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Department of Mathematics

MAA 4402- 2838 and MAA 5404-2C62
Spring 2018

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Textbook: Complex Variable and Applications
(9th edition) Brown and Churchill

Office Hours: Monday, Wednesday, Friday period 4
(or by appointment)

Links

homework
topics
messages
grades
cell phone policy

de Moivre	Cauchy	Riemann	Weierstrass

Homework

Prove: (zw)* = z*w* where z* denotes the conjugate
Pg 7 #1
Pg 13 #1,5
Pg 16 #1,2,10a
Pg 23 #1,2,5,6
Pg 30 #1,2,4
Sec 12 #1-4

Sec 14 #2,4,8
Sec 18 #3b,5,10,11
Sec 20 (pg 61)#1,8a,9
Sec 24 (pg 70) #1ac,3ab,4a
Sec 26 (pg 76) #1c,2c,4c,6
Sec 29 (pg 85) #4
Sec 30 (pg 89) #1b,2,6,8ac,10
Sec 33 (pg 95) #1,2,5,8
Sec 39 (pg 99) #1
Sec 36 (pg 103) #1,2,3,8c
Sec 38 (pg 107) #5a
Sec 37 (pg 119) # 2,3,4
Sec 46 (pg 132) #1-6,13
Sec 47 (pg 138) #1,2,5,
Sec 49 (pg 147) #2,3,5
Sec 53 (pg 159) #1,2,3,4,6
Sec 57 (pg 170) #1-4,7
Sec 59 (pg 177) #1,2,3,7,8
Sec 61 (pg 185) #2
Sec 65 (pg 195) #1-4,9,11
Sec 72 (pg 218) #1-4,6,7
Sec 73 (pg 224) #1,2a,3,4
Sec 68 (pg 205) #1-6
Sec 77 (pg 237) #1,2,4
Sec 79 (pg 242) #1,2
Sec 81 (Pg 247) #1,2,3b,4,5,7
Sec 83 (pg 254) #2-5,7
Pg 257 #1,4,6
Pg 265 #1,2,4,9
Pg 276 #1-3
Pg 312 #1,3,4,7a

Topics

- Complex numbers
  - rectangular and polar form
- Analytic functions
  - limits and the derivative
  - Cauchy-Riemann equations
  - harmonic functions
- Examples
  - exponential and log functions
  - complex exponents
  - trig functions
  - linear fractional transformations
- Integrals
  - contour integral
  - antiderivatives
  - Cauchy-Goursat Theorem (and Morera's Theorem)
  - Cauchy Integral Formula
  - Liouville's theorem and the Fundamental Theorem of Algebra
  - maximum modulus principal
- Series
  - geometric series

- power series
- Taylor series
- Laurent series
- Residues and poles
- isolated singularities
- residue theorem
- residues at poles
- behavior of a function near a singularity

Evaluating real integrals

Messages

Welcome to Complex Variable

Free tutoring at the Teaching Center, SW Broward Hall. Check Teaching Center for the time schedule.

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

The course will be conducted in accordance with the academic honesty policy, and policy regarding the use of copyrighted material.

"Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at: attendance policies.

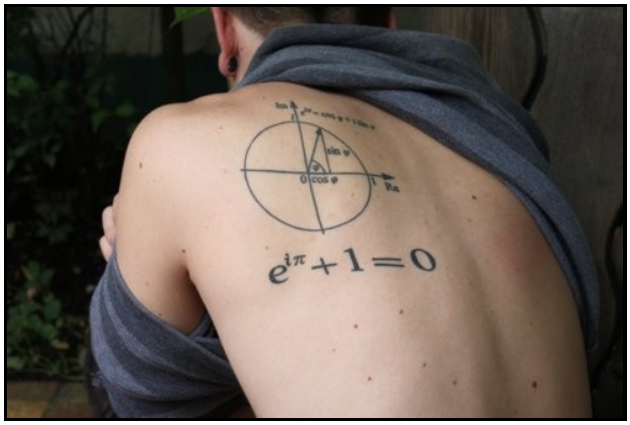
Information on current UF grading policies for assigning grade points may be found at: grades.

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at https://evaluations.ufl.edu/results/.

Grades

three exams – equally weighted
Exam 1: February 9
Exam 2: March 21
Exam 3: April 23

This is not the recommended method for remembering formulas.



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