# CSC 116 | Section 004 – Course Syllabus Introduction to Computing – Java 2012 Spring Semester

**Instructor:** Dr. Sarah Heckman

Offices: Main Campus: Daniels 219D

Centennial Campus: Engineering Building II, Room 2297

Email: sarah heckman@ncsu.edu

**Telephone:** (919) 515.2042

For TA information and teaching staff office hours, see course website.

## **Course Website**

This semester we will be using the Moodle Course Management System. When you log into the Moodle system, your course section will be listed. The message boards and submission lockers will be within the Moodle system. We will be using Wolfware Gradebook. To access ALL course information, use the following URL:

# http://courses.ncsu.edu/csc116

When you have a question, we recommend that you email the class support list, csc116-004-sup@wolfware.ncsu.edu. By emailing the support list, the instructor and TAs will receive your question. If you have a question that everyone would benefit from knowing the answer to, please post to one of the Moodle forums.

The teaching staff will use the course mailing list or message board to communicate with students outside of the classroom. The teaching staff expects that students will check their email at least once a day (preferably more often).

## **Course Objectives**

Upon successful completion of this course, a student will be able to...

- 1. apply classic problem-solving techniques to simple computational and information-management problems (without reference to any programming language), specifically
  - o breaking large problems into smaller ones,
  - o sequential analysis of solution steps,
  - logical analysis of alternative cases,
- 2. evaluate an arithmetic expression using order of operations, promotion from integer to floating-point types, and integer division,
- 3. use a programming language to write code that selects one of several alternatives based on more than one predicate.
- 4. use a programming language to write a loop whose exit depends on more than one predicate,
- 5. correct syntax errors and distinguish between them and runtime errors or errors in logic.
- 6. find and correct logical programming errors using debugging printout, pencil-and-paper tracing, and systematic search (to locate where an incorrect decision or value first appears),
- implement an object-oriented design that has at least two interacting classes,
- 8. write and document programs that adhere to specific coding and documentation standards (e.g., Javadoc for documentation; conventions regarding the naming of classes and methods, definition of constants, indention, etc.),

- 9. use the Java system classes to do text-based input and output,
- 10. construct and use arrays with one and two dimensions

# **Prerequisites and Co-requisites**

Co-requisite: E 115 and MA 141 or equivalent. You must have a basic understanding of algebra and trigonometry.

## **Required Materials**

- S. Reges and M. Stepp, <u>Building Java Programs: A Back to Basics Approach</u>. 2<sup>nd</sup> Edition. ISBN: 0136091814
- NCSU CSC Department: Style Guidelines (http://courses.ncsu.edu/csc116/common/style\_guidelines.pdf)

## Grading

Assignment	Percentage
Projects 1 – 6	30%
Exercises	10%
Linux Exercise	1%
Review Presentation	1%
Final Review Presentation	2%
Exam 1	18%
Exam 2	18%
Final Exam	20%

Grading will be on the following scale where X is your overall weighted average using the above percentages:

Range	Grade
98 <= X <= 100	A+
92 <= X < 98	Α
90 <= X < 92	A-
88 <= X < 90	B+
82 <= X < 88	В
80 <= X < 82	B-

78 <= X < 80	C+
72 <= X < 78	С
70 <= X < 72	C-
68 <= X < 70	D+
62 <= X < 68	D
60 <= X < 62	D-
X < 60	F

## **Minimum Grade Requirements**

In order to receive a final grade of C- or higher, you must have an average of 60% or higher on all three exams AND an average of 60% or higher on all six of the Projects. Students failing to meet these requirements will receive at most a maximum grade of D+ in the course.

# **Credit Only and Audit Students**

The grade of "CR" will be awarded to students who earn a 60% or higher in the course and have attempted all programs and exams.

The grade of "AU" will be awarded to students who earn a 50% or higher in the course and have attempted all programs and exams.

## **Policies on Incomplete Grades**

If an extended deadline is not authorized by the instructor or department, an unfinished incomplete grade will automatically change to an F after either (a) the end of the next regular semester in which the student is enrolled (not including summer sessions), or (b) the end of 12 months if the student is not enrolled, whichever is shorter. Incomplete grades that change to F will count as an attempted course on transcripts. The burden of fulfilling an incomplete grade is the responsibility of the student. The university policy on incomplete grades is located at: http://www.ncsu.edu/policies/academic\_afairs/grades\_undergrad/REG02.50.3.php.

## **Programs**

There are six (6) programming projects this semester. These projects will be submitted electronically by the due date. See the "Late Work" section of the syllabus for policies about late electronic submissions.

All programs are to be completed using Java 1.6.0. You may access the Java Development Kit on campus computers (Linux and Solaris) using "add jdk" at the command line. You may download the Java Development Kit 1.6.0 from http://java.sun.com to use on your home computer; however, grading of programs will be done on the Linux operating system. If you work from home, make sure to check that your program will work on a Linux box!

All programs are to be your own work. See the "Academic Integrity" section of the syllabus for further details.

Feedback on all programming projects will be returned to you electronically.

