

Math 300 - Term 1, Fall 2015

Introduction to Complex Variables

Time and Place: MWF 8-9, Buchanan A203.

Instructor: Kalle Karu.

Office: 213 Math Bldg.

Phone: 822-4787.

E-mail: karu@math.ubc.ca.

Office hours: Mon 2-3, Wed 9-10.

Textbook: *Fundamentals of Complex Analysis with Applications to Engineering, Science, and Mathematics* 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 analytic functions, 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. There will be two types of homework:

- Webwork. See "Getting started with Webwork" on the course web page.
- Written homework. Written homework will be posted on the course web site on Wednesdays and they are due the following Wednesday.

Late homework will be accepted only in exceptional circumstances.

Exams. We will have two midterm exams, on Wednesdays Oct. 7 and Nov. 18, during regular class hours. The final will be a $2\frac{1}{2}$ -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%).