

University of Nebraska at Omaha **College of Information Science and Technology Department of Computer Science**

Course Syllabus

Class: CIST 1400, Introduction to Computer Programming

Room: PKI 261

Instructor: Harvey Siv

Office: **PKI 281B**

Office Hours: MW 3:30-5:30

E-Mail Address: hsiy@unomaha.edu

On-Line Materials: Refer to course Blackboard site.

Text Book: Required: Java How To Program: Early Objects Version, 9/e, Deitel & Deitel, 2011

Class Overview: In this class, we will be covering a brief introduction to computers, an overview of the Java language, top-

down design and problem solving, specific control structures of Java, functions, simple data types and the core component of Java: object-oriented programming. This covers a majority of the material in chapters 1

through 8 in the book and prepares you for a continuation of Java study in CSCI 1620.

Prerequisite: Completion or equivalence of MATH 1310 and either CIST 1100 or CIST 1300.

Optional

If you are new to programming, taking the optional CIST 1404 one-credit course is suggested. The lecture Co-requisite: portion (1400) and lab portion (1404) are separate entities. CIST 1404 offers an environment with hands-

on assignments and instant feedback from experienced teaching assistants as to your progress in the

mastery of the Java programming language.

Most importantly, the optional lab is not intended to be a "study hall" for 1400. The lab has a separate set

of guizzes and assignments for you to work on with little or no work required outside of lab.

The lab is only offered on campus.

Tutoring: This course has dedicated, free tutors available to help you with your programming assignments in PKI

367.

Students with Accommodations are provided for students who are registered with Disability Services and make their Disabilities

requests sufficiently in advance. For more information, contact Disability Services (EAB 117, Phone: 554-

2872, TTY: 554-3799) or go to the website: http://www.unomaha.edu/disability.

Accreditation: The CS and IS programs in the College of IS&T are currently pursuing continued accreditation by ABET,

the Accreditation Board for Engineering and Technology. This organization requires that we keep samples

of student work. Unless you specify otherwise in writing, I may retain a copy of your exams and

assignments (with your name and any other identifying information removed) for accreditation purposes

and return the original back to you.

Plagiarism:

Any homework, program, quiz or exam received which looks identical, **in part or in whole**, to another student's work or an external source will be considered plagiarism.

As per the Department of Computer Science Policy on Cheating and Plagiarism, the instructor of a course is responsible for "assigning an evaluation (or grade point) to the work that is substantially lower than if the work had not been completed at all" for occurrences of plagiarism."

Any offense of plagiarism will result in a -500% grade recorded for the first offense and a grade of "F" for the course for the second offense, both accompanied by a written letter to the Vice-Chancellor for Academic Affairs, the Registrar, the Dean of your college and the chair of both the computer science department and your major's department, and possibly the pursuance of your dismissal from the University.

If you are suspected of submitting or enabling a plagiarized assignment, you will have the opportunity to meet with the instructor to discuss your situation before disciplinary actions are possibly pursued.

Ignorance of how to properly cite your sources correctly or present work as your own is not an acceptable excuse for plagiarism. You will be provided with instructions on how to cite sources.

Please make sure you keep all of your work secured and unavailable from your fellow students. If someone takes your code, even without your knowledge or consent, and submits it in modified or unmodified form, you will both be penalized for plagiarism.

All material should be your own work. You may use code or algorithms from any source in extremely small amounts, but bear in mind that failure to explicitly give proper credit is a form of plagiarism.

* "Using code" is including code in your program in either unmodified or modified form. It's always safer to cite your influences than to take a chance on committing plagiarism by not giving proper credit.

* "Using code" does not refer to the wholesale use of someone else's code for programs or projects without significant work on the student's part.

