This course will be an introduction to complex analysis in one variable. The main topics covered will be the following:

- Complex derivatives, holomorphic functions
- Complex integration, Cauchy integral formula
- The residue theorem, applications
- Picard’s theorem, Runge’s theorem
- The Riemann mapping theorem

**Textbook:**


**References:** Some other useful references are the following books:

- Ahlfors, *Complex Analysis*
- Stein, Shakarchi, *Complex Analysis*, Princeton Lectures in Analysis II
- Greene, Krantz, *Function Theory of One Complex Variable*

**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 Wednesdays, 9-10:30am, in 277 Hurley Hall, or by appointment.