Numerical Analysis
Math 4065 Fall 2023

Time: Tuesday and Thursday, 10:30-11:50 AM, at 240 Lockett Hall

Instructor: Hongchao Zhang (TA: Mbouo R Nimpa, Email: mnimpa1@lsu.edu)
Lockett, Room 220 / TEL: 225-578-1982 Email: zhc@lsu.edu
Web page : http://www.math.lsu.edu/~hozhang/Math4065-Fall2023/Math4065.html

Office Hours: Tuesday and Thursday 12:00-1:00 PM, or by Appointment, or Anytime you stop by and I am in office. (TA Office Hours: Monday and Friday 11:30am to 12:30pm)


Prerequisites: A grade of C or better in MATH 2057 (Calculus III); Basic programming abilities in Matlab.

Contents: We will cover most of chapters 2-4 and chapter 8. Topics include root-finding of equations, polynomial interpolation and approximation, numerical differentiation and integration, more general approximation theories, etc.

Homework: Homework will be assigned and posted on the course web page. Homework will not be collected; However, you will see very similar problems on the tests and quizzes. So, completion of the assignments on time is VERY ESSENTIAL to your success in this course and is one of the BEST ways to prepare for quizzes and tests.

Quizzes: There will be biweekly quizzes (each worth 20 points and takes about 20-25 minutes) at the beginning of Thursday’s class. There will NOT be any make-up quizzes. Quiz problems are very similar to the homework problems. Quiz scores will be accumulated to count 20% of your final grades.

Projects: There will be 3-4 projects during the semester consists of programming tasks in Matlab. It normally takes two weeks to complete the project and the due date will be announced in class. Project scores will be accumulated to count 15% of your final grades.

Tests: There will be one accumulative midterm and one final exam. There will not be any make-up exams. Midterm and final exams will count 25% and 35% of your final grades respectively.

Grade: Quizzes: 20%; Projects: 15%; Attendance: 5%; Midterm: 25% ; Final Exam: 35%


Final grades maybe finally scaled, but will only be scaled up.

Note: Except for unforeseen reasons, students must obtain advance approval from the instructor for missing any assignments including Quizzes and Exams, etc. Under this case, any excuse for missing an assignment must be properly documented and any missed assignment should be made up within three days.

Policy: The use of calculators without programmable memory is allowed. However, I recommend not using calculators and all the problems could be done by hand calculations.