Auburn Career Center

Attitude – Respect – Responsibility

Cyber Security & Network Technology

2022-2023 Syllabus

Building Location: Main Building

Room Number: 8D/9D

Instructor Name: Mr. Darrin Spondike

Office Phone: 440-357-7542 ext. 8243

Attendance Office: 440-358-8023

Fax: 440-358-8012

Email: dspondike@auburncc.org

Website: www.auburncc.org

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Welcome

Auburn Career Center's Mission
Auburn Career Center provides an innovative career and technical education that empowers all learners to excel in the emerging workplace and enrich their community.

Auburn Career Center's Core Values
We believe that:
- People are personally responsible for their choices and actions
- Treating people with dignity and respect will enhance learning
- Attitude and goals drive achievement
- All people can learn
- All people can make positive contributions
- Change is exciting and essential for growth

Course Information/ Contact Information
Room Number: 8D/9D
Instructor Name: Mr. Darrin Spondike
Office Phone: 440-357-7542 Ext. 8243
Fax: 440-358-8012
Email: dspondike@auburncc.org

Course Schedule
First Year Schedule: 8:15am to 10:53am
Second Year Schedule: 11:00am to 2:28pm

Course Credits:
Students can receive a total of 16 articulated college credits through our articulation program, based on criteria specified from Lakeland Community College. In addition, students will have the opportunity to earn industry-recognized certifications from OSHA, IT Fundamentals, A+, Network+ and Cisco Secutiry +, CCENT (one test is paid by the district, other testing fees must be paid by the student).

Ohio College Tech Prep prepares students for high skill, high demand technical careers in a competitive global economy. Rigorous educational pathways emphasize math, science and technology and lead to postsecondary education. Students may be eligible to earn college or technical school credit for their high school coursework if they meet Tech Prep exit requirements.

Course Materials

-Large three ring binder	-Basic Tool Kit $40
-Notebook paper	-CNT Uniform $38 - $46 (for two shirts)
-Pen and pencil	-8GB or larger flash drive
-Headphones, closed ear type	-Class fee $25

All fees are due by October 31, 2022. Fees will be waived for students who qualify for free and reduced meals. Accounts will be adjusted after the approval of free/reduced meal applications.

Program Scope:

First Year Course(s) Description/Outcomes:

- Computer Hardware
  Students will learn to install, repair, and troubleshoot computer hardware systems. They will perform preventative maintenance practices and learn techniques for maintaining computer hardware security. Communication skills and professionalism in troubleshooting situations will be emphasized.
- Computer Software
  Students will apply knowledge and skills of commercial and open source operating systems in portable, stand alone, and networked devices. Students will install a variety of operating systems manually and using remote assistance. They will learn to configure, modify, and troubleshoot operating systems. Desktop virtualization, system security, and operating system history will be addressed.
- Networking
  Students will install, configure, and troubleshoot network hardware and peripherals. Students will learn networking by exploring the OSI model, network topologies, and cabling. Students will design simple networks, know how to select physical devices, and be able to configure the equipment. Knowledge and skills relating to the operation and usage of network protocols will be developed.

Second Year Course(s) Descriptions/Outcomes:

- Cyber Security (Security Plus)
  We will introduce basics in Cyber Security. Show how to identify and mitigate basic intrusion
- Windows Server Concepts
  Student will learn the functions, characteristics, and operations of a Windows Server 2012 and 2016. Learn how to install and configure basic server roles such as Active Directory, DHCP, DNS, Security.
- Uncovering cybercrime, cyber espionage, and other networking threats are just some of the exciting cybersecurity jobs spanning across every industry . Learn the skills to join this fast-growing field and take advantage of the opportunities found   in security operation centers. Feel confident that you are helping make the world a safer place by pursuing a role in this field.

  In this course you will learn security concepts, security monitoring, host-based analysis, network intrusion analysis, and security policies procedures. This course also aligns with the National Initiative for Cybersecurity Education (NICE) Cybersecurity Workforce Framework to support consistent communication language for cybersecurity education, training, and workforce development.

