ED 2323 Introduction to Computer Technology
Section 020 --Fall 2009
CARR 287 11-12:15 PM

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Office Hours: Office hours 10:30 - 2:30 PM Monday and Wednesday
12:30 - 2:30 PM Tuesday and Thursday --Friday by Appointment

Course Overview: The course is a survey of computer technology systems supporting the instructional process with emphasis on technology foundations, acquisition of information, communications, problem solving, productivity, and evaluation tools. The course will introduce the student to technology concepts and terminology, and to a wide range of microcomputer applications including presentation software, desktop publishing, web design, multimedia, graphics and productivity software. Emphasis will be placed on the ability to demonstrate proficiency in the various microcomputer applications. **This course is designed to help students develop the proficiencies (related to technology) for all beginning teachers delineated in the Texas Technology Application Standards as found at http://www.sbec.state.tx.us/SBECOnline/standtest/standards/techapps_allbegtch.pdf.** A survey will be distributed that delineate student progress towards proficiency in meeting the Texas Technology Application Standards for all beginning teachers.

Course Goals & Objectives:: The goal of the course is to empower students in the use of technology relevant to K-12 teaching. The student will choose to use technology when appropriate. The student will be able to:

a. determine the relationship between hardware and software.
b. determine the difference between memory and storage.
c. determine how computers store and manipulate information.
d. develop a multimedia PowerPoint presentation.
e. produce a Web Page.

Objectives related to the Texas Technology Application Standards: (Note: This course will attempt to address portions of the standards listed, but not necessarily all aspects of the standard.)

Standard I. All teachers use technology-related terms, concepts, data input strategies, and ethical practices to make informed decisions about current technologies and their applications. The student will be able to:

a. demonstrate knowledge and appropriate use of operating systems and software applications, and communication and networking components. (1.1s)
b. compare, contrast, and appropriately use various input, processing, output, and primary/secondary storage devices. (1.2s)
c. select and use software for a defined task according to quality, appropriateness, effectiveness, and efficiency. (1.3s)

d. delineate and make necessary adjustments regarding compatibility issues, including but not limited to, digital file formats and cross-platform connectivity. (1.4s)
e. use technology terminology appropriate to the task. (1.5s)
f. perform basic software application functions including, but not limited to, opening an application program and creating, modifying, printing, and saving documents. (1.6s)
g. explain the differences between analog and digital technology systems and give examples of each. (1.7s)
h. use appropriate terminology related to the Internet including, but not limited to, electronic mail (e-mail), uniform resource locators (URLs), electronic bookmarks, local area networks (LANs), wide area networks (WANs), World Wide Web (WWW) pages, and Hypertext Markup Language (HTML). (1.8s)
i. compare and contrast LANs, WANs, the Internet, and intranets. (1.9s)
j. use a variety of input devices such as mouse/track pad, keyboard, microphone, digital camera, printer, scanner, disk/disc, modem, CD-ROM, and joystick. (1.10s)
k. develop strategies for capturing digital files while conserving memory and retaining image quality. (1.13s)
l. discuss copyright laws, violations, and issues including, but not limited to, computer hacking, computer piracy, intentional virus setting, and invasion of privacy. (1.14s)
m. demonstrate knowledge of the importance of technology to future careers, lifelong learning, and daily living for individuals of all ages. (1.18s)

Standard II. All teachers identify task requirements, apply search strategies, and use current technology to efficiently acquire, analyze, and evaluate a variety of electronic information. The student will be able to:

a. apply appropriate electronic search strategies in the acquisition of information, including keyword and Boolean search strategies. (2.2s)
b. identify, create, and use files in various appropriate formats such as text, bitmapped/vector graphics, image, video, and audio files. (2.3s)
c. access, manage, and manipulate information from secondary storage and remote devices. (2.4s)
d. use on-line help and other documentation. (2.5s)
e. determine and employ methods to evaluate electronic information for accuracy and validity. (2.6s)

