ITSC 1405 – PC Operating Systems

Catalog Description: This course is an introduction to personal computer operating systems including installation, configuration, file management, memory and storage management, control of peripheral devices, and use of utilities.

Lecture hours = 3, **Lab hours** = 3

Prerequisites: None

Semester Credit Hours: 4
Lecture Hours per Week: 3
Lab Hours per Week: 3
Contact Hours per Semester: 96

State Approval Code: 11.0101

Class section meeting time:

Alternate Operations During Campus Closure: In the event of an emergency or announced campus closure due to a natural disaster or pandemic, it may be necessary for Panola College to move to altered operations. During this time, Panola College may opt to continue delivery of instruction through methods that include, but are not limited to: online learning management system (CANVAS), online conferencing, email messaging, and/or an alternate schedule. It is the responsibility of the student to monitor Panola College's website (www.panola.edu) for instructions about continuing courses remotely, CANVAS for each class for course-specific communication, and Panola College email for important general information.

Instructional Goals and Purposes:

Panola College's instructional goals include 1) creating an academic atmosphere in which students may develop their intellects and skills and 2) providing courses so students may receive a certificate/an associate degree or transfer to a senior institution that offers baccalaureate degrees.

The purpose of this course is to: 1) fulfill academic requirements of an Associate of Applied Science degree or a technical certificate at Panola College, 2) provide learners with a knowledge base regarding operating systems upon which they can build, and expose learners to real-world examples and procedures that will prepare them to be skilled users of a computer operating system.

Learning Outcomes:

1. Install, configure, and maintain the operating system.
2. Perform basic file management operations.
3. Organize and allocate primary and secondary storage.
4. Access and control peripheral devices
5. Run utilities.

Specific Course Objectives (includes SCANS)

After studying all materials and resources presented in the course, the student should be able to complete all objectives listed below with a minimum competency of 70% on assignments and exams.

1. Introduce Window 10 (1a-i, 1b-v, 1c-i, 2c-i, 2c-ii, 2c-iv)
    a. Describe Windows 10
    b. Explain the following terms: app, operating system, workstation, and server

      c. Differentiate among the various editions of Windows 10
      d. Use a touch screen and perform basic mouse operations
      e. Run Windows 10 and sign in to an account
      f. Identify the objects on the Windows 10 desktop
      g. Run an app
      h. Navigate within an app
      i. Run the File Explorer Switch between apps
      j. Customize the Start menu
      k. Search for an app or a file
      l. Install an app
      m. Use the search box
      n. Add reminders
      o. Sign out of an account and shut down the computer

2. Work with Windows 10 Desktop (1a-i, 1b-v, 1c-i, 2c-i, 2c-ii, 2c-iv)
      a. Create, name, and save a document directly in the Documents folder
      b. Use WordPad to print and edit a document
      c. Change the view and arrange objects in groups in the Documents folder
      d. Create and name a folder in the Documents folder
      e. Move documents into a folder
      f. Add and remove a shortcut on the Start menu
      g. Open a document using a shortcut on the Start menu
      h. Open a folder using a desktop shortcut
      i. Open, modify, and print multiple documents in a folder
      j. Delete multiple files and folders
      k. Work with the Recycle Bin

3. Manage Files and Folders (1a-i, 1b-v, 1c-i, 2c-i, 2c-ii, 2c-iv)
      a. View the contents of a drive and folder using the This PC window
      b. View the properties of files and folders
      c. Find files and folders from a folder window
      d. Use Shake and Snap to manipulate windows
      e. View, copy, and move contents of the Pictures folder
      f. View and change the properties of a picture
      g. Run and use the Photos app
      h. View pictures as a slide show
      i. Compress a folder and view the contents of a compressed folder
      j. Back up files and folders using OneDrive

4. Personalize the Work Environment (1a-i, 1b-v, 1c-i, 2c-i, 2c-ii, 2c-iv)
      a. View the contents of a drive and folder using the This PC window
      b. View the properties of files and folders
      c. Find files and folders from a folder window
      d. Use Shake and Snap to manipulate windows
      e. View, copy, and move contents of the Pictures folder
      f. View and change the properties of a picture
      g. Run and use the Photos app
      h. View pictures as a slide show
      i. Compress a folder and view the contents of a compressed folder
      j. Back up files and folders using OneDrive

5. Use Advanced Personalization and Customization (1a-i, 1b-v, 1c-i, 2c-i, 2c-ii, 2c-iv)
      a. Open the Control Panel and switch views
      b. View system information and hardware properties
      c. View and configure the Windows Firewall
      d. Defragment and optimize a hard drive
      e. View and adjust hardware and sound settings
      f. View power plan information
      g. Change time and region settings
      h. Display and adjust ease of access settings
      i. View privacy settings
      j. Display update and security settings