You Will Learn These Core Skills:

- Deepen knowledge in how best to detect and respond to security incidents
- Gain job-ready, practical skills in cybersecurity operations
- Develop critical thinking and problem-solving skills using real equipment and Cisco Packet Tracer
- Prepare for Cisco Certified CyberOps Associate Certification
- Window Server Concepts

First Year Sequence

1st Qtr. - Students will work on OSHA requirements and computer hardware
2nd Qtr. - Computer hardware, software and basic networking
3rd Qtr. – Intermediate networking and security
4th Qtr. – Security and study for industry credential tests

Second Year Sequence

1st Qtr. – Cyber Ops associate course
2nd Qtr. – Cyber Ops associate Course, Festo Cyber Lab
3rd Qtr. – CyberStart or other cyber labs

4th Qtr. – Study or industry certs

Auburn Certificates

Auburn Career Center provides an extended curriculum for our eleven participating school districts. Students attending Auburn Career Center may earn multiple elective and academic credits each year. Following successful completion, these credits are certified by the high school in which the student is enrolled. High school students can also earn several college credits while attending Auburn Career Center.

In addition to earning academic credit toward graduation, students may earn the following certificates of achievement from Auburn Career Center.

➢ Honors
➢ Distinction
➢ Merit
➢ Completion

These certificates are awarded at the Auburn Completion Ceremony and placed in the student's portfolio.
See APPENDIX for additional information on certificates

Instructional Philosophy

Instruction is delivered through a variety of instruction including: lecture based, online/internet based, hands-on labs, student center inquiry based learning.

Assessment Plan

Grades will be determined by a Total Points method. Approximate weights are as follows:

Employability 20%
Class Work and Assignments 20%
Tests and Quizzes 20%
Academy Core Class 40%

Grading

Grading Scale

A   90-100
B   80-89
C   70-79
D   60-69
F   59 and below

Grading Policies

It is expected that students will complete assignments on time. Assignments will be dropped one letter grade for each day that they are late. If an assignment is turned in more than four days late, it will be worth half credit.

Employability Skills

Employability includes attendance, work ethics, and class preparation. Students graded as an employee. Grading policy is per the Student/Parent Handbook:

Course Assignments, Labs and Projects

All assignments are to be word processed and are to include your name, class, assignment name, and assignment date in the upper left hand corner. No hand written assignments will be accepted unless prior permission has been given. Absolutely no assignments will be accepted on torn out spiral notebook paper or assignments done in pencil.

Late assignments will only be accepted with an excused absence.
Assignments are due by midnight on the day they are scheduled to be completed.
Students can expect assignments on a regular basis. Projects of significant importance will be assigned throughout the year.

Course Policies

Attendance

Attendance is taken at the start of class. All students should be in their assigned classroom/lab before the bell sounds. If you are tardy you must report to the High School Office and obtain an admit slip. **Excessive unexcused absences may result in disciplinary action.** Refer to the Student/Parent Handbook for more information.

Safety

Completion of the CareerSafe OSHA 5-Hour course is required before the actual lab work can begin in the class. Also a specific class safety test must be passed at 100% before lab work can begin.

Safety is always a concern. Safe practices will be in place at all-time within the classroom and the lab.

Emergency Response

If there is an emergency in the lab or class room, inform the instructor. If the emergency involves the instructor, contact the main office by using the telephone in the Instructors office.

Pick up the phone and dial "0" for the Office.

Remain calm, explain the situation.

If there is no immediate answers, send someone to the nearest classroom or office and notify an adult of the incident and request additional help by calling 911.

If the victim is conscious, it is best to have them lie still until qualified emergency response personnel arrive on the scene. Do not move a victim unless there is risk of additional immediate danger to them and you. You can cause additional severe injury by unnecessarily moving a victim.

There is the possibility of the victim going into a state of physiological shock -- a condition of insufficient blood circulation different from electrical shock -- and so they should be kept as warm and as comfortable as possible.

