## KISHWAUKEE COLLEGE

## Fall 2016

# Cisco Networking 3

# CIS 147 - 3001

LOCATION AND TIME: Thursday (Online / TBA) 6:00 PM to 9:35 PM - Room 1372

DATES; 09/01/2016 - 12/19/2016

**INSTRUCTOR** Dana Fellows

Office: A1371

Office Hours:

Monday 4:00 PM - 5:30 PM Tuesday 4:00 PM - 5:30 PM Wednesday 9:00 AM - 10:00 AM Thursday 4:00 PM - 5:30 PM

Friday N/A

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

Email: dana.fellows@kishwaukeecollege.edu

## **COURSE DESCRIPTION**

Scaling Networks: This Couse describes the architecture, components and operations of routers and switches in larger and more complex networks. Students learn how to configure routers and switches for advanced functionality. By the end of this course, students will be able to configure and troubleshoot routers and switches and resolve common issues with OSPF, EIGRP and STP in both IPv4 and IPv6 networks, Students will also develop the knowledge and skills needed to implement a WLAN in a small-to-medium network. This is the third 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. Four hours lecture/discussion/guided labs a week.

IAI Number: N/A

PREQUESITE: CIS 146 Cisco Networking 2

## STUDENT LEARNING OUTCOMES (SLO)

- Understand, configure and troubleshoot enhanced switching technologies such as VLANs, Rapid Spanning Tree Protocol (RSTP), Per VLAN Spanning Tree Plus Protocol (PVST+), and Etherchannel
- Understand, configure and troubleshoot first hop redundancy protocols (HSRP) in a switched network
- Understand, configure, and troubleshoot wireless routers and wireless clients
- Configure and troubleshoot routers in a complex routed IPv4 or IPv6 network using single-area OSPF, multi-area OSPF and Enhanced Interior Gateway Routing Protocol (EIGRP)
- Manage Cisco IOS Software licensing and configuration files

#### TEXT(S)

- All text materials are online no text required
- ISBN: 978-1-935080-55-8 TestOut Routing and Switching Pro CCNA

## REQUIRED STUDENT MATERIALS

- Flash drive for storing Lab Screen Shots and Lab folders
- 3 ring binder for labs

#### ADDITIONAL STUDENT REFERENCES AND THEIR LOCATIONS

- Supplemental reference handouts (provided in class)

## BREAKDOWN OF COURSE REQUIREMENTS

Tesout Labs & Quizzes	900 points	
Lab Assignments 30% of Grade	400 points	
On-line Final Exam 10% of Grade	100 points	
Hands-on Lab Final 15% of Grade	100 points	
Total	1500 points	

## OTHER COURSE REQUIREMENTS: N/A

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 80-89% = B 70-79% = C 60-69% = D< 59 = F

#### **COURSE EXIT REQUIREMENTS:**

YOU MUST PASS THE COMPREHENSIVE FINAL EXAM WITH A 70% OR BETTER. If you do not, you may pass the class, but you will NOT be able to take Cisco IV. You can retake the

Online Final Exam a second time if needed. A grade of 75% or better is needed for the second time. It is a Cisco Requirement that you score 70% or better on the Final

## TENTATIVE WEEKLY SCHEDULE

Please note that this schedule and the topics covered are subject to change depending upon a variety of factors. Changes will be announced in class. If you are not able to attend class, it is your responsibility to find out what was covered.

