

Java1

CIS 219 - Computer Concepts & Programming

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Course: Computer Concepts & Programming CIS 219 (Winter 2007)

Genesee Community College



Instructor: James R. Habermas EMAIL JRHabermas@genesee.edu

Office:

Monday and Wednesday ONLINE ONLY	12:45pm -2pm
Tuesday & Thursday my office D273 or T204	12:20pm-2:10pm
Thursday evenings likley T204	3:20pm-4:20pm

And it is the same in all my classes, I will always make time for questions at the end of each class. Also, you can find me online to as questions on the Weekends.

http: 2 URL <http://jimhabermas.com>

<http://briefcase.yahoo.com/redwingsfanjimbo>

Text: <http://vig.prenhall.com/catalog/academic/product/0,1144,0132221586,00.html>



<http://www.cs.armstrong.edu/liang/intro6e/>

Introduction to Java Programming-Comprehensive Version, 6/E

Y. Daniel Liang, Armstrong Atlantic State University

ISBN: 0132221586 1

Publisher: Prentice Hall

Copyright: 2007

Format: Paper; 1328 pp

Software: It is highly recommend that download Java programming language from Sun Microsystems, and a text editor such as Textpad. <http://www.textpad.com>

Storage device: Strongly suggest Jump Drive 128MB USB Jump Drive

[Discussion List for the Course](#) java1@list.genesee.edu

Important	2/19/2007	President's Day -No Classes
Dates:	Monday	
	I have two travel days, so no class March 6 & 8	
	03/12 -17	Spring Break - No Classes Scheduled
	3/24	Withdraw Deadline
	5/1	No Programs accepted after that date

CATALOG DESCRIPTION:

Introduces computer concepts and programming in a modern, high-level language.

Demonstrates computing system concepts, problem solving, and systematic program development in problems from a variety of application areas. Topics include problem analysis, algorithm design, top-down development, program testing and documentation, data types, input/output, sequence, selection, loops, data manipulation, functions, arrays, records, sets, strings, files, recursion, and an introduction to sorting, searching and other basic algorithms. Students should plan sufficient time to complete the necessary programming projects using the college's computing facilities. Prerequisite: CIS125 or CIS101 taken prior to fall 2000.

Three class hours. Prerequisite: CIS 125

Student Performance Outcomes:

The main objective of this course is for students to learn fundamental computer concepts and program development using a modern, high-level languages, such as Java. At the completion of this course, students will:

1. Correctly use the syntax and semantics of the language to create object oriented programs.
2. Write a one page summary documenting the 5 steps in the program development process as it applies to procedural-oriented programming.
3. Apply programming style and methodology, such as code format, modularity, commenting, documentation, structured design, pseudocoding and algorithm development, testing, debugging, and data validation in a minimum of 7-10 assignments requiring logical programming skills.
4. Develop a minimum of 5 programs which solve problems from a variety of areas using object oriented methods, creating applications that use objects. Language elements, such as, data types, I/O, sequence, selection, loops, data manipulation, member functions, arrays, records, sets, strings will be required.*
5. Demonstrate familiarity with the syntax of the language, logic patterns, and object oriented concepts such as encapsulation, inheritance as documented by multiple unit tests covering these terms/skills.

To be successful in this course a student must:

- **Attended all classes. Be a few minutes early to class, be prompt and ready to take notes at the start of class. Before class time starts boot the computer, and sign in for attendance and get your notepad and pen ready.**
- **Bring your book, storage device, syllabus, and notebook, and old projects to all classes since we often reference an old project when we write a new program. I recommend a organized 3 ring binder. Also put the date on the top of every handout given you in class, and organize that binder by date. Be organized in your programs, put the date on everything, all handouts, all programs. Java you very often reuse old code, so you will want to have quick access to previously written programs.**
- **Participate in lecture, ask related questions during lecture.**
- **Never miss a test or quiz. Never come late to a quiz, you will be given a zero on that quiz if you come after the quiz is done.**
- **Use EMAIL and/or aol instant messenger, and email to ask more questions.**
- **A student must take all the quizzes, they really prepare you for the Midterm and Final exam. Thus, I would never skip class, you will miss a quiz, and not be able to make it up.**

