take approximately 30 minutes at the beginning of class. The quizzes will be between 5 and 10 questions, depending on the complexity. Of the questions, 25% will review the previous material. The rest will cover material presented from the Thursday before through the Wednesday of that week (that means that we will have time to discuss questions before being tested). It is likely that much of the quiz will look very similar to the assigned homework or examples presented in class. There will be no make-up quizzes. A missed quiz score may be replaced with the following weeks quiz score if the student presents sufficient evidence of extenuating circumstances.

**Grading:** The quizzes are equally weighted, so that the numerical score will be the average of the quiz scores. Letter grades will be determined from numerical grades as follows: A: 92-100; B: 85-89; C: 75-85; D: 70-75; F: 0-70. Plus or minus grades may be assigned in a manner consistent with standard

University practice. A grade of I will not be given to avoid a grade of F or to give additional study time. Failure to process a course drop will result in a course grade of F.

- Please feel free to contact me by e-mail, phone, after class, before class or during office hours. I also encourage students to work together on the homework assignments.
- HONOR CODE. The Academic Honor System of The Florida State University is based on the premise that each student has the responsibility 1) to uphold the highest standards of academic integrity in the student's own work, 2) to refuse to tolerate violations of academic integrity in the University community, and 3) to foster a high sense of integrity and social responsibility on the part of the University community. Please note that violations of this Academic Honor System will not be tolerated in this class. Specifically, incidents of plagiarism of any type or referring to any unauthorized material during examinations will be rigorously pursued by this instructor. Before submitting any work for this class, please read the "Academic Honor System" in its entirety (as found in the [FSU General Bulletin](#) and in the [FSU Student Handbook](#) and ask the instructor to clarify any of its expectations that you do not understand.
- AMERICAN DISABILITIES ACT. Students with disabilities needing academic accommodations should: 1) register with and provide documentation to the Student Disability Resource Center (SDRC); 2) bring a letter to the instructor from SDRC indicating you need academic accommodations. This should be done within the first week of class.