MATH 555
Spring 2017

Lectures:
Monday 13:40-15:30
Thursday 13:40-14:30

References:
Classical texts (more or less all are equally good):


For the subject of analytic continuation, I think

- K.Kodaira, *Introduction to Complex Analysis*, CUP (1984) and

are preferable.

For the geometric approach, the best reference at introductory level is


A good advanced general reference is

SYLLABUS:

- Review of elementary facts: Cauchy-Riemann conditions, analyticity, holomorphicity, Cauchy integral formula.

- Maximum Modulus Theorem, open mapping theorem. Schwarz lemma.


- Normal families. Riemann Mapping Theorem, Schwarz-Christoffel transformation.

- Geometric approach: Metrics in elementary differential geometry, isometries, geodesics. Metrics in complex analysis (spherical metric, flat metric, Poincare metric and Kobayashi pseudo-metric). Applications: Normal families (revisited), Picard Theorem

Grading:

Class participation 30/100
Midterm 30/100
Final Exam 40/100