- **Instructor**: Prof. Shivkumar Chandrasekaran
- **Course**: Fourier Analysis For Engineers
- **Course No.**: ECE594D
- **Class Web-site**: `http://www.ece.ucsb.edu/courses/ECE594D/594D_S09Shiv/default.html`
- **Textbook**: *Fourier Analysis: An Introduction*, Elias M. Stein and Rami Shakarchi (required)
- **Recommended textbooks**:
  - *Fourier Analysis and its Applications*, G. B. Folland (good undergraduate textbook)
  - *Fourier Analysis*, T. W. Körner (good exposition; easy read)
  - *Advanced Mathematical Analysis*, R. Beals (clean, tight introduction of Fourier series via distribution theory; must read)
  - *Fourier Series and Integrals*, by H. Dym and H. P. McKean (rigorous with lots of applications)
- **Lecture Room**: Phelps 1431
- **Lecture Hours**: Mondays & Wednesdays 10 a.m. — 11:50 a.m.
- **Office Hours**: Tuesdays 2 p.m. — 3 p.m.
- **My Office**: Eng. I, room 3109, x7542
- **Prerequisites**: Calculus, linear algebra
- **Homework**: Once a week. See the class web-site.
- **Finals**: Take home
- **Syllabus**:
  - Separation of variables solution of PDEs
  - Basic convergence properties of Fourier series
  - Applications of Fourier series
  - Basic properties of Fourier transforms