

## 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	M2-3, Tu 10:30-11:30, W1-2, or by appointment. If you're not coming to office hours, you're missing out on a valuable resource.
WEB PAGE	<a href="http://math.slu.edu/~clair/complex">http://math.slu.edu/~clair/complex</a>
TEXTBOOK	E.B. Saff, A.D. Snider, <u>Fundamentals of Complex Analysis</u> (3ed).
HOMEWORK	There will be regular homework assignments, usually due on Wednesdays. 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, incomplete or many incorrect problems.
- 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, February 19
	Exam 2      Friday, April 9
	Final Exam   Friday, May 7, 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:
	Homework      20%
	Quizzes        10%
	Exam 1        20%
	Exam 2        20%
	Final Exam    30%

## 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

Review Complex I.

Power series. Laurent series. Zeros and singularities (Ch 5).

The Residue Theorem and integration techniques (Ch 6).

Analytic continuation, the Gamma and Riemann Zeta functions.

Riemann surfaces

Möbius transformations (Ch 7.2, 7.3)

Non-Euclidean Geometry