

CSC 116 | Section 005 – Course Syllabus

Introduction to Computing – Java

2010 Spring Semester

Section 005: T & H 11:20a-1:10p in Daniels 255

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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, csc116-005-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. Each project topic has an associated forum for discussion about project questions. There is a general course forum in the top level topic.

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
 - breaking large problems into smaller ones,
 - 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),
7. 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, indentation, 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, Building Java Programs: A Back to Basics Approach. ISBN: 0-321-38283-8
- NCSU CSC Department: Style Guidelines
(http://courses.ncsu.edu/csc116/common/style_guidelines.pdf)

Grading

Assignment	Percentage
Projects 1 – 6	30%
In-class Exercises	10%
Exam 1	20%
Exam 2	20%
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	A
90 <= X < 92	A-
88 <= X < 90	B+
82 <= X < 88	B
80 <= X < 82	B-

78 <= X < 80	C+
72 <= X < 78	C
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.

Exams

There will be three exams in this course counting a total of 60% of your final grade. These exams will cover all materials (readings, labs, and lectures) 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.

In-class Exercises

There will be in-class exercises almost every class 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 in-class exercises: 0, 0.5, or 1.0. If you attempt the in-class exercise you will receive a 0.5 on the assignment. Answers to the in-class exercises will be posted on the website when the submit lockers for both sections are closed.

A Linux Information in-class exercise on Thursday, January 14th will count as 1 of 10 grade points allotted for in-class exercises. Meeting with the instructor during office hours at least once in the semester will count as another 1 of the 10 grade points allotted for in-class exercises. The remaining in-class exercise points (8) will be an average of your in-class exercise grades. The lowest four in-class exercise grades will be dropped. If you are absent from class, with an excused university absence, you will not be penalized for missing the in-class exercise.

Programs

There are 6 programming projects this semester. These projects will be submitted electronically by the due date, and a **HARDCOPY** will be turned in at the **BEGINNING** of the next class after the due date. The hardcopy must contain a printout of all code, other required materials, and a program grade sheet on top, and stapled together.

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 jdk160" 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. Please cite any sources (book, TA, course code) that you received help/inspiration from, but DO NOT copy code and DO NOT use any external resources. If you have any questions about how you may use a resource see the instructor or TAs. Additionally, make sure you follow the Academic Integrity guidelines.

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 as per NC State Academic Policy on Attendance Regulations (http://www.ncsu.edu/policies/academic_affairs/pols_regs/REG205.00.4.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 4 class periods per semester may be missed due to excused absences. Any number of excused absences beyond this number will only be allowed with special permission of the instructor.

Office Hour Attendance

You will be required to visit the instructor during her office hours at least once during the semester. You may attend any of her office hours until the last day of classes. When attending office hours for the first time, you will sign in with the instructor. If you have a conflict with the instructor's office hours, you must request an alternative time to meet with the instructor. This request must be made no later than March 31, 2010.

The office hour visit is mandatory, and will count as 1% of your final grade (it comes out of your In-class Exercise points). The office hour visit does not have to be long, but you are encouraged to come with questions about the materials or the projects.

Late Work

All program assignments are required to be handed in by **11:45p** on the specified due date(s). An additional locker for late work will also be provided that will close **48 hours** after the original submission deadline, except for the final project. Work turned into the late work locker will automatically lose 10 points. No work will be accepted after the late work locker closes, unless you have a documented excused absence.

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.

Students who cheat on a program 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 Computer Science department has 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.

Examples of Cheating:

- It is cheating to give any student access to any of your work which you have completed for class assignments. Your campus account is for your use alone.
- It is cheating 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, or post on the Internet, bulletin boards, etc. your work for others to obtain.
- It is cheating to give another student access to your account, or to give them your account password.
- It is cheating for you and another student to work on the same file to turn in for an assignment, unless otherwise specified by the assignment. This applies to both the EOS system at home computing systems where the files will be submitted for a grade.

Examples of NOT Cheating:

- Using code from the class locker (with citations).
- Using code from other programs YOU wrote.
- Help from the TA or Instructor (with citations).
- Using code from the TA or Instructor (with citations).

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.
- 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.

Message Board Use:

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

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. http://www.ncsu.edu/provost/offices/affirm_action/dss/. For more information on NC State's policy on working with students with disabilities, please see the *Academic Accommodations for Students with Disabilities Regulation*.

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