CS 1010-C Syllabus (Fall 2013)

Course Number: CS 1010 (Section C) **Course Name:** Algorithmic Problem Solving

Hours of Credit: 3 **Dept:** Math/CS, Valdosta State University

Class Time: Tuesday and Thursday (TR), 9:30 – 10:45 a.m.

Class Location: Room no. 2109 at Nevins Hall (NH 2109)

Instructor: Dr. Sudip Chakraborty **Office Location:** 1210 Nevins Hall

Office Telephone: 229-219-1341 **Email:** schakraborty@valdosta.edu

Office Hours: 12:30 p.m. – 1:30 p.m., Monday and Wednesday (MW) **OR** By Appointment

Course Description:
Catalog description: An introduction to algorithm design and programming as components of the software life cycle, with emphasis on the development of algorithms for solving problems; introduction to the development environment for a particular programming language. *A student may not receive credit for both CS1000 and CS1010.*

This course provides the beginning programmer with a guide to developing structured program logic. The course assumes no prior programming experience. It uses one of the modern high-level languages to introduce programming concepts and to enforce good style and logical thinking. In a sense this course is a "pre-programming course" and prepares students for next level of courses on programming language with more complex syntax.

Course Prerequisites:
Any upper-level high school mathematics course is sufficient. You are assumed to be familiar with basic computer operations, such as sending an e-mail, browsing the Internet, using a text editor etc. You are not expected to have any programming experience, but if you have, it will help you understanding the concepts in this course.

Text Book:
Introduction to Computing and Programming in Python – A Multimedia Approach, Third Edition by Mark J. Guzdial and Barbara Ericson. Publisher: Pearson. ISBN: 978-0-13-292351-4

Learning Outcomes:
On successful completion of this course, the student should demonstrate an understanding of the basic concepts of computers, algorithms, problem solving, and programming languages as measured by her/his ability to:

1. Name the major computer components and describe their purpose.
2. Describe the basic concepts, principles, and steps involved in the programming process.
3. Develop computer programs using the appropriate syntax of a modern programming language.
4. Use variables and constants in writing programs.
5. Apply the three basic structures – sequence, selection, and loop in writing computer programs.

6. Use modules in modularizing a program.
7. Apply Object Oriented (OO) techniques in writing computer programs.
8. Use array data structures in writing programs.
9. Document programs using comments.

Grading Scheme:

Test 1	Test 2	Test 3	Comprehensive Final Test	Assignments	Quizzes	Attendance
10%	**10%**	**10%**	**25%**	**30%**	**10%**	**5%**

Grading Policy:
Letter grades will be assigned only after the final scores of all sections (attendance, quizzes, homework, tests) are available. A student's final letter grade is based on total numeric score, on a 0-100 scale, obtained by the students. The letter grade is assigned according to the following policy:

- 90% and above in consolidated numeric grade = **A**
- 80% to less than 90% in consolidated numeric grade = **B**
- 70% to less than 80% in consolidated numeric grade = **C**
- 60% to less than 70% in consolidated numeric grade = **D**
- Less than 60% = **F** (Fail)

Course Policies:

- Students are expected to read the chapters from book and take necessary class notes.
- Cell phones should be turned off (or, at least kept in silent mode) during class time.
- **Attendance is mandatory.** Students are expected to attend all scheduled classes and tests on time and stay for the full class period. As stated in the VSU undergraduate catalog, if you miss more than 20% of class meetings then you will receive an F in the course. If you are absent make sure you get the class notes or other materials from another student in class. It is completely your responsibility to collect class materials for a class that you missed. The instructor cannot provide class notes for you, nor can he redo the lecture.
- **All assignments and quizzes must be completed and submitted before the due date. Late submissions are not allowed.** However, if a student cannot submit an assignment/quiz within the due date due to some unforeseen incident, he/she must provide a written document stating the proper reason to miss it. Upon reviewing the document the instructor will take appropriate grading decision. There will be **no make-up assignment/quiz.**
- **All tests must be taken on the scheduled date**. There will be **no make-up tests.** If a student misses a test, he/she must provide a written signed document for his/her absence. If the absence is due to severe illness, death of immediate family members, appearance in court, or a personal situation that has been discussed and approved by the instructor, then appropriate arrangements will be made for the missed test. Otherwise a 0 will be assigned.
- **Absolutely no plagiarism/cheating.** All work should be done **individually.** The instructor reserves the right to compare works using both automated and manual methods. Students must be able to defend overly similar work. Cheating and plagiarism can result in **F** grade in the course. For more information on academic integrity, please refer to Student Code of Conduct – Section 1 of Students' Handbook.

- **BlazeVIEW**: We will use the BlazeVIEW e-mail client as the primary way of communication, outside class, between the instructor and students. Make sure that your BlazeVIEW account is active and up to date. This syllabus is available on BlazeVIEW. All class-related announcements (change in schedule, cancellation of a class, test announcement etc.) will be posted on BlazeVIEW. You are responsible to check it regularly for any update/announcement/emails. If the BlazeVIEW is down then you may send emails to the instructor's VSU e-mail id. Nonetheless, you must use your VSU e-mail id for any communication with the instructor.

Important Dates:

First Day of Class:	Tuesday, August 13, 2013
Last Day to Add/Drop:	Friday, August 16, 2013 by 1:30 p.m.
Midterm (Last Day to Withdraw):	Thursday, October 3, 2013
Last Day of Class:	Thursday, November 21, 2013
Thanksgiving holiday (No class):	Monday – Friday, November 25 – 29, 2013
Final Exam:	**Thursday, December 5, 2013 (10:15 a.m. – 12:15 p.m.)**

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

ADA Service (Request for Accommodations):

Students requesting classroom accommodations or modifications because of a documented disability must contact the Access Office for Students with Disabilities located in Farber Hall. The phone numbers are 229-245-2498 (voice) and 229-219-1348. For additional information concerning the service provided by the Access Office, please visit the Access Office for Students with Disabilities web site at http://www.valdosta.edu/access/.