

# Reedley College

Fall 2019

August 12, 2019 – December 12, 2019

## Course Information

IS-80 55095 – Computer Technician A+ Training

### Meetings Dates and Times

Monday through Thursday, 12:00 pm – 1:50 pm – Lecture (PHS 352)

Monday through Thursday, 2:00 pm – 3:50 pm – Lab (PHS 352)

Except: *September 2<sup>nd</sup> (Labor Day), November 11<sup>th</sup> (Labor Day), and November 28<sup>th</sup> (Thanksgiving). Finals Week may also vary.*

## 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

Andrews, J., Dark, J. & West, J. *CompTIA A+ Guide to Technical Support*. 10th ed. Cengage Learning, 2020. ISBN: 978-0-357-10829-1.

## Required Materials

A basic, low-cost PC technician tool kit is required for this course. Your instructor will have details on this tool kit in class.

## Instructor Information

Jason Boyer, MBA

Lecture and lead instructor for the course

[jason.boyer@reedleycollege.edu](mailto:jason.boyer@reedleycollege.edu)

(559) 638-0300 ext. 3410

Gabriel Moreno

Lab instructor

[gabriel.moreno@reedleycollege.edu](mailto:gabriel.moreno@reedleycollege.edu)

## Contact Information

Preferred Contact

Use the [Canvas Inbox Tool](#) to email questions about assignments and course content. As a backup, or for other questions, contact the appropriate instructors using the above contact information.

## Office Hours

Mr. Boyer is available for in-person contact in BUS 47 or PHS 352, during office hours as posted outside BUS 47. Instructors will also meet with you at mutually agreed upon times. Please email the appropriate instructor to set up an appointment.

## Course Description

This course covers conceptual and practical areas from the national CompTIA A+ certification examination. The areas covered are hardware and software control and configuration, hardware and software repair, problem solving, maintenance, networking issues, operating systems and security protocol, policies and practices.

## Prerequisites, co-requisites, and advisories

PREREQUISITES: None

ADVISORIES: None

## Course Learning Objectives

1. Apply developed knowledge to insure encountered situations are evaluated and handled accordingly and with safety in mind.
2. Apply related controls to evaluate performance of hardware and software systems.
3. Evaluate and examine manufacturer specifications for computer systems.
4. Identify, install, test, and evaluate functionality of memory. Assess memory and replace and or upgrade as necessary.
5. Evaluate needs, install hardware and software, and test for optimal performance.
6. Examine computer system hardware and software error reporting system. Using diagnostic tools, produce a likely conclusion for error. Proceed to solution testing report results.
7. Locate third party software requirements. Install and make all systems operational.
8. Appraise and assess the best use of available hard drive capacity and how they are dedicated.
9. Install Operating System into designated partition and insure functionality.
10. Develop the maintenance rules and service time lines for hardware and software systems maintenance.
11. Modify, apply and/or implement security measures to meet individual and business requirements.
12. Outline and confirm security, malware, and virus protection protocols are current and active.
13. Troubleshoot computer networking devices and settings for proper connectivity.

## Student Learning Outcomes

1. Identify, analyze, interpret, and solve common problems of a computer system.
2. Design and implement appropriate preventative maintenance procedures for a computer system.
3. Properly use installation manuals, printed or online, for troubleshooting and maintenance tasks.

4. Document the tasks performed in troubleshooting computer problems.

## Learning Methods

- Lecture
- Lab
- Demonstrations
- Guided practice
- Other learning methods as determined necessary by the instructor.

## 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 in the first half of the semester.

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

*Be on time! I will lock the door after attendance is taken.*

## 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, unless otherwise specified, you may and are encouraged to collaborate with fellow students except on individual exams and assignments as specified.

#### Examinations

All examinations must be completed individually. Collaborative work will not 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. Due dates and times will be posted 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	Percentage of Grade
Participation and Professionalism	10%
Homework	10%
Computational Problem Solving	15%
Troubleshooting	15%
Labs	10%
Hands On Examinations	25%
Midterm and Final (Written)	15%

Table 1 - Outcomes Assessments

The grading scale is: 90-100%=A, 80-89%=B, 70-79%=C, 60-69%=D, <60%=F

## Drop Dates

- Friday, August 23, for a refund
- Friday, August 30, to avoid a "W" (in person)
- Sunday, September 1, to avoid a "W" (on Web Advisor)
- Friday, October 11, 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

There are three expectations of students in this 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 attendance is taken, you will be marked absent.
- Staying on task and mentally present 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.