Program Apparel

Standard daily dress:
  -CNT approved Polo shirt. Available in both a men's and women's style shirt.
  -Full length pants. Jeans or Khaki style pants are acceptable. Pants must be in presentable condition. Extremely low cut, torn/ripped, are not acceptable.
  -Casual dress or tennis shoes. No open toed shoes.
  -Optional CNT black zip fleece, jacket or hoodie
  -ID Badge

Special event dress and Skills USA events:
  -CNT approved light black, button down, long sleeve oxford shirt.
  -Khaki or dress pants. Women may wear skirts.
  -Casual/Dress shoes.
  -CNT Approved quarter zip fleece, black color or sweater.
  -Professional apparel is an acceptable substitute.

Classroom Entry – Attendance

Attendance is taken at the start of class. All students should be in their assigned classroom/lab before the bell sounds. If you are tardy you must report to the High School Office and obtain an admit slip.

Classroom Exit – Dismissal

Students are dismissed by the Instructor, not the bell. Students are not to line up at the door, be in the hall, or leave the classroom or lab prior to dismissal by the teacher.

Mobile Technology Policy

Cell Phones, MP3 Players and other mobile devices are included in the definition of personal mobile technology. It is expected that students will realize that mobile technology devices have their time and place and will utilize them appropriately, as stated in this handbook while in the Computer Network Technology classroom/lab. Students will abide by any policies stated within the Auburn Student Handbook and Technology Agreement while at Auburn Career Center.

Classroom Rules, Consequences and Rewards

 All students are expected to adhere to the code of conduct as spelled out in the Student Handbook.

Respect for yourself and others is essential.

CTSO

Overview of SkillsUSA

SkillsUSA is a partnership of students, teachers and industry working together to ensure America has a skilled workforce. We help each student excel. A nonprofit national education association, SkillsUSA serves middle-school, high-school and college/postsecondary students preparing for careers in trade, technical and skilled service (including health) occupations.

Membership:

SkillsUSA serves more than 333,527 students and instructors annually. This includes 19,019 instructors who join as professional members. Including alumni, Skills USA membership totals over 394,000. SkillsUSA has served nearly 14 million annual members cumulatively since 1965 and is recognized by the U.S. Department of Education and the U.S. Department of Labor as a successful model of employer-driven workforce development.

Mission:

SkillsUSA empowers its members to become world-class workers, leaders and responsible American citizens. We improve the quality of our nation's future skilled workforce through the development of Framework skills that include personal, workplace and technical skills grounded in academics. Our vision is to produce the most highly skilled workforce in the world, providing every member the opportunity for career success.

APPENDIX

AUBURN CERTIFICATES

Auburn Honors Certificate Requirements

- 95% Attendance rate for two years at Auburn (no more than 18 days over two years)
- Earned a 3.5 or higher grade point average in their career tech program over two years
- Safety certification earned in career tech program
- Employability skills earned in career tech program
- Passage of four (4) Ohio Career Technical Competency Analysis exams and/or earning twelve (12) points of Industry Recognized Credentials in the program's Career Field
- Active participation in the program's Career Technical Student Organization
- High school diploma for Seniors

Auburn Distinction Certificate Requirements

- 93% Attendance rate for two years at Auburn (no more than 26 days over two years)
- Earned a 3.0 or higher grade point average in their career tech program over two years
- Safety certification earned in career tech program
- Employability skills earned in career tech program
- Passage of three (3) Ohio Career Technical Competency Analysis exams and/or earning six (6) points of Industry Recognized Credentials in the program's Career Field
- Active participation in the program's Career Technical Student Organization
- High School Diploma for Seniors

Auburn Merit Certificate Requirements

- Earned high school credit for their career tech program over two years
- Safety certification earned in career tech program
- Employability skills earned in career tech program
- Overall passage of Ohio Career Technical Competency Analysis exams and/or earning three (3) points of Industry Recognized Credentials in the program's Career Field

Auburn Completion Certificate Requirements

- Earned high school credit for their career tech program over two years
- Safety certification earned in career tech program
- Employability skills earned in career tech program

BUSINESS PARTNERSHIPS AND STUDENT INTERNSHIPS

The Business Partnership program is an educational opportunity that prepares a student for workforce employment and transition to post-secondary education. During the program, students will apply

academic, employability, and technical skills in the workplace. There are three levels students can participate in including:

> Internship
> Mentorship
> Career Field Experience

Students must meet specific criteria in order to participate. Additional information is available in the Auburn Student/Parent Handbook.

