

10/26/2022 DATE

☒ REQUIRED COURSE
☒ ELECTIVE COURSE

 Business DIVISION
☐ NEW COURSE
☒ REVISION

Lake Land College

Course Information Form

COURSE NUMBER:	CIS-089	TITLE: (30 Characters Max)		Advanced Routing							
SEM CR HRS:	3	Lecture:	2	Lab:	2	ECH:	4				
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	SOE/ Internship:	0	SOE ECH:	0	
COURSE PCS #	12		IAI Code				Contact Hours (Minutes Per Week)				
Repeatable (Y/N):	Y	Pass/Fail (Y/N):	N	Variable Credit (Y/N):	N	Min:	Max:	16 Wks	200	8 wks	400
Prerequisites:	CIS-087										
Catalog Description: (40 Word Limit)	An in-depth look at the components of the Routing and Switching and the tools that are used in the implementation, configuration, optimization, and troubleshooting of the LAN/WAN environment. Study will lead toward Cisco CCNA certification.										

List the Major Course Segments (Units)		Contact Lecture Hours	Contact Lab Hours	Clinical Practicum	Non-Clinical Internship/ SOE
1	Introduction	2			
2	Advanced TCP/IP Topics	4			
3	Routing Basics	6			
4	Advanced Routing Topics	6			
5	Switching Basics	6			
6	CCNA Prep Review	6			
7	Lab Exercises		30		
8					
9					
10					
TOTAL		30	30	0	0

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

COURSE MATERIALS	
TITLE:	CCNA Guide to Cisco Networking Fundamentals
AUTHOR:	Cannon
PUBLISHER:	Course Technology
VOLUME/EDITION/URL:	4th
COPYRIGHT DATE:	2009

TITLE:	Network Warrior
AUTHOR:	Donahue
PUBLISHER:	O'Reilly Media
VOLUME/EDITION/URL:	
COPYRIGHT DATE:	2011

MAJOR COURSE SEGMENT	HOURS	LEARNING OUTCOMES
		<i>The student will be able to:</i>
Introduction	2	Describe the LAN/WAN environment and its components.
Advanced TCP/IP Topics	4	Describe the details of the TCP/IP packets and how they are accurately delivered in a LAN environment.
Routing Basics	6	Describe the process of routing data in a typical WAN environment - included router IOS configuration.
Advanced Routing Topics	6	Describe the variety of advanced WAN setups and configurations.
Switching basics	6	Describe the functionality of switches in the LAN/WAN environment.
CCNA Prep Review	6	Prepare for possible CCNA testing using a number of certification-grade testing methods.
Insert New Line Above this Line		
	30	

COURSE OUTCOMES*	At the successful completion of this course, students will be able to:
Configure the advanced router IOS	
Understand switching configuration	
Route packets on a LAN	

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