THE FOLLOWING PROCEDURES WILL BE USED IN DETERMINING YOUR GRADE:

1. There will be 2 exams throughout the semester, a mid-term and a final exam. The exams are worth 200 points each toward your final grade. Midterm and Final exam dates will be given verbally in class. NO MAKE UPS GIVEN. Dates to exams will be given out verbally in class.
2. In addition to the mid-term and final exam, there will be quizzes. The first quiz will be announced, the remaining will be unannounced and will come primarily from the reading assignments. Each quiz is worth 50 to 100 points and your lowest quiz grade will be automatically dropped.
3. There will be NO MAKE-UPS. If a quiz or an exam has been missed, then zero will be given for that grade. If you come to class after a quiz is completed a zero will be given for that quiz grade.
4. Attendance will be taken every class. 2 points reduction for each class they are absent from your final grade. If you miss class or come to class after a quiz has been given you will receive a zero for that grade.
5. There will be 4 assignments due. Every assignment is worth 100 points and will be collected at the beginning of the class period it is due. Some of the assignments are a collection or GROUP of several programs. For example, Group 1 is a collection of 2 Parts that have the following due dates:

1) Group 1 Part A is due February 6, 2007

2) Group 1 Part B is due February 8, 2007

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Remaining program due dates will be given out in class verbally. Often one program per week is due. Please include your email address in the output of every program.

When there is a homework due date print a copy of your output and your disk (with byte code) is due on at the start of class time. Hand in copies of all your source programs, and make sure they have excellent comments, **YOUR NAME AND YOUR EMAIL**, your program name, date written. I like your work to be well documented. At all times staple your work to be turned in to me.

Homework assignments must be turned in at the start of class time, after that point, they would be considered late.

6. The following shows the method of arriving at your total points: MAXIMUM POINTS

<u>MAXIMUM POINTS</u>	<u>POINTS</u>
Midterm exam	200
Final exam	200
Program #1	100
Program #2	100
Program #3	100
Program #4	100

quiz total points-max	<u>200</u>
Total Points Possible	1,000
- 2 points off per class missed	

FINAL LETTER GRADE:

POINTS	GRADE
900 - 1,000	A
800 - 899	B
700 - 799	C
600 - 699	D
Below 600	F

* the instructor reserves the right to change this point break down if for some reason classes get canceled

Bonus

IF you have perfect attendance (Never even come to class LATE), **AND**, if all 4 programs are completed with a total of 370 points or more and you have maintained an "A" (90%) average on your test grades, you will be excused from the final and receive an "A" for the course. IF you have perfect attendance, **AND**, if all you have is an overall 85% average on programs and test you will be excused from the final and receive a "B" for the course.

WARNING- Plagiarism

You only truly learn programming by writing your own code. Do not show your work to others.

Each student is required to write his/her own programs. Evidence of cheating or copying would result in a failing grade being given for the course. **Plagiarism is using other's words or ideas, or programming code and claiming them as your own. I DO NOT condone working together in groups.** Plagiarism will not be condoned and will result in a failing grade for the course. Cheating on an exam will be treated similarly. Also, misuse of the GCC mail system or the Internet or any file on the local network will result in a failing grade being given for the course

DO YOUR OWN WORK

Cheating of any form will result in a student Failing the course.

Accessing an objectionable site (pornographic, hate speech, bomb building etc...) will result in an immediate F for the semester

Our computer servers are for **EDUCATIONAL purposes ONLY! Absolutely no web pages are allowed to be stored on our web servers that would any way generate any interest in collecting revenue, nor should any web page on our server, fake, or simulate any revenue collection. No E-Commerce activities are allowed using SUNY computer resources. Any attempt of inappropriate use of the college servers, will result in a failing grade, and possible legal actions.**

Cell Phones:

Receiving or sending cell phone calls in classrooms or library is inappropriate and impolite. Please turn them off. No PDA, No CELL phone, NO AOL Instant messenger, and no other form of Internet Chat is allowed in class.

No Internet During the EXAMS! No form of any electronic devices allowed during my exams.

Classroom Behavior :

Being a Genesee student requires appropriate adult behavior and respect for others. Do not walk into class late. Do not leave class early. Students who want to learn and listen to the lecture are often distracted when other students get up and walk out of the class, or come in late. Please respect your classmates and your professor.

