

Oklahoma State University Institute of Technology
Online Common Syllabus
Fall 2017

ITD2133 Network Support Management

Focuses on network troubleshooting techniques and advanced network protocol configurations. Topics include router and switch configurations, IP version 6, OSPF, RIP, RIP2, and EIGRP protocols. Network devices management and IOS license management. Theory/Lab.

Course Purpose:

This course focuses on the second half of the requirements and knowledge needed to successfully complete the Cisco CCENT (ICND1) certification exam. ITD1223 Network Systems is the first half.

Type of course: Theory/Lab

Credit Hours: 3; Total hours of theory per semester: 30;

Total hours of lab for the semester: 45; Total hours of clinical per semester: 0.

Class length - Full Semester

Class format – Fully Online

Required synchronous meetings: None

Prerequisites: ITD 1223 Network Systems

Instructor Name: Dr. Fil Guinn

Instructor Phone: (918) 293-5428

Office: EET/IT, Room 15C

Instructor email: fil.guinn@okstate.edu

Contact: My preferred method of contact is **email**. Please allow 24-48 hours to return your correspondence during the normal work week.

Instructor's Office Hours: Monday and Wednesday 6:30 – 8:30 PM (Online, Phone and Email), Tuesday & Thursday 8:00 – 9:30 AM (On Campus) PLUS should be available in my office during the Study Hall, Monday-Thursday, 3-4PM, Central Time

School: Information Technologies

School's Main Phone: 918-293-5440

Required Text, References, and Materials

Texts: Cisco CCENT/CCNA ICND1 100-105 Official Cert Guide and Simulator Library, Wendell Odom, ciscopress.com, ISBN 9781587206757

References: Assorted Subject Videos

Materials: Access to a computer with broadband Internet Access (2Mbps upload preferred)

Uniform/Tools: None

Estimated Cost for Materials: \$ 150.00

Estimated Cost for Uniform/Tools: \$ None

Optional Resources: N/A

Upon completion of the course, students should:

Course Objectives	Assessment of Objectives	
Apply mathematical concepts to meet Information Technology requirements	Simulated network labs (Ch 13-16) *Course Project	A.4
Design, implement, manage, or maintain scalable networks using enterprise level, physical and virtual, network classifications, topologies, or communication models	*Course Project	C.2
communicate in a professional manner in both IT technical and non-technical presentations in live and/or recorded formats	Protocol Presentation	F.2
List the applicable certification paths related to the different career choices in the information technology domain	Discussion Questions	H.1
Conduct network maintenance, diagnostics, or testing	Simulated network labs	J.1
troubleshoot PC or network hardware issues or software errors based on scenarios to the resolution of the issue	Simulated network labs	M.1
Demonstrate knowledge of industry standard network classifications, topologies or network communication models	*Course Project	M.2

Aspects of the course objective assessments may be used in the university's assessment of student learning. If applicable, an asterisk (*) above indicates this assignment is used in the university assessment program.

COURSE ACTIVITIES

In this course students will:

- Participate in online discussions and activities
- Use the simulation software to complete labs
- Reply to chapter questions and definitions
- View course specific video presentation
- Complete a research project
- Participate in an individual presentation
- Compile a portfolio of work produced

EVALUATION - GRADES WILL BE BASED ON THE QUALITY AND COMPLETION OF THESE TASKS:

Discussions	10%
Faculty Contact.....	5%
Simulation Labs	40%
Chapter Questions.....	20%
*Course Project	10%
*Presentation	10%
Portfolio	5%
Total	100%

OSUIT Grading Scale
A = 90%-100%
B = 80%-89%
C = 70%-79%
D = 60%-69%
F = 59% & below

*The student's grade for this assignment will be used in the university's assessment of student learning. A 70% competency or higher receives a Pass rating. This Pass/Fail rating is independent of the student's course grade.

Daily and/or weekly quizzes, small weekly assignments and similar type projects: Normal return time to student by next class meeting or no later than one (1) week. Extensive assignments, large lab projects, extensive quizzes, exams and similar type projects: Normal return time to students in one (1) to two (2) weeks.

