CSCI 299 – Data Visualization and Game Programming  
Course Syllabus – Fall 2006

Professor: Dr. Bill Manaris

Office: Room: 223 J.C. Long Building  
Phone: (95)3-8159  
E-mail: manaris@cs.cofc.edu  
Web: http://www.cs.cofc.edu/~manaris/

Office Hours: MTWR 11 am – noon, and by appointment.

Course Description: An introduction to general computer programming. Through game development, students will be exposed to computer modeling, data visualization, and media transformations: images, sounds, music, and text. Programming exercises will mainly involve computer games and animations developed in Python and VPython. Students will develop at least one computer game of their choice. Upon completion of the course, students will be able to develop programs to model information and processes in their field of study. Course is open to any major. No previous programming experience required.

Prerequisite: Mathematics 111 or permission of instructor.


Additional materials will be made available via handouts and the class webpage at http://www.cs.cofc.edu/~manaris/ (follow CSCI 299 link).

Learning Goals:  
- Become proficient with Python: data types, basic operators, I/O, conditional statements, loops, functions, common modules, objects, and graphics.
- Learn how to manipulate media: images, sounds, music, (hyper)text.
- Learn fundamentals of data visualization and computer game development.
- Learn how to create models and visualizations in any field of study (e.g., physics, economics, chemistry, etc.).

Grading: To receive a passing grade for the course, you must average a passing grade on each of the following: assignments, tests, and final exam.

Scale: A: 90-100; B: 80-89; C: 70-79; D: 60-69; F: <60. The grades of B+/-, C+/-, and D+/- may be given at the professor's discretion.

Final Grade Computation: Assignments (4-6) 30%, Tests (2) 40%, Comprehensive Final Exam 20%, and Class Participation 10%.

Collaboration Policy: You must do your assignments alone (or with your teammates, for group assignments). You are not allowed to discuss assignments and possible solutions with any person other than the instructor. Any violation of the above rules is an honor offense. See The Honor System of the College of Charleston and the Student Code of Conduct (www.cofc.edu/student-life/handbook/), especially sections on Cheating, Plagiarism (pp. 10-11), and Computer Use (p. 13).

- On assignments you will be asked to identify the person(s) you received help from, if any.
- In-class exercises, when identified as collaborative, are excluded from the above.
Other Policies:  Tests:

- Attendance at tests is mandatory. Students must complete tests with no discussion or sharing of information with other students.
- Calculators, computers, cell phones, etc. may not be used during a test.

Classroom:

- You should turn off all electronic devices (e.g., cell-phones, pagers, etc.) during class.
- You are expected to attend all classes. Regardless of actual attendance, you are responsible for announcements made in class, assignment due dates, etc.
- You are expected to participate in class with questions and invited discussion. However, you should respect your classmates right to learn; see Student Handbook section on Classroom Code of Conduct (pp. 49-50).

Assignments:

- Programming assignment grades will be based on creative inspiration, design, style as well as correctness of result.
- Reading provided feedback is essential in learning. Upon return of graded work, you have one week to ask questions about your grade.
- Do not submit programs with syntax errors. They may receive a failing grade.
- Submission instructions will be provided for each assignment.

Late Policy:

- You have **four “late” days** for the whole semester. You may use these days as you wish for assignment submission. If you use them up, no late assignments will be accepted.
- If you **submit everything on time** (use no late days), **2.5 bonus points** will be added to your course grade.