This document contains 272 competencies, grouped into 36 units, for tech prep programs in the business/computer technology cluster. The competencies were developed through collaboration of Ohio business, industry, and labor representatives and secondary and associate degree educators. The competencies are rated either "essential" (necessary to ensure minimal levels of employability by entry employees; must be included in all new tech prep programs) or "recommended" (suggested addition to the State Competency Profile). Competency builders are included for each competency. A matrix relates the units to nine occupations within the business and computer technologies occupational cluster. The units cover the following groups of competencies: employability skills; professionalism; teamwork; professional practices; workplace safety; project management; problem analysis; general administrative functions; economic and business principles; basic computer concepts and applications; technical documentation; customer relations; general office functions; general accounting functions; specialized accounting functions; financial management functions; business law; legal office procedures; legal concepts; computer user support; data warehousing; software methodology; operating systems; application programming and design; network operations; basic mainframe concepts; computer hardware design and maintenance; small business management; supervision; quality assurance; telephony functions; training; statistics; banking basics; world cultures and basic principles of marketing. (KC)
Business/Computer Technologies

State Competency Profile

February 17-18, 1998
Columbus, Ohio
Business/Computer Technologies
State Competency Profile

This document is the result of collaboration between a number of individuals and organizations. The Ohio Department of Education and the Ohio Board of Regents provided financial and staff support for the development of the document. Betty Rider and Larry Casterline, Consultants, Tech Prep Curriculum Services, edited the initial document upon which the current document is based. Guidance in document development was provided by a futuring panel composed of Ohio Business, Industry and Labor Representatives. (See attached list of members of the February 4, 1998 Futuring Panel.)

The current document is a result of a review by a state panel of business/industry/labor representatives and secondary/associate degree educators on February 17-18, 1998. (The name and institutional affiliation of each panel member is provided on the following pages.) Jan Eley, Akron Area Tech Prep Consortium and Linda Fauber, Lakeland Tech Prep Consortium, served as meeting facilitators. They were assisted by Julie Daugherty, Eastern Ohio Valley Tech Prep Consortium, Larry Casterline, Tech Prep Curriculum Services Consultant, Jan Donley, Cincinnati State University, and Bev Smith, Miami Valley Tech Prep Consortium.

As you review the document, keep in mind the following:

**Essential Competencies**

Those competencies marked *Essential* in the State Competency Profile were determined by the statewide business/industry/labor panel to be necessary to ensure minimal levels of employability. Entry level employees should be able to perform this competency without supervision; therefore, students must be proficient in these competencies at least by the end of the Associate Degree.

*Essential* competencies must be included in all new Tech Prep programs. Tech Prep consortia with current programs in this area will be expected to phase-in essential competencies into their programs as well.
Wording of essential competencies may not be altered. The leveling may only be changed to deliver the competency earlier during the educational process. For example, the leveling of an essential competency in the State Competency Profile may be altered locally from a P or Proficiency leveling at the end of the Associate Degree to a P or Proficiency by the end of the 12th grade. The reverse is not permissible. For example, a competency leveled P or Proficient by the end of the 12th grade in the State Competency Profile cannot be changed locally to a P or Proficiency by the end of the Associate Degree. For additional information on leveling of competencies, refer to the Leveling Code Sheet in this document.

Competency builders are intended to help define each competency; therefore, the builders may be modified locally as long as that modification does not change or dilute the intent of the State Panel.

Issues which arise regarding delivery of the essential competencies once the program is implemented will be addressed by a State review panel of business/industry/labor and education representatives with possible revisions to the State Competency Profile at a later date. Any issues identified during the local verification meeting should be conveyed to Tech Prep Curriculum Services by the consortium coordinator.

Recommended Competencies
The competencies marked Recommended are suggested additions to the State Competency Profile. Each of these competencies should be reviewed during a local competency profile meeting; with a joint panel of business/industry/labor and education representatives deciding whether to include each competency in the local curriculum. The decision should be based upon a consideration of local business needs, as well as priorities and time constraints of the educational process. Wording and leveling of all recommended competencies and builders may be modified.

Additional Units/Competencies/Builders
Competencies and/or builders may be added to any unit in the State Competency Profile. Additional units may also be added.

Occupation Definitions
Skills may be added to the occupational definitions based on the modifications made during the competency review. Because the definition is based on the skills detailed in the competency profile, only minor modifications should be necessary.

For additional information about this State Tech Prep Competency Profile contact:

Tech Prep Curriculum Services
Center on Education and Training for Employment
The Ohio State University
1900 Kenny Road
Columbus, Ohio 43210-1090
(614) 292-8404
Business & Computer Technologies Futuring Panel
February 4, 1998
Columbus, Ohio

Jan Eley
Panel Facilitator

David Ryan, CPA
Director IT Solutions
Groner, Boyle, and Quillan
Columbus, Ohio

Bob Hsieh, Manager
International Assistance Center
Columbus Chamber of Commerce
Columbus, Ohio

Wendy Bonham, Legal Secretary
Lane, Alton, and Horst
Columbus, Ohio

Irma Ueber, Executive Secretary
Nationwide Insurance Enterprise
Columbus, Ohio

Steven L. Keller, CPA
Keller CPA
Columbus, Ohio

Brent Wolfinger, Director
International Training
Wendy’s International
Dublin, Ohio

Paul Griesse, President
Bry-Air Inc.
Sunbury, Ohio

Sue Warden, Legal Administrator
Crabbe, Jones, Potts, and Schmidt
Columbus, Ohio

Ego Onyejekwe, Director
Emerging Technology Services
University Technology Services
Columbus, Ohio

Linda Kraschinsky, Resource Manager
Property/Casulty Systems
Nationwide Insurance
Columbus, Ohio

Ted Saneholtz, President
Summit Financial Services
Columbus, Ohio

Christine Barton, Vice-President
Corporate Research Services
Pickerington, Ohio

Terry TerMeer, Special Projects Director
Secretary of State’s Office
Columbus, Ohio

Beth Mantle, Director
Non-legal Training and Recruiting
Attorney General’s Office
Columbus, Ohio
Business/Computer Technologies
State Competency Profile Meeting

Business, Industry, Labor Panel

Rosemary Bailey, Legal Administrator
Robbins, Kelly, Patterson, & Tucker, Cincinnati, Ohio

Christine Barton, Vice President
Corporate Research Services, Pickerington, Ohio

Alice Bernard, Office Management
Carrington South, Poland, Ohio

Vicki Boroski, Office Management
Jefferson Community College, Steubenville, Ohio

Kevin R. Brooker, Business/Computer Network
Health Recovery Services, Athens, Ohio

Chris Burton, Fiscal/Human Resources Officer, History
Ohio State University, Columbus, Ohio

Deborah Campana, Accounting/Treasurer/Financial
Jefferson County Educational Service Center, Steubenville, Ohio

Chip Chapman, Vice President/Owner
ADC Information Technologies, Columbus, Ohio

Melissa Flinn, Management Information Specialist
Jefferson Community College, Steubenville, Ohio

Brian D. Frost, Programming, Computer Support
Rittal Corporation, Springfield, Ohio

Jim Hartley, Director, Membership Service & Technology
Ohio Society of CPA, Dublin, Ohio

Patrick Jones
Computer People Consulting, Columbus, Ohio

Steven L. Keller, CPA
Keller CPA, Columbus, Ohio
Valerie Keough
OME-RESA, Steubenville, Ohio

Paul Kinghorn, Management Information
APEX Consulting, Inc., Jackson, Ohio

Pete Lipovsek
LDA Systems, Inc., Dublin, Ohio

Randy Luibart
Gates McDonald, Hilliard, Ohio

Gail S. Peters, University Technical Services
Ohio State University, Columbus, Ohio

Honey Puperi
Famous Supply, Wheeling, West Virginia

David Ransom, Microcomputer Applications
APEX Consulting, Inc., Jackson, Ohio

Gloria Roehrenbeck
Key Bank, Westerville, Ohio

Ted Saneholtz, President
Summit Financial Services, Columbus, Ohio

Rob Schultz, Networking, Computer Support
Speedway SuperAmerica LLC, Springfield, Ohio

Linda Stokes
Longaberger, Newark, Ohio

Marybeth Swartzmiller, Accounting
Jefferson County Educational Service Center, Steubenville, Ohio
Business/Computer Technologies
State Competency Profile Meeting

Educator Panel

Michael O. Beaver, Instructor, Microcomputer Applications
University of Rio Grande, Rio Grande, Ohio

John Bennett, Instructor, Math
Martins Ferry High School, Martins Ferry, Ohio

Steward Bonem, Instructor, Finance/Accounting
Cincinnati State Technical Community College, Cincinnati, Ohio

Tina Brooker, Instructor, Math
Tri-County JVS, Nelsonville, Ohio

Steve Chrisman
Springfield Clark JVS, Springfield, Ohio

Robert Coil, Business Technology Division
Cincinnati State, Cincinnati, Ohio

Vicki Crabtree, Instructor, Management Information
University of Rio Grande, Rio Grande, Ohio

Patti Crunelle, Instructor, Accounting
Martins Ferry High School, Martins Ferry, Ohio

Tony D'Aurora, Computer Programming
Steubenville High School, Steubenville, Ohio

Deana DeWorth, Instructor, Special Education
North Union High/Middle School, Richwood, Ohio

Larry Duck, Microcomputer Applications Specialist
Martins Ferry High School, Martins Ferry, Ohio

Colleen Dunn, Business/Retail Management
Jefferson Community College, Steubenville, Ohio

Cathy Evans, Instructor, Business Tech Prep
Tri-County JVS, Nelsonville, Ohio
Marge Flouhouse, Management Information Specialist
Steubenville High School, Steubenville, Ohio

Eric Geissler, Instructor, English/Communications
Marion Technical College, Marion, Ohio

Dennis George, Office Management Specialist
Steubenville High School, Steubenville, Ohio

Vicki Hammer, Instructor, Office Administration
University of Cincinnati-Raymond Walters College, Cincinnati, Ohio

Amy Hartman, Instructor, Communications
Tri-County JVS, Nelsonville, Ohio

Bruce Hotlosz, Computer Support Technician
Martins Ferry High School, Martins Ferry, Ohio

Bill Hope, Instructor, Communications
Jefferson Community College, Steubenville, Ohio

Jay Jacquet, Chair, Business Technologies
Central Ohio Technical College, Newark, Ohio

Jennifer Jordan, Instructor, Business Computer/Accounting
Hamilton High School, Hamilton, Ohio

Glenda Kunar
Youngstown State University, Youngstown, Ohio

Mike Laird, Microcomputer Application Specialist
North Union High School, Richwood, Ohio

Karen Lloyd, Instructor, Communications
Martins Ferry High School, Martins Ferry, Ohio

Paul Matuska, Instructor, Science
Martins Ferry High School, Martins Ferry, Ohio

Carolyn McCluskey, Office Management
Jefferson Community College, Steubenville, Ohio

Cheryl L. McKean, Instructor, Computer Technology
Choffin Career Center, Youngstown, Ohio
Sandy Mershon, Instructor, Office Management
University of Rio Grande, Rio Grande, Ohio

Frank Mioduszewski, Management Information Specialist
Jefferson Community College, Steubenville, Ohio

Edith Newell
Springfield Clark JVS, Springfield, Ohio

Roberta Parnicza, Computer Support
Jefferson Community College, Steubenville, Ohio

Rocco A. Petrozzi, Instructor, Accounting
Jefferson Community College, Steubenville, Ohio

Scott Potter, Instructor, Soft Sciences
Marion Technical College, Marion, Ohio

Terry A. Puperi, Instructor, Computer Programming
Belmont Technical College, St. Clairsville, Ohio

Tom Reardon, Instructor, Math
Fitch High School, Austintown, Ohio

Diane Richards, Instructor, Science
Jackson High School, Jackson, Ohio

Phyllis Rose, Instructor, Math
Buckeye Hills Career Center, Rio Grande, Ohio

Norman Russell, Instructor, Science
Jefferson Community College, Steubenville, Ohio

Heather Schaeffer, Instructor, Science
North Union High School, Richwood, Ohio

Melissa Stickle, Business & Industry Division
Central Ohio Technical College, Newark, Ohio

Barbara Stover
Marion Technical College, Marion, Ohio

Barbara Tietsort, Instructor, Legal/Medical Office Administration
University of Cincinnati-Raymond Walters College, Cincinnati, Ohio
Chuck Tydings, Department Chair & Science Instructor  
Springfield High School, New Middletown, Ohio

Haven Wallace, Electronics Computer Support  
Jefferson County JVS, Steubenville, Ohio

Jim Wallace, Communications  
Hocking College, The Plains, Ohio

Catherine D. Weber, Instructor, Math  
Jefferson Community College, Steubenville, Ohio

Marcia A. Welch, Instructor, Computers  
Hocking College, The Plains, Ohio

Brenda Whittaker, Financial Management Assistant  
Marion Technical College, Marion, Ohio

Brett Wilson, Instructor, Office Management  
Gallia Academy High School, Gallipolis, Ohio
LEVELING CODES

GRADE LEVEL
12 = by the end of grade 12
AD = by the end of the Associate Degree

DEPTH
I = Introduce (applies to at least three or 25% of the competency builders)
R = Reinforce or add depth (after introducing or proficiency)
P = Proficient (achievement of the competency without supervision)

ACADEMIC CODES
C = Communications related
M = Mathematics related
S = Science related

OTHER (Determined by Business, Industry and Labor Panel)
Essential Competency: Competency is needed to ensure minimal level of employability. Entry level employees should be able to perform this competency without supervision. Competencies required for certification, licensure, and/or national skills standards should be tagged as essential.
Recommended Competency: Competency should be included but is not essential for minimal level of employability.
Delete: Competency should not be included.

