Math 309 (C1) – Spring-Summer 2018
Reading Assignments and Approximate Lecture Schedule

Mon	Tue	Wed	Thur	Fri
May 7	**May 8**	**May 9**	**May 10**	**May 11**
Complex Numbers		Modulus and Conjugate		Polar Form of a Complex Number Complex Exponential
May 14	**May 15**	**May 16**	**May 17**	**May 18**
Powers and Roots Planar Sets		Riemann Sphere Point at Infinity		Functions of a Complex Variable Mappings
May 21	**May 22**	**May 23**	**May 24**	**May 25**
Victoria Day **No Class**		Limits and Continuity		Derivatives Analyticity
May 28	**May 29**	**May 30**	**May 31**	**June 1**
Cauchy-Riemann Equations		Harmonic Functions Laplace's Equation in Polar Coordinates		Elementary Functions Polynomial and Rational Functions
June 4	**June 5**	**June 6**	**June 7**	**June 8**
Exponential Trigonometric and Hyperbolic Functions		Logarithmic Functions Complex Powers Inverse Trig Functions		**Midterm Examination I**
June 11	**June 12**	**June 13**	**June 14**	**June 15**
Contour Integration Contours Contour Integrals		Contour Integrals		Antiderivatives Independence of Path Cauchy-Goursat Theorem
June 18	**June 19**	**June 20**	**June 21**	**June 22**
Simply and Multiply Connected Domains		Cauchy Integral Formul and its Consequences		Cauchy Integral Formula Continued

Mon	Tue	Wed	Thur	Fri
June 25	**June 26**	**June 27**	**June 28**	**June 29**
Bounds for Analytic Functions		Applications to Harmonic Functions		Sequences and Series Taylor Series
July 2	**July 3**	**July 4**	**July 5**	**July 6**
Canada Day No Class		Power Series Lauent Series		Laurent Series Zeros and Isolated Singularities
July 9	**July 10**	**July 11**	**July 12**	**July 13**
Isolated Singular Points Residues		Residues at Poles The Residue Theorem Trigonometric Integrals		**Midterm Examination II**
July 16	**July 17**	**July 18**	**July 19**	**July 20**
Evaluation of Improper Integrals		Improper Integrals Jordan's Lemma		Indented Contours Multiple-Valued Functions Along a Branch Cut
July 23	**July 24**	**July 25**	**July 26**	**July 27**
The Argument Principle Rouché's Theorem		Conformal Maps Invariance of Laplace's Equation		Möbius or Fractional or Bilinear Transformations
July 30	**July 31**	**August 1**	**August 2**	**August 3**
Inverse Laplace Transforms		Complex Fourier Series		Complex and Real Fourier Series **Last Day of Classes**

Final Examination: 9:00 - 11:00 am, Tuesday August 14, 2018. Location to be announced