

# Numerical Analysis I MAD 3703

## Spring 2019

**Room: 107 LOV**  
**MWF: 2:30 – 3:20 PM**

Instructor	Dr. Sanghyun Lee
Contact information	Office: 002-D LOV email: <a href="mailto:lee@math.fsu.edu">lee@math.fsu.edu</a>
Office hours	Tues: 2:00-4:00PM; or by appointment.
Course Objectives	The purpose of this course is to introduce students to the subject of numerical analysis: the theoretical analysis and implementation of numerical methods. In particular, the course covers error analysis, computer arithmetic, root finding, interpolation and polynomial approximation, numerical differentiation & integration, and approximation theory. The programming language Julia will be introduced and used in this class.
Prerequisites	MAC 2312 with a grade of "B-" or better or MAC 2313 with a grade of "C-" or better, MAS 3105, and competence in a programming language suitable for numeric computations, such as C, C++, Fortran, Java, Python, or <b>Julia</b> .
Lecture notes	Lecture notes will be uploaded on Canvas by chapter. Bring a hard or soft copy of the lecture notes to class.
Homework	Homework will be assigned, collected, and graded. Homework problems will have a theoretical and computational component to them. Homeworks will make 25% of your letter grade.
Tests	There will be two in class tests. Each test will make 25% of your letter grade. The dates of the tests will be announced during the semester.
Final exam	The final exam is comprehensive. It is on Wednesday, May 1st, at 7:30-9:30 AM. The final exam grade makes 25% of your letter grade.
Grading scale and points	A: 90-100; B: 80-89; C: 70-79; D: 60-69; F: 0 – 59 I typically use plus or minus grades for only borderline cases.
Makeup policy	If you miss a test for an excused absence (emergency, illness), and provide documentation, then the final exam grade will be substituted for the missed test grade. Absences from tests due to family social events will not be excused. Acceptable medical excuses must state explicitly that the student should be excused from class. Students must take the final examination at the scheduled time. Students must bring FSU ID cards to all tests.

University Attendance policy Excused absences include documented illness, deaths in the family and other documented crises, call to active military duty or jury duty, religious holy days, and official University activities. These absences will be accommodated in a way that does not arbitrarily penalize students who have a valid excuse. Consideration will also be given to students whose dependent children experience serious illness.

Academic Honor policy The Florida State University Academic Honor Policy outlines the University's expectations for the integrity of students' academic work, the procedures for resolving alleged violations of those expectations, and the rights and responsibilities of students and faculty members throughout the process. Students are responsible for reading the Academic Honor Policy and for living up to their pledge to ". . . be honest and truthful and . . . [to] strive for personal and institutional integrity at Florida State University." (Florida State University Academic Honor Policy, found at <http://dof.fsu.edu/honorpolicy.htm>.)

Americans with disabilities act Students with disabilities needing academic accommodation should:  
(1) register with and provide documentation to the Student Disability Resource Center; and  
(2) bring a letter to the instructor indicating the need for accommodation and what type. Please note that instructors are not allowed to provide classroom accommodation to a student until appropriate verification from the Student Disability Resource Center has been provided.  
This syllabus and other class materials are available in alternative format upon request. For more information about services available to FSU students with disabilities, contact the:  
Student Disability Resource Center  
874 Traditions Way  
108 Student Services Building  
Florida State University  
Tallahassee, FL 32306-4167  
(850) 644-9566 (voice)  
(850) 644-8504 (TDD)  
[sdrc@admin.fsu.edu](mailto:sdrc@admin.fsu.edu)  
<http://www.disabilitycenter.fsu.edu/>

Syllabus Change Policy "Except for changes that substantially affect implementation of the evaluation (grading) statement, this syllabus is a guide for the course and is subject to change with advance notice."