Valdosta State University
Department of Mathematics and Computer Science
CS 1301 Sec. C Time: MTWTh @ 8:00AM

Course Title: Principles of Programming I, Fall 2014

Instructor: Dr. R. Paul Mihail, 2119 Nevins Hall, Email: **rpmihail@valdosta.edu**

Class Meeting Times/Location: Lecture, Nevins Hall, Room 2125, M,T,W from 8:00 AM to 8:50 AM. Lab, Nevins Hall Room 2115, Thursday from 8:00 AM to 8:50 AM

Office Hours: Monday and Wednesday, Nevins Hall 2119 from 3:30 PM to 5:00 PM and by appointment.

Required Textbook: Introduction to Java Programming, by Daniel Liang, 9th or 10th edition (ISBN-13: 978-0133761313 ISBN-10: 0133761312).
Software: Everything you need is already installed on the machines in the labs (Nevins). If you choose to do work on your own machine, you will need to download the (free) Java Development Kit (available from: http://www.oracle.com/technetwork/java/javase/downloads/index.html). You will also need an Integrated Development Environment (IDE), such as jGRASP (can be downloaded from http://www.jgrasp.org). Please make sure you have access to BlazeVIEW (click on MyVSU from the http://www.valdosta.edu page, then after you log in, click on BlazeVIEW D2L). If you have problems logging into BlazeVIEW, call the service desk at 229-245-4357.

Course Description: Programming-language syntax and semantics; problem solving; algorithm design and implementation using modern programming paradigms and techniques; data types and elementary data structures. This course involves extensive programming activities. Students without a strong math and programming background are encouraged to take CS 1010 first.

Course Prerequisites: MATH 1101 or MATH 1111 with a grade of "C" or better in each. Students without a strong math and programming background are encouraged to take CS 1010 first.

Learning Outcomes: Students will understand programming terminology and techniques. More specifically students will:

1. Describe the basic concepts, principles, and steps involved in the programming process[a]
2. Analyze and design strategies for solving basic programming problems [b]
3. Apply modularity in dividing a problem into its logical set of components [b, c, j, k]
4. Use selection, loops, and basic data structures to form useful programs [c, j, k]
5. Design and implement programs with classes and methods based on problem specification [c, j, k]
6. Able to test and debug programs [c]

Topics Covered:

- Introduction
- Data and Expressions
- Using Classes and Objects
- Writing Classes
- Conditionals and Loops
- More Conditionals and Loops
- Object-Oriented Design
- Arrays
- Inheritance (if time permits)

Assessment:
The grade for this course will be calculated as follows:

- Attendance/labs/pop quizzes: 10%
- Online discussions (on BlazeView): 10%
- Programming assignments: 30%
- Exam 1: 10%
- Midterm exam: 10%
- Lab test: 10%
- Exam 2: 10%
- Final Exam (comprehensive):10%

Grades will be assigned according to the following scale:

90-100% = A
80-89.99% = B
70-79.99% = C
60-69.99% = D
Below 60% = F

Final exam: 8:00AM, Wednesday, December 10, 2014

What to do if you miss...

- **a lecture** - find out what the material covered was, read the book, borrow someone's notes, find out what any announcements or assignments were. If attendance was taken and you have a documented excuse as described in the attendance policy, contact your professor within one week of your absence.

- **a lab** - the points for attendance and for the demonstration can not be made up unless you have a documented, excused absence. If you have an excuse, make sure you contact your instructor within one week. You MUST still turn in your labwork by the deadline for the lab.

- **a test** - if you know ahead of time you must miss a test, contact your instructor and make arrangements for an alternate time. If circumstances force you to miss an exam unexpectedly, you MUST contact your instructor within a week after the test, in order to have a chance to be allowed to make the exam up.

- **a deadline on an assignment** - see the late policy. Programs are accepted up to 5 school days late, with penalty.

Due dates

- The electronic submission of program assignments will be done via the course web page electronic submission link (`http://ww2.valdosta.edu/~rpmihail/teaching/esubmit.html`); it can be done as soon as you have your program ready. It is not acceptable to email your submission. Each assignment will have a list of items to turn in at the bottom of the page.

