IT1200 - A+ Computer Hardware/Windows OS (CRN 20658)

Spring 2024 Syllabus

Skills-based course introducing basic hardware and software using lecture and hands-on, practical application. This class covers about 70% of the CompTIA A+ course material, almost all of the 1101 exam objectives and a portion of the 1102.

Prerequisites: none

Course fee: \$20, used to assist in maintaining lab infrastructure.

Course Times:

• 1200-01 TTh 9am-10:15am in Smith Computing Center (SCC) 107

Final Exam Schedule

The final for this class is **Tuesday April 30 @ 9am** in SCC 107

Instructor:

- Iav Sneddon
- Office: Burns 235
- Office hours: MTWR 11:00am-11:50am, TTh 10:30am-11:50am or by appointment. Zoom appointments may be arranged.

Course Textbook REQUIRED

CompTIA A+ Guide to Managing and Troubleshooting PCs, Seventh Edition by Mike Meyers, ISBN 978-1264712748

This textbook is available electronically through the Utah Tech Library system.

We will also frequently reference Professor Messer's free A+ video instruction found at https://www.professormesser.com

Objectives

At the end of the course, students will be able to:	Outcome is Measured through
Select, install, repair and support PC computer hardware (IT PLO 1,2,3,4)	Assignments, Quizzes, and Exams
Install, repair and support Windows, Linux and MacOS operating systems (IT PLO 1,2,3,4)	Assignments, Quizzes, and Exams
Support wireless and other mobile devices (PLO 1,2,3,4 in (IT PLO 1,2,3)	Assignments, Quizzes, and Exams
Prepare to pass the COMPTIA A+ (220-1101 & 220-1102) certification exams (IT PLO 1,2,3,4)	Assignments, Quizzes, and Exams

Computer Resources

You will need to have access to a computer to complete many of the labs associated with this course. Some assignments require administrative or sudo access.

Course Information

You are responsible for being informed regarding announcements, the schedule, and other resources posted on this website. Grading and assignments are managed at https://utahtech.instructure.com.

Artificial Intelligence (AI)

Examples of AI are chatGPT, bard, etc. AI is a great learning tool. They are very helpful, but if a student becomes dependent on AI, they will not be able to meet the course learning objectives.

When to use AI:

Using AI as a coach can be helpful. You can put code in the AI and ask it what it is doing. You can ask the AI to give you questions similar to the ones in class to practice. You can ask it which commands are needed. You can ask for help with terminology, etc.

As a general rule, if you cannot delete your assignment, start over, and re-create it successfully without further help, then your learning is not complete.

Where not to use AI:

Exams & Quizzes: Accessing an AI for any reason during an exam or quiz IS cheating.

Assignments, Quizzes and Exams

Assignments

All assignments are posted in Canvas. Most assignments are done outside of class, but a few in class assignments will be given. Expect an assignment each week, typically due either Saturday or Sunday evening. In class assignments cannot be made up if missed, and are graded based on completion and interaction with other students.

Assignments will be graded based on completeness and accuracy. Assignments are due on the date listed in the schedule.

(See the Late Work policy for more information)

Quizzes

Each chapter will have an associated quiz administered during the semester.

Exams

The course will have several exams plus a final.

Grading

The final grade is a combination of Assignments, Quizzes, Exams and the Final Exam. Some assignments are in class activities, which cannot be made up.

Grades are weighted as follows:

Assignments 25%

Group Project 25%

Ouizzes 15%

Exams 25%

Final Exam 10%

The grading scale is as follows:

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>= 94 = A

>= 90 = A-

>= 87 = B+

>= 84 = B

>= 80 = B-

>= 77 = C+

>= 74 = C

>= 70 = C-

>= 67 = D+

>= 64 = D

< 64 = F
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** A+ Certification **

A+ Certification is a significant resume enhancer, and is optional for this class. Two exams (CompTIA 220-

1101 and 220-1102) are required to become certified. CompTIA offers a significant testing discount for students at http://academic.comptiastore.com/ This course prepares you for both exams, though not all subjects in the certification exams will be covered.

Students may test out of the class with an A grade if they are able to become A+ Certified before the third week of the semester. By becoming A+ Certified you have proven that you know this course material. If you are already A+ Certified, the certification must be active (meaning passed within the last three years) and I must see a copy of your certificate.

If a student passes the CompTIA 220-1101 exam before the final, they will score 100% for Exams 1 and 2.

If a student passes the CompTIA 220-1102 exam before the final, they will score 100% for Exam 3.

Students may also avoid the final exam if they are able to become A+ Certified before the scheduled Final Exam. In which case the Final Exam will be scored as 100%.

Please note that this class covers about 70% of the A+ material, almost all of the 1101 and a portion of the 1102. Other portions of the exam dealing with security and networking are covered in other UtahTech IT courses.

Contact me if you have any questions about this.

Spring 2024 Topic Schedule

This schedule is subject to change.