The following definitions of plagiarism and related offenses are taken from the **University of Nebraska at Omaha Undergraduate Catalog 2010-2011**, page 56 (http://bit.ly/unouc1011):

- 1. Cheating. Copying or attempting to copy from an academic test or examination of another student; using or attempting to use unauthorized materials, information, notes, study aids or other devices for an academic test, examination or exercise; engaging or attempting to engage the assistance of another individual in misrepresenting the academic performance of a student; or communicating information in an unauthorized manner to another person for an academic test, examination or exercise.
- 2. **Fabrication and falsification.** Falsifying or fabricating any information or citation in any academic exercise, work, speech, test or examination. Falsification is the alteration of information, while fabrication is the invention or counterfeiting of information.
- 3. Plagiarism. Presenting the work of another as one's own (i.e., without proper acknowledgment of the source) and submitting examinations, theses, reports, speeches, drawings, laboratory notes or other academic work in whole or in part as one's own when such work has been prepared by another person or copied from another person.
- 4. **Complicity in academic dishonesty.** Helping or attempting to help another student to commit an act of academic dishonesty.

Honor Pledge:

For each programming assignment you submit, you will digitally sign an Honor Pledge stating that you have not obtained any code or answers directly from any of your fellow students or other sources, and that any code you have used from elsewhere has been used in small amounts and has been properly cited.

Assignments without Honor Pledges or with unsigned Honor Pledges will not be graded.

Information regarding the CIST 1400 Honor Pledge will be provided to you during an upcoming class.

Class Lectures:

This class consists of two 225-minute lectures per week. You are encouraged to read material in advance of the class lecture covering the selected material.

Computer Accounts:

Each student will receive instructions soon on setting up and using a University-provided Unix account.

You do not need to purchase any sort of software to do your homework in this course.

Homework:

A word processor **must** be used to answer any non-programming, written homework problems. Failure to do so will reduce your grade on that assignment by 35%.

You must follow proper procedures for submitting your completed programs in order for them to be graded. You will be given instructions on how to do that with your first programming assignment. *Programs not submitted correctly will not be graded, period.*

Grading

Grading scale:

A+ 97	'% - 100 %	4.00 GPA	
A 93	% - 96%	4.00 GPA	
A- 90	% - 92%	3.67 GPA	
B+ 87	'% - 89%	3.33 GPA	
B 83	% - 86%	3.00 GPA	
B- 80	% - 82%	2.67 GPA	
C+ 77	'% - 79%	2.33 GPA	
C 73	% - 76%	2.00 GPA	Minimum final, passing grade for Engineering
C- 70	% - 72%	1.67 GPA	Minimum final, passing grade for IS&T students
D+ 67	'% - 69%	1.33 GPA	
D 63	% - 66%	1.00 GPA	
D- 60	% - 62%	0.67 GPA	
F 00	% - 59%	0.00 GPA	

Grade Distribution:

- 60% of your grade will be based on your program/homework scores
- 40% of your grade will be based on your quiz and exam scores (4 quizzes and 1 final)

Grading Notes:

PROGRAMS - SECOND CHANCES: If I cannot compile and run your program from the file you submit, or if your program solution is grossly incorrect, it will be returned to you to fix. The maximum grade you will be able to receive on it will be a 60% if turned in by the appropriate extended due date (usually 1 week from the return of your original assignment).

If you don't turn in the assignment by the original due date, you can turn it in by the extended due date (usually 1 week from the return of your original assignment) for 40%.

Failure to resubmit a program that you have been given a second opportunity on will result in a 0 for the assignment, even if you turned in something by the first due date.

There are no third chances.

This policy will be explained in more detail when the first programming assignment is given.

GRADE DISPUTES: It is your responsibility to keep track of your grade on the class website. You have up to two weeks after a program's initial due date or a quiz date to dispute or otherwise address grades you consider to be recorded incorrectly. After two weeks past the initial due date or quiz date, grades will stand as recorded.

NOTE ON MISSED QUIZZES / EXAMS: A missed quiz or exam is automatically assigned a score of 0, and no make-up quizzes or exams will be given for any reason. Please make arrangements ahead of time if you plan to be out of town for a quiz or exam.

NOTE ON MISSED WRITTEN ASSIGNMENTS: Written assignments are to be turned in by the date and time given for each assignment. Late assignments will not be accepted for any reason and will result in a zero (0) being recorded for that assignment.

Honors Credit

Honors credit can be earned in this course. Only Honors students may take the Honors section of the course. Honors students usually do more programs, more in-depth programs and/or independent research throughout the semester.

