BENG280A, Principles of Biomedical Imaging Fall Quarter 2015

09/28/15 HO #1

INFORMATION SHEET

Instructor:	Thomas Liu Center for Functional Magnetic Resonance Imaging (fMRI), Room 1001 (858) 822-0542, <u>ttliu@ucsd.edu</u>
Teaching Assistant:	Cherilyn Go; ctgo@eng.ucsd.edu; Office hours TBD
Lectures:	Mondays/Wednesdays 11 a.m. to 12:20 p.m., Powell-Focht Bioengineering Hall, Room 161
Office Hours:	Mondays/Wednesdays 12:20 pm to 1:20 p.m., Powell-Focht Bioengineering Hall, Room 161
Prerequisites:	Graduate Standing or Consent of Instructor.
Required Text:	Principles of Magnetic Resonance Imaging, Dwight G. Nishimura (students can order through Lulu.com)(1 copy available on reserve at the main library)
Supplementary Text:	Medical Imaging Signals and Systems, Jerry L. Prince and Johnathan M. Links, Prentice Hall 2014. Errata available at <u>http://iacl.ece.jhu.edu/~prince/mibook/mierrata-v1.03.pdf</u> (1 copy of the older 2005 version is available on reserve at the main library)
Course Web Site:	http://cfmriweb.ucsd.edu/ttliu/BE280A_15.html (mirror site: http://fmriserver.ucsd.edu/ttliu/BE280A_15.html)
Course e-mail list:	Course e-mails will be sent through StudentLink to registered students.
Class Participation:	We will be using the <u>http://www.polleverywhere.com</u> system to assess learning. More details will be provided in class. Polls are at PollEv.com/be280a
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. Modalities include: X-rays, CT, and MRI.
Grading:	Class Participation 15%; Homeworks 20%; Quizzes/Midterm 30%; Final Project/Exam 35%