**Mr. Clayton Chaffin**

**Computer Science/ History Teacher**

**Utica Senior High School**

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**3rd Period Planning**

**Class**: Computer Tech. Assistant 3

**Purpose**: This course is designed for individuals who have basic computer user skills and who are interested in obtaining a job as an entry-level IT technician. This course is also designed for student who are seeking the CompTIA A+ certification and who want to prepare for the CompTIA A+ Core 1 and Core 2 certification exam.

**Objectives:** Students will learn and apply basic computer repair and networking applications through a combination of reading, discussion, demonstration, trial, hands-on and application activities. They will apply the knowledge and skills they acquire in this class to real-life computer issues in the school. Students will assist staff with technical problems they may encounter. Students will individually and cooperatively assess, prioritize, handle, and follow up on various computer issues as they arise.

**Evaluation:** Students will be evaluated based on accuracy of class assignments, observation of proper techniques in class, testing, computer lab participation and other computer lab activities.

Students earn grades on the following scale:

1. = 100-90
2. = 89-80
3. = 79-70

 D = 69-60

 F = 59 & below

**Course Topics:**  ︎

Support operating systems.

• Install and configure PC system unit components and peripheral devices.

• Install, configure, and troubleshoot display and multimedia devices.

• Install, configure, and troubleshoot storage devices.

• Install, configure, and troubleshoot internal system components.

• Install, configure, and maintain operating systems.

• Maintain and troubleshoot Microsoft Windows.

• Explain network infrastructure concepts.

• Configure and troubleshoot network connections.

• Manage users, workstations, and shared resources.

• Implement client virtualization and cloud computing.

• Implement physical security.

• Troubleshoot workstation security issues.

• Support and troubleshoot laptops.

• Support and troubleshoot mobile devices.

• Install, configure, and troubleshoot print devices.

• Implement operational procedures.

**Course Texts:**

Pengelly, James and Taylor, Pamela. *The Official CompTIA® A+® Core 1 and Core 2 Student Guide (Exams 220-1001 and 220-1002)*. Downers Grove: CompTIA, Inc, 2018.

**Rules of Conduct:**

1. Be Prepared 3. Follow UHS Handbook
2. Be Respectful 4. Have Fun!

**Emergency Procedures**: Students are expected to follow the emergency procedures that are either posted in the classroom or discussed in class. Students are also expected to adhere to all safety rules and regulations and to use the computer equipment properly. Students will receive a safety lesson for the computer lab.

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| --- | --- | --- | --- |
| Week | Lesson | Topic | Pages |
| 1 | **4: Installing, configuring and Troubleshooting Storage Devices** | A: Install System Memory | 205-218 |
| 2 |  | B: Install and Configure Mass Storage Devices | 219-231 |
| 3 |  | C: Install and Configure Removable Storage  | 232-240 |
| 4 |  | D: Configure RAID | 241-247 |
| 5 |  | E: Troubleshoot Storage Devices | 248-260 |
| 6 | **Lesson 5: Installing, Configuring, and Troubleshooting Internal System Components** | A: Install and Upgrade CPUs | 261-276 |
| 7 |  | B: Configure and Update BIOS/UEFI | 277-288 |
|  |  | C: Install Power Supplies | 289-299 |
| 8 |  | D: Troubleshoot Internal System Components | 300-314 |
|  |  | E: Configure a Custom PC | 315-326 |
| 9 | **Lesson 6: Installing, Configuring, and Maintaining Operating Systems** | A: Configure and Use Linux | 328-350 |
|  |  | B: Configure and Use macOS | 350-367 |
| 10 |  | C: Install and Upgrade Operating Systems | 368-387 |
| 11 |  | D: Maintain OS’s | 388-408 |
|  | **Lesson 7: Maintaining and Troubleshooting Microsoft Windows** | A: Install and Manage Windows Applications | 410-433 |
| 12 |  | B: Manage Windows Performance | 434-444 |
|  |  | C: Troubleshoot Windows | 445-478 |
| 13 | **Lesson 8: Network Infrastructure Concepts** | A: Wired Networks | 479-497 |
| 14 |  | B: Network Hardware Devices | 498-507 |
|  |  | C: Wireless Networks | 508-513 |
| 15 |  | D: Internet Connection Types | 514-521 |
|  |  | E: Network Configuration Concepts | 522-536 |
| 16 |  | F: Network Services | 537-554 |
| 17 |  | Clean, Organize, and Helpdesk |  |
| 18 |  | Clean, Organize, and Helpdesk |  |

Utica High School

Student CTA and CT Agreement

**Student Agreement**

I, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, understand I may have access to North Fork Local

 (Student Name)

School District’s individually identifiable student information and elevated computer privileges during my time as a Computer Tech Assistant and Computer Tech. Access to this information and these privileges is relevant and necessary in the ordinary course of performing my duty Computer Tech Assistant and Computer Tech. I do solemnly affirm that when given access to an individual's general information, I will not make any disclosure of personal information and/or personal data protected by state and federal laws or by any North Fork Local School District system policy of Utica High School policy. I will also act with integrity and respect toward the staff and any technology equipment I may interact with. I understand that any unauthorized use of privileges or any unauthorized disclosure of individually identifiable student information and/or data may lead to my dismissal as a Computer Tech Assistant and Computer Tech, the loss of school-related technology use privileges, school disciplinary action against me, and/or possible law enforcement involvement (pursuant to violation of any state and federal laws).

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(Student Signature) (Date)

**Parent Agreement**

“My signature below certifies that I, parent of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, realize

(Student Name)

my child may have access to North Fork Local School District’s individually identifiable student information and elevated computer privileges during their time as a Computer Tech Assistant and Computer Tech. I understand that any unauthorized use of privileges or unauthorized disclosure of individually identifiable information may lead to his/her dismissal as a Computer Tech Assistant and Computer Tech, to the loss of technology privileges, disciplinary action against my child, and/or possible law enforcement involvement (pursuant to violation of any state and federal laws).”

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(Parent Signature) (Date)

**August 17, 2023**

Dear Parent/Guardian:

As part of your child’s learning experience in repairing and maintaining computers in CTA 1-4 and Tech, your child may be occasionally traveling to different buildings in the North Fork School District throughout the year. These buildings include:

* Utica Elementary
* Newton Elementary
* North Fork Board Office
* Spring St Building
* Mill St Building
* Utica Senior High
* Utica Junior High

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Mr. Clayton Chaffin

**Consent Form**

I permit my child \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to take part in the educational activities described above. I have notified the school of any physical or medical problems which might interfere with my child’s participation in any activity.

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Parent/Guardian Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.