Standard III. All teachers use task-appropriate tools to synthesize knowledge, create and modify solutions, and evaluate results in a way that supports the work of individuals and groups in problem-solving situations. The student will be able to:

a. plan, create and edit word processing documents using readable fonts, alignment, page setup, tabs, and ruler settings. (3.1s)
b. plan, create, and edit spreadsheet documents using all data types, formulas, and functions, and chart information. (3.2s)
c. plan, create, and edit databases by defining fields, entering data, and designing layouts appropriate for reporting. (3.3s)

d. demonstrate proficiency in the use of multimedia authoring programs by creating linear or nonlinear projects incorporating text, audio, video, and graphics. (3.4s)
e. plan, create, and edit a document using desktop publishing techniques including, but not limited to, the creation of multicolumn or multisection documents with a variety of text-wrapping frame formats. (3.5s)
f. differentiate between and demonstrate the appropriate use of a variety of graphic tools found in draw and paint applications. (3.6s)
g. integrate two or more productivity tools, including, but not limited to, tables, charts and graphs, graphics from paint or draw programs, and mail merge, into a document. (3.7s)

Standard IV. All teachers communicate information in different formats and for diverse audiences. The student will be able to:

a. use productivity tools, such as slide shows, posters, multimedia presentations, newsletters, brochures, or reports, to create effective document files for defined audiences. (4.1s)
b. create a variety of spreadsheet layouts containing descriptive labels and page settings. (4.3s)
c. Match the chart style to the data when creating and labeling charts. (4.5s)
d. Publish information in a variety of ways including, but not limited to, printed copy, monitor displays, Internet documents, and video. (4.6s)
e. use telecommunication tools, such as Internet browsers, video conferencing, and distance learning, for publishing information. (4.8s)

Standard V. All teachers know how to plan, organize, deliver, and evaluate instruction for all students that incorporates the effective use of current technology for teaching and integrating the Technology Applications Texas Essential Knowledge and Skills (TEKS) into the curriculum. The student will be able to:

a. identify and use resources to keep current with technology education. (5.6s)
b. conduct an ongoing self-assessment of strengths and weaknesses in the knowledge and skills of Technology Applications. (5.16s)

Methods of Instruction: Students will work independently through the textbook tutorials and exercises. Help sessions during scheduled class time will be provided for those needing assistance. Students are expected to complete the exercises and compare their results to answers provided on the Internet, resolving any differences. Students are also expected to practice the required skills from the textbook until proficiency is achieved. Direct instruction and demonstrations will be provided for Web page and animation construction.

Course Requirements: **Proficiency Tasks are timed.** Students **must** dedicate sufficient practice time on each list of proficiencies to develop mastery in order to finish and pass these tests. If the student does not make 100 percent on the first administration of each proficiency task, a retake will be provided if the student completes and turns in the practice exercises. The grade will then be determined from the retake. If a student is absent from the first administration of the proficiency task, the grade will be determined from the retake only. The student must complete the practice exercises to qualify to any retake. If a student is absent from the retake administration and did not make 100 percent

on the first administration, the student will receive a zero for the task. **No late work will be accepted.** Assignments and projects are due by 3:30 pm on the due date in the instructor's office. All assignments are to be the results of your own efforts. If you are absent for a school sponsored event, turn in assignments BEFORE you leave for the event.

General Course Evaluation Plan

Tests – 37.5%
Timed Proficiency Tasks – 48%
Assignments and Projects – 14.5%

Course Grade Assignment

A - 90% Outstanding, above minimum requirements
B - 80% Satisfactorily meeting minimum requirements
C - 70% Not meeting minimum requirements
D - 60% Well below minimum requirements
F - <60% Unacceptable work

Attendance/Participation

Attendance on specified required days (on the calendar) is mandatory for success in this course. Any absence on testing days (tests and proficiencies) must be documented IN WRITING from a credible source in order for make-up arrangements to be made. Arrangements for a makeup MUST be made within 2 weeks of an approved absence. Attendance is optional for the optional days noted on the calendar.

Persons Seeking Accommodations: Persons with disabilities which may warrant academic accommodations must contact the Student Life Office, Room 112 University Center, in order to request such accommodations prior to any accommodations being implemented. You are encouraged to make this request early in the semester so that appropriate arrangements can be made.

Honor Code: Angelo State University expects its students to maintain complete honesty and integrity in their academic pursuits. Students are responsible for understanding the Academic Honor Code, which is contained in both print and web versions of the Student Handbook.

Textbooks: Hadley, Icando basic computer skills for a digital information driver's license