Week 1 09/01	Syllabus Review; Cisco Chapter 01 - Introduction to Scaling Networks; Cisco Labs and Activities Chapter 01 Cisco Chapter 02 – LAN Redundancy; Cisco Labs and Activities Chapter One and Two Testout Chapter 01 - ICNDI Introduction
Week 2 09/08	
Week 3 09/15	Cisco Chapter 03 – Link Aggregation; Cisco Labs and Activities Chapter 03
Week 4 09/22	Testout Chapter 02 - Networking Concepts
Week 5 09/29	Cisco Chapter 04 - Wireless LANS; Cisco Labs and Activities Chapter 03 and 04 Testout Chapter 03 - IPv4 Addressing Testout Chapter 04 IPv6 Addressing
Week 6 10/06	
Week 7 10/13	Cisco Chapter 05 – Adjust and Troubleshoot Single-Area OSPF; Cisco Labs and Activities Chapter 05
Week 8 10/20	Testout Chapter 05 Cisco Device Basics
Week 9 10/27	Cisco Chapter 06 – Multi-Area OSPF; Cisco Labs and Activities Chapter 06 Testout Chapter 06 Networking Concepts
Week 10 11/03	
Week 11 11/10	Cisco Chapter 07 – EIGRP;
Week 12 11/17	Cisco Labs and Activities Chapter 07 Cisco Chapter 08 EIGRP Advanced Configuration and Troubleshooting; Testout Chapter 07 – IP Routing Technologies

Week 13 11/24	11/24 Thanksgiving - No Class Cisco Finish Chapter 8 EIGRP Advanced Configuration and Troubleshooting; Cisco Labs and Activities Chapter 8 Testout Chapter 08 – IP Services
Week 14 12/01	
Week 15 12/08	Chapter 9 IOS Images & Licensing; Labs and Activities Chapter 9 Testout Chapter 09 – Device Configuration and Management
Week 16 12/15	
Final Exam	Final Exam To Be Announced

#### 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.

#### ATTENDENCE POLICY

All students are expected to attend class on time and to be prepared to work. Should you miss a class it is your responsibility to determine what was covered during your absence and make arrangements to make up the lost work. Missing class is not an excuse for failing to turn in a worksheet or lab.

#### **COMPUTER LABS:**

Students will need to spend time outside of class completing labs. Online Labs can be done from any computer with Internet Access. Please make arrangements with the instructor if you wish to use the classroom outside of class time. Food and beverages are not permitted in the open computer lab or the classrooms.

## **BEHAVIOR:**

Students are expected to show respect toward the instructor, other students and their work. Behavior inconsistent with this goal is not allowed in the classroom and is grounds for expulsion from the class.

#### **CELL PHONES:**

All cell phones and pagers must be turned off when entering the classroom. If you are expecting an emergency call during class, please tell the instructor before class starts so that an exception to this rule may be made. Any student using a cell phone during an exam will be assumed to have finished the exam at that time and the exam will be ended immediately.

## EMAIL:

All class email correspondence must be sent using email provided by Kishwaukee College. All outside of Kishwaukee College should only be used in case of a failure of the Kishwaukee system. If a student uses the instructor's regular email account it will be treated as non-critical and answered when time permits, usually within one week.

#### **ACADEMIC DISHONESTY:**

Students found cheating on an exam or assignment will be given a grade of 0 for the exam or assignment. Students found cheating may be reported to the dean and the Vice President of Student Services.

#### KISHWAUKEE COLLEGE POLICIES AND RESOURCES

04/08/16

- A. Academic Dishonesty
- B. Assistive Resources Center/Disability Services
- C. Attendance Verification Roster
- D. Class Cancellations
- E. Class Withdrawal
- F. Community Resources
- G. Copyright
- H. Emergency Procedures/Safety

- I. Graduation Requirements for Transfer Degree Students
- J. Incomplete Grade
- K. Learning Skills Center
- L. Recording of Classes/Presentations
- M. Religious Observances
- N. Student E-mail
- O. Technical Support

Please see the Kishwaukee College Catalog for other policies and resources

#### 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. Detailed information can be found by clicking on this link: <a href="www.kishwaukeecollege.edu/student-life-essential-student-information/student-code-conduct">www.kishwaukeecollege.edu/student-life-essential-student-information/student-code-conduct</a>

#### B. ASSISTIVE RESOURCES CENTER/DISABILITY SERVICES

Any student with a documented disability or special learning need and wanting to request accommodations, should contact the Assistive Resources Center in A1317 or at (815) 825-2086 ext. 4290, (815) 825-9106 (TTY). More information can be found on the MyKC Portal:

https://mykc.kishwaukeecollege.edu/collegeareas/vpss/disabilityservices/Pages/default.as px