Week of	Readings	Quiz/Exam
Jan 7	01 - Safety & Professionalism, 02 - The Visible Computer	
Jan 14	03 - CPUs, 04 - Memory	Quiz (Ch 1 & 2)
Jan 21	05 - Firmware, 06 - Motherboards	Quiz (Ch 3 & 4)
Jan 28	07 - Power Supplies, Review	Quiz (Ch 5 & 6), EXAM 1 (Ch 1 thru 6)
Feb 4	08 - Mass Storage Technologies, 09 - Implementing Mass Storage	Quiz (Ch 7)
Feb 11	10 - Essential Peripherals, 17 - Display Technologies	Quiz (Ch 8 & 9)
Feb 18	11 - Building a PC	Quiz (Ch 10, 17)
Feb 25	Review (Ch 7-11, 17)	Quiz (Ch 11), Exam 2 (Ch 7-11,17)
Mar 3	23 - Portable Devices, 24 - Mobile Devices	
Mar 10	Spring Break	
Mar 17	26 - Printers and Multifunction Devices	Quiz (Ch 23 & 24)
	15 - Working with the Command Line Interface, Review (Ch 23, 24, 26, 15)	Quiz (Ch 26)
Mar 31	Group Project - Retro Arcade Machines	Quiz (Ch 15), Exam 3 (Ch 15,23,24,26)
Apr 7	Group Project - Retro Arcade Machines	
Apr 14	Group Project - Retro Arcade Machines	
Apr 21	Comprehensive Review for Final	
Apr 30	Final exam schedule: Tuesday April 30 @ 9am in SCC 107	

Course Policies

Absences

Students are responsible for material covered and announcements made in class. School-related absences may be made up only if prior arrangements are made. The class schedule on <u>Canvas</u> presented is approximate. The instructor reserves the right to modify the schedule according to class needs. Changes will be announced in class and posted to the website. Exams and quizzes cannot be made up unless arrangements are made prior to the scheduled time.

Policy for Absences Related to College Functions

Students may periodically may miss classes for various college-related functions or military functions; these include athletics, club events, or to fulfill the requirements of a course or a program. Military functions may include: Reserve and Guard activation, activation, special assignments or other approved events or activities. These absences may often conflict with the instruction, assignments, and tests in this course.

Please provide an advanced written notification from your activity supervisor that explains the nature of the activity, and the anticipated time missed.

Late work

Assignments, quizzes and exams are due on the date specified in the schedule. Late work will be accepted but penalized.

Arranging make up quizzes and exams is despised by the instructor. It makes me extremely grumpy and moody. The student groveling gets old, and I have heard nearly all of the excuses. That said, clever students come up with new whoppers that get added to an already lengthy list. I am much happier when that cleverness is channeled into coursework learning.

Late assignments and make up quizzes will be accepted but penalized 10% per day for five days after the due date, with the maximum penalty being 50% for late work. No work will be accepted after the final exam.

• I have the option to reject any late work regardless of the submission date.

Disruptive Behavior Policy/Classroom Expectations

The classroom needs an atmosphere of learning and sharing. Class members need to feel safe and able to concentrate. Disruptive behavior that seriously detracts from this environment or inhibits the instructor's ability to conduct proper instruction will not be allowed. Disruptive behavior includes:

- Physical violence, verbal abuse, or harassment
- Intoxication or illegal drug use
- Use of profanity
- Failing to respect others when expressing their own viewpoints
- Talking while the instructor or another student is talking
- Constant questions or interruptions that interfere with classroom presentation

Disruptive class members will be warned. Continued misbehavior may lead to dismissal from class or the course. If necessary, Campus Police may be called.

Disability/Accessibility Resources

Utah Tech welcomes all students and strives to make the learning experience accessible. If you are a student with a medical, psychological, or learning disability that may require accommodations for this course, you are encouraged to contact the Disability Resource Center (DRC) as soon as possible. You may request reasonable accommodations at any time during the semester; however, they are not retroactive. The DRC is located next door to the Testing Center in the North Plaza Building (435 652-7516, drc@utahtech.edu, drcenter.utahtech.edu).

Cheating and Collaboration

Limited collaboration with other students in the course is permitted. Students may seek help learning concepts and developing programming skills from whatever sources they have available, and are encouraged to do so. Collaboration on assignments, however, must be confined to course instructors, lab assistants, and other students in the course. See the section on cheating.

Cheating will not be tolerated, and will result in a failing grade for the students involved as well as possible disciplinary action from the college. Cheating includes, but is not limited to, turning in homework assignments that are not the student's own work. It is okay to seek help from others and from reference materials, but only if you learn the material. As a general rule, if you cannot delete your assignment, start over, and re-create it successfully without further help, then your homework is not considered your own work.

You are encouraged to work in groups while studying for tests, discussing class lectures, and helping each other identify errors in your homework solutions. If you are unsure if collaboration is appropriate, contact the instructor. Also, note exactly what you did. If your actions are determined to be inappropriate, the response will be much more favorable if you are honest and complete in your disclosure.

Where collaboration is permitted, each student must still create and type in his/her own solution. Any kind of

copying and pasting is *not* okay. If you need help understanding concepts, get it from the instructor or fellow classmates, but never copy another written work, either electronically or visually. It is a good idea to wait at least 30 minutes after any discussion to start your independent write-up. This will help you commit what you have learned to long-term memory as well as help to avoid crossing the line to cheating.