- Late Policy for Programs - Programming assignments may be turned in late, but they lose 10 percent of the points possible per school day late, up to 5 school days late. That is, work that is one school day late loses 10 points out of 100, work that is two school days late loses 20 points, and so on.

- Late Policy for online discussions - Discussions are due Friday by midnight. No credit is given past the due date.

- Late Policy for Labs - The labs will be posted several days before the lab meets and before any electronic submission is due. The demo cannot be made up unless you have a University accepted excuse. Labs are due Friday at midnight. Every hour past midnight costs 10% of the lab grade.

- Free days - You have 2 "free days" (through the entire semester) to extend any of the programs' due date. They can be used consecutively on one program or separately.

- Some assignments may have bonus parts. If a program is turned in late, it is NOT eligible for any bonus points. This means if you are tempted to turn in an assignment late so you can finish the bonus, don't. The bonus will not be counted. Even if you use the 2 available days to extend your due date, the bonus will NOT be counted in that case.

- Programs will not be accepted more than 5 school days late. This means that work turned in more than 5 school days after the deadline will get a grade of zero. This allows your instructor to grade most of the submitted programs at the same time, increasing consistency and improving return times for assignments. If you have an excused absence, some deadline extension will be allowed, determined by your instructor, contact him immediately.

  Late assignments will not be accepted once the graded work has been returned to the class! Programming projects require time to prepare and a way to do POORLY on them is to wait to start work the evening before they are due. A program need not be fully functional to receive some credit, but we would much rather see a working program turned in late than one on time which does not work. A program that does not run because of syntax errors should not be turned in. It will NOT be graded; you will be asked to continue working on it, and there will be NO extension of the due date, meaning you will be losing points for the late penalty. This is another reason to start work on your assignments early - so you will have time to ask questions before the due date! This means that even if you turn in the program on time or early, if it does not run without errors, you will be losing points to the late penalty until you turn in one that DOES run! It is easy to accidently delete a character

or comment out a line at the last minute. After you submit your program, check to make sure what you just turned in DOES run! YOU are responsible for making sure your program as turned in will run cleanly!

File Formats in Electronic Submissions: You need to know the difference between a text file and a doc file and an HTML file and an executable file. Very often, the type that is acceptable in electronic submissions is a text file (which include .java files) or a doc file (test cases). We will explain how to generate them. Occasionally other files may be required (e.g., a jpg file or a csv file if your program generates one or uses one for input). The assignment will specify what format each file should be in. It is YOUR responsibility to make sure the files are in the correct format. If we have time and find files of incorrect formats in a submission, we will try to notify you by email as soon as possible, BUT the submission will be counted as getting later, up until you submit the files in the correct format. Make sure you have the files you need and NOTHING else in your submission. When in doubt, show it to your instructor ahead of time! This also means check your email regularly!

Academic Honesty:

Students are expected to do their own work. Cheating is considered a serious offense by the University. Any form of "seeking an unfair academic advantage" is considered cheating. If an assignment is designated as "cooperative learning" or "partner work", then you are allowed, encouraged, in fact required, to work with your partner or team. These are the ONLY students you are allowed to work with. Of course you can still ask questions of your instructor. Any other assignment is individual work. That includes programs, lab tests, lecture tests, and quizzes.

Learning to program is an individual task; you are expected to do the programming assignments on your own. One person taking any part of another person's work (with or without their permission) and claiming it as his or her own is plagiarism and will not be tolerated. Any occurrences will be dealt with according to the University policy. This **policy allows for a minimum penalty of zero on an assignment AND a warning letter in the student's file**. Repeat offenders (in ANY class) face increasing penalties with each offense.

The only way to LEARN programming is to DO programming. You may think you have gotten the grade very easily by using someone else's work if the copying is not detected, but you have lost that much experience and will be that much further behind on the next assignment.

If you would agree that "he/she and I worked together" on a program, then we would consider it cheating.

