CHIPOLA COLLEGE

COURSE SYLLABUS

Chipola's website: www.chipola.edu

COURSE TITLE:	COURSE NUMBER:
Introduction to Microcomputer Maintenance and Repair	CTS 1131

COURSE DESCRIPTION (with prerequisites):

This course introduces computer hardware components and system software needed to set up, install, configure, upgrade, and maintain a microcomputer system. This course prepares students for a CompTIA A+ Hardware industry certification. This course includes both lecture and structured lab experiences. Co-requisite: CTS 1110 or consent of department. 3 semester hours credit.

NAME(S) OF INSTRUCTORS:

Charlie Lynch
lynchc@chipola.edu

EFFECTIVE ACADEMIC YEAR:

2023-2024

REQUIRED TEXTBOOKS AND INSTRUCTIONAL MATERIALS:

TestOut PC Pro , ISBN: 9781935080428

GRADING POLICY:

The standing of a student in each course is expressed by one of the following letters and corresponding grading system:

A – 90 – 100
B – 80 – 89
C – 70 – 79
D – 60 – 69
F – 59 or less

The Chipola Catalog provides policies and procedures regarding the grading system. A student's Grade Point Average is derived from the grading system/quality point scale.

ATTENDANCE AND WITHDRAWAL POLICIES:

Chipola College expects regular attendance of all students and for all instructors to record attendance daily. Students who are absent from classes for any reason other than official college activities must satisfy the instructor concerned that the absence was due to illness or other clearly unavoidable reasons. Otherwise, the student may suffer grade loss at the discretion of the instructor. Chipola policy allows each instructor to specify in the Instructor First Day Handout whether or not an absence is excusable and what effect the absence or tardy may have on the grade.

A student is allowed to repeat a course a maximum of three (3) times. **On the third attempt a student (1) must bear the full cost of instruction (unless waived by Student Services), (2) cannot withdraw, and (3) must receive a grade.**

MAKE-UP POLICY:

Chipola allows each instructor to specify in the Instructor First Day Handout the makeup policy.

ACADEMIC HONOR CODE POLICY:

Students are expected to uphold the Academic Honor Code, which is based on the premise that each student has the responsibility to (1) uphold the highest standards of academic honesty in his/her own work; (2) refuse to tolerate academic dishonesty in the college community; and (3) foster a high sense of honor and social responsibility on the part of students. Further information regarding the Academic Honor Code may be found in the Chipola Catalog, Student Governance section.

STUDENTS WITH DISABILITIES POLICY:

Chipola College is committed to making all programs and facilities accessible to anyone with a disability. Chipola's goal is for students to obtain maximum benefit from their educational experience and to effectively transition into the college environment. Students with disabilities are requested to voluntarily contact the Office of Students with Disabilities to complete the intake process and determine their eligibility for reasonable accommodations.

NOTICE OF EQUAL ACCESS/EQUAL OPPORTUNITY AND NONDISCRIMINATION:

Chipola College does not discriminate against any persons, employees, students, applicants or others affiliated with the college in regards to race, color, religion, ethnicity, national origin, age, veteran's status, disability, gender, genetic information, marital status, pregnancy or any other protected class under applicable federal and state laws, in any college program, activity or employment.

Wendy Pippen, Associate Vice President of Human Resources, Equity Officer and Title IX Coordinator, 3094 Indian Circle, Marianna, FL 32446, Building A, Room 183C, 850-718-2269, pippenw@chipola.edu.

LIBRARY AND ON-LINE REFERENCE MATERIALS:

The library is a comprehensive learning resource center providing information in print, electronic, and multimedia format to support the educational objectives of the College. On-line catalogs, e-books, and electronic databases can be accessed through the Library Resources link within your course in Canvas or by using the *Search* icon on the Chipola Library website at www.chipola.edu/library. If you have questions about database usage, consult the "How to Use the Chipola Databases" on the Library website or call the Library at 850/718-2274 during regular hours. Library hours are posted each semester at the building entrance and on the Library website. See your Instructor First Day Handout for individual instructor recommendations and resources.

