SYLLABUS - MATH 313:COMPLEX ANALYSIS - Fall 2013

Week	**Dates**	**Topic(s)**	**Section(s)**
Week 1	Aug. 20-22	Complex numbers	1.1-1.4
Week 2	Aug. 27-29	Roots, functions of a complex variable, limits and continuity.	1.5-1.6 2.1-2.2
Aug. 30 - Last day to change grade mode (LoboWeb)			
Week 3	Sep. 3-5	Analytic and harmonic functions.	2.3-2.6
Week 4	Sep. 10-12	Elementary functions: polynomials, rational, exponential, trig and logs.	3.1-3.3
Sep. 13 - Last day to change grade mode (in person)			
Week 5	Sep. 17-19	Boundary value problems, complex powers, inverse trigonometric functions.	3.4-3.5
Week 6	Sep. 24 Sep. 26	Review midterm 1	 Chapters 1-3
Week 7	Oct. 1-3	Complex integration.	4.1-4.3
Week 8	Oct. 8	Cauchy's integral theorem.	4.4
Fall break Oct 10-11			
Week 9	Oct. 15-17	Cauchy's integral formula, bounds for analytic functions, applications to harmonic functions.	4.5-4.7
Week 10	Oct. 22-24	Power series: Taylor and Laurent series.	5.1-5.3, 5.5
Week 11	Oct. 29-31	Classification of singularities.	5.6-5.7
Week 12	Nov. 5 Nov. 7	Review midterm 2	 Chapters 4-5
Nov 8 - Last day to drop without Dean's permission			
Week 13	Nov. 12-14	Residue theorem, improper (contour) integrals.	6.1-6.4
Week 14	Nov. 19-21	More on integration, conformal mappings.	6.5-6.7, 7.1-7.2
Week 15	Nov. 26	Möbius transformations.	7.3-7.4
Thanksgiving Nov 28-29			
Week 16	Dec. 3-5	Applications and Review, optional 3rd test,	7.6
Dec. 8 - Last day to drop with Dean's permission			
Week 17	Dec. 9-13 Dec. xx	Finals Week final exam	 n-n+2 hours