

2010/2011 Spreadsheet Software Applications

PTI306 - 18 weeks

DoDEA Course Description and Competencies

About the Program

Spreadsheet Software Applications prepares students for careers in business. The course sequence focuses on advanced duties and tasks performed by professionals using spreadsheet software as well as pre-employment and employment skills.

Major Concepts/Content: Spreadsheet Software Applications provides students with the opportunity to develop professional level skills in spreadsheet software. Curriculum will include instruction in creating data and content, analyzing data, formatting data and content, collaborating and managing workbooks.

Major Instructional Activities: Instruction will be provided in a lab utilizing individualized instruction and electronic learning services. Students successfully completing this course will be **eligible** to take at least one of the user or specialist exams for spreadsheet software certification.

Major Evaluative Techniques: Assessment will be accomplished by checking student work in progress to ensure that each student adheres to the timelines throughout the course and that the assignments are successfully completed. In addition, objective and problem-solving tests, projects and other means deemed appropriate by the facilitator will be used.

Essential Software: The focus of this course will be the use of Microsoft Excel to produce a variety of spreadsheets, charts and graphs.

The table below is a competency list for the Spreadsheet Software Applications course. The competencies are considered essential and are required of all students.

PTI306 18 weeks	Spreadsheet Software Applications TASKS/COMPETENCIES
Implementing DoDEA's CTE Course Requirements	
• 001	Demonstrate DoDEA's Workplace Readiness Skills in course activities.
• 002	Identify issues related to this field of study that affect the environment and impact local and global communities.
• 003	Identify Internet safety issues and procedures for complying with acceptable use standards.
Exploring Computer Concepts	
• 004	Explain the functions of computer system components.
• 005	Identify basic networking components.
• 006	Know and use appropriate technology vocabulary.
Exploring Ethical Issues Related to Computers and Computer Systems	
• 007	Identify security issues related to computer hardware, software, and data.
• 008	Identify concepts related to copyright, public domain, copy protection, and licensing agreements.
• 009	Identify concepts of security, integrity, courtesy, and confidentiality related to information and communications systems.
• 010	Investigate physical and logical security issues related to technology (e.g., viruses,

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	firewalls, spam, system backup, passwords).
• 011	Investigate computer crimes and privacy issues related to Internet use.
Managing Computer Systems	
• 012	Maintain workstation, equipment, software, and supplies.
• 013	Obtain assistance via electronic and hard copy references and documentation.
• 014	Troubleshoot hardware problems (e.g., power supply, network and peripheral connections, printer malfunctions).
• 015	Identify components of the user interface (e.g., menus, toolbars, icons).
• 016	Manage the desktop environment (e.g., creating shortcuts/aliases).
• 017	Manage files and directories (in networked and stand alone environments).
Developing Electronic Spreadsheets	
• 018	Differentiate among a variety of spreadsheet programs and their functions.
• 019	Effectively use and customize the application environment.
• 020	Create and edit a spreadsheet using various methods (e.g., templates, find/replace).
• 021	Enhance a spreadsheet by using a variety of formatting features and graphics.
• 022	Construct arithmetic formulas to solve typical business oriented problems.
• 023	Apply basic function commands (e.g., AVG, MIN, MAX, SUM, COUNT), and perform relative and absolute cell addressing and conditional formats.
• 024	Analyze and interpret data.
• 025	Create graphs and charts to visually represent data.
• 026	Integrate word processing and database information.
• 027	Use specialized formulas and functions (e.g., pmt, pv, if).
• 028	Analyze, interpret, and present data.
• 029	Sort and filter spreadsheet data.
• 030	Import and export linked and embedded data to and from a spreadsheet.
• 031	Design appropriate output options for spreadsheet delivery.
Communicating through Technology	
• 032	Incorporate information from the World Wide Web into a business project.
Preparing for Industry Certification	
• 033	Describe the process and requirements for obtaining industry certifications related to the Spreadsheet Applications course.
• 034	Identify testing skills/strategies for a certification examination.
Developing Employability Skills	
• 035	Create or update a portfolio containing representative samples of student work.