Programming assignment requirements:

1. Homework assignments **must** be turned in at the start of class time, after that point, they would be considered late
2. Assignments may be turned in past the due date up to April 1 . However, a penalty of 25% per day late will be assessed for late submission for grading. Also, you will NOT be able to re-do an assignment once it is turned in for grading. That 25% off per day counts every day, including Friday, Saturday, Sunday and holidays . (For an example, if a programming assignment is due on a Thursday, you have to email it to me before the next Monday night if you expect to receive any points for the project.
3. After **4 days** has passed the assigned due date the project is not accepted to be turned in for a grade.
4. Please make sure your name and email address is the first line of output of every program and in the comments at the top of every program.
5. Assignments must be turned in to me at the beginning of your class period on the due date. Assignments turned in after this time are considered late. Do not expect to work on

your programs during class time, especially the day they are due.

6. All incoming homework exercises need a typed cover page.

After April 1 all programs MUST be turned in on the due date specified in class lecture. No programs will be accepted after the due date. If your program is syntax free, but it doesn't work correct by a due date, turn this project in on the due date with a note to this effect. With all programs submitted for grading I required a cover page. My goal is to not allow a student to think they can turn in projects at the end of the semester, that should have been completed earlier, and think they can pass the course. Turning projects in on time, is a key requirement for a student to be successful in my course! Do not even attempt to turn homework in after it is a 4 days late, I will not accept any work if it is more than a week late. Be on time with your homework!

All incoming homework exercises and computer exercises should have a top sheet stapled to submitted work. The top sheet should contain the following information as follows:

Your name

Your email

CIS219.01 - Introduction to Java

Winter 2007

Program # 1 part A

Date turned in:February 6, 2007

Due Date: February 6, 2007

Completed for Professor Habermas, office D273

Describe the program's goal on the cover (be descriptive)

All exercises must be submitted by 5/1/2007. All assignments submitted after this date will be recorded as a zero. No back projects or homework will be accepted after 5/1/2007.

Potential computer down time and snow days are accounted for when assigning due dates. Therefore, do not wait until the last minute to complete an assignment. All assignments **MUST** have internal documentation //REMARKS containing variable explanations, the purpose of

program, the purpose of each variable, and the objective of each module. The more documentation in the program, the better. You could never have enough documentation. Add lots of comments in your code.

Withdraw:

Withdraw from the course

At any time Prior to 3/24/2007 a student can simply go to Records and withdraw themselves from the course. A student should really self-reflect and evaluate how they are doing in the course by Mid October. Also, speak to the instructor outside of class to discuss if a student should withdraw or stay in the course prior to the end of October. The instructor will not withdraw the student, it is the students responsibility. **No exceptions. Watch this date!**

At any time Prior to **3/24/2007**

ATTENDANCE:

- Attendance is required for all lectures and labs. A student's final semester average will be lowered by 2 point for each class missed.
- **Coming to class late, counts the same as an absence**, in a computer lab, you must be ready to take notes, and start promptly at the beginning of the class time.
- If you miss class or come to class after a quiz has been given you will receive a zero for that grade.
- Each student is responsible for obtaining assignments and lecture notes from a classmate when absent. Should extended absences occur for any reason such as sports, or illness, contact all the students in the listserv asking for notes, I will see that letter and also try to help if I have any electronic version of my notes for that given lecture.
- Missing Class for a sports function is not an excuse, this is still an absence from my class. That student must take the exam or quiz a head of time, prior to the schedule time of the class. If a student has a game, and has to miss class, the must turn in all work before they leave, and take all quizzes before they leave for that game.
- Please do not walk in late, and distract the class, it takes the attention away from the lecture. Also do not leave early.
- Also no cell phone calls during class time!

No Makeup's!!!!!!!!!!!!!!!!!!!!!!

There will be no makeup exams or quiz! No exceptions!!! No excuse will be acceptable!!!!!!!!!!!!!!!!!!!!!!

No sports excuse, no personal excuse, or any other excuse, you must take the exam at the same time as everybody else in the class!!! Missing an exam or quiz is just unacceptable, it is equivalent to missing a job interview!!!!