University Policies

OTHER UNIVERSITY SUPPORT SERVICES

NAME	SERVICE
Utah Tech Resources Overview	Visit this site to see many student resources in one place.
Academic Advisement	Helps students make decisions about their courses and degree path.
Academic Performance and Tutoring Center	Offers one-on-one tutoring, study hall, and online tutoring to help students in many subjects ranging from Math to Foreign Language.
Booth Wellness Center	Provides acute health care, referral services, health education, and brief mental health services.
Campus Life	The Utah Tech University Student Association offers a variety of ways to get involved socially at the university.
Career Services	Assists students with career exploration, choosing a major, writing a resume, and getting a job.
Center for Inclusion & Belonging	Increases diversity through scholarship opportunities, community outreach, academic advisement, and diversity club participation.
Dean of Students Office	Serves as a primary advocate and support network for students. Assists students who are facing personal challenges, including financial, food, and housing concerns.
<u>Disability Resource</u> <u>Center</u>	Serves students with disabilities by providing equal access to academic programs, non-academic activities, and campus facilities
DRC Accessibility	A list of DRC services including exam accommodations, ASL interpreting, materials in alternative format, and more.
Help Desk	Provides assistance for Canvas, Student Email, Student Services, Trailblazers wireless configuration, laptop assistance, and any other technical troubleshooting you may need help with.
Library	Provides the resources necessary to facilitate research and enhance university curriculum and programs.
Math Tutoring Center	Students can drop in to work on homework, take tests, and receive individualized or group tutoring. Online tutoring is also available.
Student Support Services	Provides a variety of free services to help first-generation, low-income, or students with disabilities to complete an associate degree and move on to a bachelor degree.
Testing Center	Provides all proctored exams on campus and can make accommodations for remotely proctored exams.
<u>Utah Health</u> <u>Scholars</u>	Provides tutors for upper-division, health-related courses. Students must register into the UHP program to qualify for this free tutoring.
<u>Veterans Services</u>	Offers tutoring for some classes and arranges tutoring in other centers for other classes. Must have VA benefits to qualify.
Writing Center	Offers students personalized attention from tutors for writing.

UTAH TECH POLICIES & STATEMENTS

PRIVACY

It is your responsibility to protect your data and privacy online. Be careful and use discretion when using any of the course technologies to complete required learning activities. If you are unsure about how to protect your data and privacy online, please use the resources provided to understand your responsibility.

101 Data Protection Tips: How To Keep Your Passwords, Financial, and Personal Information Safe

Harper, E. (2018). 9 Simple Ways To Protect Your Privacy

Canvas Privacy Policy

Google Privacy Policy

YouTube Policies

Vimeo Privacy Policy

Utah Tech Policy Links

<u>Code of Student Rights and Responsibilities (Academic dishonesty / academic integrity policy, student academic conduct policy)</u>

Financial Aid

Registration

Student Association

Student absence related to college function

Sexual Harassment

DISABILITY/ACCESSIBILITY RESOURCES

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TITLE IX STATEMENT

Utah Tech University affirms its commitment to the promotion of fairness and equity in all aspects of the educational institution. Harassment and discrimination—including sex/gender discrimination, gender identity, gender expression, sexual harassment, sexual misconduct, gender-based violence, dating violence, domestic violence, stalking, pregnancy or parental, family or marital status and or retaliation—not only disrupts our commitment to maintaining an environment in which every member of the University community is treated with respect and dignity, but may also violate University policy and federal, state, and/or local law.

Should you or someone you know experience behavior that is coercive, discriminatory, harassing, and or sexually violent in nature, or if you or someone you know has questions about their rights and options regarding such behavior, you are encouraged to contact:

Hazel Sainsbury Dir. Of Equity Compliance, Title IX Coordinator 435.652.7747 (ext. 7747)

Incidents may also be reported directly to law enforcement, either separately or in conjunction with any report made to the University's Title IX Coordinator, and the University will aid in making contact if requested.

Utah Tech University Police 435.275.4300 or by calling 9-1-1

Maintaining a safe and inclusive University community is a shared responsibility. For more information on how Title IX protections can benefit you and help us keep a productive campus environment, visit titleix.utahtech.edu to learn more.

STUDENT EMAIL

You are required to frequently check your university email account. Important class and university information will be sent to your university account, including Utah Tech bills, financial aid/scholarship notices, notices of cancelled classes, reminders of important dates and deadlines, and other information critical to your success at Utah Tech and in your courses. To access your university-sponsored account, visit helpdesk.utahtech.edu/about-dmail. Your username is your digital ID (e.g. D00111111).

NON-STUDENT

Non-student in the classroom and other designated study areas: It is expected that only bona fide students as defined and classified by the Utah Tech University catalog, will attend classes, unless specific prior permission for guests has been obtained from the instructor.

ACADEMIC GUIDELINES REGARDING COVID-19

For Utah Tech's <u>up-to-date COVID-19 Emergency Response Plan</u> , please visit the university website.	