Information:

Course: BMENE 6000, MR Instrumentation
Prof: Tommy Vaughan
Classroom: JLGSC L7-081, Wed 1:10 – 3:40P
Office: 402 CEPSR Schapiro
Hours: Monday, Tuesday, 9:30 – 12:00
Email: jtv2114@columbia.edu
Admin Assist: Marleny Martinez, mm5631@cumc.columbia.edu
Research Manager: Kathleen Durkin, kd2649@columbia.edu

Syllabus:
Jan 22 – Course Introduction
Jan 29 - MR System Overview, Project Assignments
Feb 5 – MR Safety Training
Feb 12 – MR System Operation
Feb 19 – Magnets
Feb 26 – Gradients and Shims
Mar 4 – Cryostats and Cryogenics
Mar 11 - RF Spectrometer
Mar 25 – RF Coils
Apr 1 - Data Acquisition and Control Interface
Apr 8 - Digital Console
Apr 15 - Remote Control / Automation
Apr 23 - Final Written Exam
Apr 29 – Design Presentations, Reports Due
Objectives and Expectations

"1.) Learn the components of an MR system and how it works. - evaluated by exam.

"2.) Design a new generation MR system. - evaluated by project report and presentation

Each member will be asked to design a different subsystem of a new generation MR system to meet world accessibility criteria.