## Math 312 (Complex Analysis) – Week 10 Spring Term 2004 BUCKMIRE

## Monday March 29 Class 25:

**Cauchy's Integral Formula.** We shall learn how to use the CIF to evaluate a wide variety of integrals without having to paranetrize again! Reading:

Saff & Snider, (Section 4.5)

## Wednesday March 24 Class 26:

**Applications of Cauchy's Integral Formula** We shall look at the amazing list of implications and results which arrive from the Cauchy Integral Formula and the Generalized Cauchy Integral Formula.

Reading:

Saff & Snider, (Section 4.5)

## Friday March 26 Class 27:

**Zeroes, Poles and Residues.** We shall begin our study of the "residue calculus" by classifying zeroes and singularities (often called poles) of a function and illustrate their application to contour integration through the Cauchy Residue Theorem. Reading:

Saff & Snider, (Section 5.6 and 6.1)

Homework:

Quiz #8 DUE MON APR 2 HOMEWORK SET # 9 DUE TODAY