

Pellissippi State Community College  
Master Syllabus

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**ENTERPRISE JAVA PROGRAMMING  
CSIT 2655**

Class Hours: 3.0  
Credit Hours: 4.0  
Laboratory Hours: 3.0  
Revised: Spring 2011

Instructor:  
Office:  
Phone:  
Email:

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**Catalog Course Description:**

A study of the Java programming language to design advanced graphical user interfaces and Web-enabled applications. Topics include JavaBeans, internationalization, Java GUI design, APIs and advanced Java database programming. Java Servlets, JavaServer Pages and JavaServer Faces. The emphasis is on design and development of usable software products and documents through team projects.

**Entry Level Standards:**

The entering student should have a familiarity with the Windows operating system and an integrated program development environment such as NetBeans. Basic knowledge of Java programming fundamentals and graphical user interface design concepts is expected.

**Prerequisites:** CSIT 1510, CSIT1810 or Java programming experience.

**Corequisites:** None

**Textbook(s) and Other Course Materials:**

1. Introduction to Java Programming by Daniel Liang, 8<sup>th</sup> edition, Prentice Hall. ISBN: 978-0132130806.
2. Murach's Java Servlets and JSP by Andrea Steelman, 2<sup>nd</sup> edition, Mike Murach and Associates. ISBN: 978-1890774448.

**I. Week/Unit/Topic Basis:**

Week	Chapter	Topic(s)
1	-	Introduction and course overview
2	31	Internationalization
3	32	Java Beans and Bean Events
4	33	Containers; Layout Managers and Borders
5	34	Menus, Toolbars, Dialogs and Internal Frames
6	35	MVC and Swing Models
7	36	JTable and JTree
8	37	Accessing Databases with JDBC
9	38	Advanced Java Database Programming
10	39	Java Servlets
11	39	Java Servlets
12	40	Java Server Pages (JSP)
13	40	Java Server Pages (JSP)
14	-	Project Review and Presentations
15		<b>Final Exam Period</b>

## II. Course Goals\*:

The course will

- A. Expand student understanding of advanced GUI programming concepts of the Java language. (III, IV, V)
- B. Guide students to understand and use server-side programming concepts and tools. (IV, V)
- C. Enhance effective use of object-oriented programming concepts and software development principles. (III, IV)
- D. Foster student ability to work individually and in project teams. (I, II)
- E. Expand student understanding to write Java programs and create documents to meet end-user needs. (I, II, III, IV, V)

\*Roman numerals after course objectives reference goals of the *CSIT* program.

## III. Expected Student Learning Outcomes\*:

Students will be able to:

- 1. Explain enterprise Java platform architecture and its components. (A, B)
- 2. Write Java programs that meet internationalization requirements. (C, E)
- 3. Use Java Beans and Bean events. (A, B, C, E)
- 4. Explain Swing models and identify advanced GUI components such as internal frames, toolbars, menus and layout managers. (A, C)
- 5. Write Java programs using JTable and JTree Swing components to display data in grid and hierarchical formats. (A, C)
- 6. Explain database connectivity methods and write Java programs to interface with major databases. (B, C, E)
- 7. Write modular programs and Java applications using Java Servlets and Java Server Pages (JSP). (A, B, C, D, E)
- 8. Generate project documents such as requirement specifications document, design document and test document. (C, D, E)
- 9. Use NetBeans IDE to configure web servers, databases and other server-side computing resources. (B, E)

\* Capital letters after Expected Student Learning Outcomes reference the course goals listed above.

## IV. Evaluation:

- A. Testing Procedures: 30% of grade  
At least two tests are recommended for the course. There will be no make-up tests unless prior arrangements have been made with the instructor. Failure to make a passing test average may result in a grade of F for the course.
- B. Laboratory Expectations: 70% of grade  
At least 4 lab assignments will be given during the semester. In addition, a team project will be assigned. A late penalty will be imposed on any overdue assignment. Failure to make a passing average in lab assignments and team project may result in a grade of F for the course.
- C. Field Work: None
- D. Other Evaluation Methods: None

E. Grading Scale:

93 – 100	A
88 – 92	B+
83 – 87	B
78 – 82	C+
73 – 77	C
65 – 72	D
Below 65	F

V. **Policies:**

A. **Attendance Policy:**

Pellissippi State Community College expects students to attend all scheduled instructional activities. As a minimum, students in all courses must be present for at least 75 percent of their scheduled class and laboratory meetings in order to receive credit for the course.

*(Pellissippi State Online Catalog)*

B. **Academic Dishonesty:**

Plagiarism, cheating and other forms of academic dishonesty are prohibited. A student guilty of academic misconduct, either directly or indirectly through participation or assistance, is immediately responsible to the instructor of the class. In addition to other possible disciplinary sanctions that may be imposed through the regular Pellissippi State procedures as a result of academic misconduct, the instructor has the authority to assign an F or a zero for the exercise or examination or to assign an F in the course. *(Pellissippi State Online Catalog)*

C. **Accommodation for Disabilities:**

Students who need accommodations because of a disability, have emergency medical information to share, or need special arrangements in case the building must be evacuated should inform the instructor immediately, privately after class or in her or his office. Students must present a current accommodation plan from a staff member in Services for Students with Disabilities (SSWD) in order to receive accommodations in this course. Services for Students with Disabilities may be contacted by going to Goins 127, 132, 134, 135, 131 or by phone: 539-7153 or TTY 694-6429. More information is available at [www.pstcc.edu/departments/swd/](http://www.pstcc.edu/departments/swd/).

D. **Extended College Closure:**

Pellissippi State Community College is committed to the educational process and student learning. In the event of a prolonged college closure (of at least a week), the educational process will continue through the use of the college's on-line learning environment (Desire2Learn). The instructor will post instructions, specific assignments, due dates, etc. in Desire2Learn (D2L). It is the student's responsibility to login to D2L and check posted instructions and assignments.