Example:
BIL: Essential  Recommended  Delete
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<th>AD</th>
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Competency: XXXXXXX

Example:
BIL: Essential  Recommended  Delete
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Competency: YYYYYYY
Competency Builders:
SSS
XXX M
Competencies in this document were compared against Occupational Competency Analysis Profiles (OCAP) and the National Standards for Business Education. Where the Tech Prep competencies were similar to, or comparable to the OCAPs or national standards, a notation was made beside the competency or builder. The following notation system was used:

#   OCAP
#A  OCAP advancing skill
*   National Standards for Business Education
Business/Computer Technologies

Job Definitions

Job definitions are not job descriptions. They are broader in focus and provide general skill training directions.

**Accounting Specialist**—An individual who provides technical administrative support to professional accountants and other financial management personnel. Technical skills should include, but not be limited to:

- basic financial knowledge
- general accounting principles
- basic financial report preparation
- basic financial record analysis
- basic tax compliance
- record keeping & posting transactions
- documentation & organizational skills
- accounting software skill
- information access and usage

**Financial Management Assistant**—An individual who assists in the financial planning, procurement, and investment of funds for an organization or individuals. Technical skills should include, but not be limited to:

- basic financial knowledge
- general accounting principles
- basic financial report preparation
- basic financial record analysis
- basic tax compliance
- basic financial planning
- documentation & organizational skills
- financial planning accounting software usage
- information access and usage

**Office Management Specialist**—An individual who supervises and manages the operations of a business office at management levels. Technical skills should include, but not be limited to:

- business communications and coordination
- office systems operations and procedures
- data preparation and evaluation
- office equipment operation and maintenance
- public relation skills
Programming & Applications Specialist—An individual who applies software theory and programming methods to the solution of business data problems. Technical skills should include, but not be limited to:

- programming skills and languages
- interface theory
- problem analysis
- input specification
- report generation
- documentation skills
- prototype design and testing
- customized software applications
- basic data warehousing
- information access and usage
- keyboarding skills
- operating systems
- basic data communication

Microcomputer Applications Specialist—An individual who understands software applications and helps the end users. Technical skills should include, but not be limited to:

- desktop productivity tools (e.g., Microsoft Office)
- hardware and software applications
- computer list maintenance
- help desk
- support and training
- keyboarding skills
- documentation skills
- information skills
- information access and usage
- operating systems
- application analysis/implementation
- diagnostic skills

Network Systems Technician—An individual who ensures computer hardware and software compatibility. Technical skills should include, but not be limited to:

- network, PC, & UNIX operating systems
- hardware and communication system recommendations
- hardware/operating system integration
- set-up operating systems integration
- set-up operational networks
- train network users
- troubleshoot networks and PCs
• records management
• computer skills
• basic data warehousing
• information access and usage
• labor law/personnel issues

Legal Administrative Assistant—An individual who assists with research and drafting of documents and correspondence; maintains files, time and billing records, and docket management; and performs related administrative functions under the supervision of an attorney(s). Technical skills should include, but not be limited to:

• research and analysis skills
• legal document preparation
• legal terminology
• court rules and procedures
• knowledge of various court systems
• docket management and scheduling
• knowledge of ABA code of ethics
• business law
• file organization
• computer skills
• time management
• information access and usage

Management Information Specialist—An individual who provides and manages data systems and related facilities for processing and retrieving business information. Technical skills should include, but not be limited to:

• business systems networking
• repositories
• database management
• data modeling
• integration theory
• management and control systems
• cost and accounting information
• computer operation and maintenance
• data storage and security
• supervision and training
• documentation skills
• data report writing skills
• basic data warehousing
• information access and usage
- multi-user network maintenance
- network security
- disaster recovery
- documentation skills
- information access and usage

**Information Support Specialist/Computer Support Technician**—An individual who researches, plans, and evaluates current and future software and office system equipment needs based on user requirements. Technical skills should include, but not be limited to:

- desktop operating systems
- problem analysis
- system configurations
- personal computer system maintenance
- initial hook-up of hardware
- software installation
- train software system users
- maintain software library
- project management
- documentation skills
- fundamental programming skills
- troubleshooting skills for network systems & PCs
- information access and usage
## Business/Computer Technologies Cluster
### Tech Prep Competency Profile Matrix

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<th>Large Type</th>
<th>UNIT</th>
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X = Required for the occupation  
S = Required/Recommended only for specialization within an occupation  
R = Recommended
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**X** = Required for the occupation
**R** = Recommended
**S** = Required/Recommended only for specialization within an occupation

**AS** = Accounting Specialist
**FM** = Financial Management Specialist
**OM** = Office Management Specialist
**LA** = Legal Administrative Assistant
**MI** = Management Information Specialist
**PS** = Programming & Applications Specialist
**MA** = Microcomputer Applications Specialist
**NT** = Network Systems Technician
**IS** = Information Support Specialist/Computer Support Technician
Unit: Employability Skills

BIL: Essential

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Competency: Develop a career plan # *

Competency Builders:
Identify current interests and aptitudes
Identify common barriers to employment
Describe strategies to overcome employment barriers
Locate resources for finding employment
Research job trends
Identify career options
Identify advantages and disadvantages of career options (in addition to monetary)
Identify job requirements
Investigate education/training opportunities (including speaking with someone in the trade)
Evaluate personal strengths and weaknesses
Refine a written educational plan which leads to a specific career field
Create career passport
BIL: Essential

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Competency: Prepare for employment # *

Competency Builders:
Identify employment sources
Identify advantages and disadvantages of self-employment
Identify present and future employment opportunities (by geographic location)
Research job opportunities
Compare salary ranges and benefit packages
Compile occupational profile
Identify rights and responsibilities of equal employment opportunity laws
Demonstrate ability to accurately complete a job application
Design resume and cover letter
Target resume
Secure references
Investigate generic and specific employment tests (e.g., civil service exam; drug screening)
Use follow-up techniques to enhance employment potential
Demonstrate legible written communication skills using correct grammar, spelling, punctuation, and concise wording
Use proper diction in interviews
Describe methods for handling illegal questions on job application forms and during interviews
Write letter of application
Research prospective employer and services performed
Explain critical importance of personal appearance, hygiene, and demeanor
Interpret job description
Demonstrate appropriate interview question and answer techniques
Demonstrate methods for handling difficult interview questions using simulated role playing exercises
Describe procedures for following up after an interview
Evaluate job offers
Give notice to employer of job change
Write letter of acceptance
Write letter of declination
Demonstrate good listening skills
Ask for the job tactfully
Participate in extracurricular activities (e.g., student government, community projects)
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**Competency:** Evaluate the importance of self-esteem as an employability skill # *

**Competency Builders:**
Identify factors that affect self-esteem
Compare effects of low self-esteem and high self-esteem
Identify strategies to promote positive self-esteem
BIL: Essential

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**Competency:** Demonstrate job retention skills # *

**Competency Builders:**
- Identify employer expectations regarding job performance, work habits, attitudes, personal appearance, and hygiene
- Exhibit appropriate work habits and attitude
- Demonstrate ability to set priorities
- Identify behaviors to establish successful working relationships
- Identify alternatives for dealing with harassment, bias, and discrimination based on race, color, national origin, sex, religion, handicap, or age
- Identify opportunities for advancement
- List reasons for termination
- List consequences of being absent frequently from job
- List consequences of frequently arriving late for work
- Demonstrate interpersonal relations skills (e.g., verbal and written)
- Demonstrate negotiation skills
- Demonstrate teamwork
- Follow chain-of-command
- Exhibit appropriate job dedication
Competency:  Demonstrate knowledge of work ethic # *

Competency Builders:
Define work ethic
Identify factors that influence work ethic
Differentiate law and ethics
Describe how personal values are reflected in work ethic
Describe how interactions in the workplace affect personal work ethic
Describe how life changes affect personal work ethic
BIL: Essential

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**Competency:** Exhibit appropriate work ethic # *

**Competency Builders:**
- Use time-management techniques
- Avoid personal activity during work hours
- Attend work as scheduled
- Adhere to company and/or governmental policies, procedures, rules, and regulations
- Exercise confidentiality
- Demonstrate appropriate human relations skills
- Adhere to rules of conduct
- Accept constructive criticism
- Offer constructive criticism
- Take pride in work
- Resolve conflict
- Manage stress
- Avoid sexual connotations and harassment
- Adjust to changes in the workplace
- Demonstrate punctuality
- Assume responsibility for personal decisions and actions
- Take responsibility for assignments
- Follow chain-of-command
BIL: Essential

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Competency: Apply decision-making techniques

Competency Builders:
- Identify decision to be made
- Identify possible alternatives and their consequences
- Make decisions based on facts, legality, ethics, goals, and culture
- Apply time factor(s)
- Present decision to be implemented
- Evaluate decision made
- Take responsibility for decision
- Identify ownership of decision to be made
### Competency:
Apply problem-solving techniques #

#### Competency Builders:
- Identify problem
- Select appropriate problem solving tools/techniques
- Identify root problem cause(s)
- Track root problem cause(s)
- Identify possible solutions and their consequences (e.g., long term, short term, crisis)
- Use resources to explore possible solutions to problem
- Contrast advantages and disadvantages of each solution
- Identify appropriate action
- Evaluate results
- Identify post-preventive action
BIL: Essential

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Competency: Exhibit characteristics for job advancement # *

Competency Builders:
- Display positive attitude
- Demonstrate knowledge of position
- Perform quality work
- Adapt to changing situations and technology
- Demonstrate capability/responsibility for different positions
- Identify characteristics of effective leaders
- Identify opportunities for leadership in workplace
- Demonstrate initiative to affect change in workplace
- Participate in continuing education/training program
- Respond appropriately to criticism from employer, supervisor, or other employees
- Exhibit awareness of corporate culture
- Prepare for job setbacks
- Exhibit continual growth based on performance evaluation
- Set realistic goals
Unit: Professionalism

BIL: Essential

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Competency: Project professional image # *

Competency Builders:
Define professionalism
Exhibit professional appearance
Exhibit professional manners
Project professional attitude
Identify individual's vital role in organization
Exhibit proper etiquette in professionally-related situations
**Competency:** Formulate individual and professional goals # A *

**Competency Builders:**
- Set flexible, realistic, and measurable goals
- Identify potential barriers to achieving goals
- Identify strategies for addressing barriers to goal achievement
- Breakdown long-term goals into short-term goals
- Prioritize goals
- Commit to goals
- Adjust goals
- Obtain support for goals
- Reward goal achievement

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Competency: Organize personal finances *

Competency Builders:
- Explain need for personal management records
- Balance checkbook
- Identify tax obligations
- Analyze how credit affects financial security
- Compare types and methods of investments
- Compare types and methods of borrowing
- Compare types and methods of insurance
- Compare types of retirement options/plans
- Identify discretionary vs. non-discretionary expenditures
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**Competency:** Support community well-being *

**Competency Builders:**
- Identify environmental, educational, and social issues
- Participate in social and/or community/industry activities
- Participate in industry activities and organization
**Competency:** Achieve organizational goals *

