# **Reedley College**

Fall 2018 October 15, 2018 – December 15, 2018

# Course Information

IS-63 55293 – Computer Networking I

Meetings Dates and Times Monday and Wednesday, 12:00 pm – 4:50 pm in PHS 352 Except: *Nov. 12<sup>th</sup> (Veterans' Day - Observed)* 

#### **Class Cancellation**

In the event that class is cancelled unexpectedly, an announcement will be sent out via Canvas and Remind. Additional means, such as via email may also be employed.

# Textbook

West, J., Andrews, J., & Dean, T. *Network+ Guide to Networks*. 8th ed. Cengage Learning, 2019. ISBN: 1-337-56933-X

# Instructor Information

#### Jason Boyer, MBA

**Contact Information** 

#### Preferred Contact

Use the <u>Canvas Inbox Tool</u> to email questions about assignments and course content. As a backup, or for other questions, email me at <u>jason.boyer@reedleycollege.edu</u> or call (559) 638-0300 ext. 3410 (if there is no answer, please leave a detailed message.)

#### Remind App

I use the Remind app for class notifications. It is a free app that works on iOS and Android mobile devices, as well as via SMS (text) message. It allows me to broadcast messages to the class, and it allows for direct two-way communication between us.

#### Via App

- 1. Install the Remind app using Google Play, Apple App store, or other location.
- 2. Use join code IS63-55293 to join the class.

#### Via SMS

Text @is63-55293 to the number 81010.

# Office Hours

I am available for in-person contact during office hours and at the location posted outside BUS 47. Please email me to set up an appointment outside of those hours.

# Course Description

This course provides an introduction to computer networking by providing hands on networking learning tasks such as: making and testing network cabling; troubleshooting networking hardware; as well as working with common network protocols. In this course, students will learn network topology, network types (wired and wireless), and basic principles of network security as well as network hardware and software installation and configuration. This course will prepare students to be competitive candidates in obtaining their CompTIA Network+ Certification.

# Prerequisites, co-requisites, and advisories

PREREQUISITE: Information Systems 15. ADVISORIES: Mathematics 201 and English 126 or 128 or 132.

### **Course Learning Objectives**

- 1. Explain how networks are interconnected.
- 2. Distinguish different media types and properties for the most used network topologies.
- 3. Recognize various nodes that can exist on a network.
- 4. Compare, contrast, and install various network media.
- 5. Distinguish the differences between major computer operating systems for both client and server applications, and determine their appropriate configuration.
- 6. Determine the correct hardware and software requirements for a variety of network topologies.
- 7. Demonstrate the ability to set up security policies, create user profiles, and modify registry entries.
- 8. Understand and be able to monitor network system performance.
- 9. Set rights by creating groups, assigning user rights and modifying permissions for folders and files.

# Student Learning Outcomes

- 1. Demonstrate understanding of information technology concepts in hardware, software, networks, and the systems development life cycle.
- 2. Apply effective information technology skills to perform practical business functions that include word processing, spreadsheet, presentation, and database management applications.
- 3. Demonstrate critical thinking to solve technology problems ethically and effectively.

# Learning Methods

- Required reading from presentations and documents found on Canvas
- Lecture
- Videos
- Canvas Assignments
- Hands-on projects (lab work)
- Exams

# Attendance

You will be dropped from the course under the following circumstances:

- 1. If you do not attend the first day of class.
- 2. If you miss more than two combined weeks

For every day you are present and participate, 5 points will be awarded to a final participation grade.

## Readings, Assignments, Hands on Projects, and Exams

#### Academic Honesty

#### Assignments and Projects

Students are required to complete assignments and hands-on projects on their own. In other words, <u>unless otherwise specified</u>, you may <u>and are encouraged</u> to collaborate with fellow students except on individual exams and assignments as specified.

#### Examinations

All examinations must be completed individually. Collaborative work <u>will not</u> be allowed during examinations. The use of books, notes, cell phones, and other electronic devices will not be allowed during examinations, unless specifically stated by the instructor prior to the examination.

#### Late Work Policy

Late work will not be accepted. If a student fails to submit an assignment or project on the day that it is due, then the student will lose points for that project. No excuses will be accepted. To summarize:

- No late work accepted!
- Absolutely no excuses will be accepted!

Make-up examinations are only granted with advanced notification for extenuating circumstances.

#### Due Dates

You will find all work that is due organized into modules (folders) in Canvas.

Required reading is expected to be completed prior to the next class lecture. Therefore, it is recommended that you complete weekly reading assignments early. <u>Due dates and times will be posted</u> on Canvas.

### Outcomes Assessment

Below is an outline of assessments and point values assigned. Use this for determining your final grades.

Understand that this is approximate, and total points values may change slightly as assignments change as needed at the instructor's discretion.

Assessments	Points
Network+ Guide to Networks: Quizzes (2 @ 50 points each)	100
Network+ Guide to Networks Hands-On Projects (14 @ 10 points each)	140
Network+ Guide to Networks Capstone Projects (9 @ 20 points each)	180
Participation and Professionalism	85
Midterm Exam	50
Final Exam	50

Table 1 - Outcomes Assessments

The total point value for this class is 605 points. The grading scale is: 90-100%=A, 80-89%=B, 70-79%=C, 60-69%=D, <60%=F

### Drop Dates

- Friday, October 19, for a refund
- Friday, October 26, to avoid a "W" (in person)
- Sunday, October 28, to avoid a "W" (on Web Advisor)
- Tuesday, November 23, to avoid a "Letter Grade"

It is each student's responsibility to drop the class if they are no longer attending or no longer interested, otherwise they risk obtaining a grade of "F" in the class.