6. Use Advanced Searching Techniques (1a-i, 1b-v, 1c-i, 2c-i, 2c-ii, 2c-iv)

       a. Understand advanced searching techniques
       b. Find a file by using Boolean operators
       c. Search for a file by specifying properties
       d. View and modify the index
       e. Search for media files using specialized properties
       f. Save a search and find a file using a saved search
       g. Refine searches using the search box
       h. Configure search box settings

7. Security, Networking, and Utilities (1a-i, 1b-v, 1c-i, 2c-i, 2c-ii, 2c-iv)
       a. Configure sign-in options
       b. Configure family and other user accounts
       c. Manage Windows Firewall
       d. Configure User Account Control (UAC) settings
       e. Protect against computer viruses and malware
       f. Enable BitLocker drive encryption
       g. Use the Network and Sharing Center
       h. Create and join a HomeGroup
       i. Enable Remote Desktop and Remote Assistance connections
       j. Sync settings across devices
       k. Run performance tools
       l. Backup and restore files
       m. Use System Restore features
       n. Understand recovery options
       o. Configure search box settings

8. Final Topics (1a-i, 1b-v, 1c-i, 2c-i, 2c-ii, 2c-iv)
       a. Install Windows 10
       b. Manage Windows 10 memory and storage

Course Content:

A general description of lecture/discussion topics included in the course are listed in the Learning Objective / Specific Course Objectives section of this syllabus.

Students in all sections of this course will be required to do the following:

1. Complete reading activities and other activities assigned to meet the course outcomes.
2. Complete terms and concepts quizzes
3. Complete assigned skills activities/quizzes.
4. Complete other assigned activities required to meet the outcomes.
5. Complete a MINIMUM of two proctored skills exams.
6. Complete a Final exam.

Methods of Instruction/Course Format/Delivery:

Learners in the traditional class, hybrid class, and online class will have access to this course via the current Learning Management System. Learners in the traditional class and hybrid class will meet regularly for discussion on the new material. Learners in the online class will only be required to meet with the instructor or the proctor in a verified testing center for exams. Details will be posted in the Learning Management System.

All assignments will be completed and submitted via the current Learning Management System.

Learners may complete and/or submit the following using the current Learning Management System: a) A MINIMUM of two proctored exams; b) Quizzes; c) End-of-Chapter Activities

Learners in both the traditional and Internet classes should use the messaging (email) component of the current Learning Management System to communicate with the instructor and others in the learning community. If you are unable to contact the instructor using this method, you may use the instructor's Panola College email address. Panola College instructors attempt to respond to all email within 24 hours when on campus or during virtual office hours. Always include a subject line and your name in your email.

Major Assignments / Assessments:

The following items will be assigned and assessed during the semester and used to calculate the student's final grade.

Assignments

1. Concepts Activities/Quizzes
    For each chapter (or group of chapters) assigned, the learner may complete an activity or quiz on the terms and concepts introduced.

2. Skills Activities/Quizzes
    For each chapter assigned, the learner may complete an activity or quiz on the skills introduced.

3. The learner may complete other activities required to fulfill course outcomes requirements.

Assessment(s)

Major Exams
    1. A minimum of two proctored exams will be assigned per semester.
    2. A final exam will be assigned.

Course Grade:

The grading scale for this course is as follows:

Major Exams	60%
Other Activities	40%
90 and above	A
80 – 89	B
70 – 79	C
60 – 69	D
Under 60	F

Texts, Materials, and Supplies:

- GO! With Windows 10; Introductory (a physical book is required for this course)
    ISBN: 9780133839821
    Authors: GASKIN
    Publisher: Pearson
- Access to a reliable computer and high-speed Internet.
- Access to Window 10

Required Readings:

Textbook listed in this syllabus.

Any additional documents required to meet the outcomes of the course.

Recommend Readings:

None

Other:
- Courses conducted via video conferencing may be recorded and shared for instructional purposes by the instructor.
- For current texts and materials, use the following link to access bookstore listings: https://www.panolacollegestore.com
- For testing services, use the following link: https://www.panola.edu/elearning/testing.html
- If any student in this class has special classroom or testing needs because of a physical learning or emotional condition, please contact the ADA Student Coordinator in Support Services located in the Charles C. Matthews Student Center or go to https://www.panola.edu/student-success/disability-support-services/ for more information.
- Withdrawing from a course is the student's responsibility. Students who do not attend class and who do not withdraw will receive the grade earned for the course.
- Student Handbook, *The Pathfinder:* https://www.panola.edu/student-success/documents/pathfinder.pdf

