Math 370
CRN:23422
Complex Variables
Spring 2013, Section 1
TR 11:00-12:15
OH 225

Instructor: Dr. Christopher Mouron
Office: 320 Ohlendorf Hall
Office Hours: MWF 2:30-3:30 or by appointment. Pop-ins are welcomed
Phone: x3720
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Text: Complex Variables and Applications, 8th ed. by Brown and Churchill
Course Description: Complex variables have numerous applications in mathematics, physical science and engineering. This course covers the basic principles (both theory and applications) of differentiable complex-valued functions of a single complex variable.

Course Content: The goal is to cover the first 9 chapters of the book. This included the following topics: The field structure of complex numbers, analytic functions, continuity, differentiability, Cauchy-Reimann equations, elementary functions, integration, series, residues and poles, mappings of elementary functions, conformal mappings.

Also, it would be interesting if we could examine the dynamics of the iteration of a complex function.

Course Prerequisites: Calculus III with trigonometry, Math 223, or equivalent.

Attendance Policy: I will follow the College's attendance policy, which can be found on page 71 of the Catalogue. In particular, a student will be giving a warning after 4 absences and a written recommendation to the Dean that the student be dropped from the course will be made after 7 absences. In the case of a missed test, the student will be allowed to make-up the test only if both of the following conditions are satisfied:
   1) I am contacted before the test is given (at least 1 week in the case of absence due to the attendance of an official school function.)
   2) I am given proper documentation.
Finally, the student is responsible for all material and notes due to an absence. Get the notes from another student. Come to my office for any materials handed out in class.

Homework (27%): Mathematics is not a spectator sport. In order to learn the techniques and concepts, the student must work problems outside of class. The student is expected to spend at least 3 hours outside of class for every hour spent in class.

   1) Practice and Board work exercises (10%). These are problems that the student should do before the next class meeting. Different problems will be assigned various point values. The goal is to get 100 points.

Note: A student must get at least 20 points in each of the following periods to get full credit for the points. Otherwise, the maximum grade will be 85.

- Jan. 15 – Feb. 5
- Feb 7 – March 5
- March 7- April 2
- April 4 – April 25

2) Graded exercises (17%). These problems will be collected usually once a week. It is imperative that the work turned in is neat and organized. The student will be graded on correctness of the work. Also the student is required to show all work leading to an answer. The students may work together on these problems but the work turned in must be the students own, i.e. no copying. Copying homework will be considered an honor violation and students suspected of copying homework will be referred to the Honor Council. Also, if student do work together on homework, they must document who they worked with.

Also, the student is expected to "pre-read" the text before the lecture. This is a excellence way for the student to familiarize him/herself will the material covered and will aid the student in following the lectures.

Written Project (8%): There will be a project that will consist of longer, more involve applications of complex variables. This project must be typed and will be graded on correctness of the mathematics and written exposition. Rough drafts submission will be optional.

Late homework and projects will not be accepted. You will have plenty of time to complete assignments to turn in. If you are sick, have a roommate, classmate or friend turn in your homework for you. If they can get it to me before noon, it will be accepted. I f you plan to miss class for other reasons, turn in the homework early or have a classmate turn it in during class.

Tests (40%): There will be 2 tests throughout the semester. There will a take home portion of the tests and an inclass portion that will be closed book and notes. The tentative test dates are:
1) February 19
2) April 9

Final Exam (25%): The final exam will be cumulative. There will a take home portion of the final exam and an in-class portion that will be closed book and notes. The final exam will be Monday, April 29 at 1:00 p.m.

Grades: Grades will be earned for the following percentages:

A	Score >= 93%	C	73% <= Score < 77%
A-	90% <= Score < 93%	C-	70% <= Score < 73%
B+	87% <= Score < 90%	D+	67% <= Score < 70%
B	83% <= Score < 87%	D	63% <= Score < 67%
B-	80% <= Score < 83%	D-	60% <= Score < 63%
C+	77% <= Score < 80%	F	Score < 60%

MathHelp: MathHelp is a free problem session run by students in the evenings. It is a place to enhance your understanding of the concepts of the course. However, it is not a place to get the answer for the work that is to be turned in.

Honor Code: The student is expected to conduct him or herself within the guidelines of the College's Honor Code. If you have any questions about what is or not allowed, please ask.

If you have a documented disability and wish to receive academic accommodations, please contact myself and the Office of Student Disability Services as soon as possible.