CAREER SAFE PROGRAM/OSHA 10-HOUR GENERAL INDUSTRY TRAINING
Description of Program

The OSHA Outreach Training Program for General Industry provides training for students, entry level workers, and employers on the recognition, avoidance, abatement, and prevention of safety and health hazards in workplaces in general industry. The program also provides information regarding workers' rights, employer responsibilities, and how to file a complaint. Through this training, OSHA helps to ensure that workers are more knowledgeable about workplace hazards and their rights. Each module contains a brief assessment, which must be successfully completed before the student can move on to the next module. Once all modules have been viewed and the corresponding assessments are passed, there is a comprehensive final assessment.

Purpose

The purpose of the program is to provide students with basic safety awareness training so they will be able to recognize, avoid and prevent safety and health hazards in the workplace. Young workers develop a safety mindset and acquire marketable skills for a competitive edge.

Credential Earned

Students who successfully complete the CareerSafe OSHA 10-Hour course receive an OSHA 10-Hour General Industry wallet card from the OSHA Training Institute (OTI). As a result, they become more employable, gaining a competitive advantage in the job market.

Student Support Services:
- Special Education Department: Intervention Specialist.
- Student Services: Counseling and Career Development Services.
  - You can make an appointment to see a counselor or recruitment specialist by visiting the Student Services office.

Symplicity
It is with great enthusiasm that I want to announce an opportunity for students to participate in an on-line job match software program. The online job match software, Symplicity, allows students to develop an online profile and to upload a resume and cover letter in order to apply for

employment. Once students choose to apply to job opportunities posted by local employers interested in Auburn students, those employers can contact students directly for interviews.

 If you would prefer your son or daughter not to participate in our on-line job board or at in school job fairs, please contact the high school office or send in a note.

TECHNOLOGY LITERACY PROGRAM

Description of Course

Technology Literacy is offered to first and second year students at Auburn Career Center. In the first year, the course provides an overview of the basic fundamentals of working with computers. Students will study computer basics such as computer hardware, software, and operating systems. The course introduces basic use of Windows 10 and productivity programs such as Gmail and Microsoft Office 2019 including Word, PowerPoint, and Excel. Students will also begin to use and navigate e-learning environments using Schoology, Internet navigation, and ever-changing technology will also be overviewed within the course.

In the second year, students focus on creating a portfolio that showcases their work over the last two years at Auburn. It includes their resume, three references, a cover letter, a transition plan and samples of the projects they have completed. Also included are the certificates they have earned in their program of study.

Purpose

The purpose of the Technology Literacy course is to provide students with the basic knowledge of working with computers in ways beneficial in their career paths of choice. The course will give them an overview of online communication, email, word processing, spreadsheets, presentation programs, internet navigation, computer security and our technologically evolving world.

Mastery Learning

Grades in the Technology Literacy course will be based on Mastery Learning. Students will be required to achieve 80% on each assignment. Additional attempts will be provided if the 80% benchmark is not achieved.

Auburn Career Center – Cyber Security & Network Technology

Syllabus Agreement

After reviewing the Computer Networking Technology Syllabus, please sign and return this agreement page to the Cyber Security & Network Technology Instructor.

I have read and understand all of the information included in the Auburn Career Center Cyber Security & Network Technology Syllabus.

Student Name: _____
                                        (Please print)

Student Signature: _____

Date: _____

Parent/Guardian Name: _____
                                            (Please print)

Parent/Guardian Signature: _____

Date: _____