☑ REQUIRED COURSE
☐ ELECTIVE COURSE

Business DIVISION
☐ NEW COURSE
☑ REVISION

Lake Land College
Course Information Form

COURSE NUMBER:	ITT-070	TITLE: *(30 Characters Max)*		Python			

SEM CR HRS:	3	Lecture:		3		Lab:	0					ECH:	3

Course Level:	☐ Gen Ed / IAI ☐ Baccalaureate /Non-IAI	☑ Career/Technical ☐ Dev Ed/ Not in Degree Audit	Clinical Practicum:	0	SOE/ Internship:	0	SOE ECH:	0

COURSE PCS #	12	IAI Code					Contact Hours Per Week		
Repeatable (Y/N):	Y	Pass/Fail (Y/N):	N	Variable Credit (Y/N):	N	Min:	Max:	16 Wks	150	8 wks	300

Prerequisites:	
Catalog Description: (40 Word Limit)	Focuses on using the Python programming language, building a problem-solving skillset, and automation of tasks.

List the Major Course Segments (Units)	Contact Lecture Hours	Contact Lab Hours	Clinical Practicum	Non-Clinical Internship/ SOE
Introduction to Programming	3			
Data and Variables	4			
Debugging	3			
Modules	4			
Functions	4			
Selection and Decision Structures	4			
Exceptions and Problem Solving	5			
Repetition Structures	3			
Strings	3			
Lists and Tuples	3			
Dictionaries and Sets	4			
Classes, Objects, and Object Oriented Programming	5			
TOTAL	45	0	0	0

EVALUTION

QUIZZES ☑	EXAMS ☑	ORAL PRES ☐	PAPERS ☐
LAB WORK ☑	PROJECTS ☑	COMP FINAL ☑	OTHER ☑

COURSE MATERIALS

TITLE:	Starting Out with Python (ISBN: 978-0134444321)
AUTHOR:	Tony Gaddis
PUBLISHER:	Pearson
VOLUME/EDITION/URL:	4th
COPYRIGHT DATE:	2017

MAJOR COURSE SEGMENT	HOURS	LEARNING OUTCOMES
		The student will be able to:
Introduction to Programming	3	1. Describe the fundamentals of Python programming. 2. Structure, compile, and execute introductory code.
Data and Variables	4	1. Describe programming operators and keywords. 2. Describe statements and expressions. 3. Create variable names and input statements
Debugging	3	1. Explain syntactical guidelines. 2. Identify error messages.
Modules	4	1. Utilize instances in code examples. 2. Create programs using Turtle modules. 3. Understand proper module implementation.

Functions	4	1. Describe proper use of parameters and local variables. 2. Describe proper flow of execution. 3. Define proper function syntax and return values.
Selection and Decision Structures	4	1. Identify Boolean values and logical operators. 2. Implement nested and chained conditional statements.
Exceptions and Problem Solving	5	1. Explain standard exceptions and methods. 2. Distinguish critical elements of the coding process. 3. Exercise proper comment utilization.
Repitition Structures	3	1. Differentiate standard loop implementations. 2. Code break an continue statements.
Strings	3	1. Describe character classification. 2. Implement string traversal.
Lists and Tuples	3	1. Concatenate elements within a list. 2. Explain tuples and mutability.
Dictionaries and Sets	4	1. Detail dictionary operations. 2. Explain the proper use of enumeration. 3. Implement proper aliasing and copying.
Classes, Objects, and Object Oriented Programming	5	1. Define class types and modifiers. 2. Instantiate objects, properties, and methods. 3. Describe object mutatibility. 4. Create object oriented code.
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	45	

COURSE OUTCOMES*	At the successful completion of this course, students will be able to:
	Explain proper Pythod code development and debugging principles.
	Demonstrate modules and functions.
	Produce properly formatted Pythod Code.

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