

## Kishwaukee College

Spring 2016

### CISCO NETWORKING IV - Independent Study

#### CIS 148 – 5002

LOCATION AND TIME: N/A – Independent Study

DATES; 1/21/15 – 5/16/16

INSTRUCTOR Mark Uscian

Office: A1371

Office Hours:

Monday	4:00 - 5:10 PM
Tuesday	3:30 - 4:40 PM
Wednesday	4:00 - 5:10 PM
Thursday	2:00 - 3:15PM
Friday	N/A

Dept Secretary (815)-825-2086 x 2030 – leave a message

Email: [Muscian@kishwaukeecollege.edu](mailto:Muscian@kishwaukeecollege.edu)

#### COURSE DESCRIPTION

The final course in the Cisco Networking Academy program sequence of four classes, (CIS145, CIS146, CIS147, CIS148), designed to prepare the student to take the Cisco Certified Network Associate (CCNA) exam. This course discusses the WAN technologies and network services required by converged applications in Enterprise Networks. The course uses the Cisco Enterprise Composite model (ECM) to introduce integrated network services and explains how to select the appropriate devices and technologies to meet ECM requirements. Implementation and configuration of common data link protocols and how to apply WAN security concepts, principles of traffic, access control and addressing services are covered. Students learn how to detect, troubleshoot and correct common enterprise network implementation issues. Four hours lecture/discussion/guided labs per week

IAI Number: N/A

PREREQUISITE: CIS 147

#### STUDENT LEARNING OUTCOMES (SLO)

- Understand and describe different WAN technologies and their benefits.

- Understand and describe the operations and benefits of Virtual Private Networks (VPNs) and tunneling.
- Understand, configure and troubleshoot serial connections.
- Understand, configure and troubleshoot broadband connections.
- Understand, configure and troubleshoot tunneling operations.
- Understand, configure and troubleshoot Network Address Translations (NAT) operations.
- Monitor and troubleshoot network operations using syslog, SNAP and NetFlow
- Understand and describe network architectures; Borderless Networks; Data Centers and Virtualization: Collaboration technology and solutions.
- Use skills learned in class to complete a hands-on team project implementing technologies learned.

- TEXT(S)

- All text and material are online. No text required
- 3 ringed binder for labs
- Supplemental reference handouts

REQUIRED STUDENT MATERIALS

- Flash drive for storing Lab Screen Shots and Lab folders

ADDITIONAL STUDENT REFERENCES AND THEIR LOCATIONS

Supplemental reference handouts

BREAKDOWN OF COURSE REQUIREMENTS

8 On-line Chapter Tests	- 300 points
Lab Assignments	- 300 points
On-line Final Exam	- 150 points
Group Project	- 250 points
	-----
	1000 points

FINAL GRADE DETERMINATION: Grade reports will not be mailed out. *Please check KishSOS, My Student Info, under Academic Profile, Grades, for grade reports*

- 90-100% = A – 900-1000 points
- 80-90% = B – 800-899 points
- 70-80% = C – 700-799 points
- 60-70% = D – 600-699 points
- < 60 = F - < 600 points

COURSE EXIT REQUIREMENTS: N/A

## **COURSE SPECIAL NOTES**

- **Two attempts allowed per chapter exams and final**
- **Chapter tests will have a close date after which they will not be allowed to be taken. Close dates are listed in the weekly schedule below**
- **All labs assigned will be Packet Tracer Labs**
- **Two skills based PTs will be assigned with due dates**
- **Group Project with presentation and supporting documentation due last week of class**

## TENTATIVE WEEKLY SCHEDULE

### Suggested Outline for Completion

Week 1 1/18-1/24	Chapter 1 – Hierarchical Network Design – PT Labs	
Week 2 1/25-1/31	Chapter 1 – Hierarchical Network Design – PT Labs Chapter 2 – Connecting to the WAN – PT Labs	
Week 3 2/1–2/7	Chapter 2 – Connecting to the WAN – PT Labs Chapter 3 – Point to Point Connections – PT Labs	
Week 4 2/8-2/14	Chapter 3 – Point to Point Connections – PT Labs Chapter 4 – Frame Relay – PT Labs	
Week 5 2/15-2/21	Chapter 4 – Frame Relay – PT Labs	02/22 – Test 1 & 21 Closes
Week 6 2/22-2/28	Chapter 5 – Network Address Translation for IPv4 – PT Labs	
Week 7 2/29-3/6	Chapter 5 – Network Address Translation for IPv4 – PT Labs Chapter 6 – Broadband Solutions – PT Labs	03/08 Test 3 Closes
Week 8 3/7-3/20	Chapter 6 – Broadband Solutions – PT Labs	
Week 9 3/21-3/27	Chapter 7 – Securing Site-to- Site Connectivity – PT Labs	03/29 Test 4 Closes

Week 10 3/28-4/3	PT – Skills based assessment – Chapters 1-7  Chapter 8 – Monitoring the Network – PT Labs	
Week 11 4/4-4/10	Chapter 8 – Monitoring the Network – PT Labs	04/12 Tests 6 & 6 Closes
Week 12 4/11-4/17	Chapter 9 – Troubleshooting the Network	
Week 13 4/18-4/24	Group Project Work  Skills Based Assessment - Final	
Week 14 4/25-5/1	Group Project Work  Skills Based Assessment - Final	
Week 15 5/2-5/8	Group Project Work  Practice Finals	05/10 Tests 7 & 8 & 9 Closes
Week 16 5/9-5/15	Group Project Presentation	
Final Exam TBD	<b><u>TBD</u></b>	
5/15 – 6/5	<b><u>Practice Certification Exams</u></b>	

#### MAKE-UP POLICY

Missed labs and/or tests may or may not be made up depending upon individual circumstances. In all cases contact the instructor via email or telephone to review options and procedures for completing missed tests or labs.