TECHNOLOGY RESOURCES:

The college's learning management system is **Canvas**. Classes become available on Canvas on the first day of the semester. It is the student's responsibility to log onto the Canvas system the first day of class to establish the first day of attendance and to check announcements. All official class communication must be through Canvas. For further information, contact your instructor or the Director of Learning Resources. The Canvas support hotline is available online in live chat and on the phone, toll-free, at 855-308-2812 for any issues utilizing Canvas. The **Technology Center**, located in the library, is equipped with computer workstations. Lab hours are posted each semester at the building entrance and on the Library website.

FREE TUTORING RESOURCES:

The Academic Center for Excellence (**ACE)** Lab, located in Building L, offers free tutoring from 8 a.m. to 5 p.m. and is equipped with computer workstations. ACE lab hours are posted each semester at the room entrance and on the website. Additionally, live online tutoring conferences and individual tutoring sessions are available for a variety of courses through ACE@Home. For a conference schedule or to schedule an individual appointment, visit "ACE Tutoring" in the left navigation from any course in Canvas.

ELECTRONIC DEVICE USAGE STATEMENT:

Classrooms should be free of all unnecessary distractions from the task of learning. Therefore, as a general rule, students should silence and avoid use of all electronic devices (laptops, phones, tablets, etc.) not being used for coursework. Consult first-day handouts for any specific policies related to the use of electronic devices in the classroom, as they may vary depending upon the nature of the course or the guidelines of the instructor. Faculty reserve the right to regulate the use of electronic devices and their accessories in class.

DISCIPLINE SPECIFIC COMPETENCIES / LEARNING OUTCOMES:

Associate in Science degree in Computer Information Technology Learning Outcomes:

CIT-1 Understand, install, configure, monitor, use, and troubleshoot computer hardware and software. [1.0, 2.0, 3.0, 4.0, 6.0, IT Support 12.0, 13.0]

CIT-2 Understand, install, configure, monitor, use, and troubleshoot network hardware and software. [8.0, 9.0]

CIT-3 Demonstrate general computing workplace competencies, including employability skills, interpersonal & customer service skills, and user support skills. [11.0, IT Support 12.0, 13.0, 14.0, 15.0]

CIT-4 Demonstrate project management skills. [10.0]

CIT-5 Perform database management and design tasks. [7.0]

Associate in Science degree in Network Systems Technology Learning Outcomes:

NST-1 Understand, install, configure, monitor, use, and/or troubleshoot computer hardware and software. [1.0, 3.0]

NST-2 Understand, install, configure, monitor, use, and troubleshoot network hardware and software. [2.0, 4.0]

NST-3 Demonstrate general computing workplace competencies, including

employability skills, interpersonal & customer service skills, and user support skills. [5.0, Server Admin 18.0]

NST-4 Demonstrate project management skills. [6.0] NST-5

Depends on Specialization:

A) Server Administration (Program Code 2181): Demonstrate advanced understanding of networked environments and perform network administration activities. [Server Admin Specialization 7.0-8.0]

B) Network/Cybersecurity (Program Code 2182): Demonstrate proficiency in securing networks and data, including performing penetration testing and responding to cybersecurity incidents. [Network/Cybersecurity Specialization 7.09.0]

C) Digital Forensics (Program Code 2183): Demonstrate understanding of forensic casework procedures and perform computer and mobile device forensic investigations. [Digital Forensics Specialization 7.0-14.0]

