

## EE 210 Signals and Systems

### Week 6 Summary:

1. Existence conditions and convergence behavior of Fourier series; Gibbs' phenomenon
2. Optimality of Fourier series coefficients in terms of minimizing m.s.e.
3. Properties of Fourier series
4. Frequency response of LTI systems, and computing LTI system output via Fourier series representation of periodic input signals

### Homework exercises

3.19, 3.25, 3.33, 3.35, 3.40, 3.41, 3.43