Technical College of the Lowcountry

Jean Smith

921 Ribaut Road ~ P O Box 1288

Business Technologies Division

Beaufort, South Carolina 29901-1288

New River, Room 206

843-470-6021

jsmith@tcl.edu

CPT 236
JAVA Programming I

Course Description

This course covers an introduction to JAVA Programming. It emphasizes the designing, coding. Testing and debugging of JAVA Programs involving input/output operations, data types, storage classes, decision structures, looping, functions, arrays, and simple pointers and strings.
Prerequisite: CPT 111 or instructor approval   3 Cr (3 lect/pres, 0 lab, 0 other)

Course Focus

The purpose of this course is to develop the first step in building computer programs using
C++.Upon completion of the course a student will be able to:

A.   Use the JAVA software developer kit (netbeans/drjava).
B.   Use variables appropriately.
C.   Write programs with functions, variables, and control structures.
D.   Use loops   `
E.   Understand arrays and pointers.
F.   Work with strings and files.

Text and References

JAVA An introduction to problem solving and programming. Walter Savitch.
ISBN-13:   9780132162708
Publisher: Pearson
Copyright: 2012

Online Students should have access to a computer running Windows 2000 or later with internet access. You should be able to load Netbeans or Drjava on your computer at home so you have the JAVA developer environment to complete your class assignments and homework. If you are taking this as an online course, you should have web access and be able to send in homework via email. If you don't have the tools, you will need to find a computer that has them (e.g., you can go to the TCL Learning Resource Center).

To access the class web site:
Go to: elearning.tcl.edu or www.tcl.edu
Click on the Blackboard logo (you might need to scroll down on the web page)

Enter your login and password

Your Blackboard User Name is as follows:

Username:_____
Your seven-digit TCL Student ID number including the proceeding zeroes.
Example: 0012345

Your new Blackboard Password is as follows:

Password:_____
First letter of your first name, lowercase, and the last three digits of your social security
number.
Example: j123
NOTE: Use lowercase letter and without spaces.

Click on class cpt236
If you cannot get to the site, please call the helpdesk 525 8344 or email them at
helpdesk@tcl.edu.

Course Goals
The following list of course goals will be addressed in the course. These goals are directly related to the
performance objectives. (*designates a CRUCIAL goal)
- *1. display output
- *2. use relational operators
- *3. compile program
- *4. define operator precedence
- *5. demonstrate assignment statement
- *6. Define applet
- *7. include library
- 8. calculate arithmetic result
- *9. initialize variables
- 10. modify array element
- 11. understand string variables
- *12. program sequential statement
- *13. get user input
- 14. identify objects
- 15. define objects
- *16. debug program
- *17. write test plan
- *18. test program
- *19. produce simple program
- *20. design simple program
- 21. define object-oriented programming
- *22. use ide
- *23. load ide
- 24. use Boolean variables
- 25. call functions
- 26. insert array element
- 27. access array elements
- 28. define arrays

29.   stub program functions
*30.   Use swing library
31.   understand global/local variables
*32.   return functional value
*33.   pass value reference arguments
*34.   convert data types
*35.   send functional parameters
*36.   program decision structure
37.   breakdown functions
38.   define sentinel
*39.   implement for loop
*40.   implement while do-while loop
*41.   demonstrate prefix postfix notation
*42.   implement switch statement
43.   incorporate string library methods
*44.   manipulate string objects
*45.   identify variable scope
*46.   demonstrate logical operations
*47.   program equality statement
*48.   implement simple class

Student Contributions
Each student will spend approximately 2.5-5 hours per week preparing for class and completing assignments to turn in weekly.   Each week students will turn in assignments as specified on Blackboard. In addition, chapter tests are to be completed as assigned. Students will also complete a final exam/project to demonstrate their knowledge of the material.

Students will use a developer environment on a TCL computer or they will set up the development environment on their own computers. Students will be expected to write programs and demonstrate them.

