

Course Code: CIS 112**Course Title:** Computing Essentials**Department:** Business/Computer Science and Technologies**Effective Date:** Summer 2026**PCS Code:** 1.2 - Occupational/Technical Instruction**CIP Code:** 11.0201**Repeatability:** 0

Credit Hours

Catalog Notation: 3-2-4**Credit Hour Distribution:**

Lecture: 3

Lab: 2

Clinical: 0

Total: 4

General Course Information

Catalog Description

Introduction to computer operation and software use; terminology, hardware and software fundamentals, word processing, electronic spreadsheets, databases, the Internet, microcomputer operating systems file management, networking fundamentals, programming, and logic. Advising and career choices are addressed.

General Course Objectives

To introduce students to the fundamentals of computer operation, terminology, and software use.

Minimum Placement Levels**English**

None

Reading

None

Math

None

Prerequisites

None

Methods of Evaluation

Multiple choice, True/False, matching, fill in the blanks, and project-based quizzes at the end of each chapter.

Instructional Materials and Additional Supplies

Cirrus for Marquee Office 365/2019: Understanding Technology, and Windows 10, 6-month. Author: Rutkosky. ISBN 9780763891282

Course Content

General Learning Outcomes (GLOs)

- Technology: Students will demonstrate the ability to evaluate, select, and appropriately use current and emerging tools.

Course Segments and Student Learning Outcomes

Course Segment	Learning Outcomes	Lecture Hours	Lab Hours	Clinical Hours
Parkland Student Systems	1. Explain the process to log into the Parkland student interface and student email, find course information, submit assignments, and upload and download files.	2	1	0
Sizing Up Computer and Device Hardware	1. Identify types of input devices. 2. Explain how computers represent and process data with bits and bytes. 3. Describe the components of a system unit. 4. Explain how the CPU functions. 5. Differentiate between types of memory. 6. Differentiate between types of display technologies and understand digital audio. 7. Describe several printer technologies and their advantages/disadvantages.	4	4	0
Working with System Software and File Storage	1. Define software and identify types of system software. 2. Explain the purpose of the system BIOS. 3. Explain the main functions of an operating system. 4. Differentiate between types of operating systems. 5. Describe the major types of utility programs and their purposes. 6. Explain how software is used to create computer programs. 7. Explain how the file storage works. 8. Differentiate between types of storage devices and media. 9. Describe the uses and functions of large scale storage.	4	3	0
Network Fundamentals	1. Explain the characteristics of data transmission. 2. Distinguish between wired and wireless communication media. 3. Differentiate among network topologies. 4. Identify common types of networking hardware. 5. Describe the software that a network requires and the protocols used in network connections. 6. Describe how to set up and use wireless networks.	2	1	0
Plugging Into the Internet and All Its Resources	1. Describe the overall types of activities made possible by the internet.	4	2	0
Basic PC Maintenance	1. Identify basic practices for purchasing and setting up computing devices. 2. Explain how to clean, back up, secure, and configure computing devices. 3. Describe how to troubleshoot problems with computing devices. 4. Discuss how to avoid potential health and environmental problems caused by using computers.	5	4	0

Course Segment	Learning Outcomes	Lecture Hours	Lab Hours	Clinical Hours
Word Processing	1. Format characters, paragraphs, and documents (alignment, line spacing, styles, borders/shading, tabs, headers/footers, page numbers, and watermarks). 2. Proofread and edit documents (cut, copy, paste, format painter, spelling and grammar check, find/replace, and screenshots). 3. Create and edit clip art. 4. Cite references. 5. Use templates. 6. Create and edit tables.	4	4	0
Spreadsheets	1. Prepare and format worksheets/workbooks. 2. Create formulas and use functions (sum, average, max, min, count, PMT, and IF). 3. Create and edit a chart.	4	4	0
Presentation Software	1. Create and save a presentation. 2. Apply slide layout theme. 3. Insert clipart, charts, tables, and hyperlinks; embed videos. 4. Use transitions and animations and run slide shows.	4	2	0
Databases	1. Apply an understanding of field/table/database concepts: primary keys, foreign keys, relational databases, data redundancy, data types, reports, simple queries, and simple forms. 2. Distinguish an appropriate use of DBMs.	3	2	0
Emerging Technologies	1. Identify emerging technologies. 2. Create a presentation about a chosen technology.	5	1	0
Advising and Career Choices	1. Use Parkland College Catalog as a tool for college services and academic planning. 2. Explore career options through research and hands-on learning projects. 3. Create a personal career plan. 4. Recognize lifelong learning skills. 5. Schedule and meet with advisors to plan an academic path to graduation.	4	2	0

Total Contact Hours

Lecture Hours	Lab Hours	Clinical Hours
45	30	0