MATERIAL TO STUDY FOR MATH 788F

- Difference between irreducibility over $\mathbb{Z}$ and over $\mathbb{Q}$
- Gauss' Theorem connecting irreducibility over $\mathbb{Q}$ with irreducibility over $\mathbb{Z}$ (know proof)
- Computing the greatest common divisor of two polynomials
- The Schönemann-Eisenstein Criterion (know a proof)
- Determining if a polynomial is Eisenstein
- Newton polygons (definitely on test)
- Do not concern yourselves with the last section of Chapter 2 (Schur's theorem)
- Perron's Theorem (know proof given the second lemma, that is given Rouché's theorem)
- A. Cohn's and G. Pólya's Theorem concerning $f(10)$ being prime (know proof of the theorem and the lemma to the theorem)
- Bernoulli polynomials (know proof of Theorem 4.2.2)
- Be able to do the exercises at the end of the chapters