## **Exercises**

There will be one or more exercises almost every lecture period. These exercises will be used to check attendance and to see how well you understand the material that was presented in lecture the day of the class. There are only three possible grades for the exercises: 0, 0.5, or 1.0. If you attempt the exercise you will receive a 0.5 on the assignment. Answers to the exercises will be posted on the website sometime after the submit locker has closed. The solutions will be provided by your fellow students, and may contain mistakes.

The lowest *four* exercise grades will be dropped. If you are absent from class, with an excused university absence, you will not be penalized for missing the exercise. Exercises may run over the end of the lecture period and some exercises may be assigned as homework. The deadline for those exercises will be 10 minutes before the next lecture.

#### **Linux Exercise**

The CSC116 classroom contains computers running the Linux operating system. Basic familiarity with navigating the Linux file system and using the operating system from the command line is required for success in this course. A crash course in Linux will be presented during the first lecture. A Linux Exercise will be given January 12, 2012 to review the material for navigating the Linux operating system through the command line and will count as 1% of your final grade.

#### **Review Presentation**

Every student will be randomly assigned a day where they will present a five-minute review of the previous class' lecture materials. Additionally, the student will submit and go over a solution to the exercise assigned in the previous class period. The presentation should summarize the materials covered in the last class and highlight key parts to the exercise solution. All materials, including the presentation slides and exercise solution, should be submitted *via Moodle by 8am* the day of the lecture.

Students will be evaluated by the teaching staff and their peers on their presentation skills, the presentation content, the correctness of their solution, and how well their solution is documented. The review presentation is mandatory and is 1% of your final grade.

Notify the instructor of any anticipated absences that will interfere with your assigned review presentation as soon as possible to allow time for rescheduling. If you miss your assigned review presentation due to a university excused absence, notify the instructor before the class that you will miss or within 24 hours of the missed class. You will complete your review presentation when you return to class.

#### **Final Review Presentation**

The last two classes of the semester are reserved for review of all CSC116 materials for the final exam. Each student will give a five-minute presentation reviewing a topic from earlier in the semester. The topic will be different from the review presentation topic and must be the student's own work (you may not use the materials created by your peers on that topic). Students will also provide a sample exam question and solution.

Students will be evaluated by the instructor on their presentation skills, exam question and solution, and the presentation content. The review presentation is mandatory and is 2% of your final grade. The review presentation will be videotaped. Your lecture slides will be submitted through Moodle.

## **Exams**

There will be three exams in this course counting a total of 56% of your final grade. These exams will cover all materials (readings, lectures, and exercises) for the materials covered by the exam and each exam will contain an electronic portion where you will complete a programming exercise. The final exam will be cumulative.

#### **Grade Appeals**

If at any time you feel an assignment was graded improperly, write a request for regrade and explain why you believe the assignment was graded improperly. First, discuss the grade with the TA who graded the assignment. If you are still unsatisfied with the answer, submit the assignment to the instructor for a regrade. All regrade requests must be submitted to the instructor no later than 2 weeks after the assignment was returned to you! Please talk with the TA who graded the assignment FIRST and have the written regrade explanation!

#### Time

You are expected to spend 6 to 12 hours per week outside of class preparing and working on assignments.

## Attendance

Attendance to lecture is mandatory! If you miss a lecture, you must present documentation in order for the absence to be excused. Exam makeups will only be given with a documented excused absence. Excused absences will be handled NC State Academic Policy on Attendance as per (http://www.ncsu.edu/policies/academic affairs/courses undergrad/REG02.20.3.php). All anticipated absences must be presented to the instructor no later than one week before the absence. All emergency absences must be turned in no later than one week after the student's return date. All other absences will be unexcused. A maximum of four (4) class periods per semester may be missed due to excused absences. Any number of excused absences beyond four will only be allowed with special permission of the instructor.

An unexcused absence will result in a 1 point deduction from your final grade, up to 5% of your grade. If you miss more than five (5) classes with unexcused absences, your final grade will drop one full letter grade (i.e. 10 points).

## **Late Work**

All work for the course MUST be submitted electronically through Moodle. No work will be accepted after the submission locker closes, unless you have a documented excused absence that must be provided to the instructor within a week of the deadline. No work will be accepted through email. To ensure correct submission, log out and then log back into Moodle. Make sure after you submit that your work is displayed in the submit locker for your login id.

All program assignments are required to be handed in by **11:45p** on the specified due date(s). An additional locker for late projects will also be provided that will close **48 hours** after the original submission deadline. Work turned into the late work locker will automatically lose **10 points**.

## **Academic Integrity**

All work that you turn in for grading must be your own! This means that all work must be an independent and individual creation by you. Any attempt to gain an unfair advantage in grading, whether for yourself or another, is a violation of academic integrity. The only exception is when the instructor states that you may work with a neighbor on an *exercise* as part of your classwork. In that case, the work is an independent creation of the pair or team.

## Students who cheat on a program, exercise, or exam will receive a -100 for the assignment!!!

Cheating is worse than not turning in the assignment, and may lead to suspension from the university! The University's policy on academic integrity may be found at: <a href="http://policies.ncsu.edu/policy/pol-11-35-1">http://policies.ncsu.edu/policy/pol-11-35-1</a>.