ATTENDANCE POLICY: N/A

#### CLASS WITHDRAWAL

A “W” cannot be given as a final grade. The student is responsible for officially withdrawing from the class according to procedures described in the college catalog. Any student that does not officially withdraw from the class will receive a letter grade. The last date for withdrawal for this course can be found at “MY CLASS SCHEDULE” on KishSOS. Kishwaukee College reserves the right to administratively withdraw at midterm those students who are not actively pursuing course objectives or who are in violation of standards of behavior as outlined in the Student Code of Conduct and Discipline. For a copy of the student conduct policy, contact the

Vice President of Student Services Office or refer to the Kishwaukee College catalog.

### INCOMPLETE GRADE

All course requirements must be completed by the end date for the course. In the event that extremely difficult circumstances merit granting a student more time to finish course requirements, an “Incomplete” (I) grade may be given. Taking an Incomplete is possible only at the instructor's discretion. To receive an Incomplete, a contract between the student and the instructor must be completed and approved regarding the completion of all remaining work within a strictly defined period of time. If the conditions of the contract are not met, an “I” grade may revert to an “F”.

### CLASS CANCELLATIONS

N/A

### ACADEMIC DISHONESTY

In order to evaluate student work, faculty must be able to trust that the work is original with a student and not the work of someone else. Cheating, falsifying information, forgery, plagiarism, and other dishonest actions will not be tolerated. Sanctions for academic dishonesty are at the discretion of the instructor and subject to appeal as provided in Student Code of Conduct and Discipline. A complete explanation of the policy and procedures surrounding academic dishonesty are outlined in the Kishwaukee College Catalog.

### COPYRIGHT

As a Kishwaukee College Student, you may have copyrighted materials or software made available to you by the college for course use. Please understand that copyright law may prohibit copying these materials. Violation of copyright laws can lead to prosecution for a criminal offense. You are required to abide by the specific copyright and licensing agreements that apply to each particular piece of software.

### GRADUATION REQUIREMENTS FOR TRANSFER DEGREE STUDENTS

All students intending to graduate with an A.A., A.S., A.E.S., or A.F.A. are required to submit a complete Degree Portfolio. The Degree Portfolio is a means for the institution to measure its effectiveness in preparing students for successful completion of a degree at a transferring institution. Save your college-level work throughout your academic career in order to facilitate the portfolio compilation. Also, submit a completed application for graduation from the college the semester that you plan on graduating prior to submitting the complete Degree Portfolio. Guidelines and the specific requirements (along with the rubrics used for assessment) for the Degree Portfolio can be found at [www.kishwaukeecollege.edu/portfolio](http://www.kishwaukeecollege.edu/portfolio).

### ASSISTIVE RESOURCES CENTER/DISABILITY SERVICES

Any student with a documented disability or special learning need and wanting to request accommodations, should contact the Coordinator in A1317 or at (815) 825-2086 ext 3960, (815) 825-9106 (TTY), or send an email to [awilson@kishwaukeecollege.edu](mailto:awilson@kishwaukeecollege.edu). The student's disability must impact their ability to participate in the educational environment and be documented by an appropriate professional prior to accommodations being approved.

#### LEARNING SKILLS CENTER (A1300)

Students must present their Kishwaukee College student ID when using any Learning Skills Center services. For more information on the Learning Skills Center go to <http://www.kishwaukeecollege.edu/go/lsc>. Tutoring is available to all Kishwaukee students free of charge. The Writing Center (Learning Skills Center, A1306) answers your writing-related questions regardless of the class or assignment. Students are expected to bring all material related to the assignment, including textbooks, paper prompts, etc. Make-up tests, online tests, and placement tests are available through Testing Services, also located in the Learning Skills Center

#### EMERGENCY PROCEDURES/SAFETY

N/A

#### RELIGIOUS OBSERVANCES

Students faced with schedule conflicts related to a religious observance should make prior arrangements with the instructor a minimum of seven (7) school days in advance of the examination or other activity involved.

#### STUDENT E-MAIL

Your Kishwaukee College e-mail account will be the only way to receive official notices from the College. If you choose to forward your e-mail to another account, please be advised that all communication from and within the college will use your Kishwaukee student e-mail. When communicating with instructors or employees of the college, you are required to use your Kishwaukee e-mail address.

#### COMMUNITY RESOURCES

There are numerous community resources that are available to assist students in addressing a variety of personal needs. A listing and description of community resources can be found at <http://www.kishwaukeecollege.edu/go/communityresources>

