8701 (Complex Analysis) Syllabus Part III – Fall 2013

This final part of the syllabus covers from the integration quiz to the end of the semester.

V. Bonus Topics in Residue Calculus

29.	W	Nov. 20	Residues at Infinity (Course notes)
30.	F	Nov. 22	Fourier analysis (Course notes, Folland)

VI. Canonical forms and the Riemann zeta function

31.	M	Nov. 25	Functions with prescribed poles (A 5.1.1–5.2.1)
32.	W	Nov. 27	Infinite products (A 5.2.2)
33.	M	Dec. 2	Weierstrass products (A 5.2.3)
34.	W	Dec. 4	The Gamma function (A 5.2.4)
35.	F	Dec. 6	Reimann Zeta function I (A 5.4.1, 5.4.2)
36.	M	Dec. 9	Riemann Zeta function II (A 5.4.3, 5.4.4)
37.	W	Dec. 11	Prime number theorem (Course notes)

A = Ahlfors' Complex Analysis (Another good source: Conway's "Functions of One Complex Variable I")