

Mei-Chi Shaw - Spring 1999

Math. 606 Basic Complex Analysis\ II

We will cover the following
topics:

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1) Convergence of Analytic Functions and the Riemann Mapping Theorem

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2) The inhomogeneous Cauchy-Riemann equations and Runge's Theorem.

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3) Series and Product of Analytic Functions.

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4) Harmonic Functions and the Dirichlet Problem.

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5) Analytic continuation and Riemann Surfaces.

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6) The Picard's Theorem.

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Text Book: 1. Ahlfors, L. V., Complex Analysis, 3rd edition, New York,
Mcgraw-Hill, 1979.

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2. Conway, J. B., Functions of One Complex Variable, 2nd edition,
Springer-Verlag, 1978.

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Other References:

2. Narasimhan, R., Complex Analysis in One Variable, Birkh\"auser.

3. Forster, O. Lectures on Riemann Surfaces. Springer-Verlag, 1993

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