Math 300 - Term 2, Spring 2021
Introduction to Complex Variables

Instructor: Kalle Karu (karu@math.ubc.ca).

Lectures: TuTh 2-3:30, via Zoom.

Textbook: *Fundamentals of Complex Analysis with Applications to Engineering and Science* by E.B. Saff and A.D. Snider. 3rd edition, 2003 or later.

Web site: Canvas page for the course has more detailed information, including the Zoom link, posted homeworks, solutions, grades.

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: 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 one homework every week. These will be posted on Fridays and are due after 10 days on Mondays 10PM. Late homework will be accepted only in exceptional circumstances.

Exams. We will have two midterm exams in class, on Tuesday, February 23 and on Thursday, April 1. The final exam will be scheduled by the university. If you miss an exam with a documented reason, then the weight of that exam will be moved to other exams.

Final Grade. Your final grade will be based on your performance on homework (20%), midterms (20% + 20%) and final exam (40%).

University policies. UBC provides resources to support student learning and to maintain healthy lifestyles but recognizes that sometimes crises arise and so there are additional resources to access including those for survivors of sexual violence. UBC values respect for the person and ideas of all members of the academic community. Harassment and discrimination are not tolerated nor is suppression of academic freedom. UBC provides appropriate accommodation for students with disabilities and for religious observances. UBC values academic honesty and students are expected to acknowledge the ideas generated by others and to uphold the highest academic standards in all of their actions. Details of the policies and how to access support are available on the UBC Senate website.