Linking Course-level Student Learning Outcomes with Discipline-Specific Competencies, Assessment Methods, and Artifacts		
COURSE-LEVEL STUDENT LEARNING OUTCOMES FOR CTS 1131	**DISCIPLINE-SPECIFIC GENERAL EDUCATION COMPETENCIES**	**ASSESSMENT METHODS FOR COURSE LEVEL STUDENT LEARNING OUTCOMES (see Notes below)**
• Propose Ports and Connector Resources.	CIT-1, CIT-2, CIT-3, NST-1, NST-2, NST-3	H, T, Q
• Appraise and Troubleshoot Hard Drives, Motherboards, Power Supplies, CPUs RAM and other hardware.	CIT-1, CIT-2, CIT-3, NST-1, NST-2, NST-3	H, T, Q
• Formulate and Configure BIOS and CMOS.	CIT-1, CIT-2, CIT-3, NST-1, NST-2, NST-3	H, T, Q
• Evaluate Removable Media Adapter Cards and Peripherals.	CIT-1, CIT-2, CIT-3, NST-1, NST-2, NST-3	H, T, Q
• Formulate Printer Maintenance Best Practices.	CIT-1, CIT-2, CIT-3, NST-1, NST-2, NST-3	H, T, Q
• Propose Portable Computers Repair Steps.	CIT-1, CIT-2, CIT-3, NST-1, NST-2, NST-3	
• Formulate the Optimization of and Troubleshooting of PC's.	CIT-1, CIT-2, CIT-3, NST-1, NST-2, NST-3	
• Evaluate Basic Network and WIFI Installation and Concepts.		

Notes: ***Assessment Codes***

BO - Behavioral Observation
Cap Proj - Capstone Course
CF - Cumulative Final
Clin - Clinicals
CP - Case Plan
CS - Case Study
DB - Discussion Board
DE - Documented Essays
E - Essays
EX - Dept Exam
Exp - Experiments
F - Final Exam
H - Homework
Intern - Internship
J - Jury
JP - Judged Perf/Exh
Ob**s** - Teacher Observ
OT - Objective Tests
Port - Portfolio
Prac - Practicum
Pre/ Post - Pre-/Post-Tests
Proj - Projects
PS - Problem Solving
Q - Quizzes
R - Recital
RP - Research Papers
RPT - Report/Presentation
SD - Skills Demonstration
SE - Natl or State Standardized
Sk - Ck Skills Check-Off
SP - Skills Performance
T - Tests
UT - Unit Tests
W - Writing Assignments

MEANS OF ACCOMPLISHING STUDENT LEARNING OUTCOMES:

In-Person

The instructor will:

1. Lecture and lead class discussions.
2. Assign readings from textbooks and/or other sources to supplement lectures.
3. Provide supplemental materials that align with the material presented in the textbook as appropriate.
4. Design assignments, quizzes, discussions, etc., to help students engage with the course material.
5. Use other teaching strategies to assist students in examining and understanding course materials as needed.
6. Provide timely feedback on assignments.
7. Hold weekly office hours to address questions and student needs outside of class time.

The students will:

8. Attend class regularly and be attentive to lectures.
9. Engage with class discussion.
10. Participate in student discussion groups.
11. Read assigned readings.
12. Complete assignments, quizzes, discussion boards, etc., as assigned by the instructor.

Online

The instructor will:

13. Lead class discussions.
14. Assign textbook and/or other readings.
15. Provide supplemental materials that align with the material presented in the textbook as appropriate.
16. Design assignments, quizzes, discussions, etc., to help students engage with the course material.
17. Use other teaching strategies to assist students in examining and understanding course materials as needed.
18. Provide timely feedback on assignments.
19. Hold weekly virtual office hours to address questions and student needs.

The students will:

20. Engage with the course regularly.
21. Engage with class discussions.
22. Participate in student discussion groups.
23. Read assigned readings.
24. Complete assignments, quizzes, discussion boards, etc. as assigned by instructor.

ASSIGNMENT AND/OR COURSE OUTLINE

The following topics will be covered in this course at the discretion of the instructor:

First Look at Computer Parts and Tools
Working Inside a Computer
Introducing Windows Operating Systems
All About Motherboards
Supporting Processors and Upgrading Memory
Supporting Hard Drives
Installing Windows
Supporting I/O and Storage Devices, Satisfying Customer Needs
Maintaining Windows, Optimizing Windows
Troubleshooting Windows and Applications
Troubleshooting Hardware Problems
Troubleshooting Windows Startup Problems
Connecting to and Setting up a Network
Networking Types, Devices, and Cabling
Windows Resources on a Network
Security Strategies, Supporting Notebooks
Mobile Devices and Client-Side Virtualization
Supporting Printers

See your Instructor First Day Handout for individual instructor assignment schedule.