Course Plan
MATH 5010.352—Seminar in Mathematics
Applications of Complex Variables
Summer 2010

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Office hours Monday, Tuesday, Wednesday, and Thursday 1:00–1:50, or by appointment

Grading Grades for this course will be based on averages of homework scores. The following scores are guaranteed: 90%—A; 80%—B; 70%—C; 60%—D.

University drop policy The last day to drop the course with no grade is Wednesday, June 9. A grade of "W" will be recorded if the course is dropped after June 9 and before the end of Friday, July 16. The last day to drop the course is Friday, July 16.

References The following books are on reserve in the OSU Library.

- John H. Mathews and Russell W. Howell: *Complex Analysis for Mathematics and Engineering*
- E. B. Saff and A. D. Snider: *Fundamentals of Complex Analysis*

First assignment These three problems are due on Thursday, June 10. In each case use residues to find the Fourier transform of the given function.

1. $(t^2 + 8t + 20)^{-1}$
2. $(a^2t^2 + b^2)^{-1}$ if a and b are positive constants
3. $(t^4 + 1)^{-1}$