If you and your roommate share a computer, be VERY careful. Your work MUST be your OWN. Discuss your design or algorithm or logic in GENERAL terms, but write your own design and your own code, your own implementation. Advice: if it makes you uneasy, then it's probably NOT ok. When in doubt, ASK your instructor before submitting work. **Do not show your source code to ANY other student.** It may seem an easy way to "show them how it's done" or "help them understand the problem". It is a recipe for trouble. It is a temptation to copy the other person's work without figuring out how to solve the problem.

It is just as dishonest to allow someone to represent your work as their own as to do the reverse. This also means YOU are responsible for making sure that your code does not accidentally fall into someone else's hands. Don't leave floppy disks or memory sticks or printouts in a lab; don't leave source code files on a hard drive somewhere. Be aware that files that you put on the local hard drive (C or D or E) in a computer lab on campus STAY there until they are deleted. They do NOT

automatically go away when you log out! If someone else finds your code and turns it in, YOU are responsible too!

Do not post your code on the Internet. This is an open invitation for someone else in the class to copy it and turn it in as theirs! If you get help from a person who is not in the class, be extremely careful. Do not take code from anyone! Make sure the help you get is using the material covered in THIS class. You can be penalized in this situation also. If you work with a tutor, make sure you understand what the tutor is telling you. If they just "transplant" code into your program, you are being cheated of the understanding you need to do the next program and to take the Lecture tests. This is also considered cheating. All programs may be checked by plagiarism detection software.

Withdrawing:If you decide to leave the class, please do it officially. There is a date on the Academic Calendar past which you are not allowed to drop for academic reasons. We'd much rather give a W grade than an F. Don't just stop coming to class - you WILL get an F! Take care of your transcript! All policies associated with this course are subject to revision. Reasonable notification will be provided to students prior to any major changes.
New Withdrawal Policy (5 W Policy): Effective Fall 2010, all undergraduate students are limited to five course withdrawal (W) grades for their entire enrollment at Valdosta State University. Once a student has accumulated five W grades, all subsequent withdrawals (whether initiated by the student in BANNER or initiated by the instructor on the proof roll) will be recorded as WF. The grade of WF is calculated as an F for GPA purposes. To get more details about this policy, students are strongly recommended to check the following link:
http://www.valdosta.edu/academic/WithdrawalPolicy.shtml

Extra Help: Do not hesitate to come to my office during office hours or by appointment to discuss a homework problem or any aspect of the course. There are also tutors available Monday through Friday, see Dr. Said Fares (office in 1126 Nevins Hall) for more information. There is also the Student Success Center on campus located on the ground floor of the Langdale Residence Hall. The Student Success Center offers free one-on-one tutoring for core courses, success workshops, etc. You can find more information at http://www.valdosta.edu/academics/student-success-center/.

Attendance Policy: Please keep in mind that attendance is extremely important for this course. You are expected to show up for lectures and participate. In case you have to miss class, please make sure you ask for notes or see your professor. While not directly part of your course grade, in-class quizzes/labs/exams have a dramatic impact on your grade. If you have a valid university excuse, please notify your professor as soon as possible.

Accommodation for Disabilities: If you have a documented disability that requires academic accommodations, please contact your professor as soon as possible. In order to receive accommodations in this course, you must provide a Letter of Accommodation from the Access Office for Students with Disabilities located in Farver Hall. The phone numbers are 229-245-2498(V/VP) and 229-219-1348(TTY). Accommodations can be made for all parts of the course. We only make special arrangements for class activities after we receive the letter.

Student Opinion of Instruction: At the end of the term, all students will be expected to complete an online Student Opinion of Instruction survey (SOI) that will be available on BANNER. Students will receive an email notification through their VSU email address when the SOI is avail-

able (generally at least one week before the end of the term). SOI responses are anonymous to instructors/administrators. Instructors will be able to view only a summary of all responses three days after they have submitted final grades. While instructors will not be able to view individual responses or to access any of the data until after final grade submission, they will be able to see which students have or have not completed their SOIs, and student compliance may be considered in the determination of the final course grade. These compliance and non-compliance reports will not be available once instructors are able to access the results. Complete information about the SOIs, including how to access the survey and a timetable for this term is available at http://www.valdosta.edu/academic/OnlineSOIPilotProject.shtml.