**Competency Builders:**
- Evaluate personal goals in relation to organizational goals
- Monitor progress by evaluating feedback
- List responsibilities in relation to organizational goals
- Accomplish assigned tasks
- Exercise responsibility in relation to organizational goals
- Set appropriate personal performance standards
- Communicate goals with supervisor and peers
- Demonstrate knowledge of products and services
- Promote organizational image and mission
BIL: Essential

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**Competency:** Demonstrate positive relations in the workplace

**Competency Builders:**
- Identify personality types
- Identify methods of working with various personalities
- Identify various management styles
- Support organization expectations
- Support organization decisions
- Accept constructive criticism
- Give constructive feedback
- Adapt to changes in workplace
- List factors to consider before resigning
- Write letter of resignation
BIL: Recommended

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Competency: Manage stressful situations

**Competency Builders:**
Accept stress as part of daily life
Identify personal and professional factors contributing to stress
Describe physical and emotional responses to stress
Evaluate positive and negative effects of stress on productivity
Identify strategies for reducing stress
Identify positive methods to channel stress
Implement strategies to manage stress
Create strategies for developing and maintaining support systems
Competency: Analyze effects of family on work and work on family

Competency Builders:
Identify how family values, goals, and priorities are reflected in work place
Identify responsibilities and rewards associated with paid and non-paid work
Identify responsibilities and rewards associated with families
Explain how family responsibilities can conflict with work
Explain how work can conflict with family responsibilities
Explain how work-related stress can affect families
Explain how family-related stress can affect work
Identify family support systems and resources
Identify work-related support systems and resources
Communicate with family regarding work
BIL: Essential

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Competency: Apply lifelong learning skills # *

Competency Builders:
Define lifelong learning
Identify factors that cause need for lifelong learning
Analyze effects of change
Identify reasons why goals change
Describe importance of flexibility and adaptability
Evaluate need for continuing education/training
**BIL:** Essential

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**Competency:** Manage professional development *

**Competency Builders:**
- Identify career opportunities
- Modify career plan
- Participate in continuing education/training opportunities
- Document continuing education/training
- Read profession-related manuals, technical journals, and periodicals
- Attend meetings, workshops, seminars, conferences, and demonstrations
- Participate in professional organizations
- Build personal/professional mentor relationship
- Build personal/professional support system
- Build professional network
- Strengthen communication skills
- Strengthen leadership skills
- Strengthen management skills
Unit: Teamwork

BIL: Essential

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Competency: Demonstrate knowledge of teamwork # *

Competency Builders:
Define self-direction
Define responsibility
Define accountability
Differentiate work groups and teams (e.g., internal, external)
Identify conditions essential to teamwork (e.g., problem solving)
Explain influence of culture (e.g., corporate, community) on teamwork
Identify appropriate situations for using teams
Define team structures (e.g., cross functional, quality improvement, task force, quality circles)
Identify team building concepts
Describe characteristics and dynamics of teams
Identify characteristics of effective team leaders and members
Identify responsibilities of team members
Identify methods of involving each member of a team
Explain how individuals from various backgrounds contribute to work-related situations (e.g., technical training, cultural heritage)
Explain the purpose of facilitators
Define consensus
Define reward/recognition system
Define mutual respect
Define equality
Define "group think"
Provide feedback
Receive feedback
Define communication styles
Define management styles
Define social style
BIL: Essential

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Competency: Demonstrate teamwork # *

Competency Builders:
Identify purpose of team and intended goal (include time frames)
Structure team around purpose
Define responsibilities of team members (e.g., talents, skills, abilities)
Contribute to efficiency and success of team
Work toward individual and team milestones
Analyze results of team project
Facilitate a team meeting
Assist team member(s) with problem
Monitor time frame
Stress continuous improvement
Recognize failure as part of learning
BIL: Essential

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Competency: Use teamwork to solve problems

Competency Builders:
- Identify appropriate situations for using teams
- Identify quality management processes/techniques
- Identify quality assurance processes/techniques
- Prepare presentation (e.g., business plan & procedure)
- Identify problem
- Use problem-solving process in a team setting (e.g., Brainstorm, Pareto, Fishbone)
- Identify resources
- Gather data
- Analyze data
- Describe solution options
- Implement solution options
- Review solution
- Review case studies
BIL: Essential

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Competency: Conduct team meetings *

**Competency Builders:**
Plan agenda
Set ground rules
Schedule meeting and location
Set time limitations
Invite appropriate personnel
Set next team meeting
Solicit outside speakers as needed
Select scribe
Select meeting leader
Facilitate ground rules
Select facilitator
Invite questions and comments and group participation
Focus team on agenda items
Assign appropriate action, budget, time frame and accountability to tasks
Monitor time
Overcome team impasse
Close meeting on time
Publish minutes in timely manner
Avoid placing individual agendas above the group's agenda
Unit: Professional Practices

BIL: Essential

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Competency: Explain professional responsibilities *

Competency Builders:
- Explain the need for professional and ethical standards
- Explain responsibility of the individual to apply ethical standards
- Identify responsibility to client(s) and employer(s)
- Explain consequences of unprofessional and/or unethical behavior
- Explain importance of conflict resolution in the workplace
BIL: Essential

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Competency: Identify legal and ethical behavior

Competency Builders:
Differentiate between legal and ethical behavior
Explain terms, principles, and characteristics of legal and ethical behavior (e.g., loyalty, discretion, solicitation, competitor, supplier)
Explain legal ramifications of breaching rules and regulations
Explain effects of unethical and/or unlawful behavior
Practice within scope of the profession
**BIL:** Essential

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**Competency:** Function as a self-managed employee

**Competency Builders:**
- Propose project (C)
- Organize tasks
- Manage time
- Meet deadlines
- Maintain business records (C)
- Make long-term and short-term plans
- Evaluate progress
- Report progress (C)
- Delegate project
- Acquire appropriate licenses/registrations
- Obtain permits and releases
BIL: Essential

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Competency: Follow intellectual property rights and copyright laws

Competency Builders:
Explain purpose of patent
Explain purpose of copyright
Explain purpose of licenses
Explain purpose of trademarks
Explain rights of the originator
Explain rights of the public
Define confidentiality
Define proprietary
Explain legal ownership of proprietary material
Describe stock image/text usage rights
Explain negotiation of contracts
Explain reproduction licensing and residual usage
Unit: Workplace Safety

BIL: Essential

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Competency: Maintain safe working environment

Competency Builders:
Describe what an MSDS sheet is
Comply with HMIS material safety data sheets (MSDS) and OSHA regulations
Comply with all MSDS regulations regarding hazardous materials
Maintain clean work area by removing waste, keeping alleyways clear, cleaning tools, and preventing spills
Minimize workplace causes of environmental burdening, pollutants, and poisoning
Describe pollution solution limits imposed by permits and regulations
Comply with regulatory guidelines in handling, labeling, and disposal of solutions (e.g., fountain chemicals, inks, wash-up solutions, drum grounding)
Identify visual equipment controls (e.g., monitors, read outs)
Identify auditory equipment controls
Comply with workplace safety rules and procedures
Comply with personal safety rules and procedures
Comply with applicable electrical, mechanical, hydraulic and pneumatic safety rules and procedures
Recycle appropriate materials
Use preventive maintenance checklists
Identify location of control panels, shut-off valves, and fire extinguishers
BIL: Recommended

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Competency: Demonstrate knowledge of ergonomics

Competency Builders:
Define ergonomics
Define risk factor
Define maximum permissible limit (MPL) and action limit (AL) for lifting
Define cumulative trauma disorder (CTD)
Identify susceptibility factors for CTD
Minimize extreme joint movement
Minimize use of excessive muscle/physical force
Minimize repetitive tasks
Minimize mechanical stresses (e.g., sharp edges, heat, cold, hard surfaces, weights, vibration)
Minimize awkward body positions
Explain use of rest pauses
Explain need for mats and footrest for standing jobs
Explain need for appropriate working heights of chairs, stools, workbenches, equipment
Explain need for adequate lighting
Explain use of anthropocentric design (e.g., centering one's view of everything around man)
Unit: Project Management

BIL: Essential

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Competency: Explain project management *

Competency Builders:
Identify project purpose/goal
Identify project objectives
Identify work breakdown structure (WBS)
Identify resource requirements
Identify project economics/funding
Identify risks
**BIL:** Recommended

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**Competency:** Plan projects *

**Competency Builders:**
- Apply responsibility assignment matrix (RAM)
- Apply Gantt or bar charts
- Apply network diagrams
- Apply critical path method (CPM)
- Apply project education and review techniques (PERT)
- Apply software programs
BIL: Essential

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Competency: Implement projects *

Competency Builders:
Monitor project
Control project
Modify project
BIL: Essential

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Competency: Evaluate projects *

Competency Builders:
Analyze performance
Perform critical review of project
Draw project management conclusions
**BIL:** Recommended

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**Competency:** Write project summary *

**Competency Builders:**
List project goals
Document project's key successes
Document project's key failures
Analyze costs vs. accomplishments
Unit: Problem Analysis

BIL: Essential

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Competency: Appraise situations #

Competency Builders:
Identify concerns
Set priorities
Identify resolution process
Plan resolution
**BIL:** Recommended

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**Competency:** Analyze problems #

**Competency Builders:**
Identify potential problems
Identify likely causes
Test for probable causes
Verify cause
Identify preventive actions
Identify contingent actions
Competency: Analyze decisions #

Competency Builders:
Identify objective(s)
Identify alternatives
Evaluate alternatives
Assess risks
Make final choice
Determine effectiveness of decision
Document results
Unit: General Administrative Functions

BIL: Essential

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Competency: Maintain work flow#

Competency Builders:
Organize work
Prioritize work
Apply time-management techniques
Complete assigned tasks in a timely manner
Coordinate with team members
BIL: Recommended

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Competency: Perform telecommunications operations #

Competency Builders:
- Display telephone etiquette
- Operate equipment
- Listen assertively
- Verify information
- Record messages
- Place calls
- Organize teleconferences
- Use voice mail/messaging systems
- Operate fax/modem machine
- Use e-mail systems
- Use Internet communications services
- Use videoconference facilities
BIL: Recommended

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Competency: Perform scheduling functions

Competency Builders:
Create calendar/schedule
Maintain and use appointment calendars with accurate addresses and phone numbers
Process requests for appointments
Verify appointments
**BIL:** Essential

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**Competency:** Manage records #

**Competency Builders:**
- Implement filing system
- Implement retention system
- Perform electronic filing operations
- Maintain inventory records
- Retrieve files
Unit: Economic and Business Principles

BIL: Essential

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Competency: Describe basic economic concepts *

Competency Builders:
Identify importance of economic resources
Explain concept of economic resources
Explain importance of economic resources
Explain concept of economic goods and services
Differentiate between economic goods and services
Differentiate between needs and wants
Explain concept of supply and demand
Explain concept of price
Explain how supply, demand, and price are related
Explain concept of private enterprise and business ownership
Explain concept of profit
Explain concept of risk
Explain concept of competition
Explain relationship among risk, competition, and profit
Describe global economic and world markets
Describe economic cycles (e.g., unemployment, recession, inflation, budget deficits)
Describe economic arena's effect on business (e.g., financial, competitor indicators, industry)
Competency: Describe economic systems # *

Competency Builders:
Describe free enterprise system
Describe relationship between government and business
Describe relationship between labor and management
Compare types of economic systems
**BIL:** Essential

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**Competency:** Understand income statement data *

**Competency Builders:**
- Identify revenue
- Identify overhead expenses
- Identify fixed expenses
- Identify direct labor
- Identify indirect labor
- Identify direct and indirect materials
- Identify general and administrative expenses
- Identify selling expenses
- Identify net income
Competency: Understand income statement data #*

Competency Builders:
Identify revenue
Identify overhead expenses
Identify fixed expenses
Identify direct labor
Identify indirect labor
Identify direct and indirect materials
Identify general and administrative expenses
Identify selling expenses
Identify net income
BIL: Recommended

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Competency: Explain equipment depreciation *

Competency Builders:
- Explain straight line
- Explain sum of year's digits
- Explain declining balance
- Explain IRS strategies
**BIL:** Essential

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**Competency:** Identify cost and profit influences *

**Competency Builders:**
- Explain importance of loss prevention
- Explain importance of maximizing quality
- Explain importance of maximizing productivity
- Differentiate between specialized training and cross training
- Explain labor, management, and government influences on cost/profit
- Explain cost/profit influences of retraining
- Define impact of seasonal business cycles
BIL: Recommended

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Competency: Describe economic indicators and trends # A *

