Basic Complex Analysis II - Math 60380

Instructor: Gábor Székelyhidi
MWF 3:00 – 3:50, Fall 2016
Hayes Healy 229

This course will be an introduction to complex and Kähler geometry. The main topics covered will be the following:

- Several complex variables

- Complex and Kähler Manifolds

- Vector bundles

- Hirzebruch-Riemann-Roch and Kodaira Embedding Theorems

Textbook: Daniel Huybrechts: Complex Geometry - An Introduction
References: Some other useful references which are more advanced are:

- Griffiths, Harris: Principles of Algebraic Geometry, Chapter 0, 1.

- Demailly: Complex Analytic and Differential Geometry

Grading policy: There will be weekly homework sets, a midterm, and a final exam. The final grade will be broken down as follows: Homework 40%, Midterm 30%, Final 30%.

Office hours: I will have regular office hours on Mondays, 1-2:30pm, in 277 Hurley Hall, or by appointment.