RECOMMENDED STUDENT COMPETENCIES/SKILLS

Recommended student skills needed for success are the following:

- Ability to access a website (uCertify) and use the site to run computer simulations
- Ability to read and follow step by step instructions within the course site
- Ability you complete all required assignments within the allotted time
- Ability to research related topics and use MLA formatted in-text citations
- Ability to build a MLA formatted Work Cited page for all research cited

AUTHORIZED TOOLS

Students may use any/all course materials, including books and notes, while participating in online classroom activities. All quizzes, labs, and written assignments are to be completed independently and any instance of collaboration will be considered academic dishonesty. Collaboration with classmates while studying concepts and network configurations is permitted and encouraged.

Late Work

Turning in your properly-executed work early is always acceptable. All exams, assignments, papers and projects must be completed and submitted by the specified due date; late work will not be accepted after the due date unless prior authorization is given.

If the faculty member grades an assignment you have submitted before the due date, you do not have the ability to modify the assignment to increase your grade. Any additional submissions will not be opened, so make sure you are ready to submit your assignments and accept the grade you are given.

Testing

Quizzes may be timed or proctored during this course.

OTHER LAB AND CLASSROOM POLICIES

N/A

ONLINE COURSE INTERACTION

OSUIT requires all online courses to include interaction between students, peers and instructors. Our online courses use a variety of tools to build a community of learners and strengthen engagement between students and their peers, as well as between students and the instructor. Communication tools used in courses may include Discussion, News, and Email. Read the syllabus completely to determine which of these methods you, your classmates and your instructor will use for interaction. General guidelines for student conduct while interacting within an online course include: (1) Use proper language in all communications; (2) Harassment of any type will not be tolerated; (3) No jokes, insults or threats of an offensive nature.

For more information, go to: <http://osuit.edu/center/netiquette>

SYLLABUS ATTACHMENT

View the Syllabus Attachment, which contains other important information, by visiting http://osuit.edu/center/student_syllabus_information

Course Schedule

Schedule	Topic	Assignment	Due Date
Week 1	Module 1 Subnet Design	Chapter 21 network simulator labs. Chapter 21 end of chapter questions, Discussion Board responses	9/10/2017
Week 2	Module 2 Variable-Length Subnet Masks	Chapter 22 network simulator labs. Chapter 22 end of chapter questions, Discussion Board responses	9/17/2017
Week 3	Module 3 IPv4 Troubleshooting Tools Plus Troubleshooting IPv4 Routing	Chapter 23 & 24 network simulator labs. Chapter 23 & 24 end of chapter questions, Faculty contact	9/24/2017
Week 4	Module 4 Basic IPv4 Access Control Lists and Advanced IPv4 Access Control Lists	Chapter 25 & 26 network simulator labs. Chapter 25 & 26 end of chapter questions, Discussion Board responses	10/1/2017
Week 5	Module 5 Network Address Translation	Chapter 27 network simulator labs. Chapter 27 end of chapter questions, Discussion Board responses	10/8/2017
Week 6	Module 6 Fundamentals of IP Version 6 and IPv6 Addressing and Subnetting	Chapter 28 & 29 network simulator labs. Chapter 28 & 29 end of chapter questions, Faculty contact	10/15/2017

Week 7	Module 7 Implementing IPv6 Addressing on Routers	Chapter 30 network simulator labs. Chapter 30 end of chapter questions, Discussion Board responses	10/22/2017
Week 8	Module 8 Implementing IPv6 Addressing on Hosts	Chapter 31 network simulator labs. Chapter 31 end of chapter questions, Discussion Board responses	10/29/2017
Week 9	Module 9 Implementing IPv6 Routing	Chapter 32 network simulator labs. Chapter 32 end of chapter questions, Faculty contact	11/5/2017
Week 10	Module 10 Device Management Protocols	Chapter 33 network simulator labs. Chapter 33 end of chapter questions and Discussion Board responses.	11/12/2017
Week 11	Module 11 Device Security Features	Chapter 34 network simulator labs. Chapter 34 end of chapter questions, Discussion Board responses	11/19/2017
Week 12	Module 12 Managing IOS Files	Chapter 35 network simulator labs. Chapter 35 end of chapter questions, Discussion Board responses	11/26/2017
Week 13	Module 13 IOS License Management	Chapter 36 network simulator labs. Chapter 36 end of chapter questions, Discussion Board responses Course Project	12/3/2017
Week 14	Module 14 Final Review	Chapter 37 network simulator labs. Chapter 37 end of chapter questions, Discussion Board responses	12/10/2017
Week 15	Module 15 Presentation & Portfolio	Presentation Video Course Portfolio	12/12/2017 12/14/2017

Schedule is subject to change at instructor discretion.