Class Syllabus: Scientific Programming

Location	HCB0219
Course name	Scientific Programming
Course number	ISC 5305
Course time	Tuesday: 11:00 am – 12:15 pm Thursday: 11:00 am – 12:15 pm
Office Hours	Tuesday: 12:30 am – 1:30 pm Thursday: 12:30 am – 1:30 pm
Instructor	Xiaoqiang Wang
Telephone (wk)	(850) 644-4274
FAX	(850) 644-0098
Email	wwang3@fsu.edu
Instructor home page	http://www.sc.fsu.edu/~wwang3
Teaching Assistant	Rui Gu: rg10e@fsu.edu, Office: 492A DSL
Prerequisites	Students must have knowledge of at least one programming language (hopefully C++).
Text	None. Web-based documentation will be used.
Assignments	Students will be given homework problems on a weekly basis to help master the material learned in class. The assignments will be executed using the tools on either the classroom machines, or on the personal laptops or PCs of students. Using the linux operating system will be easiest. Assignments take the form of programs to write in the languages worked on in class. The homeworks will often be intensive. Students should expect to program 15 hours a week outside course time. The web is a bountiful resource of program examples and tutorials.
Course Objectives	This course proposes to teach students the basic elements of C++ and Python to enable them to perform simple to intermediate object oriented programming tasks. The course assumes basic familiarity with a programming language, but not necessarily some of its advanced aspects such as structures, pointers, etc. A student that completes this course will be comfortable thinking in objected oriented terms, know how to manipulate objects with dynamically changing information, know how to organize the data structure, know how to write a scientific program in an efficient way, know how to do the parallel programming, know how to access elements of one language from another, and learn to construct software libraries and more.
Attendance	Students are required to attend all classes. Exemptions are only accepted for sickness and the attendance of scientific conferences. Students, not the professor, are then responsible for bringing themselves up to date both on subject matter covered during class, as well as completing homework assignments in a timely manner. Information given in class supplants information provided on the course web site.
Courtesy	You should get to class on time, and remain until class is dismissed. If you must leave class early, please let the instructor know before class begins. Please consider leaving home 15-20 min early to take potential morning traffic into account.

Grading	There will be 2 or 3 in class quizzes. These will consist of some multiple choices problems for the content taught in class. There will be homework given out on a weekly basis. These will consist of either articles to read and summarize (online), or programming homeworks. The summaries will usually be due one week after being assigned. The programming homeworks will usually be due 1-2 weeks after assignment. There is no final project, midterm or final exam. Every quiz, article summary homework, programming assignment has equal weight. Plus or minus grades may be assigned in a manner consistent with standard University practice. A grade of I will not be given to avoid a grade of F or to give additional study time. Failure to process a course drop will result in a course grade of F. If the scores are curved, the letter grades will be assigned after curving. Homeworks must be received on time, and uploaded through the Blackboard. The homeworks are to be returned in zip format, whether article summaries or programming assignments. There is no guarantee that late homeworks will be graded.
Exam Policy	No written tests will be given except quizzes during this class. Students are required to come to class up until the last lesson of the last week. Short of medical emergencies, a zero will be given to any project that is not returned on time.
Honor code	The Academic Honor System of The Florida State University is based on the premise that each student has the responsibility 1) to uphold the highest standards of academic integrity in the student's own work, 2) to refuse to tolerate violations of academic integrity in the University community, and 3) to foster a high sense of integrity and social responsibility on the part of the University community. Please note that violations of this Academic Honor System will not be tolerated in this class. Specifically, incidents of plagiarism of any type or referring to any unauthorized material during examinations will be rigorously pursued by this instructor. Before submitting any work for this class, please read the ``Academic Honor System'' in its entirety (as found in the *FSU General Bulletin* and in the *FSU Student Handbook* and ask the instructor to clarify any of its expectations that you do no understand.
American Disabilities Act	Students with disabilities needing academic accommodations should: 1) register with and provide documentation to the Student Disability Resource Center (SDRC); 2) bring a letter to the instructor from SDRC indicating you need academic accommodations. This should be done within the first week of class. This and other class materials are available in alternative format upon request.