



Course Name: Java Programming II

Course Number: CSC* E224

Credits: 4

Catalog description: This is a course in advanced Java programming techniques. Topics include GUI components and Java Swing, graphics and Java 2D, exception handling, Java applets, files and streams, data structures and collections, generics, multithreading and concurrency, database connectivity (JDBC), networking and sockets, and regular expressions.

The course requires substantial hands-on use of computers in a computerized classroom environment.

Prerequisite: CSC* E223 *or* permission of the instructor

Corequisite or Parallel:

General Education Competencies Satisfied:

HCC General Education Requirement Designated Competency Attribute Code(s):

None

Additional CSCU General Education Requirements for CSCU Transfer Degree Programs:

None

Embedded Competency(ies):

None

Discipline-Specific Attribute Code(s):

COMP Computer Science Elective

Course objectives:

General Education Goals and Outcomes:

None



Course Specific Objectives:

1. Understand GUI components and Java Swing; design and implement Java applications using GUI components and Java Swing
2. Understand graphics and Java 2D; design and implement Java applications using graphics and Java 2D
3. Understand and utilize exception handling
4. Understand and create Java applets
5. Understand file input/output and streams; implement Java applications using file input/output and streams
6. Understand and utilize data structures
7. Understand Java collections; write Java applications using Java collections
8. Understand generics; write Java applications using generics
9. Understand multithreading and concurrency; write multi-threaded Java applications
10. Understand database connectivity (JDBC); write Java applications using JDBC
11. Understand networking and sockets; write Java applications using networking and sockets
12. Understand regular expressions; write Java applications using regular expressions

Course Content:

- GUI components and Java Swing
- Graphics and Java 2D
- Exception handling
- Java applets
- File input and output, streams
- Data structures
- Java collections
- Generics
- Multithreading and concurrency
- Database connectivity (JDBC)
- Networking and sockets
- Regular expressions

Date Course Created: Fall 2012

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