# MAT 301 APPLIED COMPLEX ANALYSIS: OUTLINE 2015/2016 Term 2

Instructor: Juncheng Wei, LSK 303B, Tel. 604-822-6510, E-mail: jcwei@math.ubc.ca

**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%
Midterm Examination	1	15~%

Assignments	7	35~%
Total		100 $\%$

## 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.