Competency Builders:
- Define gross national product and gross domestic product
- Define national debt
- Define impact of interest rates
- Define impact of government spending
- Define impact of seasonal business cycles
- Define impact of inflation, growth, recession, and unemployment
- Define impact of national and world events
- Define impact of the growth of international trade
BIL: Recommended

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Competency: Explain international trade *

Competency Builders:
Describe nature and importance of international trade
Explain marketing in international trade
Explain balance of trade concepts
Describe impact of foreign investment
Describe the influence of national debt
Describe the effect of currency exchange rates on international trade
**BIL:** Essential

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**Competency:** Explain basic business concepts *

**Competency Builders:**
- Identify functions of business
- Explain role of management
- Explain role of labor
- Explain concept of service as a product
- Explain role of administration
- Explain role of operations
- Identify role of company objectives
- Identify importance of ethical business practices
- Identify types of ownership
- Identify components of a business plan
- Calculate break even and payback
- Explain role of depreciation in business decisions
- Explain role of capital gains
- Describe business reporting and information flow
- Map interface of departmental functions
- Describe business communication channels (e.g., formal, informal)
- Explain basic total quality management (TQM/ISO) principles
- Explain the effects of bankruptcy
**BIL:** Essential

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**Competency:** Explain legal concepts *

**Competency Builders:**
Define legal terminology
Explain business law concepts
Identify contracts and/or legal documents
Explain relationship of laws and regulations to company contracts, policies, and procedures
Identify laws relating to working conditions, wages and hours, civil rights, social security, disability, unemployment insurance, and exempt vs. nonexempt
**BIL:**  Essential

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**Competency:**  Explain role of marketing # *

**Competency Builders:**
- Identify aspects of sound business image
- Explain purposes of marketing
- Describe functions of marketing
- Describe effects of marketing
- Identify target markets
- Define sales potential
- Explain pricing strategies
- Differentiate among advertising campaigns
- Explain functions of advertising agencies
- Describe sales incentive programs
- Differentiate among types of marketing strategies (e.g., phone, mail, person)
Unit: Basic Computer Concepts and Applications

BIL: Essential

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Competency: Describe personal computer operations # *

Competency Builders:
- Explain how data is stored in main computer memory
- Explain how computer system executes program instruction
- Explain computer storage capacity
- Explain how data is represented
- Describe data storage devices
- Identify types of memory
- Describe back-up and archival disciplines
BIL: Essential

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Competency: Explain information processing cycle *

Competency Builders:
Describe computer languages and their use (e.g., machine, postscript, proprietary, graphic description)
Describe difference between data files and program files
Explain PC/Mac layout
Explain PC/Mac network layout
Explain mini/mainframe network layout
Differentiate among hardware, software, and firmware
Differentiate between open from proprietary architecture
Explain upload/download
BIL:  Recommended

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Competency:  Explain operating systems # *

Competency Builders:
Identify operating systems and their attributes (e.g., DOS, Unix, Macintosh, Windows)
Describe compatibility issues
Identify cross-platform file conversion tools
Describe how commands handle tasks in operating systems
Describe various input/output systems
Describe the purpose of operating system utilities
Differentiate between a compiler and an interpreter
**BIL:** Essential

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**Competency:** Demonstrate basic computer literacy # *

**Competency Builders:**  
Create directories/folders and sub-directories  
Format disks  
Manipulate files (e.g., copy, rename, delete)  
Keyboard proficiently by touch
BIL: Essential

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Competency: Operate computer hardware # *

Competency Builders:
Practice proper media handling techniques (e.g., magnetic fields, dust, liquids)
Identify hardware and its use
Use hardware (e.g., printers, modems, touch screen, digitizers, plotters, graphic tablets, scanners, film recorders, video, laser image setters)
Demonstrate basic care of hardware
Explain need for and application of security levels/procedures
Perform basic hardware troubleshooting
Explain hardware addressing techniques
Maintain usage and maintenance logs
BIL: Essential

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Competency: Explain operation of peripheral devices # *

Competency Builders:
Identify peripherals and operating requirements of each
Identify primary devices used for personal computer auxiliary storage
Describe how data is stored on diskettes and hard drives
List speed and storage capacities of computer auxiliary storage devices
Describe attributes of diskettes and hard disks regarding speed and storage capacity
List types of disk storage used with large computer systems
Define role of tape storage in relation to personal and large computers
Describe security issues related to peripheral devices
Explain purpose of input devices (e.g., keyboard, mouse, scanners, pens, bar code readers, credit/debit/smart cards, voice, video, gloves)
Describe operation of output devices (e.g., voice, speaker output devices, printers, plotters, printer sharing units, SCSI interface, video display)
Describe operation of multimedia (e.g., video, audiosound)
Describe operation of storage devices (e.g., tape, disk, CD-ROM)
BIL: Essential

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Competency: Operate peripheral devices # *

Competency Builders:
- Use appropriate reference materials
- Load media devices
- Start media devices
- Unload media devices
- Import, edit, and export video and audio
- Set up print devices
- Operate scanner devices
- Operate print devices
- Maintain print devices
- Monitor peripheral equipment operations
- Perform routine maintenance on peripheral devices
- List appropriate control procedures
- Transmit via modem
- Receive via modem
- Search a CD-ROM library
- Print information from a CD-ROM library
- Describe device driver
**BIL:** Essential

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**Competency:** Store media # *

**Competency Builders:**
- Identify need for data library
- Retrieve stored media (e.g., on-line, off-line, permanent, off-site)
- File stored media (e.g., on-line, off-line, permanent, off-site)
- Initialize media
- Catalog media
**BIL:** Essential

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**Competency:** Explain software applications # *

**Competency Builders:**
Define software types and functions
Describe need for application software
Describe different types of software applications
Explain advantages and disadvantages of integrated and dedicated software
Differentiate features between like applications
List software sources
Explain software copyright laws
Explain data compression techniques
Explain use of passwords/security
Explain desktop productivity tools
Competency: Use word processing packages # *

Competency Builders:
Define word processing terminology
Explain functions of word processing software
Explain word processing applications
Use appropriate reference materials including on-line help
Keyboard efficiently by touch
Use mouse
Initialize diskette
Prepare backup file
Maintain backup file
Update spelling dictionary and spell check
Perform document functions (e.g., locate, rename, delete, save, retrieve, copy)
Perform formatting functions (e.g., center, underline, bold, cut and paste)
Perform redlining functions
Use edit features
Use sort features
Add page numbers to document
Add headers and footers
Print files, pages, screens and blocks of text
Verify accuracy of output
Create a document
Save a document to disk
Retrieve a document from disk
Edit an existing document
Describe word-wrap
Print a document
Store boilerplate material (e.g., templates, stationary files)
Compose documents at keyboard
Tabulate multiple columns
Prepare new documents from existing ones
Merge selected copy with new information
Prepare various types of table options
Format text
Integrate database, spreadsheet and graphic files
Convert documents from one system/version to another
Demonstrate use of computer thesaurus
Use multimedia techniques/resources
Perform merge functions
BIL: Essential

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Competency: Use spreadsheet packages # *

Competency Builders:
- Define spreadsheet
- Explain basic spreadsheet terminology
- Define components of spreadsheets
- Describe implementation of spreadsheet operations in business scope
- Use mouse
- Use spell check
- Execute an electronic spreadsheet
- Enter data, formulas, and functions
- Differentiate between labels and numbers
- Speculate using "what if..." questions
- Sequence keystrokes in the creation of a macro
- Create database within spreadsheet
- Perform data query functions
- Move around in spreadsheet and correct errors
- Create links to other files
- Format spreadsheet
- Create graphs
- Print graphs
- Save previously saved files
- Load previously saved files
- Replicate cells using copy commands
- Use electronic spreadsheet to complete business application
- Use spreadsheet to plan financial strategies
- Prepare spreadsheet
- Use multimedia techniques/resources
BIL: Essential

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**Competency:** Use databases # *

**Competency Builders:**
- Define database
- Explain terms used in database systems
- Describe common functions of database systems
- Use database to design, create, input, edit, and display fields and records
- Analyze structure of database files
- Perform calculations with a database file
- Alter structure of database file
- Sort records based on multiple fields
- Identify advanced database technology
- Use appropriate reference materials
- Utilize relational database
- Enter elements into database
- Proofread database
- Explain database
- Design report formats
- Import/export data from alternate file formats
- Transfer data to and from remote database
- Link data to and from remote database
- Print reports using data from multiple databases
- Use database files with other application software
- Verify accuracy of output (e.g., edit reports)
- Query databases
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Competency: Use graphic user interface (GUI) techniques # *

Competency Builders:
Describe a variety of computer interfaces
Explain multi-tasking environment
Use general navigational skills
Use cut and paste functions
**BIL:** Essential

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**Competency:** Manage software packages

**Competency Builders:**
- Install software packages
- Upgrade software packages
- Document installation and upgrade of software packages
- Apply security levels/procedures to sensitive data
- Manage software preferences
- Manage software conflicts
- Identify system requirements
- Identify licensing issues
**BIL:** Essential

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**Competency:** Maintain computer security requirements # *

**Competency Builders:**
- Apply business ethics
- Follow security rules, regulations, and codes
- Implement security procedures
- Document security procedures
- Perform security audits
BIL: Essential

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Competency: Maintain personal computer systems # *

Competency Builders:
Monitor system status and performance
Run diagnostics, utilities, and anti-virus
Report computer system malfunction(s)
Report software malfunction(s)
Identify corrupted files and recovery procedures
Maintain security
Maintain hardware/software inventory
Perform backup procedure(s)
Perform preventive maintenance
Demonstrate file management techniques
Follow log-off and power-down procedure(s)
Follow equipment maintenance procedures
Follow quality control procedures
BILL: Essential

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Competency: Demonstrate basic knowledge of networks #*

Competency Builders:
- Explain communications standards
- Describe network structures
- Explain network types and protocols
- Explain network connectivity
- Explain the function of servers in a graphic network
- Describe various network operating systems
- Explain the difference between network software and individual use software
- Use a network to access, file, and store files
**BIL:** Essential

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**Competency:** Use a shared environment # *

**Competency Builders:**
- List purposes of a network environment
- Define electronic mail
- Identify advantages and disadvantages of electronic mail
- Describe impact of local and wide area networks on mail delivery
- Compose electronic messages
- Send electronic messages using appropriate format
- List categories of electronic mail service
- Transmit document using electronic mail system
- Use collaboration tools
- Monitor electronic mail
- Use networked environments
- Search database for properties of materials
- Conduct literature searches using a variety of on-line tools
- Explain access, security, transmission and retrieval
BIL: Essential

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Competency: Demonstrate knowledge of the Internet/Intranet *

Competency Builders:
Define the Internet/Intranet
Explain how the Internet/Intranet works
Explain Internet/Intranet capabilities and limitations
Explain how to connect to the Internet/Intranet via modem, ISDN, etc.
Install Internet/Intranet software
Navigate the World Wide Web
Identify services and tools offered on the Internet/Intranet
Explain bookmarks
Describe security issues
Describe ethical use of the Internet/Intranet
BIL: Essential

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Competency: Use the Internet/Intranet*

Competency Builders:
Define how the Internet can be used for research
Use services and tools offered on the Internet for research
Identify search engines
Use search engines
Evaluate Internet resources and accuracy of information
Access library catalogs on the Internet
Access commercial and government resources
Download files
Use other Internet/Intranet tools and services
Unit: Technical Documentation

BIL: Essential

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Competency: Demonstrate proficiency in technical documentation *

Competency Builders:
Determine audience
Identify parameters
Observe progress
Ask questions
Interpret specifications or drawings for target audience
Record process (e.g., flowchart, step-by-step)
Record data
Maintain test logs
Compile cumulative reference/record
Measure appropriate parameters
Verify accuracy and validity
Draft procedures
Maintain appropriate logs
Track expenses involved
BIL: Essential

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Competency: Demonstrate proficiency in technical reporting *

Competency Builders:
Determine audience
Use data books and cross reference/technical manuals
Identify type of report needed
Compile relevant data
Design applicable charts and graphs
Analyze data
Draw conclusions
Outline reports
Write reports
Present reports
Unit: Customer Relations

BIL: Essential

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Competency: Demonstrate positive relations with customers/clients

Competency Builders:
Identify importance of ("customers/clients") to business
Demonstrate prompt and courteous service
Assess customer inquiries
Resolve customer inquiries and complaints and/or refer customer/client to appropriate person ("promptly")
Identify methods of addressing dissatisfied customers/clients
Develop customer/client background file for reference
BIL: Essential

