Wilco Area Career Center 2022-2023

Syllabus Computer Technology

Online and Onsite

Instructor: Mrs. Faye Jackson, MS.Ed, MS.HE, ABD
Phone: 815-838-6941
Email: fjackson@wilcoacc.org
Office Hours: By Appointment

Grade level: 11-12

Suggested Prerequisites: None

Supplies needed: Flash drive, Earbuds, Notebook, Pen

COURSE DESCRIPTION

Computer Technology covers four JJC college level courses:

- Computer Information Systems — CIS 122
  A first course for business or computer information systems majors planning to transfer to a four-year institution. A complete introductory study of information systems, computer programming and application software is presented. Course topics include the elements of a business computer system, system analysis and design, computer-to mainframe systems, program design and implementation. Also included will be an introduction to the internet and its uses, computer application software. This course also introduces basic concepts regarding word processing (Microsoft Word), (Excel Spreadsheet), (PowerPoint) and database management systems (Access). At the end of the course, you will achieve a reasonable proficiency in the above areas. Syllabus subject to change.

- Fundamentals of Networking -- CIS 145
  This course discusses the basic concept of Local Area Networking. Topics include networking overview, sharing computer resources, using E-mail, using file servers, protocols, different networking software, how to manage your network and an introduction to Wide Area Network.

- CompTIA A+ Guide to IT Technical Support- CIS 275
  This course investigates the hardware components of the personal computer. Heavy emphasis is placed on diagnosing and maintaining the PC. Students will learn to install and replace the major hardware components of the system. The students will learn to work the BIOS/CMOS, as well as what it takes to build a PC. This is the first course in preparation for taking the A+ exam.

LAB SIMULATIONS:

- TestOut Lab Simulation Assignments -**Microsoft Office -CIS 122**
  The Office Pro course provides students with the ability to practice and prove their ability to use key computer software. These skills are essentials for any working professional. TestOut Office Pro is an all-in-one online learning solution. It has everything a student needs to learn the basics of computers such as lab simulations, video lessons, demonstrations, text lessons, exams including Microsoft Office's Word, Excel, PowerPoint, Access, and Outlook programs. Multiple learning activities, including the virtual hands-on labs, are designed to develop proficiency in Computers and Microsoft Office skills. The course is uniquely designed to improve student confidence resulting in higher test scores and academic and career success.

- TestOut Lab Simulation Assignments – **Personal Computer PC Pro**
  The main purpose of the TestOut PC Pro is to help with necessary skills to work as an IT support professional. In an IT support job, you'll be asked to install, repair, configure, secure, and manage computer hardware, operating systems, and software in home or corporate environments. TestOut provides the most advanced IT simulation environment. These simulations allow students to gain valuable experience by developing real-world IT skills. By simulating hardware, software, operating systems, and entire network environments, students can practice IT skills in a realistic environment.

Students enrolled in Wilco are given the opportunity to receive college credits for certain portions of the course through Joliet Junior College. Students who enroll in these credits are expected to complete the course with minimum completion grade of a "C" or instructor may encourage the student to withdraw. No student should willingly accept a "D" on a college transcript as a result choosing to voluntarily withdraw would be in his/her best interest. Wilco will not be held responsible if student does not meet the minimum requirements. It is expected that the student will accept full responsibility for completing necessary requirements to obtain all college credits.

Instructional Philosophy

Students will be expected to meet all listed course goals and be able to demonstrate their understanding of the concepts necessary for an introductory technology career. The instruction involves a laboratory based structure with audio/visual support and class lecture. Students will work collaboratively to troubleshoot individual problem areas and complete review activities. Assignments will require students to utilize academics skills in basic applied computer skills that involve trouble shooting, step-by-step problem solving and online research. Student's will be given work readiness evaluations monthly which will be based on class participation, quality of work, attendance, assignment completion, behavioral expectations, use of resources and ability to communicate with peers and instructor. Daily written assignments, written and oral unit projects, chapter quizzes, unit exams, and comprehensive semester exams shall comprise the main portion of the students' grade.

Students will be able to access grades through the Wilco Area Career Centers on line grade component to monitor progress and attain ongoing grade reports. Instructor feedback will also be provided, so the student can make necessary corrections and adjustments. Upon completion of the school year students will demonstrate mastery of tasks as indicated on the student task list tool. Students will be held to all safety and quality standards as expected on the job. Students will be expected to utilize outside resources to obtain information for some assignments. Library research and professional consultation will be required for some projects. Tutoring is available in Student Services. For those students pursuing college credits through Joliet Junior College, semester grade must be a minimum requirement of 70%, as well as, the student is required to complete or meet any other standardized testing minimum scores as established by the institution seeking credits from.

Class Operation:

The instructor provides direction and manages the classroom setting, but also gives the students some autonomy for planning certain day to day assignments and managing the class environment with peers. The instructor will meet briefly with students at the beginning of each day to review previous lectures, discuss the content for the day and demonstrate any new concepts as needed. Individual assistance will be provided as necessary. Periodic class discussions will focus on student understanding of material. Students will be called upon in class discussion scenarios. Students will work independently and in small groups as the lesson dictates. Students will be given a variety of resources in the form of resource lists and study guides. Students will be expected to actively participate in the instructor's on-line resources of Campus and Google classroom. If student has a situation which prevents this access the instructor should be made aware of these special circumstances.

Monitoring Performance:

Each student will be responsible for monitoring their individual progress throughout the year. Students will have access to the school's grade posting system. Students and families will be educated on access to the system at the beginning of the year. Students will be expected to check grades regularly and are encouraged to question any grade in dispute in private with the instructor. Student progress will be evaluated /updated weekly. Since the focus of attending a career center is also to build appropriate skills for future technical employability, students will receive weekly/monthly evaluations from the instructor focusing on these skills as they relate to the classroom setting. Students will be provided comments for improvement. These evaluations may be copied and used when student may be obtaining future employment.

