Computer Science 221 Computer Programming II Sections 1 and 2 Spring 2010

Professor: Walter Pharr Office hours: MWF 10-11 AM, Office: 212 J.C. Long Building MWR 2-3 PM,

Phone: (95)3-8151 and by appointment.

email: pharrw@cofc.edu

Text: Barnes and Kölling – *Objects First with Java* (Prentice-Hall – ISBN 978-0-13-606086-4)

Course Description:

This course builds on the foundation established in CSCI 220 and introduces and develops object-oriented programming. Topics include recursion, classes, methods, inheritance and polymorphism, and exception handling.

Prerequisites and Corequisite:

Prerequisites: Computer Science 220 and 222. Prerequisite or Co-requisite: Mathematics 207.

Course Policies:

- 1. Attendance: I strongly encourage you to attend all classes. Regardless of actual attendance, you are responsible for announcements made in class, assignment due dates, etc. There will be two tests and a comprehensive final exam, attendance at all of which is mandatory. Tests are scheduled for February 12 and March 26. If it becomes necessary to change either of these dates, I will announce the new test date at least a week in advance. The final exam times for this course are: Section 1 Wednesday May 5, 8-11 AM; Section 2 Friday April 30, 12-3 PM.
- 2. *H1N1 Pandemic*: It is possible that many of us will be sick this semester. The CDC recommends that people with influenza-like illness remain at home until at least 24 hours after they are free of fever. If you miss class or a test because of the H1N1 virus, I will do everything reasonable to help you make up the missed classes and work. In return, I ask you to stay away from class if you believe that you have contracted H1N1 or any other highly contagious disease.
- 3. *Programs:* About ten Java programs will be assigned. You may discuss the problem and how to solve it with you classmates, but you may not look at, copy, or use any code that was written by anyone other than yourself. If I have evidence that two or more students have shared program code, their grade will be zero. In extreme cases offenders may be taken before the Honor Board. Note that the Honor Board may now give a grade of XF (Fail because of an honor violation).

- 4. Assignment Due Dates: Each assignment is due by the date and time that will be stated on the assignment. Assignments will be accepted only via WebCT. If you are late submitting an assignment, give me a written explanation (on paper, not by email) why the submission was late, including documentation. If the reason is acceptable, I will reset WebCT to allow the late work to be submitted. (Do not submit programs by email. If you submit a program by email without getting permission first, you will be penalized.) If work is not submitted by the announced date and time, and if the reason for its being late is unacceptable, the grade will be zero.
- 5. Test and Program Average: Tests will be averaged: Tests 1 and 2, 25% each; Exam, 50%. To pass the course you must have a passing average (at least 70%) on the three tests (including the exam), independent of the programs. All programs will be averaged with the same weight. To pass the course you must have a passing average (at least 70%) on the programs, independent of the tests.
- 6. *Final Grade Computation:* If both of test and program averages are passing, the final grade will be computed: Average of tests, as computed above, 80%; average of all programs, 20%.
- 7. *Grading Scale:* A: 90-100; B: 80-89; C: 70-79; F: <70. The grades of A-, B-, and D may be given at my discretion. I will not give the grades of B+, C+, C-, D+ or D-. (This scale will be explained during the first class.)

Course Goals:

- 1. To learn the software development process.
- 2. To learn object-oriented design principles.
- 3. To learn to use classes and methods.
- 4. To learn to use inheritance and polymorphism.
- 5. To learn to use arrays and the ArrayList class.
- 6. To learn to use exceptions.
- 7. To learn to use recursion. (Note: this topic is not covered in our text.)
- 8. To learn the implementation of these features in the Java language.