The Georgia Institute of Technology
Fall 2010
Math 8813 - Analytic Function Theory
Lecture: Room: Skiles 169 - Time: TTH 9:35am – 10:55am

Instructor: Brett D. Wick Office: Skiles 224
Office Phone: 404-864-4311 Office Hours: T/TH 11:00am – 12:00pm
Email: wick@math.gatech.edu or by appointment
Webpage: http://people.math.gatech.edu/∼bwick6/math8813.html

Text: There will be no assigned text for the course. The material to be covered will be given out in course notes. Parts of the material to be covered can be found in:

"Bounded Analytic Functions" by Garnett;

"Theory of H^p Spaces" by Duren;

"Spaces of Holomorphic Functions in the Unit Ball" by Zhu;

"Bergman Spaces" by Duren and Schuster;

"Theory of Bergman Spaces" by Korenblum, Hedenmalm, and Zhu.

Additional material will be taken from other sources such as books or papers in the literature.

Prerequisite and Description: Math 8813 is an introduction to analytic function theory on the unit disc. Topics covered include: Hardy spaces on the disc, Besov-Sobolev spaces on the disc, interpolation theorems, Corona Theorems, and Carleson measures. Other topics that will be studied time permitting will include Sobolev spaces, bilinear forms on these spaces of functions, and factorization results.

Prerequisites for the course are Math 4320, Math 6337, and Math 6338.

Attendance: Attendance is required for all lectures. The student who misses a class meeting is responsible for any assignments and/or announcements made. Office hours will not be utilized to re-teach material presented in class. However, questions to better understand the course are always welcome.

In the event of an absence that will impact your ability to complete your assignments due to travel representing Georgia Tech, you must notify the professor at least two weeks in advance to arrange an early test or other alternative. Otherwise, such absences will be treated as personal.

Homework: This course will have daily homework assignments which should be done before the next class. Homework will not be collected, but will help with the learning of the material.

Projects: There will be a required project to complete for the course. The project will be to work through a particular paper and present it to the class. The project will be determined by discussion between the student and the instructor and selected based on connections with

the course and students interests. Exact details will be provided later.

Learning Disabilities: It is the right of any student with a certified learning disability to request necessary accommodation. Such requests must be made well in advance of the time that the accommodation is required and a letter of documentation from the ADAPTS office must be presented at the time of any request.

Academic Honesty: It is expected that all students are aware of their individual responsibilities under the Georgia Tech Academic Honor Code, which will be strictly adhered to in this class.

Grades: The usual ten-point scale will be used (A: 90-100, B: 80-89, C: 70-79, D: 60-69, F: 0-59), however, if necessary, adjustments will be made to arrive at a standard grade distribution. Grades will be based upon attendance, participation, and a class project.

Important Dates for Fall 2010:

August 23	First day of classes
August 27	Last day to register
September 6	Labor Day - No Class
October 16 - 19	Fall Student Recess - No Class
October 15	Last day to drop or withdraw with a grade of "W"
October 31	Last day to withdraw from school with a grade of "W"
November 25 - 26	Thanksgiving Break - No Class
December 10	Last day of classes