

INFORMATION SHEET

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- Teaching Assistant: Amran Assadi, aasadi@ucsd.edu
- Lectures: Mondays/Wednesdays 11 a.m. to 12:20 p.m.,
Powell-Focht Bioengineering Hall, Room 161
- Office Hours: Listed at the course website.
- Prerequisites: Graduate Standing or Consent of Instructor.
- Required Texts: Principles of Magnetic Resonance Imaging, Dwight G. Nishimura
(students can order through Lulu.com)(1 copy available on reserve at the
S&E library)
- Supplementary Text: Medical Imaging Signals and Systems, Jerry L. Prince and Johnathan M.
Links, Prentice Hall 2006. Errata available at
<http://iacl.ece.jhu.edu/~prince/mibook/mierrata-v1.03.pdf>
(1 copy available on reserve at the S&E library)
- Course Web Site: http://cfmriweb.ucsd.edu/ttliu/BE280A_12.html
(mirror site: http://fmrserver.ucsd.edu/ttliu/BE280A_12.html)
- 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, time-
frequency analysis, blind source separation, and visualization with an
emphasis on applications to biomedical imaging. Examples from MRI and
EEG, with a focus on functional brain connectivity and integration of
information from different modalities.
- Grading: Class Participation 15%; Homeworks 20%; Quizzes/Midterm 30%;
Final Project/Exam 35%