

**ISC 3313 - Introduction to Scientific Computing
Programming Language: Fortran 90**

Fall 2015

Instructor:	Professor Janet Peterson email: jpeterson@fsu.edu Office: 444 DSL Phone: 644-1979
Office Hours:	M 11-12, W 9-10, other times by appointment
Class:	MWF 12:20-1:10, 152 DSL
Course Website:	http://people.sc.fsu.edu/~peterson/
TA:	Isaac Lyngaas email: irlyngaas@gmail.com Office: DSL 492F Office Hours: TBA
Prerequisites:	MAC 2311, MAC 2312 (corequisite)
Text:	Notes from Website
Suggested Text:	<i>Introduction to Fortran90 for Engineers and Scientists</i> , L Nyhoff and S. Leetsma.

Course Description: This course introduces the student to the science of computations. Algorithms for standard problems in computational science are presented. In this course the programming language Fortran90 is used. The basics of this object-oriented programming language are taught to facilitate the student's implementation of algorithms. Aspects of the programming language are taught through a set of standard problems in scientific computing.

Course Objectives: At the conclusion of the course, the students will be able to

1. identify the components of scientific computing;
2. identify standard problems in scientific computing;
3. implement basic algorithms for standard problems in computational science using the programming language Fortran90;
4. write, debug, and verify computer codes;
5. output results of computer simulations in a meaningful manner.

Computer Competency Requirement: In order to fulfill FSU's Computer Competency Requirement, the student must earn a "C-" or better in the course.

Grading Policy: The student's grade for the course will be based upon classwork, homework, projects, a midterm and a final capstone project. This work is weighted as follows:

Classwork/Homework - 50%
Projects - 15 %
Midterm Exam - 15%
Capstone Project - 20%

Homework/Project Submission: Each homework assignment or project must be submitted as pdf documents in a single tar file via email to Isaac Lyngaas with a copy to Professor Peterson.

Late Homework Assignments. You are allowed to turn in one homework assignment up to one week late during the semester with no questions asked. Other assignments turned in late will have their value reduced by 5% daily up to one week late; after one week no late assignments will be accepted. Exceptions to these rules will only be made in the case of illness, etc. which can be properly documented as dictated by the University Attendance Policy below.

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. This should be done during the first week of class.

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)
sdr@admin.fsu.edu
<http://www.disabilitycenter.fsu.edu/>