Course Evaluation
Each week's assignments are worth 100 points and averaged over the semester. Chapter tests are also worth 100 points and averaged at the end of the semester. The final will be 100 points.

Tests: 45%
Homework:40%
Final: 10%
Timeliness/Attendance/Participation: 5%

Course Schedule
The class can be taken online or   as an web-enhanced class that meets 1.5 hours per week.   We will cover the information in the order of the content goals as listed.

Approved by: _Kenneth Flick_____Developed/Revised: 8/13
                         Ken Flick, Division Dean for Business/Industrial Division

ADA Statement
The Technical College of the Lowcountry provides access, equal opportunity and reasonable accommodation in its services, programs, activities, education and employment for individuals with disabilities. To request disability accommodation, contact the counselor for students with disabilities at (843) 525-8228 during the first ten business days of the academic term.

Academic Misconduct
There is no tolerance at TCL for academic dishonesty and misconduct. The College expects all students to conduct themselves with dignity and to maintain high standards of responsible citizenship.   It is the student's responsibility to address any questions regarding what might constitute academic misconduct to the course instructor for further clarification. The College adheres to the Student Code for the South Carolina Technical College System. Copies of the Student Code and Grievance Procedure are provided in the *TCL Student Handbook*, the Division Office, and the Learning Resources Center.

Attendance
The College's statement of policy indicates that students must attend ninety percent of total class hours or they will be in violation of the attendance policy.

- Students not physically attending class during the first ten calendar days from the start of the semester must be dropped from the class for NOT ATTENDING.   Reinstatement requires the signature of the division dean.
- Students taking an online/internet class must sign in **and** communicate with the instructor within the first ten calendar days from the start of the semester to indicate attendance in the class. Students not attending class during the first ten calendar days from the start of the semester must be dropped from the class for NOT ATTENDING.   Reinstatement requires the signature of the division dean.
- In the event it becomes necessary for a student to withdraw from the course *OR if a student stops attending class*, **it is the student's responsibility to initiate and complete the necessary paperwork.**   Withdrawing from class may have consequences associated with financial aid and time to completion.   When a student exceeds the allowed absences, the student is in violation of the attendance policy. The instructor MUST withdrawal the student with a grade of "W", "WP", or "WF" depending on the date the student exceeded the allowed absences and the student's progress up to the last date of attendance

Or
Under extenuating circumstances and at the discretion of the faculty member teaching the class, allow the student to continue in the class and make-up the work.   This exception must be documented at the time the allowed absences are exceeded.

- Absences are counted from the first day of class. There are no "excused" absences. All absences are counted, regardless of the reason for the absence.
- A student must take the final exam or be excused from the final exam in order to earn a non-withdrawal grade.
- A copy of TCL's STATEMENT OF POLICY NUMBER: 3-1-307 CLASS ATTENDANCE (WITHDRAWAL) is on file in the Division Office and in the Learning Resources Center.

Hazardous Weather
In case weather conditions are so severe that operation of the College may clearly pose a hardship on students and staff traveling to the College, notification of closing will be made through the following radio and television stations: WYKZ 98.7, WGCO 98.3, WGZO 103.1, WFXH 106.1, WWVV 106.9, WLOW 107.9, WGZR 104.9, WFXH 1130 AM, WLVH 101.1, WSOK 1230 AM, WAEV 97.3, WTOC TV, WTGS TV, WJWJ TV, and WSAV TV.   Students, faculty and staff are highly encouraged to opt in to the Emergency Text Message

Alert System. www.tcl.edu/textalert.asp

Emergency Text Message Alert
Students, faculty and staff are highly encouraged to opt in to the Emergency Text Message Alert System. Participants receive immediate notification of emergency events and weather cancelations via text messaging on their cell phones.   Participants can also opt in to receive non-emergency news and announcements.   Go to www.tcl.edu.   On the homepage, click on "emergency Text Alert at TCL" and fill out the form or go to www.tcl.edu/textalert.asp