

INFORMATION SHEET

- Instructor: Thomas Liu, Department of Radiology
Center for Functional Magnetic Resonance Imaging (fMRI), Room 1001
(858) 822-0542 , ttliu@ucsd.edu
- Teaching Assistant: Anna Leigh Rack-Gomer, arackgom@ucsd.edu (Office hours TBA)
- Lectures: Tuesdays/Thursdays 9:30 a.m. to 10:50 a.m., Sequoyah Hall 148
- Office Hours: Tuesdays 2 to 3 pm; Wednesdays 1 to 2 pm; or by appointment.
Center for fMRI Conference Room.
- Prerequisites: Graduate Standing or Consent of Instructor.
- Required Texts: Medical Imaging Signals and Systems, Jerry L. Prince and Johnathan M. Links, Prentice Hall 2005. Errata available at http://iacl.ece.jhu.edu/~prince/jlp_mibook.html
- Principles of Magnetic Resonance Imaging, Dwight G. Nishimura (we will order copies of this from the author)
- Course Web Site: http://cfmriweb.ucsd.edu/ttliu/BE280A_07.html
(mirror site: http://fmrserver.ucsd.edu/ttliu/BE280A_07.html)
Lecture notes will be posted on the web by 5 p.m. the day before the class.
- Course e-mail list: Course e-mails will be sent through StudentLink to registered students.
- Course Description: Fundamentals of Fourier transform and linear systems theory including convolution, sampling, noise, filtering, image reconstruction, and visualization with an emphasis on applications to biomedical imaging. Examples from optical imaging, CT, MRI, ultrasound, nuclear, PET, and radiography.
- Grading: 25% Homework/Quizzes/Class Participation, 35% Midterm Project, 40% Final Project