Course Outcome Guide (COG)

Course:	CSCI 127 – Beginning Java/J++	Credits:	3	Instructor:	TBD	
Course Description:	Introduction to programming in the Java/J++ language					

Concepts and Issues	Process Skills	Assessment Tasks	Intended Outcomes		
			Course	General Education or Program	Institutional
Design Language Object-oriented design principles Basic control structures User interface, controller, and application logic layers Test plans	Apply object-oriented design to small software projects. Produce simple object-oriented programs demonstrating use of class definition, methods, primitive and reference data types, alternation and repetition control structures, and file-based and interactive input/output. Produce simple event-driven object-oriented programs using basic Java library components. Assess the quality of programs using simple glass box and black box testing strategies. Describe and demonstrate different physical data representations for primitive data types. Use good software development principles including object-oriented design, test planning and adherence to style guidelines.	*Participate in class discussions and activities demonstrating knowledge of subject matter. *Complete examinations demonstrating acceptable skill level of concept and process. *Complete textbook readings, questions and problems (both individually and collaboratively) demonstrating acceptable skill levels of concept and process. * Design, construct and test your final project.	Create UML class diagrams Create classes from class diagrams Use simple design patterns Create unit tests using JUnit Use inheritance from interfaces and abstract classes Use proper Java exception handling techniques Use the various collection classes Use Java's IO system Write a simple client and server program using networking classes Create Java packages Use threadsS	1.Mathematics- including numeration literacy and the knowledge and use of statistical and logical processes. 2.Analytical-gathering, organizing, and evaluating information 3.Analogical-using former knowledge to help comprehend and explain new situations 4.Critical Thinking-the ability to identify ad define criteria, understand biases, and construct objective judgments. 5.Problem solving-the ability to analyze situations and synthesize solutions.	1. Students will demonstrate effective communication skills. 2. Students will use reasoning skills to analyze and solve problems.

	Describe the purpose and operation of Java software development tools including compilers, editors, and integrated development environments; use tools to do software development. Describe the Java runtime environments. Identify and describe the activities involved in the software development process.				