- Instructors reserve the right to lock the door once class begins.

## **2. Dress for success.**

What you wear reflects who you are. It is not just being properly attired, but the attitude you wear too. Be respectful and professional always. 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 the devices during lecture.
- Keeping distractions out of the classroom: visitors are not allowed unless arrangements are made 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 instructors 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	Topic	Reading Assignments/Major Assessments
1	8/12/19	<ul style="list-style-type: none"> <li>Intro &amp; Taking a Computer Apart and Putting it Back Together</li> </ul>	<ul style="list-style-type: none"> <li>Syllabus</li> <li>Chapter 1</li> <li>Appendix A</li> </ul>
2	8/19/19	<ul style="list-style-type: none"> <li>Motherboards, Processors, &amp; Upgrading Memory</li> </ul>	<ul style="list-style-type: none"> <li>Chapter 2</li> <li>Chapter 3</li> </ul>
3	8/26/19	<ul style="list-style-type: none"> <li>The Power System and Troubleshooting</li> </ul>	<ul style="list-style-type: none"> <li>Chapter 4</li> </ul>
4	9/2/19	<ul style="list-style-type: none"> <li>Hard Drives and Storage Devices</li> </ul>	<ul style="list-style-type: none"> <li>Chapter 5</li> </ul>
5	9/9/19	<ul style="list-style-type: none"> <li>I/O Devices</li> </ul>	<ul style="list-style-type: none"> <li>Chapter 6</li> </ul>
6	9/16/19	<ul style="list-style-type: none"> <li>Setting up a Local Network</li> </ul>	<ul style="list-style-type: none"> <li>Chapter 7</li> </ul>
7	9/23/19	<ul style="list-style-type: none"> <li>Network Infrastructure and Troubleshooting</li> </ul>	<ul style="list-style-type: none"> <li>Chapter 8</li> </ul>
8	9/30/19	<ul style="list-style-type: none"> <li>Mobile Devices</li> </ul>	<ul style="list-style-type: none"> <li>Chapter 9</li> </ul>
9	10/7/19	<ul style="list-style-type: none"> <li>Virtualization, Cloud Computing, and Printers</li> </ul>	<ul style="list-style-type: none"> <li>Chapter 10</li> </ul>
10	10/14/19	<ul style="list-style-type: none"> <li>Customer Service</li> </ul>	<ul style="list-style-type: none"> <li><b>Midterm Exam – CompTIA A+ 220-1001</b></li> <li>Chapter 11</li> </ul>
11	10/21/19	<ul style="list-style-type: none"> <li>Windows Versions and Installing Windows</li> </ul>	<ul style="list-style-type: none"> <li>Chapter 12</li> </ul>
12	10/28/19	<ul style="list-style-type: none"> <li>Maintaining Windows</li> </ul>	<ul style="list-style-type: none"> <li>Chapter 13</li> </ul>
13	11/4/19	<ul style="list-style-type: none"> <li>Troubleshooting Windows</li> </ul>	<ul style="list-style-type: none"> <li>Chapter 14</li> </ul>
14	11/11/19	<ul style="list-style-type: none"> <li>Troubleshooting Windows Startup</li> </ul>	<ul style="list-style-type: none"> <li>Chapter 15</li> </ul>
15	11/18/19	<ul style="list-style-type: none"> <li>Securing and Sharing Windows Resources</li> </ul>	<ul style="list-style-type: none"> <li>Chapter 16</li> </ul>
16	11/25/19	<ul style="list-style-type: none"> <li>Security Strategies and Documentation</li> </ul>	<ul style="list-style-type: none"> <li>Chapter 17</li> </ul>
17	12/2/19	<ul style="list-style-type: none"> <li>macOS, Linux, Scripting</li> </ul>	<ul style="list-style-type: none"> <li>Chapter 18</li> </ul>
18	12/9/19	<ul style="list-style-type: none"> <li>Final Exam</li> </ul>	<ul style="list-style-type: none"> <li><b>Final Exam – CompTIA A+ 220-1002</b></li> </ul>