If there is not a separate section for Honors students, you can contract for Honors credit. Please obtain an Honors contract from the Honors office or website and bring it to me when you have it filled out.

Testing Out of 1400

If you feel you have the knowledge outlined for this class and would like to test out of the course and take CSCI 1620 instead, you have two options. You need to make the decision to attempt to test out of 1400 within the first week of the course.

Your first option for testing out of CIST 1400 is if you don't want credit for the course itself but would simply like to bypass it. In order to pursue this option, you can take five exams and if your average for the five exams is an 83% or better, I will sign a "course test out form" with the IS&T advising office. They will then enter a waiver for the course, allowing you to then try to sign up for CSCI 1620. It doesn't cost anything and you don't get credit for CIST 1400, but you can make up the credits later on..

Your second option for testing out of CIST 1400 is if you'd like to receive credit for the course. If this is the case, you need to pick up a "challenge exam" form from the UNO Testing Center and pay a \$25 testing fee. This form needs to be signed by you, your instructor and the chair of the Computer Science department before you will be allowed to take the exams. Upon successfully passing the exams (as described in the previous paragraph) with an 83% or better average, your completed form indicating you have passed the class would be taken to the Registrar's office where they enter the credit for the course on your transcript and you pay 50% tuition for the course. If you don't pass the exam with a B or better average, you're only out \$25 for the testing fee.

If you were to successfully test out of or bypass CIST 1400, I cannot guarantee you that there will be available seating in a section of CSCI 1620. Please check with the instructor of the section of CSCI 1620 that you would likely try to enroll in before pursuing testing out of 1400.

Additional Information:

Additional information sheets, including specifications for each program, program documentation, etc., will be handed out during future classes. This information should be considered to be official extensions to this syllabus.

Tentative Coursework Schedule

Please note that the schedule below is just a guideline; sometimes the class will move faster and sometimes the class will move slower. It all averages out in the end, though, as we cover at least chapters 1 through 8 of the textbook in the allotted time frame.

Key for Notes column "L" indicates new lecture.

"P" indicates new programming assignment given.

All dates are approximate.

Week of	Торіс	Book Section(s)	DOW	Notes
May 14 th	May 14 th Course Overview / Syllabus		М	
	History and Overview	1.1 – 1.13	М	L1
	Basic Java program, input, output	2.1 – 2.5	W	L2, P1, P2
	Arithmetic, Decisions	2.6 – 2.8	W	L3, P3, P4
May 21 st	Introduction to objects, Classes and the UML	1.16, 3.1 – 3.2	М	L4, P5
	Methods, Multiple Files, Arguments	3.3 – 3.5	М	L5, P6
	Constructors, Primitive/Reference Types, Instance Vars	3.6 - 3.8	W	L6, P7
	Algorithms, Keywords, Control Structures, if, if/else	4.1 – 4.6	W	L7, P8
May 28 th	Logical Operators	5.8	М	L8, P9
	switch, compound assignment, unary operators	5.6, 4.11, 4.12	М	L9, L10, P10
	while repetition, counter-controlled, sentinel-controlled	4.7 – 4.9	W	L11, L12, P11
	while repetition, counter-controlled, sentinel-controlled	4.7 – 4.9	W	L13, Quiz #1 : Chaps 1 through 3
June 4 th	for, do-while, break, continue	5.1 – 5.5, 5.7	М	L14, P12
	Primitive data types, promotion, demotion	4.9, 6.7	М	L15
	Method introduction, Math, static methods and fields	6.1 – 6.3	W	L16, P13
	Multiple parameters, scope, Method overloading	6.4 – 6.6, 6.11, 6.12	W	L17, P14 Quiz #2 : Chapters 4 and 5
June 11 th	Introduction to arrays	7.1 – 7.3	М	L18, P15
	Array examples	7.4	W	L19, P16
	Random numbers, enhanced for loop	6.9, 7.6	М	Quiz #3 : Chapter 6, L20, P17
	Passing arrays to methods, sorting, searching	7.7, extra	W	L21, P18
June 18 th	Multidimensional arrays	7.9	W	L22, P19
				Final Exam