Instructor : Xiaobai Sun
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Teaching Assistant : Rex Yin
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Class Time: 4:40–5:50pm, Tu. Th.
Class Location : D106 LSRC
Office Hour : Friday 4:00pm - 5:00pm
Citation Hour : Friday 3:00pm - 4:00pm

Prerequisite : Calculus, Linear Algebra
Text books : recommendation, self-selection
Work load : 3 homework, 2 exams, 20%/each
Grading : 50% rebound points
(for correction within a week)

Theme : Large-Scale Numerical Computation with Local and Global Structures

Approach 1 : use applications as motivation and case studies, to help identify (mis)connections between computational theory and practice, to help make extension from the concrete and specific to the abstract and general

Approach 2 : discussion to dissect, digest, discover

Three subjects, related, one per month

1. Sampling/Re-sampling, weighting/re-weighting in projection, integration and differentiation
2. Optimization subject to equality and inequality constraints
3. Iterative solution methods

Reading or reference material will be suggested for each subject.

Participation policies

– Attendance of discussion is expected in and out of class
– Any absence due to exceptional circumstances is to be reported to the teaching staff in a timely manner