USING VOICEMAIL

For calls to campus, after hours or to leave a message

[A] Dial (585) 343-0055

[B] Ask for 6207 my office (or enter 6207 from a touch-tone telephone)

[C] Follow record direction to leave a message (recording will pick up after the 4th ring, immediately if my line is busy.

[D] I also check the voice mail Genesee Community College (585) 343-0055 x 6207

Discussion List for the Course Java1

I have established an electronic discussion list called java1 for this course. You are expected to subscribe to this list from your email account that you check everyday.

Purpose

- To disseminate additional information and recent news items relating to computer technology
- To disseminate additional information regarding course assignments, tests, etc.
- To provide a cooperative learning environment with peer assistance

What should you do?

Subscribe to the list immediately.

How to subscribe?

SUBSCRIBING:

<http://list.genesee.edu>

PLEASE NEVER REPLY TO A LISTSERV MESSAGE, CREATE A NEW MESSAGE. I RECOMMEND THAT YOU DO NOT USE THE REPLY OPTION, BUT RATHER COMPOSE A NEW EMAIL. OFTEN WITH LISTSERV INDIVIDUALS WILL WRITE ONE LETTER TO ONE INDIVIDUAL, BUT IT WILL GO TO THE ENTIRE CLASS JUST BECAUSE THE PERSON REPLIED TO A LISTSERV MESSAGE VS COMPOSING A NEW MESSAGE.

The following list is a detailed list of the course content: Topic by Topic Week by Week Outline

Why Java (Introduction and of Java to other languages) Chapter 1 for Week 1 & 2

- History
- Abstract Data Types - Introduction
- Define Syntax
- Writing Java Programs
- Alphabetical list of Java Keywords

Introduction to UNIX

- How to compile Java (javac filename.java)
- How to run the BYTE CODE
- Many other UNIX commands for file management, making folders, changing folders, pwd, ls, mkdir, rm, cd
- classpath

Week 3 Quiz 1 Chapters 1 & 2

- Reusable code, store more classes in the classpath
- Many other UNIX commands for file management, making folders, changing folders, pwd, ls, mkdir, rm, cd
- classpath
- Using Different data types within a program
- Numeric Literals
- Escape Sequences
- Basic Arithmetic Operators in Java
- Advanced Arithmetical Operators

Week 4 Chapter 3

- Start to use "static" Methods
- More on Methods Classes and Objects
- Using Textpad and Jbuilder to write java source code
- Quiz 2 after Chapter 3 is finished
- Making Decisions (IF/ELSE)
- Java Comparative Operators

- Operator Precedence

Week 5 Chapter 9 Introduction to Applets

- Create simple Java applets and store them on the Linux box (page 286)
- Convert Java applications to Java applets
- Run the applet using the Applet Viewer command (page 287)
- Create an HTML document that will run an Applet (page 290)

Week 6 Continue to work with Applets

- Create more Java applets and store them on the Linux box
- Looping (chapter six)

Week 7 MIDTERM

- Java operators such as pre-increment ++x, post-increment x++
- Accumulative MIDTERM EXAM

Week 8 OOP

- Constructors
- Overloading Constructors
- Overloading Methods
- Passing Parameters

Week 9

- Encapsulation
- Inheritance
- GC Garbage Collection

Week 10

- Exploring Java.Lang
- Classes and Interfaces
- The String Class
- The Math Class

Week 11 & 12

- Creating online web pages with applets
- Fonts and Colors
- Graphics - images
- Handling Events
- Mouse Events

Week 13

- Introduction to Java Arrays

Week 14 & 15

- Reading and writing data from Disk
- Writing Java methods to align data, pad with spaces
- Parallel Arrays

Week 16

- Review for Final exam
- Accumulative Final exam

[mod.pdf](#)

Online PDF tutorial on Modulus % operator

[logicalAndOr.pdf](#)

Online PDF tutorial on && (and) || or

[for.pdf](#)

Online PDF tutorial about for loops and variables

[dowhile.pdf](#)

Online PDF tutorial about POST-TEST loops do while

****Instructor reserves the right to change this syllabus as required due to weather or class cancellations.**

January 15, 2007 3:32 PM