## C. ATTENDANCE VERIFICATION ROSTER

Students who do not attend their class during the refund period will be dropped from the class roster and will be charged for the class. More information can be found on the MyKC Portal:

 $\underline{https://mykc.kishwaukeecollege.edu/collegeareas/vpfa/bo/Pages/default.aspx}$ 

#### D. CLASS CANCELLATIONS

Class cancellations due to inclement weather will be posted on the College Website: www.kishwaukeecollege.edu or announced by the local radio stations. You may sign up

for text alerts at myKC/Student Resources/Text Alert. Students may also call the College at (815) 825-2086. Class cancellations due to instructor absence will be posted on the classroom door. Room changes will be announced in advance whenever possible and posted on the classroom door.

## E. 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. Refer to page 166. Kishwaukee College reserves the right to administratively withdraw students from the Attendance Verification Roster or the Midterm Roster 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.

#### F. COMMUNITY RESOURCES

There are numerous community resources that are available to assist students in addressing a variety of personal needs. Resource contact information can be found on MyKC:

https://mykc.kishwaukeecollege.edu/collegeareas/vpss/counseling/Pages/Documents.aspx

#### G. 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 or further distribution of these materials. Full information can be found here: <a href="www.kishwaukeecollege.edu/student-life-essential-student-information-students-right-know/copyright-law-notification">www.kishwaukeecollege.edu/student-life-essential-student-information-students-right-know/copyright-law-notification</a>

## H. EMERGENCY PROCEDURES/SAFETY

Yellow and red Emergency Information flipcharts are located in each classroom. These are quick reference sheets with telephone numbers to reach emergency assistance and a brief description of the correct actions to take in the event of a tornado, fire or other emergency on campus. More information can be found in the college catalog on page 196.

# I. GRADUATION REQUIREMENTS FOR TRANSFER DEGREE STUDENTS Guidelines and specific requirements can be found here:

www.kishwaukeecollege.edu/academics-resources/graduation-requirements

## J. 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. More information can be found in the college catalog on page 170.

## K. LEARNING SKILLS CENTER (A1300)

Tutoring, The Writing Center, make-up tests, online tests, and placement tests are available through the Learning Skills Center. For more information, go to <a href="https://mykc.kishwaukeecollege.edu/collegeareas/vpi/lsc/Pages/default.aspx">https://mykc.kishwaukeecollege.edu/collegeareas/vpi/lsc/Pages/default.aspx</a>

#### L. RECORDING OF CLASSES/PRESENTATIONS:

Kishwaukee College prohibits students from electronically recording class lectures and presentations (either by audio, video, picture, or otherwise) unless certain qualifying conditions are met.

- 1) The student requires the recording of lectures/presentations as part of his/her accommodations related to a disability that has been adequately documented with the Coordinator of the Assistive Resources Center.
- 2) The instructor has given advance written permission to the student that stipulates what may be recorded and by which device(s) the lectures/presentations may be recorded.

In either of the above cases, the following restrictions shall apply:

- 1. Recordings are solely for the use of the student designated either in the disability accommodations or the instructor's written permission to record.
- 2. Recordings must not be shared or reproduced for any reason.

complete a Permission to Record a Class/Lecture Presentation form.

- 3. Recordings must not be posted on any public or private website or social media service.
- 4. Recordings must be destroyed by the student at the end of the semester in which the recording was made.

A student found to have committed a violation of this procedure shall be subject to one or more sanctions described in the Code of Student Conduct and Discipline.

Students seeking to obtain permission to record a class must inquire with the instructor in question and, if the instructor agrees to allow recording, the student and instructor must

## M. 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.

#### N. STUDENT E-MAIL

Your Kishwaukee College e-mail account will be the official way to receive 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, <u>you are required</u> to use your Kishwaukee e-mail address.

## O. TECHNICAL SUPPORT

If you require technical support, please contact the Help Desk:

- a. helpdesk@kishwaukeecollege.edu
- b. (815) 825 2086, ext. 4357 (HELP)

- c. Visit the Helpdesk's office located in Media Services A1252d. http://helpdesk.kishwaukeecollege.edu