

10/26/2022 DATE

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REQUIRED COURSE

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ELECTIVE COURSE

Business DIVISION

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NEW COURSE

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REVISION

Lake Land College

Course Information Form

COURSE NUMBER:	CIS-170	TITLE: (30 Characters Max)	Object-Oriented Programming III				
SEM CR HRS:	3	Lecture:	3	Lab:	0	ECH:	3
Course Level:	<input type="checkbox"/> Gen Ed / IAI <input type="checkbox"/> Baccalaureate /Non-IAI		<input checked="" type="checkbox"/> Career/Technical <input type="checkbox"/> Dev Ed/ Not in Degree Audit	Clinical Practicum:	0	Work-based Learning	0
COURSE PCS #	12 - 11. 0201		IAI Code			Contact Hours (Minutes Per Week)	
Repeatable (Y/N):	Y	Pass/Fail (Y/N):	N	Variable Credit (Y/N):	N	Min:	Max:
Prerequisites:	CIS-162, CIS-164						
Catalog Description: (40 Word Limit)	This course teaches advanced concepts in object-oriented programming including data structures, threads, animation, networking, databases, ASP.NET and XML.						

List the Major Course Segments (Units)		Contact Lecture Hours	Contact Lab Hours	Clinical Practicum	Work-based Learning
1	Introduction to Java	3			
2	Object-Oriented Concepts	6			
3	Program Control	5			
4	Character, Strings, and StringBuilder	4			
5	Arrays	5			
6	Inheritance	7			
7	Exception Handling	4			
8	File I/O	4			
9	Swing components	4			
10	GUI & Graphics	3			
TOTAL		45	0	0	0

EVALUATION					
QUIZZES	<input checked="" type="checkbox"/>	EXAMS	<input checked="" type="checkbox"/>	ORAL PRES	<input type="checkbox"/>
LAB WORK	<input type="checkbox"/>	PROJECTS	<input checked="" type="checkbox"/>	COMP FINAL	<input type="checkbox"/>
				PAPERS	<input type="checkbox"/>
				OTHER	<input type="checkbox"/>

COURSE MATERIALS	
TITLE:	Java Programming (ISBN: 978-1-337-39707-0)
AUTHOR:	Joyce Farrell
PUBLISHER:	Course Technology
VOLUME/EDITION/URL:	9th Edition
COPYRIGHT DATE:	2019

MAJOR COURSE SEGMENT	HOURS	LEARNING OUTCOMES
		<i>The student will be able to:</i>
Introduction to Java	3	Discuss problem solving in Java and using data in Java; create a simple Java program.
Object-Oriented Concepts	6	Use methods, classes, arguments, and method overriding to develop objects.
Program Control	5	Discuss the control structures used in higher level programming to complete tasks, such as iterations, if else logic, and switch case structures.
Characters, String, and StringBuilder	4	Evaluate the manipulation of characters, the use of String methods, and using the String Builder Class.
Arrays	5	Discuss the declaration of and the processing of Arrays in Java.
Inheritance	7	Discuss the Concepts of Inheritance, Extending Classes, and Using Superclasses.
Exception Handling	4	Implement the Try Catch concepts and Error Trapping to create a complete java application.
File I/O	4	Use Java's IO classes to design an application that reads from & writes to a file.
Swing Components & GUIs	4	Implement the JFrame Class, JLabels, GUI Objects Using Layout Manager and JPanels to create a complete java application.

Graphics	3	Create a java application that contains graphics using the drawString() method.
Insert New Line Above this Line		
	45	

COURSE OUTCOMES*	At the successful completion of this course, students will be able to:
• Understand the three basic logic structures.	
• Understand how to create and use an array.	
• Understand how to create and use a class.	

* Course Outcomes will be used in the Assessment Software for Outcomes Assessment. Limit to 3 - 5.