



Course Syllabus

ITSC 1405 – Introduction to PC Operating Systems

Catalog Description: A study of personal computer operating systems. Topics include installation and configuration, file management, memory and storage management, control of peripheral devices and use of utilities. Students will install, configure and maintain the operating system; perform basic file management operations; organize and allocate primary and secondary storage; access and control peripheral devices; and demonstrate the use of utilities. Lecture hours = 3, Lab hours = 3

Prerequisites: None

Semester Credit Hours: 4

Lecture Hours per Week: 3

Contact Hours per Semester: 96

State Approval Code: 1103010000

Course Subject/Catalog Number: ITSC 1405

Course Title: Introduction to PC Operating Systems

Course Rationale: Computer skills are imperative in today's workforce. Having a broad knowledge of computer operating systems increases one's marketability in the 21st century workforce.

Instructional Goals and Purposes: The purpose of this course is to:

1. Provide learners with a knowledge base regarding operating systems upon which they can build.
2. Expose learners to real-world examples and procedures that will prepare them to be skilled users of a computer operating system.

Learning Objectives:

1. Identify terms and concepts associated with operating systems.
2. Identify concepts required to install, configure, and maintain an operating system.
3. Identify concepts required to organize and allocate primary and secondary storage.
4. Identify concepts required to access and control peripheral devices.
5. Identify concepts required to run operating system utilities.
6. Identify concepts required to perform basic file management operations.

Specific Course Objectives (includes SCANS):

After studying the material presented in the text and online, the learner should be able to complete all behavioral/learning objectives listed below with a minimum competency of 70% on assignments and exams.

1. Given a definition, the learner will identify the matching operating term. (1a-i, 1b-v, 1c-i, 2c-i, 2c-ii, 2c-iv)

2. Given a definition, the learner will identify the matching operating concept. (1a-i, 1b-v, 1c-i, 2c-i, 2c-ii, 2c-iv)
3. The learner will identify procedures for installing Windows 9x, ME, NT 4.0 Workstation, 2000 Professional, and XP and bringing the operating system to a basic operational level. (1a-i, 1b-ii, 1c-i, 2c-i, 2c-ii)
4. Given configuration parameters, the learner will configure an operating system. (1a-i, 1b-ii, 1c-i, 2c-i, 2c-ii)
5. The learner will demonstrate the ability to use command-line functions and utilities to manage the operating system including proper syntax and switches. (1a-i, 1b-ii, 1c-i, 2c-i, 2c-ii)
6. The learner will identify basic concepts and procedures for creating, viewing and managing disks and directories. (1a-i, 1b-ii, 1c-i, 2c-i, 2c-ii)
7. The learner will identify the major Operating System Utilities, their purpose, location, and available switches. (1a-i, 1b-ii, 1c-i, 2c-i, 2c-ii)
8. The learner will identify basic concepts and procedures for creating, viewing and managing and files. (1a-i, 1b-ii, 1c-i, 2c-i, 2c-ii, 2eii, 2eiii)

SCANS learned indirectly: 1a-i, 1a-iv, 1a-v, 1c-iii, 1c-iv, 1c-v, 2a-i, 2b-ii, 2b-vi, 2e-ii

Course Grade:

Grades will be determined for the following required work:

- There will be three (3) written examinations. Each written exam will be worth 150 points.
- There will be a comprehensive Final examination worth 250.
- There will be twelve (12) projects worth 25 points each.
- Letter Grades will be assigned using the following table:

Total Points Earned	Percentage	Letter Grade	Required Projects
900-1000	90-100	A	12
800-899	80-89	B	11
700-799	70-79	C	10
600-699	60-69	D	9
000-599	0-59	F	

A minimum of two (2) exams will be proctored. Information regarding the testing sites available as well as the dates and times of the exams is available on the course website. Others exams may not be proctored. Information necessary to determine which exams are proctored is available on the website. Learners enrolled in the course through the **Virtual College of Texas (VCT)** may complete the proctored exam at the testing center of the 'home' college.

Grades will be posted to My Grades in WebCT.

Texts, Materials, and Supplies:

- New Perspectives on Microsoft® Windows 7: Comprehensive, 1st Edition, Dan Oja & Lisa Ruffolo., Course Technology, 2007.
- **BUNDLE ISBN 1111488444 which includes:**
 - Textbook
 - WebTutor™ on WebCT™ Printed Access Card for Parsons/Oja/Carey/Carey/Ruffolo's New Perspectives on Microsoft® 7, Comprehensive, 1st Edition

Other:

- For current texts and materials, use the following link to access bookstore listings: <http://www.panola.edu/collegestore.htm>
- For testing services, use the following link: <http://www.panola.edu/instruction/dl/testing.htm>

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.