Suggested Course Supplies:

Wilco provides the books and laptops for student use. Books may be checked out but laptops cannot!

Wilco Area Career Center Grading Scale

90.0 A
80.0 B
70.0 C
60.0 D
Below 59.0 F

Grade Components

Participation 30%
Assignments: 30%
Computer Lab: 20%
Quizzes/Tests 10%
Midterm/Final Exam 10%

Classroom Policies and Procedures

*General Information - Students will come prepared for class with a notebook, Pen, and flash drive daily.

*Students are to keep desk areas clean at all times. Students are to be respectful of fellow classmates.

*Cell phones are to be put away prior to the start of class and may only be utilized at teacher discretion.

*Books & Laptops - Students will be responsible for their individual textbook throughout the school year and are responsible for replacement fee if damaged or lost. Students will also utilize laptops on a daily basis to complete assignments and must maintain their condition.

*Attendance Policy - 5 or more unexcused absences will result in an attendance contract.

*Make-up Policy - ALL students are responsible for checking Google Classroom for daily coursework and announcements. Students who have an excused/exempt absence will be granted three days upon their return to complete all assignments for full credit. Students with an unexcused/unknown absence will be responsible for completing the coursework by the assigned date and are encouraged to contact their instructor, Mrs. Jackson with concerns.

*Academic Honor Code - The objective of the academic honor code is to sustain a learning-centered environment in which all students are expected to demonstrate integrity, honor, responsibility, and recognize the importance of being accountable for one's academic behavior.

*Intellectual Property - Students own and hold the copyright to the original work they produce in class. It is a widely acceptable practice to use student work as part of the college's internal self-evaluation, assessment procedures, or other efforts to improve teaching and learning and in promoting programs and recruiting new students. If you do not wish your work to be used in this manner, please inform the instructor.

*Student Code of Conduct - Each student is responsible for reading and adhering to the Student Code of Conduct stated in the college catalog and Wilco Student Handbook.

*Sexual Harassment - Wilco Area Career Center seeks to foster a community environment in which all members respect and trust each other. In a community in which persons respect and trust each other, there is no place for sexual harassment. Wilco has a strong policy prohibiting the sexual harassment of one member of the college community by another. See Catalog or Student Handbook.

*Student Support - Available through student services at Wilco and coordinated with high school.

COURSE CONTENT Semester ONE

TESTOUT is part of each semester. LabSim is TestOut's learning platform that Computer Technology will work with. It includes Testout's best-of-class IT simulations. The LabSim courses will keep each student engaged and is flexible. Great tools for IT education. With LabSim, students are able to gain practical knowledge and practice real-world skills anytime and anywhere. All they need is Internet access on a supported device. LabSim is equipped with powerful features that advances a student's ability to learn and gain skills. With my ability to assess the needs of each individual student, I am able to help each student succeed.

Book: Technology in Action	Chapter lesson	Chapters/Technology Covered
Chapters 1	Impact of Technology in a Changing World	Technology
Chapter 2	Computer Parts	Understanding the Parts
Chapter 3	Using Internet	Web's Resources
Chapter 4	Application Software	Programs that let you work and play
Chapter 5	System Software	Operating system, Utility programs, and File management
Chapter 6	Hardware	Evaluating your system
Chapter 7	Networking	Connecting Computing Devices
Chapter 8	Digital Lifestyle	Challenges and Ethics
Chapter 9	Securing Your System	Protecting Digital Data
Chapter 10	Software Programming	Programming

Chapter 11	Databases & Information Systems	Databases
Chapter 12	Networking & Security	Networking in the Business World
Chapter 13	How the Internet Works	Internet
Microsoft Office	Word	Creating, Formatting, and editing a Word Document with a Picture.
Microsoft Office	PowerPoint	Creating and editing a Presentation with Pictures
Microsoft Office	Excel	Create a Worksheet and a Chart

COURSE CONTENT Semester TWO

Book: Data Communications	Chapter lesson	Chapters/Technology Covered
Intro to Computer Networks	1	The Big Pictures of Networks
Conducted and Wireless Media	3	Twisted Pair, Coaxial, Fiber optic
Local Area Networks Part I	7	Primary Functions of Local Area Network
Introduction to Metropolitan and Area Networks	9	Differentiate Metro and Wide Area Networks
The Internet	10	Internet protocols, World Wide Web, Services, Future of Internet
Network Security	12	Common System attacks, Physical Protection, Securing Data

A+ Guide to IT Technical Support-Book	Chapter lesson	Chapters/Technology Covered
First Look at Computers and parts	1	First Look at Computers and pans
Working Inside Desktop Computers and Laptops	2	Removing parts
All About Motherboards	3	Types, Sizes, and settings
Processors and Memory	4	Types and characteristics of processors and memory
Power Systems and Troubleshooting	5	Selecting power supplies, solving hardware problems, & troubleshooting electrical systems
Hard Drives and Storage Systems	6	How to select and install Hard drives. Troubleshooting Hard Drives.

A+ Guide to IT Technical Support	Chapter lesson	Chapters/Technology Covered
Windows Features and Support tools	7	Windows interfaces and tools
Installing Windows	8	Planning and installing windows
Supporting I/O Devices	9	Installing and configuring devices
Maintaining Windows	10	Backup Procedures and file management.
Optimizing Windows	11	Using Windows Utilities and Tools
Supporting Customers	12	Knowing what customers want and strategies to troubleshoot computer problems