| Name: | Bryson R. Payne, Ph.D. | Term: | Fall 2012 |
|------------------|---|------------------|-------------------------|
| School: | North Georgia College & State University | Email Address: | bpayne@northgeorgia.edu |
| Department Name: | Math/CS | Office Location: | Barnes Hall 129 |
| Course #: | CSCI 1302 B | Office Phone #: | 706-864-1694 |
| Course Title: | Computer Science II (Java) | Office Hours: | M/W 1-2, T/Th 10-12 |
| Semester Hours: | 4 | Web Site: | www.BrysonPayne.com |
| Class Hours: | M/W 2:00-3:40 pm | Class Location: | NOC 208 |

Prerequisites: Grade of C or above in CSCI 1301 and CSCI 1301L

Course Description: This course is a continuation of the topics introduced in CSCI 1301. It extends the discussions of abstract data types and algorithm development in CSCI 1301. It also covers concepts of object-oriented programming such as interfaces and inheritance. Some basic abstract data structures will also be discussed.

Course Objectives:

At the end of this course students are prepared to apply the Java programming language to solve small to middle-scale problems. Students will explore object-based programming, object-oriented programming, strings, graphics, graphical user interfaces, exception handling, files and streams.

Methods of Instruction: A combination of class lecture, online class delivery, discussion, presentation slides, labs and project assignments.

Evaluation Methods:

| Item | Weight | Grading Scale | |
|------------|--------|---------------|---|
| 2 Tests | 30% | 90% and Above | A |
| Final Exam | 20% | 80% and Above | В |
| Labs | 20% | 70% and Above | C |
| Projects | 30% | 60% and Above | D |
| Total | 100% | Below 60% | F |

Exams:

Examination will be of mixed format, i.e. short answer, true/false, multiple choice, and programming problems. It is strongly recommended to review the Review Exercises section at the end the chapters that we cover.

General Expectations:

All projects are to be completed by the start of class on the due date given. Late work will receive a 10 point per day penalty. Daily attendance is crucial to your success in this course. North Georgia's Course Management System (Vista) will be used in this course.

Course Content: Please note the following schedule is tentative. It may be necessary from time to time to change the order of the topics. The course calendar on the Web site will be updated regularly and should be consulted before each class period.

- Review of Java fundamentals (1.5 week)
- Two dimensional arrays (1 weeks)
- Classes and Objects: a second look (2.5 week)
- Test 1
- Object Oriented Programming: inheritance (2 weeks)
- Object Oriented Programming: polymorphism (1.5 week)
- Interfaces (1.5 weeks)
- Test 2
- Data Structures (3 weeks)
- Recursion (1 week)

Knowledge Base:

Required Text

Java Software Solutions: Foundations of Program Design, 7th edition, John Lewis & William Loftus, Addison Wesley, 2012.

Required Software

JDK (Java Development Kit), version 7 or newer (current version 7u6) from: http://www.oracle.com/technetwork/java/javase/downloads

Bibliography

- Java documentation at http://docs.oracle.com/javase/7/docs/api/

Academic Integrity Policy:

Honor Code: "On my honor, I will not lie, cheat, steal, plagiarize, evade the truth, or tolerate those who do." Suspected violations of the Academic Integrity policy should be referred by students to the instructor. If the instructor concludes that a violation of the Academic Integrity policy has occurred, the instructor will either (1) penalize the student and file an incident report with the Academic Integrity Council or (2) refer the matter directly to the Academic Integrity Council. If an incident report is filed by the instructor, the instructor will review the completed report with the student and will request that the student sign the report as an indication that the student is aware of the contents of the report

Accommodation for Students with Disabilities:

North Georgia College & State University (NGCSU) is committed to the full inclusion of individuals with disabilities and to the principle of individual rights and responsibilities. To that end, the policies and procedures of NGCSU reasonably ensure that a person with a disability is not, on the basis of that disability, denied full and equal access to and the enjoyment of academic programs and co-curricular activities or otherwise is subjected to discrimination in such programs and activities.

The policies for access by individuals with disabilities at NGCSU are designed to ensure full compliance with all pertinent federal and state legislation, specifically to include Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act (ADA) of 1990.

To receive disability accommodations, the student should contact the Coordinator of Disability Resources, Office of Academic Support Programs, Room 121 Barnes Hall. Approval of reasonable accommodations will be made on a case-by-case basis.