## Basic Complex Analysis II - Riemann Surfaces

Instructor: Gábor Székelyhidi MWF 9:25 – 10:15, Spring 2015 Pasquerilla Center 109

This course will be an introduction to the theory of Riemann Surfaces. The main topics covered will be the following:

- Basic theory definitions, calculus on surfaces, elliptic functions, maps between Riemann surfaces.
- Analysis on Riemann surfaces, meromorphic functions, uniformization theorem.
- Line bundles, Jacobians, deformations.

Textbook: The textbook for the course is

Donaldson - Riemann surfaces (Oxford Graduate Texts in Mathematics)

**Grading policy:** There will be weekly homework assignments, a midterm and a final exam. In addition your grade will also be based on class attendance and effort.