

Course outline

APPM 4360/5360

Spring 2004

1. Complex numbers : Representations, basic operations and properties,
and topology of the complex plane
A and F : 1.1, 1.2
2. Complex valued functions and mappings
A and F : 1.2, 2.2, 3.1, 3.5
3. Limits, continuity, and differentiation
A and F : 1.3
4. Analytic functions
A and F : 2.1, 2.4, 2.5, 2.6, 3.2
5. Functions with singularities
A and F : 3.3, 3.5, 4.1, 4.2, 4.3, 4.4, 4.5, 4.6
6. Conformal mapping
A and F : 5.1, 5.2, 5.3, 5.4, 5.5