MAT 301 APPLIED ANALYSIS AND COMPLEX VARIABLES: OUTLINE

2015/2016 Term 2

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Textbook: No required textbook. Optional textbook: Fundamentals of Complex Analysis for Mathematics, Science and Engineering, by E. Saff, A. Snider.

Notes: Notes are important. Old notes are available at www.math.ubc.ca/ ward

Topics and Teaching Scheme

• Complex Integration: 1 Week

• Multi-Valued Functions: 1.5 Week

• Integrals Involving Multi-Values Functions: 1 1/2 weeks

• Conformal Mapping and Applications: 3 weeks

• Nyquist Criterion; Poles and Zeroes of Complex functions. 1 week

• Laplace Transform: 2 weeks

• Fourier Analysis: 2 weeks

Assignments:

There will be 7 assignments. (I will post them on my web page: www.math.ubc.ca/~jcwei.) There will be one midterm and one final examination.

Lecture notes, assignments, solutions to assignments and examinations will be posted on my web when they are ready.

Assessment Scheme

Final Examination 1 50%

Office Hours:

Monday, Wednesday, Friday, 5:20-6:00pm

Final Remark: Any questions? Please send me an email or drop by my office LSK 303B.