Mathematics 5351 Syllabus
Introduction to Complex Variables
Fall 2016

Instructor: Dr. Grow
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Office Hours: 1:00-1:50 MWF

Prerequisite: Math 3304 (Elementary Differential Equations)

Textbook: *Complex Analysis* (1st, 2nd, or 3rd edition) by Lars Ahlfors, McGraw-Hill.

Course Description: This course is an introduction to the theory and applications of analytic functions of one complex variable. Topics include the Cauchy-Riemann equations, complex contour integration, the Cauchy-Goursat theorem, the calculus of residues, conformal mappings, and applications to boundary value problems.

Tentative Outline:
>Chapter 1   Complex Numbers
>Chapter 2   Complex (Analytic) Functions
>Chapter 3   Analytic Functions as Mappings
>Chapter 4   Complex Integration
>Chapter 5   Series and Product Developments
>Chapter 6   Conformal Mappings. Dirichlet's Problem.
>Lecture Notes: Applications of Conformal Mappings

Attendance Policy: You are expected to attend every class period. If you know in advance that you will not be able to attend, please check with me ahead of time to determine what work you will miss. If you miss a class, it is your responsibility to find out what you missed, pick up any handouts, returned exams or homework, etc. Absences from class will be excused if your doctor or the Student Health Center can verify that you were seen for a medical condition, or if your faculty advisor or athletic coach communicates to me an academic reason for your absence. If you accumulate three unexcused absences, I will meet with you in my office to discuss the reasons for your non-attendance. If you accumulate six unexcused absences, you can expect to be dropped from the course.

Homework: Approximately twelve equally-weighted homework assignments will be collected periodically during the semester and selected problems will be graded. Your lowest two homework scores will be dropped and the average of the remaining homework assignments will determine your 200 point homework score.

Examinations: One midterm exam worth 100 points will be given on Friday, October 14 during our regular class time. One comprehensive final exam worth 200 points will be given on Thursday, December 15 from 10:00-12:00 noon.

Grading Policy: There are 500 possible points in the course. Your final grade will be determined according to the following schedule.

Course Average	85%-100%	70%-84.9%	50%-69.9%	0%-49.9%
Letter Grade	A	B	C	D (Undergrad) or F (Grad)

Question/Concern Resolution: If you ever have a question, problem, or concern about anything in this course, please come see me first. If your concern still is unresolved, then see the Mathematics and Statistics Department Undergraduate Coordinator, Dr. Ilene Morgan, in room 212 of the Rolla Building. If you still have a concern, then see our Department Chair, Dr. Stephen Clark, in room 202 of the Rolla Building.

Disability Support Services: It is the policy and practice of Missouri University of Science and Technology to promote inclusive learning environments. If you have a documented disability you may be eligible for reasonable accommodations in compliance with university policy, the Americans with Disabilities Act of 1990, the Americans with Disabilities Amendment Act (ADAAA) of 2008, and Section 504 of the Rehabilitation Act of 1973. Please note, students are not encouraged to negotiate accommodations directly with professors. To request accommodations or assistance, please self-identify with Disability Support Services (DSS), 203 Norwood Hall. For more information or to register for services, contact DSS at (573) 341-6655 or by email at dss@mst.edu.

Academic Honesty: Page 30 of the Student Academic Regulations handbook describes the student standards of conduct relative to the University of Missouri System's Collected Rules and Regulations section 200.010, and offers descriptions of academic dishonesty including cheating, plagiarism, or sabotage. Academic dishonesty will not be tolerated and will result in a penalty of at least a failing grade on the affected assignment or exam. Also see the student council honor code and student resources for academic integrity from the Office of Undergraduate Studies.

Title IX: Missouri University of Science and Technology is committed to the safety and well-being of all members of its community. US Federal Law Title IX states that no member of the university community shall, on the basis of sex, be excluded from participation in, or be denied benefits of, or be subjected to discrimination under any education program or activity. Furthermore, in accordance with Title IX guidelines from the US Office of Civil Rights, Missouri S&T requires that all faculty and staff members report, to the Missouri S&T Title IX Coordinator, any notice of sexual harassment, abuse, and/or violence (including personal relational abuse, relational/domestic violence, and stalking) disclosed through communication including but not limited to direct conversation, email, social media, classroom papers, and homework exercises. Missouri S&T's Title IX Coordinator is Vice Chancellor Shenethia Manuel. Contact her directly (manuels@mst.edu; (573) 341-4920; 113 Centennial Hall) to report Title IX violations. To learn more about Title IX resources and reporting options (confidential and non-confidential) available to Missouri S&T students, staff, and faculty, please visit http://titleix.mst.edu.