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Competency: Perform scheduling functions to meet customers' needs

Competency Builders:
Create calendar/schedule
Maintain appointment calendars
Process requests for appointments
Verify appointments
Notify customer of changes in schedule
Identify scheduling conflicts
Document results
Unit: General Office Functions

BIL: Essential

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Competency: Maintain work flow

Competency Builders:
Organize and prioritize work
Apply time-management techniques
Complete assigned tasks accurately in a timely manner
Coordinate with team members as needed
BIL: Essential

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Competency: Maintain office supplies

Competency Builders:
Prepare vendor and product comparison for purchasing supplies
Process appropriate paperwork (e.g., purchase order, purchase requisition)
Order supplies
Store and secure supplies
Distribute supplies
Develop inventory control system
Develop vendor list with phone number and order information
**BIL:** Essential

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**Competency:** Assist visitors

**Competency Builders:**
- Greet visitors
- Screen visitors
- Maintain visitor log
- Make appropriate introductions
- Portray professional image
- Identify emergency and facility exits, restrooms, etc.
BIL: Essential

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Competency: Perform scheduling functions

Competency Builders:
Create calendar/schedule
 Maintain appointment calendars with accurate addresses and telephone numbers
 Process requests for appointments
 Verify appointments
 Schedule necessary room and equipment
 Maintain duplicate appointment calendars
BIL: Essential

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Competency: Maintain filing system #

Competency Builders:
Justify keeping records
Describe current types of filing systems available (e.g., electronic options)
Identify types of records needed
Develop proper techniques/procedures for maintaining records
Use appropriate reference materials
Describe procedure for initial inventory of records
Organize and index files
File information/materials
Retrieve information/materials
Archive or destroy files
Secure files for legality and confidentiality
Determine and follow retention schedule
Create new files
Update files
BIL: Essential

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Competency: Coordinate meeting arrangements

Competency Builders:
Make arrangements with meeting planners
Develop agenda
Assemble relevant information
Notify participants
Confirm arrangements
Conduct follow-up activities (e.g., thank you, minutes, results, actions)
**BIL:** Recommended

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**Competency:** Generate minutes

**Competency Builders:**
- Record appropriate notes
- Gather materials
- Prepare minutes
- Distribute minutes
- File minutes
BIL: Essential

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Competency: Perform copying functions #

Competency Builders:
- Operate equipment
- Collate documents
- Identify copying methods
- Determine best copying method for task
- Identify characteristics of paper stock
- Keep appropriate records
- Determine appropriate copyright applications
- Perform basic maintenance procedures (e.g., changing paper, eliminating paper jams)
BIL: Essential

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Competency: Perform mail functions

Competency Builders:
- Identify various mail and delivery services
- Process and distribute incoming mail
- Operate equipment
- Process outgoing mail
BIL: Essential

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Competency: Coordinate travel plans #

Competency Builders:
Check travel resources
Identify traveler's preferences
Arrange necessary transportation and lodging
Obtain passports and/or visas
Confirm arrangements
Prepare itineraries
Distribute itineraries
Develop traveler's preference profile (e.g., file of frequent traveler's preferences)
Make arrangements for international travel
Unit: General Accounting Functions

BIL: Essential

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Competency: Apply arithmetical skills to accounting

Competency Builders:
Compute discounts for various terms (e.g., cash, trade)
Compute extension, sales tax, and totals of sales slips
Compute markups and markdowns
Calculate rates of trade and cash discounts
Calculate unit prices given quantity prices
Calculate costs of portions of units
Solve problems involving fractions, decimals, and percentages
Solve commission problems
Solve finance-charge problems
Solve annual percentage rate problems
BIL: Essential

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Competency: Apply accounting principles

Competency Builders:
Define accounting terminology
Define journals and ledgers
Identify basic accounting principles and applications
Identify computer accounting applications
Identify financial control procedures
Explain increases and decreases in accounts
Explain periodic reporting procedures
Prepare income statement
Prepare balance sheet columns
Prepare cash flow statement
Prepare change in equity statement
Interpret balance sheets
Interpret income statements
BIL: Essential

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Competency: Perform manual accounting functions

**Competency Builders:**
- Explain use of record keeping in relation to business and economic applications
- Analyze transactions
- Use "T" accounts to label increases, decreases, and balances
- Record transactions
- Monitor expense accounts
- Prepare budgets
- Process purchases
- Prepare comparative (actual vs. budget) income statement
BIL: Essential

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Competency: Perform automated accounting functions

Competency Builders:
Key data on numeric keyboard
Import or download data from computer records
Retrieve data from various media
BIL: Essential

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Competency: Perform payroll functions

Competency Builders:
- Use appropriate reference materials and online help
- Collect payroll data
- Process payroll
- Comply with company policies and procedures
- Comply with government and legal requirements
- Maintain records and forms
- Print and distribute payroll according to company policy
BIL: Essential

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Competency: Perform banking functions

Competency Builders:
Use appropriate reference materials
Prepare checks, deposit slips, and withdrawal slips
Maintain checkbook
Balance checkbook
Maintain petty cash
Explain automated banking transactions
Prepare banking records
Maintain banking records
Explain importance of maintaining banking records
Reconcile bank accounts
Prepare bank reconciliation
BIL: Recommended

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Competency: Process cost accounting information

Competency Builders:
Define cost accounting, direct materials, direct labor and overhead
Define cost allocation methods
Identify source documents
Compute direct materials by job or process
Compute overhead rates to apply to jobs or processes
Compute cost of goods produced
Journalize cost of goods produced and sold entries
Post cost of goods produced and sold entries
Compute cost of inventories
Prepare cost production reports
Prepare related records of job or process costs
BIL: Essential

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Competency: Process end-of-fiscal-period information

Competency Builders:
- Prepare worksheet
- Prepare trial balance
- Foot ledger accounts and compute balances
- Prove equality of debits and credits
- Locate errors
- Record adjustments
- Make appropriate extensions
- Journalize basic adjusting, closing, and reversing entries
- Post basic adjusting, closing, and reversing entries
- Prepare basic income statement
- Prepare basic balance sheet
- Prepare basic cash flow statement
- Prepare changes in equity statement
BIL: Essential

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Competency: Use microcomputers in accounting

Competency Builders:
Use integrated software package for simulation of accounting cycle
Set up chart of accounts for general ledger
Set up accounts payable and accounts receivable ledgers
Add accounts to general and subsidiary ledgers
Delete accounts to general and subsidiary ledgers
Input account balances
Enter journal transactions
Process journal transactions
Prepare trial balance
Verify data and correct errors
Generate reports
Unit: Specialized Accounting Functions

BIL: Essential

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Competency: Process purchase orders # *

Competency Builders:
Identify source documents
Verify purchase requisitions
Prepare purchase orders and related documents/records
Prepare receiving reports
Interpret purchase orders
BIL: Essential

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Competency: Process purchase invoices # *

Competency Builders:
Verify invoices against purchase orders and receiving reports
Check invoice calculations
Journalize purchase invoice entries
Post purchase invoice entries
Competency: Process purchase returns and allowances # *

Competency Builders:
Verify return of goods
Issue debit memoranda
Journalize purchase returns and allowance entries
Post purchase return and allowance entries
Adjust secondary records
BIL: Essential

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Competency: Process accounts payable # *

Competency Builders:
Identify source documents
Journalize payable entries
Post payable entries
Maintain subsidiary records
Reconcile subsidiary records to accounts payable
Prepare schedule of accounts payable
BIL: Essential

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Competency: Process purchase payables and payments # *

Competency Builders:
Verify invoices, vouchers, and/or interoffice memorandums for payment
Calculate purchase discounts
Prepare checks or electronic transfers
Mark source documents paid
Journalize payment entries
Post payment entries
Adjust subsidiary records
BIL: Essential

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Competency: Process notes, interest payable, and receivable *

Competency Builders:
Identify source documents
Identify appropriate entries for notes payable
Compute payment of notes payable and interest
Record payment of notes payable and interest
Apply present value concepts
Journalize note payables entries
Post note payables entries
BIL: Essential

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Competency: Process invoices and receivables # *

Competency Builders:
Define financial control procedures
Identify source documents
Verify sales invoices
Journalize sales invoice entries
Post sales invoice entries
Maintain subsidiary records
**BIL:** Essential

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**Competency:** Process sales returns and allowances # *

**Competency Builders:**
- Verify sales returns and allowances
- Prepare credit memorandums
- Journalize sales returns and allowance entries
- Post sales return and allowance entries
- Adjust subsidiary records
**BIL:** Essential

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**Competency:** Process uncollectible accounts # *

**Competency Builders:**
- Prepare schedule of aged accounts receivable
- Apply company policies and procedures to determine uncollectibles
- Prepare related documents
- Journalize uncollectible account entries
- Post uncollectible account entries
- Adjust subsidiary records
BIL: Essential

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Competency: Process collections # *

Competency Builders:
Determine due dates for various discount terms
Compare receipts with amount due
Verify checks, money orders, credit card receipts, and cash
Prepare cash proofs
Prepare deposits
Verify sales discounts
Prepare related documents
Journalize receipt entries
Post receipt entries
Adjust subsidiary records
BIL: Essential

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Competency: Process notes and interest receivables # *

Competency Builders:
Identify source documents
Identify appropriate entries for notes receivable
Compute and record principal and interest of notes receivable entries
Journalize notes receivable entries
Post notes receivable entries
BIL: Essential

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Competency: Perform checking account functions # *

Competency Builders:
Issue checks
Keep check records
Journalize entries
Post entries
Reconcile bank statement
File checks and deposit slips
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**Competency:** Maintain petty cash fund #

**Competency Builders:**
- Set up petty cash fund
- Pay petty cash vouchers
- Reconcile petty cash fund
- Replenish petty cash fund
- Journalize petty cash transaction entries
- Post petty cash transaction entries
**BIL:** Essential

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**Competency:** Process payroll # *

**Competency Builders:**
- Calculate regular and overtime hours
- Compute gross earnings
- Compute deductions
- Compute net pay
- Prepare voucher checks
- Prepare payroll checks
- Journalize payroll entries
- Post payroll and deduction entries
BIL: Essential

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Competency: Process employer payroll taxes *

Competency Builders:
- Apply payroll laws and regulations
- Prepare required tax deposits/payments
- Prepare payroll tax returns as required
- Prepare employee tax forms and reports as required
- Journalize employer's payroll tax entries
- Post employer's payroll tax entries
- Post recorded liability for payroll tax entries
- Post withholding and payroll taxes
- Describe magnetic media reports (e.g., W-2’s, bonds, Medicare)
BIL: Essential

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Competency: Process accruals and deferrals #A*

Competency Builders:
Define accruals and deferrals
Calculate amounts to be accrued and deferred
Journalize accrued and deferred liability and revenue entries
Post accrued and deferred liability and revenue entries
Journalize reversing entries as required
Post reversing entries
BIL: Essential

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Competency: Provide financial statements for internal use #A*

Competency Builders:
Prepare balance sheet
Prepare income statement
Prepare cash-flow analysis
Prepare break-even analysis
Prepare budgets
Prepare comparative financial statement
Prepare cost and revenue analysis
Interpret financial statements
Prepare cash-flow statement
Explain cash-flow analysis statements
BIL: Essential

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Competency: Update value of plant and equipment assets #A

Competency Builders:
Differentiate between revenue and capital expenditures
Define depreciation methods
Calculate depreciation
Journalize plant and equipment asset entries
Post plant and equipment asset entries
Journalize depreciation entries
Post depreciation entries
Record disposition of plant assets by selling, discarding, and trading
Post disposal of plant and equipment asset entries
BIL: Recommended

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Competency: Process cost accounting information #A*

Competency Builders:
- Compute direct materials by job or process
- Compute direct labor by job or process
- Compute overhead rates to apply to jobs or process (e.g., % of labor)
- Prepare cost production reports
- Prepare related records of job or process costs
- Define transfer pricing (e.g., interplant transfers)
- Compute inventory balance of inventory turns
- Prepare variance analysis (e.g., purchase price variance, materials price variance)
Unit: Financial Management Functions

BIL: Essential

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Competency: Apply accounting principles

Competency Builders:
- Define accounting terminology
- Define journals and ledgers
- Identify basic accounting principles and applications
- Identify computer accounting applications
- Identify financial control procedures
- Explain increases and decreases in accounts
- Explain periodic reporting procedures
- Prepare income statement
- Prepare balance sheet columns
- Prepare cash flow statement
- Prepare change in equity statement
- Interpret balance sheets
- Interpret income statements
Competency: Provide financial statements to make personal decisions

