RAD 227: Functional Magnetic Resonance Imaging Methods
Winter, 2012; 3 credits. Room: P083 Lucas Learning Center
## Lectures: Tue Thu 2:00 PM- 3:30 PM

COURSE SYLLABUS

Professor Gary Glover
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TA: Priti Balchandani <pritib@stanford.edu>, phone: xxxx, office: Lucas P067, hours: after each class or by appt.

Course Goals: Students will learn the methods of functional magnetic resonance neuroimaging, including data acquisition, analysis and experimental design. Material will emphasize the principles underpinning acquisition and design tradeoffs. The course will comprise both lecture and discussion/journal club sections and will demonstrate both cognitive neuroscience and clinical applications.

Prerequisites: some basic physics, mathematics helpful. If in doubt contact prof.

Course description: There will be two sessions each week, comprising lectures, journal club presentations and homework discussion. For each lecture, there will be assigned reading from text (below) as well as homework problems. During journal club, students will present articles relating to the lectures. Students not presenting will be required to read the articles and email the TA with 3 questions or comments about the article. The final project will involve proposing an fMRI experiment in the style of a short NIH-type fellowship grant.
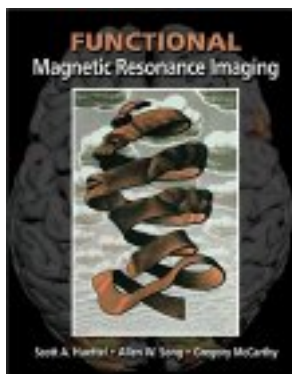
Book: Required text available at the bookstore: Scott A. Huettel, Gregory McCarthy, Allen W. Song. *Functional Magnetic Resonance Imaging.* Publish Date: Dec. 2008. ISBN: 0878932887. cost: ~$80

Course website: **coursework.stanford.edu**, RAD 227. Homework assignments and weekly articles will be posted on the website.

Grading: 60% Reading & Homework, 40% Final Project