# Policies

#### Expectations

I have three expectations of students in my class. These expectations can be applied anywhere in your educational journey as well as in your career and will serve you well.

#### 1. Be where you need to be, when you need to be there.

You may have heard it said the "early is on-time; on-time is late." Punctuality and dependability is one of the most sought after qualities in employees. Showing up is important, but also, be present. Stay focused, on-task, and pay attention to whatever you are doing. If you are not present, you are not participating, and you will lose participation points. In class, this looks like:

- Being in your seat, ready to work at the beginning of class. If you are not present and seated when I take attendance, you will be marked absent.
- Staying on task and <u>mentally present</u> in the class. Work only on in-class assignments. Work for other classes and personal business needs to be handled elsewhere.
- Cell phones and other personal electronic devices, as well as social media are a distraction and unless otherwise specifically authorized, are not allowed.
- I reserve the right to lock the door once class begins.

#### 2. Dress for success.

What you wear is a reflection of who you are. It is not just being properly attired, but the attitude you wear too. Be respectful and professional at all times. Failing to maintain a proper attitude can be a distraction, and could lead to discipline if it becomes a distraction to others. In class, this looks like:

- Wearing shoes or sandals and appropriate attire at all times on campus, per SCCCD and Reedley College rules.
- Conduct yourself in a manner that reflects how you want to be seen by others.
- Maintaining a positive and pleasant learning environment.

#### 3. Know and Do the Right Thing

Knowing what is right only has meaning if you do what is right. In the classroom, respect between classmates, respect for the school and school property, as well as respect between instructor and students is the key to a positive learning environment. Failing to respect each other will result in disciplinary consequences, from loss of participation points up to and including suspension and expulsion per State Center Community College policy. In class, this looks like:

- Being respectful in all interactions with others, tolerant of different points of view and backgrounds, and using language that is respectful to others.
- Eating and drinking OUTSIDE the classroom and computer labs.
- Turning cell phone ringers off and remaining off of the devices during lecture.
- Keeping distractions out of the classroom: visitors are not allowed unless arrangements are made with me prior to the start of class.
- Leaving the classroom and lab cleaner than you found it.

#### Personal and Academic Conduct

A student will be subject to discipline if she or he:

- Prevents other students from pursuing their authorized curricular or co-curricular interests.
- Interferes with or disputes faculty and administrators who are fulfilling their professional responsibilities.
- Prevents classified employees from fulfilling their prescribed duties.
- Deliberately endangers the safety of persons or the security of college property.
- Violates Reedley College computers and networks usage policy.
- Violates Reedley College cheating/plagiarism policy.

# Accommodations

If you have a verified need for an academic accommodation or materials in alternate media (i.e. Braille, large print, electronic text, etc.) per the Americans with Disabilities Act or Section 504 of the Rehabilitation Act, please contact your instructor as soon as possible.

# Cheating

Cheating is the act or attempted act of taking an examination or performing an assigned, evaluated task in a fraudulent or deceptive manner such as having improper access to answers, attempting to gain an unearned academic advantage.

Cheating may include but is not limited to:

- Copying from another's work
- Supplying one's work to another
- Giving or receiving copies of examinations without an instructor's permission
- Using or displaying notes or devices inappropriate to the conditions of the examination
- Allowing someone other than the officially enrolled student to represent the student
- Failing to disclose research results completely.

Incidents of cheating may result in any of a variety of sanctions and penalties, which may range from a failing grade on a particular examination, assignment, or hands-on project in question to a failing grade in the course, at the discretion of the instructor and depending on severity and frequency.

# Class Schedule

Note: This schedule is subject to change to meet the needs of the class.

Week	Week of	Торіс	<b>Reading Assignments</b>	Homework/Lab Assignments
1	10/15/18	Orientation	Chapter 1	Orientation
		• Introduction to	•	Intro to Networking
		Networking		Hands-On Projects
				o 1-1
				0 1-2
				Capstone Project 1-1
				Ch 1 Review Questions
2	10/22/18	Network	Chapter 2	Hands-On Projects
	,	Infrastructure and		o 2-2
		Documentation		0 2-4
				Capstone Projects
				o 2-1
				0 2-2
				Ch 2 Review Questions
				• Quiz 1
3	10/29/18	Addressing on	Chapter 3	Hands-On Projects
•	-0, -0, -0	Networks		o 3-3
		incentorito		Capstone Projects
				o 3-1
				0 3-2
				Ch 3 Review Questions
4	11/5/18	Network Cabling	Chapter 5	Hands-On Projects
	, 0, _0			0 5-1
				o 5-2
				0 5-3
				Capstone Projects
				o 5-2 *(Need to see CS Proj 4-1)
				Ch 5 Review Questions
5	11/12/18	• No Class Mon 11/12	Review	Midterm
6	11/19/18	Wireless Networking	Chapter 6	Hands-On Projects
-	,,			0 6-1
				0 6-2
				0 6-3
				Capstone Projects
				0 6-1
				Ch 6 Review Questions
				Quiz 2
7	11/26/18	Subnets and VLANs	Chapter 8	Hands-On Projects
-	,,	o <u>Subnets</u>		0 8-1
		o <u>CIDR</u>		0 8-2
				0 8-3
				Capstone Projects
				○ 8-1
				0 8-2
				Ch 8 Review Questions
8	12/3/18	Review	Review for Finals	Review
9	12/10/18	Final Exam	Final Exam	Final Exam