Competency Builders:
- Prepare balance sheet
- Prepare income statement
- Prepare cash-flow analysis
- Prepare break-even analysis
- Prepare budgets
- Prepare comparative financial statements
- Prepare cost and revenue analysis
- Interpret financial statements
- Prepare cash-flow analysis statements
- Interpret cash-flow analysis statements
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**Competency:** Analyze cultural demographics of major world regions

**Competency Builders:**
- Compare the major cultural groups of the United States and another country
- Compare the major cultural groups of two other countries
- Compare cultural groups within a country
- Identify major cultural groups of East Asia
- Identify major cultural groups of the Asian Sub-continent
- Identify major cultural groups of the Middle East
- Identify major cultural groups of Sub-Saharan Africa
- Identify cultural groups of Eastern Europe
- Identify cultural groups of Western Europe
- Identify major cultural groups of Latin America
BIL:  Essential

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Competency:  Analyze the impact of cultural environment on business

Competency Builders:
Identify social and cultural sectors that affect the conduct of business
Compare and contrast business practices in different cultures
Illustrate how culture influences business operations
Identify United States cultural attitudes and practices that could inhibit successful business operations in another country
Analyze necessary modifications to American business practices for success in the global marketplace
Describe the steps to receive business visitors from specific countries
Describe negotiation tactics and decision-making processes of various cultures
Identify types of business relationships in various cultures
Compare business entertainment among people in various parts of the world
**BIL:** Essential

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**Competency:** Describe customs that impact international business

**Competency Builders:**
- Identify cultural differences in food, dress, and social behaviors
- Compare the use of calendars in different societies
- Identify major holidays of various cultures and how they are celebrated
- Assess the importance of gift giving in various cultures
### Competency

**Demonstrate knowledge of estates, trusts, and wills**

**Competency Builders:**
- Explain information needed to administer an estate
- Identify legal procedures of Testamentary Letters and Letters of Administration through probate
- Demonstrate other legal procedures pertinent to estates
- Explain court documents commonly filed in connection with estate administration
- Identify tax returns for an estate
- Explain differences and types of wills and trusts
- Explain the differences between testate and intestate
Competency: Describe investment instruments

Competency Builders:
Define terminology related to investments (e.g., principal, maturity)
Describe certificates of deposit (CD’s)
Describe money market funds/accounts
Describe mutual funds
Describe treasury bills
Describe treasury notes and bonds
BIL: Essential

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Competency: Perform banking functions

Competency Builders:
Use appropriate reference materials
Prepare checks, deposit slips, and withdrawal slips
Maintain checkbook
Balance checkbook
Maintain petty cash
Explain automated banking transactions
Prepare banking records
Maintain banking records
Explain importance of maintaining banking records
Reconcile bank accounts
Prepare bank reconciliation
BIL: Essential

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Competency: Execute financial planning functions

Competency Builders:
Identify risk management principles
Apply investment principles
Review estate plans
Prepare cash flow/income tax analysis
Review employee benefits
Develop retirement plans
Unit: Business Law

BIL: Essential

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Competency: Illustrate legal concepts # *

Competency Builders:
Define basic legal terminology
Explain basic business law concepts
Describe contracts and/or legal documents
Explain basic relationship of laws and regulations to company contracts, policies, and procedures
Explain basic laws relating to working conditions, wages and hours, civil rights, social security, disability, and unemployment
Competency: Explain legal rights and responsibilities *

Competency Builders:
Describe different types of laws
Identify rules of law affecting minors
Describe basic differences between crimes and torts
Describe basic differences between criminal and civil law
Describe basic differences between state and federal court systems
Describe court system and how a case goes to trial
Explain the right to appeal
**BIL:** Recommended

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**Competency:** Demonstrate knowledge of labor law # *

**Competency Builders:**
- Describe rights and responsibilities of parties to an employment contract
- Identify state and federal laws dealing with employment
- Identify protections available to employees
- Describe the role of unions in business
BIL: Recommended

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Competency: Demonstrate knowledge of environmental law *

Competency Builders:
Identify environmental agencies and regulations
Use applicable reference materials
Explain reporting procedures for violations to appropriate agencies
BIL: Recommended

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Competency: Demonstrate knowledge of contract law # *

Competency Builders:
Analyze elements of a contract for validity
Explain different types of contracts (e.g., oral, written, implied)
Differentiate between contracts that are transferable and contracts that are non-transferable
Identify means of discharging contracts
Describe means of discharging contracts
Describe remedies available for a breach of contract
BIL: Essential

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Competency: Demonstrate knowledge of corporation law *

Competency Builders:
Explain the different types of business structures (e.g., sole proprietorship, general partnership, limited partnership, corporation including subchapter S)
Describe how to form a corporation
Describe the difference between equity and debt securities
Identify the principle/agent relationship and the basic terms of employment agreements
Identify special forms of corporations
Name corporation purpose and structure
BIL: Essential

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Competency: Demonstrate knowledge of consumer law *

**Competency Builders:**
- Describe types of negotiable instruments
- Describe laws related to buying on credit
- Explain negotiable instruments
- Identify factors to consider when borrowing money
- Describe laws that apply to the collection of negotiable instruments
- Identify regulatory agencies (e.g., FDIC, FTC)
- Explain retirement plans (e.g., IRAs, 401Ks)
**BIL:** Recommended

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**Competency:** Demonstrate knowledge of real estate law *

**Competency Builders:**
- Distinguish between real and personal property
- Describe legal documents relating to residential transactions
- Explain a residential real estate settlement procedure
- Describe title insurance and financing documents
- Identify various documents relating to the sale of commercial property
- Explain a commercial real estate settlement
BIL: Essential

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Competency: Demonstrate knowledge of tax law

Competency Builders:
Identify local, state and federal laws dealing with taxes
Use applicable reference materials
Explain penalties for noncompliance with local, state, and federal tax laws
Competency: Demonstrate knowledge of estates, trusts and wills *

Competency Builders:
Explain information needed to administer an estate
Identify legal procedure of testamentary letters and Letters of Administration through probate
Demonstrate other legal procedures pertinent to estates
Explain court documents commonly filed in connection with estate administration
Identify tax returns for an estate
Explain differences and types of wills and trusts
Explain the differences between testate and intestate
Unit: Legal Office Procedures

BIL: Essential

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Competency: Demonstrate proficiency in legal terminology *

Competency Builders:
- Identify correct legal terms
- Define and spell legal terms
- Differentiate among types of legal documents such as pleadings, contracts, and forms that include deeds, wills, mortgages, etc.
- Edit legal correspondence for accuracy of content
- Identify procedures for maintaining confidentiality of client information
- Display knowledge of the ABA code of ethics
BIL: Essential

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Competency: Demonstrate proficiency in production of legal documents

Competency Builders:
- Gather initial intake information from clients
- Explain the difference between various sources of legal authority such as statutes, cases, and administrative codes
- Prepare table of contents and table of authorities
- Process legal documents with minimum or no instruction (e.g., pleadings, contracts, agreements, wills, trusts, real estate)
BIL: Essential

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Competency: Maintain diary/docket system

Competency Builders:
File documents, using various legal filing system
Prepare records for new clients
Maintain forms file
Control calendar and scheduling
Docket management
Maintain case file for trial/hearing/conference or settlement
BIL: Essential

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Competency: Demonstrate proficiency in litigation

Competency Builders:
- Explain basic steps in the conduct of civil lawsuit and criminal proceedings from pleadings through appeal
- Explain discovery tools used to obtain relevant information
- Draft commonly used court documents
- Draft digests of deposition transcripts and other forms of recorded testimony
- Prepare pleadings in proper form
- Draft written discovery requests designed to elicit specific relevant information (e.g., notices, subpoenas)
- Explain basic legal principles of torts vs. crimes, contracts, real property, etc.
- Define statues of limitations for various areas of law
BIL:  Essential

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Competency:  Demonstrate proficiency in keyboarding/transcription skills

Competency Builders:
Demonstrate appropriate keyboarding skills (e.g., 70 wpm)
Demonstrate transcription skills
Unit: Legal Concepts

BIL: Essential

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Competency: Illustrate legal concepts # *

Competency Builders:
Define legal terminology
Explain business law concepts
Interpret contract and/or legal documents
Explain relationship of laws and regulations to company contracts, policies, and procedures
Explain laws relating to working conditions, wages and hours, civil rights, social security, disability, and unemployment
BIL: Essential

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Competency: Explain legal rights and responsibilities *

Competency Builders:
Describe different types of laws
Identify rules of law affecting minors
Describe differences between crimes and torts
Describe differences between criminal and civil law
Describe differences between state and federal court systems
Describe court system and how a case goes to trial
Explain the right to appeal
BIL: Essential

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Competency: Demonstrate knowledge of labor law *

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BIL: Essential

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Competency: Demonstrate knowledge of environmental law *

Competency Builders:
- Identify environmental agencies and regulations
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- Explain reporting procedures for violations to appropriate agencies
Competency: Demonstrate knowledge of contract law # *

Competency Builders:
Analyze elements of a contract for validity
Explain different types of contracts (e.g., oral, written, implied)
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Describe means of discharging contracts
Describe remedies available for a breach of contract
**BIL:** Essential

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**Competency:** Demonstrate knowledge of corporation law *

**Competency Builders:**
- Explain the different types of business structures (e.g., sole proprietorship, general partnership, limited partnership, corporation including subchapter S and limited liability corporation)
- Describe how to form a corporation
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- Identify special forms of corporations
- Name corporation purpose and structure
Competency: Demonstrate knowledge of consumer law *

Competency Builders:
Describe types of negotiable instruments
Describe laws related to buying on credit
Explain negotiable instruments
Identify factors to consider when borrowing money
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**Competency:** Demonstrate knowledge of real estate law *

**Competency Builders:**
- Distinguish between real and personal property
- Describe legal documents relating to residential transactions
- Explain a residential real estate settlement procedure
- Describe title insurance and financing documents
- Identify various documents relating to the sale of commercial property
- Explain a commercial real estate settlement
BIL: Essential

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Competency: Demonstrate knowledge of tax law

Competency Builders:
- Identify local, state and federal laws dealing with taxes
- Use applicable reference materials
- Explain penalties for noncompliance with local, state, and federal tax laws
BIL: Essential

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Competency: Demonstrate knowledge of estates, trusts and wills *

Competency Builders:
Explain information needed to administer an estate
Identify legal procedure of testamentary letters and Letters of Administration through probate
Demonstrate other legal procedures pertinent to estates
Explain court documents commonly filed in connection with estate administration
Identify tax returns for an estate
Explain differences and types of wills, trusts and POA's
Explain the differences between testate and intestate
Unit: Computer User Support

BIL: Essential

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Competency: Provide user support and training

Competency Builders:
Operate help desk
Utilize desktop productivity tools
Support computer users
Train computer users
Manage user accounts
Unit: Data Warehousing

BIL: Recommended

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Competency: Describe basic data warehousing concepts *

Competency Builders:
Differentiate between traditional databases and data warehouses
Describe importance of data warehouses and integration
Define components of data warehouses: subject-oriented, integrated, time-variant, non-volatile
Explain and define types of information: associations, sequences, classifications, clusters, and forecasting
Explain data conversion
Identify types of programs and applications for data warehousing
Explain the four types of tools for data mining: neural networks, decision trees, rule induction, and data visualization
Define public summary data
**Competency:** Explain ethical behaviors related to data warehousing *

**Competency Builders:**
- Describe appropriate security measures
- Define use of permanent detail data for legal or ethical use
- Explain the limitations of external data
- Explain ethical use of data
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**Competency:** Perform data entry and update *

**Competency Builders:**
- Identify and use appropriate index or indices
- Explain data repositories
- Apply appropriate security measures
- Differentiate between permanent detail data and regular data
- Exhibit skill in data programs
- Manage databases
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Competency: Perform data retrieval *

Competency Builders:
Locate appropriate data warehouses
Secure necessary indices
Design reasonable query
Explain nature of application
Apply appropriate security measures
Obtain necessary responses from data query
Verify accuracy of information
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Competency: Apply data *

Competency Builders:
Evaluate information gathered in query
Utilize public summary data
Design reporting medium
Construct report from data gathered
Unit: Software Methodology

BIL: Essential

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Competency: Explain fundamental software methodology