The Computer Science department uses software that detects cheating violations for programming projects. Do not use other student's code, do not share your code, and do not copy code from someone who took the class X semesters ago.

The only people that you MAY receive help from are your instructor and the official TAs and tutors for CSC116 as listed on the TA and Tutors Office Hours link on the website.

You MAY also reference your textbook, the textbook website, and the Java API.

You MAY NOT receive help from anyone or anything else.

# **Examples of Cheating:**

- It is cheating to give any student access to any of your work which you have completed for individual class assignments.
- It is cheating AND plagiarism to use another person's work and claim it as your own. You are expected to complete all assignments on your own, unless otherwise specified in the assignment.
- It is cheating to interfere with another student's use of computing resources or to circumvent system security.
- It is cheating to email, ftp, post on the Internet, bulletin boards, etc. your work for others to obtain. Do not use sites that allow you to "anonymously" post code. Those sites are searchable, and others may find your code.
- It is cheating to ask or pay another person or persons to complete an assignment for you.
- It is cheating AND plagiarism to decompile any compiled code and use the decompiled source code as your own. You may also break the law by decompiling code.
- It is cheating AND plagiarism to use code that you find online.
- It is cheating to give another student access to your account (NC State account or others that you use for university work) or to give them your account password.

• It is cheating for you and another student to work collaboratively on an assignment, unless otherwise specified by the assignment.

## **Examples of NOT Cheating:**

- Using code from the class website (with citations in the comments).
- Using code from other programs YOU wrote.
- Using code from other programs that YOU and a partner wrote as part of assigned exercises.
- Help from the TAs, tutors, or Instructor (with citations in the comments).
- Using code from the textbook or textbook website (with citations in the comments)

## **Example Citations**

/\*\*

- \* (In method or class level comments)
- \* I received help from Dr. Heckman on *date* during her office hours. We discussed X.

\*/

/\*\*

\* The code for this method is based on Exercise Y that I completed with Z on date.

\*/

#### **Protecting Yourself:**

- Do not leave papers lying around your workstation
- Do not dispose of important papers in the lab recycling bins and trashcans until after the assignment is graded.
- Do not give out your password.
- Do not leave your workstation unattended or forget to log yourself out.
- Do not give other students access to any of your workspace or email them any code.
- Do not give other students access to your course materials on your personal computer.
- Do not email, ftp, or post your code on the Internet, bulletin boards, etc.
- Keep all copies of final and intermediate work until after assignment is graded.
- Keep graded assignments until after you receive the final grade for the course.

# Forum Use:

The forum is available to ask questions about assignments and tests. Do not post any code to the forum!

## **Honor Pledge**

Your name on any test or assignment or the electronic submission of an assignment through Moodle or other courseware system indicates, "I have neither given nor received unauthorized aid on this test or assignment".

## **Electronically-hosted Course Components**

Students may be required to disclose personally identifiable information to other students in the course, via electronic tools like email or web-postings, where relevant to the course. Examples include online discussions of class topics and posting of student coursework. All students are expected to respect the privacy of each other by not sharing or using such information outside the course.

## **Course Evaluations**

Students will receive an email message directing them to a website where they can login using their Unity ID and complete evaluations on this (and their other) course(s). All evaluations are confidential; instructors will not know how any one student responded to any questions, and students will not know the ratings for any instructors.

More information about Course Evaluations may be found at http://www2.acs.ncsu.edu/UPA/classeval/index.htm.

## **Students with Disabilities**

Reasonable accommodations will be made for students with verifiable disabilities. In order to take advantage of available accommodations, students must register with Disability Services for Students at 1900 Student Health Center, Campus Box 7509, 515-7653. For more information on NC State's policy on working with students with disabilities, please see the <u>Academic Accommodations for Students with Disabilities Regulation (REG02.20.1)</u>. Also, visit the Disability Services Office website at: <a href="http://www.ncsu.edu/dso/">http://www.ncsu.edu/dso/</a>.

Students registered with Disability Services should present their letters of accommodations to the instructor prior to end of the first full week of class.

## **Non-Discrimination Policy**

NC State University provides equality of opportunity in education and employment for all students and employees. Accordingly, NC State affirms its commitment to maintain a work environment for all employees and an academic environment for all students that is free from all forms of discrimination. Discrimination based on race, color, religion, creed, sex, national origin, age, disability, veteran status, or sexual orientation is a violation of state and federal law and/or NC State University policy and will not be tolerated. Harassment of any person (either in the form of guid pro guo or creation of a hostile environment) based on race, color, religion, creed, sex, national origin, age, disability, veteran status, or sexual orientation is also a violation of state and federal law and/or NC State University policy and will not be tolerated. Retaliation against any person who complains about discrimination is also prohibited. NC State's policies and regulations covering discrimination, harassment, and retaliation be accessed http://www.ncsu.edu/policies/campus\_environ/ may http://www.ncsu.edu/equal\_op/. Any person who feels that he or she has been the subject of prohibited discrimination, harassment, or retaliation should contact the Office for Equal Opportunity (OEO) at 919-515-3148.