Math 451
Introduction to Complex Variables
Fall 2009

Syllabus

Class meets
MWF 3:10-4:00 in Ritter 217.

Instructor
Dr. Bryan Clair

Email
bryan@slu.edu

Office
Ritter Hall 110.  977-3043.

Office Hours
M1-2, Th10-12, or by appointment.  If you’re not coming to office hours, you’re missing out on a valuable resource.

Web Page
http://math.slu.edu/~clair/complex

Textbook
E.B. Saff, A.D. Snider, Fundamentals of Complex Analysis (3ed).

Homework
There will be regular homework assignments, usually due on Fridays.  Your work should be neat and legible. Use plenty of paper, and staple your work!

I encourage you to work together on homework, but everyone should write up results separately.  You should also feel free to check your solutions in the back of the book and then correct them.

Your homework assignment must have a self-assessment on the front page. The self evaluation should tell me which problems you found easy, which were difficult, and how well you feel you have mastered the material on the assignment. This is also the place to request feedback on problems that caused you trouble.

Homework is graded as follows:
+ On time, complete (or mostly complete).
√ On time, missing self-evaluation or otherwise incomplete.
Late 50% credit, you will receive no comments
0 Not turned in.

Quizzes
There will be a handful of short in-class quizzes (dates to be announced).

Exams
I give makeup exams only for severe and documented reasons.

Exam 1     Friday, September 25
Exam 2     Friday, October 30
Final Exam  Wednesday, Dec 9, 2-3:50pm

Grading
Grading is on a straight scale (uncurved), with 90%,80%,70%,60%
guaranteeing A,B,C,D respectively.  Grading is weighted as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Homework</td>
<td>15%</td>
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<tr>
<td>Quizzes</td>
<td>10%</td>
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<tr>
<td>Exam 1</td>
<td>20%</td>
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<tr>
<td>Exam 2</td>
<td>20%</td>
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<tr>
<td>Final Exam</td>
<td>35%</td>
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**HONESTY**  
Students are expected to be honest in their academic work, as per the Honesty Policy of the College of Arts & Sciences. Plagiarism, cheating and dishonesty will be reported to the dean and may result in probation, expulsion, or worse.

**TOPICS**

<table>
<thead>
<tr>
<th>Week</th>
<th>Chapters</th>
<th>Topics</th>
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<tbody>
<tr>
<td>1-2</td>
<td>Ch 1.</td>
<td>Algebra and geometry of complex numbers. Complex exponentials, powers, and roots. Euler's formula.</td>
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<tr>
<td>14-15</td>
<td>Ch 6.</td>
<td>The Residue Theorem and integration techniques.</td>
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