Competency Builders:
Identify basic concepts of algorithm development and programming
Complete project (given formal specifications) requiring incorporation of control structures
Explain principles of program design (e.g., structure, object oriented, event driven)
Describe different data types (e.g., numeric, alphanumeric)
Explain software design process (e.g., specification through implementation and testing)
Resolve issues of program implementation (e.g., debug, documentation, audit)
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Competency: Describe concepts used to design software systems *

Competency Builders:
Explain modular design and programming, including specifications and design tools
Explain module implementation (e.g., subroutine)
Explain module testing
Explain module documentation
Explain module maintenance
Explain data normalization
Explain computer-aided software engineering (CASE)
Explain object-oriented programming (OOP)
BIL: Essential

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Competency: Develop software requirements *

Competency Builders:
Use interviewing strategies to gather information
Describe different system design models (e.g., client server, centralized)
Identify system requirements
Develop informal specifications
Develop formal specifications
Develop documentation
Describe computing standards and methodologies
Describe security measures
**BIL:** Essential

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**Competency:** Use data modeling techniques

**Competency Builders:**
- Define data modeling
- Explain terms used in data models
- Use data to create models
- Analyze data models
- Perform data normalization
Unit: Operating Systems

BIL: Essential

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Competency: Describe operating systems # *

Competency Builders:
- Describe microcomputer operating systems
- Describe minicomputer operating systems
- Describe mainframe operating systems
- Describe network operating systems
- Describe how commands handle tasks in operating systems
- Describe the purpose of operating system utilities
- Differentiate between a compiler and an interpreter
- Describe the processing that occurs when an interpreter is used
- Describe the processing that occurs when a compiler is used
- Define interface theory
BIL: Essential

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Competency: Explain central processing unit (CPU) control # *

Competency Builders:
- Explain CPU processes
- Explain CPU concurrency
- Explain CPU scheduling
- Explain CPU multitasking
- Explain CPU multiprocessing
**Competency:** Explain memory management

**Competency Builders:**
- Describe memory types for PCs
- Describe memory types for mainframes
- Describe functions of virtual memory (e.g., paging, segmentation)
- Describe memory types for minicomputers
- Describe memory types for networks
- Describe functions of extended memory
- Describe functions of expanded memory
- Describe functions of cache memory
- Describe the relationship between memory and software applications
Competency: Explain auxiliary storage management

Competency Builders:
- Explain storage management software
- Identify auxiliary storage media
- Describe operational characteristics of storage media
- Describe storage capacities of storage media
- Describe retrieval methods of storage media
- Differentiate between files and directories
- Differentiate among storage devices (e.g., disk, tape, CD-ROM)
- Explain mirroring concepts and RAID concepts
BIL: Essential

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**Competency:** Explain security issues # *

**Competency Builders:**
- Define backup and recovery
- Explain disaster planning
- Define authentication (e.g., passwords, access level)
- Describe encryption techniques
- Describe viruses and protection
BIL: Essential

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Competency: Maintain security requirements # *

Competency Builders:
- Implement security procedures
- Apply business ethics
- Follow security rules, regulations, and codes
- Document security procedures
- Perform security checks
Competency: Explain disaster recovery and business resumption

Competency Builders:
Identify common backup devices
Explain criteria for selecting a type of backup system (tape)
Explain difference between disaster recovery and business resumption
Site examples of how to avoid common computer system disasters (e.g., UPS, RAID)
Contrast streaming and file-by-file backup systems
Explain process for archiving files
Explain steps of a disaster recovery plan and a business resumption plan
Competency: Operate system # *

Competency Builders:
Utilize desktop operating skills
Review automated scheduling software
Define job, batch, and job step
Describe data requirements
Use appropriate reference materials
Perform power-up and log-on procedures
Demonstrate basic programming skills
Use console device to interact with and respond to system messages
Secure supplies and resources
Follow processing procedures for each application/job
Run application/job
Describe scheduling priority
Describe transmittal form and transmittal log
Develop an audit trail
Handle materials and equipment in a responsible manner
BIL: Essential

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Competency: Maintain system # *

Competency Builders:
- Use appropriate reference materials
- Monitor system status and performance
- Run diagnostics
- Respond to system messages
- Document computer system malfunction(s)
- Document software malfunction(s)
- Fix recoverable problems
- Maintain security
- Maintain computer log
- Perform backup procedure(s)
- Perform preventative maintenance procedures
- Install software packages
- Restore system
- Follow log-off and power-down procedure(s)
- Handle materials and equipment in a responsible manner
- Review automated scheduling software
- Describe scheduling priority
BIL: Recommended

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**Competency:** Provide support and training

**Competency Builders:**
- Operate help desk
- Utilize desktop productivity tools
- Support computer users
- Train computer users
Unit: Application Programming and Design

BIL: Essential

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Competency: Demonstrate knowledge of computer applications # *

Competency Builders:
- Explain hardware component functions
- Describe major events in the development of computers
- Describe major types of software and their functions
- Describe batch processing
- Describe interactive processing
- Describe event driven and object oriented processing
BIL: Essential

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Competency: Develop computer applications *

Competency Builders:
Identify development team
Create specs with development team
Divide design specifications into logical blocks (e.g., flowchart, data flow diagram, system flows record and layout)
Identify constraints (e.g., political, financial, time, hardware, systems)
Identify programming language
Identify hardware platform
Identify input and output (I/O) requirements
Prepare logic using program-flow diagram
Define business problem to be solved by the application
Use steps outlined in program development cycle, prototyping, storyboarding, etc.
Maintain project scope
**BIL:** Essential

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**Competency:** Demonstrate knowledge of programming theory # *

**Competency Builders:**
- Explain the meaning of “reserved word”
- Describe arrays and tables
- Explain compilers
- Differentiate between system documentation and user documentation
- Describe what is meant by top-down design and structured programming
- Identify the steps in the program development cycle
- Design a decision table for a specified problem
- Identify the steps and procedures required to develop test data and test plan
- Explain the difference between recursion and iteration
- Describe what is meant by data validation
- Explain importance of user interface
Competency: Apply programming theory # *

Competency Builders:
Write source code per standards
Use spacing charts to plan program output
Code a modular program
Interpret a simple hierarchy chart
Interpret a simple pseudo code design
Create a flow-chart
Perform program sorts
Demonstrate use of loops
Demonstrate use of logical operators (e.g., AND, OR, NOT)
Code error-handling techniques
Demonstrate use of data files
Identify primary use of programming languages and their weaknesses
Follow commenting and internal documentation standards
BIL: Essential

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Competency: Utilize programming languages # *

Competency Builders:
- Perform character manipulation
- Declare (and initialize) variables
- Modify variables
- Use a function
- Use a library
- Use system calls
- Evaluate series of logical expressions
- Code separate addition, subtraction, multiplication, and division statements
- Declare a one-dimensional array
- Initialize an array
- Generate executable code
- Follow algorithm to produce desired output
- Use functions, including library, user-defined, and string functions
- Write arithmetic statements
- Write IO statements
- Write internal documentation
- Write sub-routines
- Use conditional statements
**BIL:** Essential

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**Competency:** Use operating system # *

**Competency Builders:**
- Apply appropriate development tools
- Apply operating system commands
- Apply operating system utilities
- Apply operating system standards
- Explain operating system constraints
**BIL:** Essential

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**Competency:** Test programs # *

**Competency Builders:**
- Perform debugging functions
- Create test data and plan that checks logic and error routines
- Execute program with test data
- Correct execution errors
- Perform unit and integration test
- Analyze test results
- Correct logic errors
- Perform usability tests
BIL: Essential

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Competency: Apply programming skills # *

**Competency Builders:**
- Develop program using file handling techniques
- Develop intuitive user interfaces
- Develop program using data validation techniques
- Develop interactive process
- Develop menu-driven program
- Develop database program
- Develop program that utilizes a recursive process
- Develop program using copy libraries
- Develop program using system calls
- Develop program using design tool
- Develop program using arrays, both one- and two-dimensional
BIL: Essential

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Competency: Develop documentation # *

Competency Builders:
- Explain the need for appropriate documentation
- Prepare program documentation
- Prepare user documentation
- Prepare data-flow diagrams
- Update design documentation
- Prepare documentation update method
Competency: Demonstrate knowledge of the systems design process #A*

Competency Builders:
Identify processing requirements
Describe role of user and management in the development of a computer system
Describe use of data flow diagrams, system flowcharts and display screen layout forms
Conduct interviews
Design system inputs and outputs and processes
Create design documentation
Present system design
### Competency: Evaluate system # *

**Competency Builders:**
- Identify evaluation criteria
- Develop test plan
- Conduct test
- Analyze test data
- Present results

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Competency: Implement system *

Competency Builders:
Identify implementation plan
Present implementation plan
Identify conversion method
Implement system
Train personnel
Identify on-going support requirements
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**Competency:** Conduct systems analysis #A *

**Competency Builders:**
- Identify scope of project
- Use company procedural manuals, references, documentation, and standards
- Conduct interviews
- Define business information requirements
- Determine hardware and software needs
- Interpret source data, charts, and graphs
- Review organizational structure
- Interpret existing operating documents and procedures for the system
- Observe existing procedures
- Document existing procedures
- Document possible alternative solutions
- Identify processing requirements
- Define variables
- Design system input/output (I/O) professes
- Determine programming language
- Create design documentation
- Analyze specifications
- Prepare logic using program-flow diagram
- Present findings and recommendations to users and management (e.g., work plan, project estimate)
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Competency: Conduct systems installations #A *

Competency Builders:
Review organizational structure
Interpret existing operating documents and procedures for the system
Design implementation plan
Present implementation plan to users and management
Perform implementation or changeover to new system
Perform post-implementation evaluation of new system
Correct deficiencies
Unit: Network Operations

BIL: Essential

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Competency: Explain communication standards # *

Competency Builders:
Identify the seven layers of the International Organization Standard’s Open System Interconnection (OSI)
Describe each OSI layer, including their interconnectivity
Identify software standards for subnet, presentation layers, and file servers
Competency: Describe network structures # *

Competency Builders:
- Differentiate topologies (e.g., hierarchical, ring, star)
- Differentiate architecture(s)
- Describe protocols (e.g., TCP/IP, IPX/SPX)
- Describe frame types (e.g., SNA<802.3, 802.5)
- Define different types of LANs and WANs
- Differentiate between network operating systems and data distribution systems
- Identify advantages and disadvantages of various LAN operating systems
- Define routers and switches
- Explain integration theory
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**Competency:**  Explain network transmission and media # *

**Competency Builders:**
- Explain signals
- Explain patterns
- Explain error detection and correction
- Explain speed of transmission
- Explain type and use of media
- Explain use of equipment
Competency: Explain network connectivity and inter-operability 

Competency Builders:
Differentiate between sync and async devices
Describe software used to connect networking devices
Identify type of interoperability (e.g., peer-to-peer, peer-to-host)
Identify problems of mixed vendor network implementation
Describe internet solutions (e.g., FTP, web servers, fire walls)
Describe cabling schemes and alternatives
Identify network topologies
Describe the function/purpose of network interface cards
Describe evaluation techniques of hardware and software
Describe levels at which networking can occur
Identify protocols used for remote interconnecting and when each should be used
List common pitfalls when networking computers
Describe gateways (e.g., mainframe, protocol)
Describe network connectivity devices (e.g., hobs, routers, switches)
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Competency: Describe network operating systems # *

Competency Builders:
Identify the purpose(s) of a network operating system
Explain installation procedure for network operating systems
Explain commands needed to use network operating systems
Define criteria used to evaluate network operating systems
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Competency: Describe potential networking problems with applications software # *

Competency Builders:
Describe potential hardware compatibility problems
Differentiate between license options (e.g., single-user, multi-user)
Describe necessary precautions included in programs used on networks (e.g., self metering, security keys, required configuration settings)
Describe network areas in which application problems could exist (e.g., memory allocation, file lock settings, resource availability)
BIL: Essential

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Competency: Explain network management #A *

Competency Builders:
List steps in mapping a network
Explain why files must be organized according to owners, users, and privileges
Describe common standards for setting up and naming files
List criteria used to determine if a file should be network accessible
Identify methods to increase performance
Define hierarchical directory
Define the role of a network manager
Explain methods used to segment and balance the network load
Explain methods used to determine how many servers should be used
State reasons for channel and cable bottlenecks and reasons and resolutions for the bottlenecks
BIL: Essential

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Competency: Explain network security # *

Competency Builders:
- Explain need for data protection
- Explain necessity for network security
- Identify levels of network security and reasons for their existence
- Describe the functions of account administration that support network security
BIL: Essential

