Math 513 section 001 Fall, 2017

TuTh, 10:15 - 11:30 a.m. Room: SAS 2225.

Instructor: Michael Shearer **Office**: SAS 3228 **Phone**: 515-3298 **Email:** shearer@ncsu.edu

Office Hours: Tuesdays, Thursdays, 1:30-2:00pm, and by appointment.

Book: J.W. Brown and R.V. Churchill, Complex Variables and Applications. 9th Edition, McGraw-Hill.

Prerequisite: MA 341

Web page: http://www4.ncsu.edu/~shearer/ma513_2017.html

Grading:
1. Weekly Homework Assignments (10% of final grade) **due Thursdays (but not always).**
2. Two in-class exams (60%).
Tentative Dates: Thursday, September 28th; Thursday, November 16th.
3. Final Exam: (30%) Thursday, December 7th, 9:00-12:00 a.m.

Basic Grading Scale: 90%-100%: A, 80%-89%: B, etc. (+ and - will also be used.)

Syllabus:
Chapter 1: (1 week)
Chapter 2: (2 weeks)
Chapter 3: (2 weeks)
Chapter 4: (2 weeks)
Chapter 5: (2 weeks)
Chapter 6: (2 weeks)
Chapter 7: (2 weeks)
Chapters 8/9 topics: (1 week)

Course Objectives: The analysis of functions of a complex variable is an elegant subject, with some surprizes. The focus of this course is on fundamental properties and techniques, with a few applications to evaluating integrals, and to fluid flow. The objective of the course is to achieve (i) facility with properties of complex functions, and (ii) the capability of solving problems involving complex numbers, functions and mappings.

Additional Policies:
1. I encourage you to discuss homework with other students, or with me during office hours. You should be aware that the homework is intended for you to learn from the course; working on homework at least in part on your own will help you master the material, keep up with the course and prepare for tests. Homework will be graded on a scale of 1-10. Points will be awarded for amount of homework attempted; selected problems will be graded in detail.
2. I expect you to read sections of the book around the time of lectures and homework from those sections. The book has additional examples and discussion that you will find helpful. Some test questions may resemble examples from the book.
3. You are expected to attend all classes on time. Classroom discussion and questions in class help clarify issues in this course, so please feel free to participate by asking questions.
4. Arriving late for a class or leaving early is very disruptive of class. If you need to leave early, please let me know at the beginning of class, and sit near the door so you can slip out quietly.
5. If you are unavoidably absent from a test, a score for that test will be assessed at the end of the semester, based on your performance in homework, the other tests, and on the final, with an emphasis on the material of the missed test. Attendance regulations can be found at http://www.ncsu.edu/policies/academic_affairs/courses_undergrad/REG02.20.3.php

Academic Integrity Statement: Students are expected to follow university policies on academic integrity and the Honor Pledge, which may be viewed by following the links at: http://www.ncsu.edu/policies/academic_affairs/courses_undergrad/REG02.20.7.php

Further Statements:
Reasonable accommodations will be made for students with verifiable disabilities. In order to take advantage of available accommodations, students must register with Disability Services for Students at 1900 Student Health Center, Campus Box 7509, 515-7653. For more information on NC State's policy on working with students with disabilities, please see the Academic Accommodations for Students with Disabilities Regulation (REG02.20.1)
There are no pass through charges for this course, such as field trip costs.
Statement on laboratory safety or risk assumption in courses requiring physical activity or field trips: None