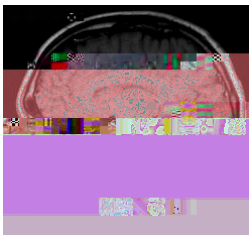

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Instructor: Joyoni Dey, PhD
459A Nicholson Hall; 225-578-4289; deyj@lsu.edu

Description: This course covers mathematical topics in imaging, including the theory of image formation, sampling and Fourier analysis; algorithms for image reconstruction; digital image processing, restoration and analysis; image registration (fusion); other topics as possible.

Textbook: (*optional – see list below*) Handouts and material will be provided. No single book covers all the material to be covered.

Class times: –

Office hours: – Other times as needed

$;*4243:<% %

Attendance at all lectures is required.
Homework assignments must be individually prepared by each student, and are *due at the beginning of class on due-date*. Requests for late submission must be made *prior* to the due date of an assignment.
Redistributing, sharing or posting (physically or electronically) is prohibited for any course-related content, including electronic recording of lectures or materials.

Grades: Grades comprise a mid-term exam (20%), a cumulative final exam (40%), and homework assignments (40%). Assignment of final letter grades will be based on grades of Homework, Mid-Semester Exam, and Final Exam, with an anticipated distribution of 90-92.5 = A-, 92.5-97.5 = A, and 97.5-100 = A+; 80-82.5 = B-, 82.5-87.5 = B, and 87.5-90 = B+; 70-72.5 = C-, 72.5-77.5 = C, and 77.5-80 = C+; 60-62.5 = D-, 62.5-67.5 = D, and 67.5-70 = D+; <60%=F.

Homework: Homework assignments will include math and programming exercises. All homework must be submitted on paper, including sample outputs and code snippets as appropriate (code by itself is insufficient). Students can use a programming language with which they are comfortable.

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