SCANS CRITERIA

1) **Foundation skills are defined in three areas: basic skills, thinking skills, and personal qualities.**

   a) **Basic Skills**: A worker must read, write, perform arithmetic and mathematical operations, listen, and speak effectively. These skills include:
      i) Reading: locate, understand, and interpret written information in prose and in documents such as manuals, graphs, and schedules.
      ii) Writing: communicate thoughts, ideas, information, and messages in writing, and create documents such as letters, directions, manuals, reports, graphs, and flow charts.
      iii) Arithmetic and Mathematical Operations: perform basic computations and approach practical problems by choosing appropriately from a variety of mathematical techniques.
      iv) Listening: receive, attend to, interpret, and respond to verbal messages and other cues.
      v) Speaking: Organize ideas and communicate orally.

   b) **Thinking Skills**: A worker must think creatively, make decisions, solve problems, visualize, know how to learn, and reason effectively. These skills include:
      i) Creative Thinking: generate new ideas.
      ii) Decision Making: specify goals and constraints, generate alternatives, consider risks, and evaluate and choose the best alternative.
      iii) Problem Solving: recognize problems and devise and implement plan of action.
      iv) Visualize ("Seeing Things in the Mind's Eye"): organize and process symbols, pictures, graphs, objects, and other information.
      v) Knowing How to Learn: use efficient learning techniques to acquire and apply new knowledge and skills.
      vi) Reasoning: discover a rule or principle underlying the relationship between two or more objects and apply it when solving a problem.

   c) **Personal Qualities**: A worker must display responsibility, self-esteem, sociability, self-management, integrity, and honesty.
      i) Responsibility: exert a high level of effort and persevere toward goal attainment.
      ii) Self-Esteem: believe in one's own self-worth and maintain a positive view of oneself.
      iii) Sociability: demonstrate understanding, friendliness, adaptability, empathy, and politeness in group settings.
      iv) Self-Management: assess oneself accurately, set personal goals, monitor progress, and exhibit self-control.
      v) Integrity and Honesty: choose ethical courses of action.

2) **Workplace competencies are defined in five areas: resources, interpersonal skills, information, systems, and technology.**

   a) **Resources**: A worker must identify, organize, plan, and allocate resources effectively.
      i) Time: select goal-relevant activities, rank them, allocate time, and prepare and follow schedules.
      ii) Money: Use or prepare budgets, make forecasts, keep records, and make adjustments to meet objectives.
      iii) Material and Facilities: Acquire, store, allocate, and use materials or space efficiently.
      Examples: construct a decision time line chart; use computer software to plan a project; prepare a budget; conduct a cost/benefits analysis; design an RFP process; write a job description; develop a staffing plan.

   b) **Interpersonal Skills**: A worker must work with others effectively.
      i) Participate as a Member of a Team: contribute to group effort.
      ii) Teach Others New Skills.
      iii) Serve Clients/Customers: work to satisfy customer's expectations.
      iv) Exercise Leadership: communicate ideas to justify position, persuade and convince others, responsibly challenge existing procedures and policies.
      v) Negotiate: work toward agreements involving exchange of resources, resolve divergent interests.
      vi) Work with Diversity: work well with men and women from diverse backgrounds.
      Examples: collaborate with a group member to solve a problem; work through a group conflict situation, train a colleague; deal with a dissatisfied customer in person; select and use appropriate leadership styles; use effective delegation techniques; conduct an individual or team negotiation; demonstrate an understanding of how people from different cultural backgrounds might behave in various situations.

   c) **Information**: A worker must be able to acquire and use information.
      i) Acquire and Evaluate Information.
      ii) Organize and Maintain Information.
      iii) Interpret and Communicate Information.
      iv) Use Computers to Process Information.
      Examples: research and collect data from various sources; develop a form to collect data; develop an inventory record-keeping system; produce a report using graphics; make an oral presentation using various media; use on-line computer data bases to research a report; use a computer spreadsheet to develop a budget.

   d) **Systems**: A worker must understand complex interrelationships.
      i) Understand Systems: know how social, organizational, and technological systems work and operate effectively with them.
      ii) Monitor and Correct Performance: distinguish trends, predict impacts on system operations, diagnose deviations in systems' performance and correct malfunctions.
      iii) Improve or Design Systems: suggest modifications to existing systems and develop new or alternative systems to improve performance.
      Examples: draw and interpret an organizational chart; develop a monitoring process; choose a situation needing improvement, break it down, examine it, propose an improvement, and implement it.

   e) **Technology**: A worker must be able to work with a variety of technologies.
      i) Select Technology: choose procedures, tools or equipment including computers and related technologies.
      ii) Apply Technologies to Task: understand overall intent and proper procedures for setup and operation of equipment.
      iii) Maintain and Troubleshoot Equipment: Prevent, identify, or solve problems with equipment, including computers and other technologies.
      Examples: read equipment descriptions and technical specifications to select equipment to meet needs; set up and assemble appropriate equipment from instructions; read and follow directions for troubleshooting and repairing equipment.