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Competency: Explain media installation procedures # *

Competency Builders:
- Explain why documentation and labeling are necessary
- Identify methods of properly installing cable
- Identify problems associated with cable installation
- Describe types of cable, cable connectors, and grounding techniques
- Explain cable testing and tolerance levels
- Identify sources of interference and include methods to overcome each
BIL: Essential

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Competency: Apply network installation and operations # *

Competency Builders:
Assess user needs to determine which network operating systems to use
Demonstrate applications used on LANs
Describe how the network protocols work together
Operate the system in a multi-user environment
Demonstrate knowledge of various networks and compatibility
Differentiate among various topologies
Build synchronous transmission circuit using a modem
Connect PCs to form a network
Perform file to file copy in a PC network
Implement print queue in a PC network
Configure file server in a PC network
Connect PC to mini or mainframe
Link mixed vendors (e.g., PC to Mac)
Interconnect via backbone network
Build small ethernet or token ring network
Install cabling
Install network
BIL: Essential

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Competency: Administer network #A *

Competency Builders:
- Apply current LAN concepts and technology
- Attach computers and peripherals to LAN
- Change computer hardware
- Set up system configuration
- Install and use LAN manager software
- Install software packages
- Respond to system messages
- Troubleshoot system
- Run software applications
- Back up and restore systems
- Perform system analysis
- Use security procedures
- Perform preventative maintenance
- Select access control and security
- Outline resource management
- Analyze network operations
- Check physical and virtual connections
- Modify network
- Apply standards
- Describe licensing
- Plan disaster recovery
- Address protocols (e.g., ethernet, token ring, Arcnet)
- Monitor network activity/performance
- Document actions taken
- Define the role of the LAN administrator
- Perform software license audit
BIL: Essential

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Competency: Perform network maintenance and diagnostics # *

Competency Builders:
Execute network diagnostics program for software
Execute network diagnostics program for hardware
Apply standard and protocols
Document action(s) taken (maintenance log)
Define a preventive maintenance schedule
Competency: Explain disaster recovery and business resumption

Competency Builders:
Identify common backup devices
Explain criteria for selecting a type of backup system (tape)
Explain difference between disaster recovery and business resumption
Site examples of how to avoid common computer system disasters (e.g., UPS, RAID)
Contrast streaming and file-by-file backup systems
Explain process for archiving files
Explain steps of a disaster recovery plan and a business resumption plan
Unit: Basic Mainframe Concepts

BIL: Recommended

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Competency: Describe mainframe operations

Competency Builders:
Identify types of mainframe memory
Identify data storage techniques used by mainframe operation
Explain how data is stored in mainframe computer memory
Explain how a mainframe computer system executes program instruction
Explain mainframe storage capacity
**BIL:** Recommended

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**Competency:** Explain mainframe operating systems

**Competency Builders:**
- Identify operating systems and their attributes
- Describe how commands handle tasks in operating systems
- Describe the purpose of operating system utilities
- Explain the difference between a compiler and an interpreter
- Describe the processing that occurs when an interpreter is used
- Describe the processing that occurs when a compiler is used
- Describe process prioritization
BIL: Recommended

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Competency: Use mainframe database system

Competency Builders:
- Edit data
- Prepare reports using mainframe database
- Explain types of database systems
BIL: Recommended

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Competency: Operate mainframe computer systems

**Competency Builders:**
- Define job, batch, and job step
- Describe data requirements
- Use appropriate reference materials
- Perform log-on procedures
- Use console device to interact with and respond to system messages
- Follow processing procedures for each application/job
- Describe scheduling priority
- Describe transmittal form and transmittal log
- Develop an audit trail
- Handle materials and equipment in a responsible manner
- Use data interchange methods
- Describe the function of a job scheduler
- Describe the use of a job control language
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**Competency:** Maintain mainframe computer systems

**Competency Builders:**
- Solve recoverable problems
- Maintain security
- Maintain computer log
- Perform backup procedure(s)
- Follow log-off procedure(s)
- Explain quality control
**BIL:** Recommended

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**Competency:** Describe interface techniques

**Competency Builders:**
- Identify elements of mainframe user interface
- Describe client/server to mainframe connectivity
- Identify mainframe hardware components and their advantages and disadvantages
- Explain emulation software
- Illustrate various forms of mainframe menus
- Describe mainframe graphical user interface (GUI)
- Describe gateway functionality and operation
BIL: Recommended

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Competency: Explain purpose of mainframe database systems

Competency Builders:
- Define mainframe database
- Explain terms used in mainframe database systems
- Describe common function of mainframe database systems
- Describe methods to interface with mainframe databases (e.g., ODBC)
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**Competency:**  Store media

**Competency Builders:**
- Identify need for data library
- Describe filing and retrieval methods of stored media
- Initialize and catalog media
- Maintain company and/or government standards for media security
- Maintain archives of company records required by policy or law
Unit: Computer Hardware Design & Maintenance

BIL: Recommended

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Competency: Explain standards *

Competency Builders:
Identify OSI, IEEE, ISO, and CCITT standards
Identify standard setting bodies and their proclamations
Explain conformance and APIs
**BIL:** Essential

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**Competency:** Describe computational site environment *

**Competency Builders:**
- Identify environmental requirements, conditions, limitations
- Identify power requirements and power supplies
- Identify ergonomic issues
- Identify structural capacities
- Identify electrical wiring codes
BIL: Essential

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Competency: Differentiate among architecture and processor types *

Competency Builders:
Describe architecture and processors of microcomputers
Describe architecture and processors of minicomputers
Describe architecture and processors of mainframes
Describe internal box components

223
Competency: Analyze computer systems architecture *

Competency Builders:
Describe the principles and operation of addresses and interrupts
Describe the principles and operation of volatile and non-volatile memory
Describe the principles and operation of advanced memory techniques
Define individual system blocks
Interpret computer acronyms
Describe priorities and interrupts at systems
Identify direct memory access data handling system(s)
Define functions of advanced memory techniques (e.g., virtual, pipeline, cache)
Describe how commands handle tasks in operating systems
Describe various input/output systems
Describe various input/output devices
Describe the purpose of operating system utilities
Define analog and digital signals
BIL: Essential

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Competency: Describe operation of chips and boards *

Competency Builders:
- Describe chip configuration and structure
- Describe function of internal components
- Describe operation of mother boards
- Describe operation of co-pressor boards (e.g., math, graphics, FAX, modems, voice)
- Describe operation of controller cards
- Describe operation of network interface cards
- Describe operation of PCMCIA
BIL: Recommended

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Competency: Describe operation of connectivity devices *

Competency Builders:
Describe operation of baluns
Describe operation of multiplexers, MODEMS, CODECS, DSU
Describe operation of switches, gateways, bridges, routers, brouters, and repeaters
Describe operation of test equipment (e.g., protocol analyzers)
BIL: Essential

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Competency: Explain operation of microprocessor systems *

Competency Builders:
Describe essential components of microprocessor and their functions
Describe principles and operation of BUS concepts (e.g., VESA, EISA)
Describe principles and operation of types of memory circuits
Identify operating systems (e.g., DOS, OS/2, UNIX)
Describe microprocessor instructions sets
Describe principles and operation of microprocessor machine
Identify types of input and output devices and peripherals
Describe principles and operation of storage devices
Interface input and output ports to peripherals
Identify central processing unit building blocks and their uses
BIL: Essential

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Competency: Install computer system (e.g., monitor, keyboard, disk drive, and printer) # *

Competency Builders:
- Configure system
- Verify system
- Document system installation
- Backup system configuration
- Test all applications
**BIEL:** Essential

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**Competency:** Troubleshoot a microcomputer system *

**Competency Builders:**
- Identify priorities and interrupts at system level
- Demonstrate use of volatile and non-volatile memory
- Repair or replace volatile and non-volatile memory
- Operate diagnostic tools/software
- Identify operating system and related hardware issues
- Diagnose hardware failure vs. software failure
- Update flash memory
BIL: Essential

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Competency: Explain operation of peripheral equipment # *

Competency Builders:
- Define printer types and interface controllers
- Explain the operation of typical magnetic tape equipment and interface controllers
- Describe disk equipment and interface controllers
- Define environmental requirements for peripherals and media
BIL: Essential

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Competency: Troubleshoot peripheral equipment # *

Competency Builders:
- Troubleshoot disk equipment and interface controllers
- Troubleshoot and repair display terminals and interface controllers
- Troubleshoot printers and interface controllers, including laser printers
- Troubleshoot mouse
- Troubleshoot bar code scanner
- Troubleshoot CD-ROM
BIL: Essential

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Competency: Explain communication interfacing *

**Competency Builders:**
Identify basic EIA, IEEE, and CCITT standards
Differentiate sync and async devices
Define protocols
Define packet switching
Define multi-user systems
BIL: Essential

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Competency: Conduct disaster recovery

Competency Builders:
- Gather information on problem from user
- Conduct appropriate diagnostic tests
- Repair or replace malfunctioning hardware
- Re-install software as needed
- Recover data and/or files
- Restore system to normal operating standards
Unit: Small Business Management

BIL: Essential

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Competency: Explain entrepreneurship # *

Competency Builders:
Identify characteristics of entrepreneurs
Identify qualities and skills needed by business owners
Identify means of obtaining technical assistance
Identify advantages and disadvantages of owning a small business
Describe basic factors contributing to business success
Describe a franchise-dealer relationship
BIL: Essential

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Competency: Identify role of small business in the economy # *

Competency Builders:
Describe effects of supply, demand, profit, and competition
Explain relationship of small business in the national (USA) and global economy
BIL: Essential

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Competency: Analyze how legislation affects small business *

Competency Builders:
Identify legal issues faced by entrepreneurs
Describe the relationship between government agencies and business owners (e.g., OSHA, taxes, EPA, NFPA, city, state, federal, disaster relief)
Participate in the legislative process
BIL: Essential

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Competency: Evaluate factors affecting small business management *

Competency Builders:
Identify cooperative arrangements
Describe legal forms of retail businesses
Differentiate between various types of insurable business risks
Describe social and ethical problems that affect business
Analyze current trends in business
Competency: Develop a business plan*

**Competency Builders:**
- List sources of information for starting a business
- Classify local and state requirements for starting a business
- Identify means of obtaining technical and financial assistance
- Select best location and layout
- Analyze financing of business ownership
- Select best location and layout for a business
- Identify when and how to obtain appropriate legal assistance
- Identify start-up cost
- Develop budget
- Identify advantages and disadvantages of each type of business ownership
BIL:    Essential

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Competency:   Explain marketing mix *

Competency Builders:
Explain importance of having the right product
Explain importance of having the product at the right place
Explain importance of having the product with the right promotion
Explain importance of having the product at the right price
Explain importance of having the product at the right time
Explain right target market
BIL: Essential

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Competency: Promote products and/or services *

Competency Builders:
Explain promotion function
Describe relationship of sales to promotion
Identify factors used to select appropriate products
Prepare merchandise/buying plan
Maintain vendor information and select appropriate vendors
Identify selling price
Analyze merchandising trends
BIL: Essential

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Competency: Manage customer relations *

Competency Builders:
Identify advantages of customer services and accommodations
Explain importance of price, quality, and variety
Use acceptable techniques in handling customer complaints
Identify customer wants/needs
Explain how to develop a good customer relationship
**BIL:** Recommended

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**Competency:** Minimize internal theft *

**Competency Builders:**
- Establish internal theft policy
- Identify types of internal loss
- Identify potential loss situations
- Develop and/or follow company policies regarding internal theft
- Develop and/or follow security procedures
- Review internal controls
BIL: Essential

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Competency: Explain financial services *

Competency Builders:
Speculate on revenue sources and expenses
Explain importance of a sound credit rating
Outline long-range financial plans
Compare financial services available from financial institutions
Identify critical professionals used to assist decision making
BIL: Essential

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Competency: Prepare financial records and reports *

Competency Builders:
Classify revenue and expenses
Prepare financial statements
Classify revenue and expenses
BIL: Essential

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Competency: Manage finances *

**Competency Builders:**
- Project revenue sources and expenses
- Explain costs of obtaining financial assistance
- Explain importance of a sound credit rating
- Outline long-range financial plans
- Explain how sources of finance are used in business operations
- Compare financial services available from financial institutions
- Define time value of money concepts
BIL: Essential

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Competency: Explain management's role in operating a business *

Competency Builders:
- Explain importance of organizational skills
- Identify management functions
- Compare specific management techniques
- