Computer Information Systems I Course Competencies

Demonstrating Workplace Readiness Skills: Personal Qualities and People Skills
1. Demonstrate positive work ethic.
2. Demonstrate integrity.
3. Demonstrate teamwork skills.
4. Demonstrate self-representation skills.
5. Demonstrate diversity awareness.
6. Demonstrate conflict-resolution skills.
7. Demonstrate creativity and resourcefulness.

Demonstrating Workplace Readiness Skills: Professional Knowledge and Skills
8. Demonstrate effective speaking and listening skills.
9. Demonstrate effective reading and writing skills.
10. Demonstrate critical-thinking and problem-solving skills.
11. Demonstrate healthy behaviors and safety skills.
12. Demonstrate an understanding of workplace organizations, systems, and climates.
13. Demonstrate lifelong-learning skills.
14. Demonstrate job-acquisition and advancement skills.
15. Demonstrate time-, task-, and resource-management skills.
16. Demonstrate job-specific mathematics skills.
17. Demonstrate customer-service skills.

Demonstrating Workplace Readiness Skills: Technology Knowledge and Skills
18. Demonstrate proficiency with technologies common to a specific occupation.
19. Demonstrate information technology skills.
20. Demonstrate an understanding of Internet use and security issues.
21. Demonstrate telecommunications skills.

Examining All Aspects of an Industry
22. Examine aspects of planning within an industry/organization.
23. Examine aspects of management within an industry/organization.
24. Examine aspects of financial responsibility within an industry/organization.
25. Examine technical and production skills required of workers within an industry/organization.
26. Examine principles of technology that underlie an industry/organization.
27. Examine labor issues related to an industry/organization.
28. Examine community issues related to an industry/organization.
29. Examine health, safety, and environmental issues related to an industry/organization.

Addressing Elements of Student Life
30. Identify the purposes and goals of the student organization.
31. Explain the benefits and responsibilities of membership in the student organization as a student and in professional/civic organizations as an adult.
32. Demonstrate leadership skills through participation in student organization activities, such as meetings, programs, and projects.
33. Identify Internet safety issues and procedures for complying with acceptable use standards.

Exploring Computer Concepts
34. Explain the functions of computer system components.
35. Describe the information processing cycle.
36. Trace the development of computers and their impact on society.
37. Describe various computer input devices.
38. Describe wireless and mobile devices.
39. Describe various computer output devices.

40. Describe various auxiliary storage devices.
41. Identify basic networking components.

Exploring Ethical Issues Related to Computers and Computer Systems
42. Identify security issues related to computer hardware, software, and data.
43. Identify concepts related to copyright, public domain, copy protection, intellectual property, and licensing agreements.
44. Identify concepts of security, honesty, courtesy, and confidentiality related to information and e-mail systems and social networking (e.g., spam, viruses, e-mail etiquette).
45. Investigate physical and logical security issues related to technology (e.g., viruses, firewalls, spam, system backup, passwords).
46. Investigate Internet privacy issues and computer crimes, including identity theft.

Managing Computer Systems
47. Maintain workstation, equipment, software, and supplies.
48. Obtain assistance via electronic and hard-copy references and documentation.
49. Troubleshoot hardware problems (e.g., power supply, network and peripheral connections, printer malfunctions).
50. Identify components of the user interface (e.g., menus, toolbars, ribbons, icons).
51. Manage the desktop environment (e.g., creating shortcuts/aliases).
52. Manage files and folders/directories (in networked and stand-alone environments).
53. Backup/restore programs and data files.
54. Scan storage devices and equipment for viruses and spyware, and disinfect as needed.
55. Describe the steps to install and remove software.
56. Operate peripherals (e.g., flash drive, scanner, digital camera, fax machine, modem, CD/DVD burner, USB devices, LCD projector).
57. Identify safety precautions and devices (e.g., surge protectors, anti-static mats and pads, power plugs, and UPS systems) associated with computer use.

Producing Word Processing Documents
58. Compare features of a word processing program to determine the best tools to use for a given task.
59. Compose a variety of documents (e.g., letters, memoranda, reports, and tables).
60. Use word processing programs to perform desktop publishing functions (e.g., to create brochures, pamphlets, flyers, business cards, newsletters, programs).
61. Proofread and edit documents.
62. Enhance layout of documents by using a variety of formatting features.
63. Import graphics, using a variety of tools (e.g., from file, scanner, digital camera) and sources.
64. Analyze and use writing tools (e.g., speller, thesaurus, grammar check, readability test, comparison tools).
65. Utilize advanced word processing operations (e.g., merge, macros, template wizards).
66. Integrate databases, graphics, and spreadsheets into a word-processed document.
67. Save word-processed documents in a variety of formats (e.g., .pdf, .html).

Developing Electronic Spreadsheets
68. Compare features of various spreadsheet programs to determine the best software for an individual's or organization's needs.
69. Create and edit a spreadsheet.
70. Enhance a spreadsheet by using formatting features and graphics.
71. Construct arithmetic formulas to solve typical business-oriented problems.
72. Apply basic function commands (e.g., AVG, MIN, MAX, SUM).
73. Apply intermediate functions.
74. Analyze and interpret data.
75. Create graphs and charts (embedded or stand-alone) to represent data visually.
76. Integrate word processing and database information.

77. Format graph features (e.g., chart titles, labels, colors).

Developing and Managing Databases
78. Determine when it is appropriate to use a database and identify the benefits derived.
79. Compare features of various database programs to determine the best software for an individual's or organization's needs.
80. Plan, design, and create a database file.
81. Edit a database file.
82. Sort, index, and filter databases.
83. Create and run queries to access information.
84. Generate reports and forms.
85. Enhance reports using formatting features and graphics.
86. Integrate database information into word processing and spreadsheet applications by creating links.

Developing Multimedia Presentations
87. Identify the components of an effective presentation.
88. Describe various output options from presentation software (e.g., slide show, transparencies, slide handout, streaming, smartboards).
89. Research and organize information for a multimedia presentation.
90. Plan and build a multimedia presentation.
91. Proofread and edit a multimedia presentation.
92. Utilize options for creating, inserting, and editing objects (e.g., styles, shapes, fills, borders).
93. Enhance a multimedia presentation with specialized features (e.g., color, transitions, animations, timings, backgrounds, graphics, charts, graphs).
94. Integrate a variety of software applications into a multimedia presentation.
95. Deliver a multimedia presentation according to the principles of effective communication.
96. Critique the clarity and effectiveness of multimedia presentations.

Communicating through Technology
97. Identify various new and emerging devices, methods, and channels for communicating electronically.
98. Describe networking features and concepts.
99. Describe how the Internet works (e.g., network structures, devices and components, protocols, ISPs, online services).
100. Explore uses of the Internet in business applications.
101. Incorporate information from the World Wide Web into a business project.
102. Create a Web site using Web page design software.
103. Describe Internet services (e.g., e-mail, FTP, instant messaging, newsgroups, file storage).
104. Describe the uses of electronic commerce (e-commerce).
105. Explore trends in emerging communications technology and information processing.

Preparing for Industry Certification
106. Describe the process and requirements for obtaining industry certifications related to the Computer Information Systems course.
107. Identify testing skills/strategies for certification examination.
108. Demonstrate ability to successfully complete selected practice examinations (e.g., practice questions similar to those on certification exams).
109. Successfully complete an industry certification examination representative of skills learned in this course (e.g., MCAS, MOS, IC3, NOCTI).

Developing Employability Skills
110. Research career opportunities in Computer Information Systems.
111. Develop/update a résumé.
112. Compose a letter of application.

113.   Complete manual and electronic application forms.
114.   Create and maintain a portfolio.
115.   Participate in a mock interview.
116.   Compose an interview follow-up letter.
117.   Identify criteria for evaluating self-performance.
118.   Identify the steps to follow in resigning from a position.
119.   Identify potential employment barriers for nontraditional groups and ways to overcome the barriers.