

## MATHEMATICS 513 SYLLABUS - SPRING 2019

TH 4:30 pm - 5:45 pm, WI 150

### INSTRUCTOR

Min Kang [ office: SAS Hall, Room 4114, phone #: (919) 515-7891, email: mkang2@ncsu.edu or kang@math.ncsu.edu ]

### TEXTBOOK

“Complex Variables and Applications” written by J. W. Brown & R. Churchill, 9th edition.

### PREREQUISITES

Advanced Calculus (MA242). Basic Real Analysis background (MA 425, MA 426 or MA 515, MA 715).

### CONTENT

We cover fundamental concepts and useful theorems in Complex Analysis as well as some applications. Individual topics include analytic functions, Cauchy theorems for contour integrals, series representation of analytic functions, residue theorem and conformal mappings if time allows.

### HOMEWORK

Homework will be assigned and collected once every three or four weeks. It is the student's responsibility to do the homework. The students are to check the corresponding course webpage for the homework assignments. Late homework will NOT be accepted. The course webpage will be announced in class.

### MIDTERMS

There are two midterm tests in class, one on February 5th (Tuesday) and another on March 7th (Thursday). There will NOT be any make-up midterm unless the student has a completely justifiable reason (e.g. illness followed by hospital visits). These are closed-book exams without any external aid allowed.

### FINAL EXAM

The final is given on May 2nd, 2019 (Thursday), 1 pm - 4 pm in WI 150. The instructor is not allowed to schedule a make-up final exam. Students must arrange their schedule to avoid the conflicts (e.g. three final tests within 24 hours). The final exam is cumulative, including the whole material covered throughout the semester. The final is a closed-book exam without any external aid allowed.

**GRADE**

Homework assignments 12 %, two midterm tests 25 % each, and the final will get 38 % for the term grade. All the exams are curved including the final.

**OFFICE HOURS**

Wednesdays 3 pm - 5 pm or by appointments.

**ACCOMMODATION OF DISABILITY**

Reasonable accommodation will be given to the students with learning disabilities. The students with learning disability should first contact Disability Resource Office at Holmes Hall Suite 304, 2751 Cates Avenue, Campus Box 7509, then the instructor will provide the necessary support based on the assessment made by the office. Phone # is (919) 515-7653.