Math 300 - Term 2, Spring 2013 Introduction to Complex Variables

Time and Place: TuTh 2-3:30, Buchanan A202.

Instructor: Kalle Karu. Office: 213 Math Bldg. Phone: 822-4787. E-mail: karu@math.ubc.ca. Office hours: Mon 2-3, Th 11-12.

Textbook: Fundamentals of Complex Analysis with Applications to Engineering and Science by E.B. Saff and A.D. Snider.

Web site: www.math.ubc.ca/~karu/m300 Homeworks and solutions will be posted there.

Course description. Topics include complex numbers, complex derivatives and analyticity, elementary functions, contour integration, Cauchy's theorem, Cauchy's Integral Formula, Taylor series, Laurent series, singularities and residues. We will cover most of chapters 1-6 in the text, including sections: 1.1-1.6, 2.1-2.5, 3.1-3.3, 3.5, 4.1-4.6, 5.1-5.6, 6.1-6.3.

Homework. We will have a homework every week. Homeworks are posted on the course web site on Thursdays and they are due the following Thursday in class. Late homework will be accepted only in exceptional circumstances.

Exams. We will have two midterm exams, on Thursdays Feb. 7 and Mar. 14, during regular class hours. The final will be a 2 1/2-hour exam scheduled by the university. No makeup exams will be given.

Final Grade. Your final grade will be based on your performance on homework (15%), midterms (35%) and final exam (50%).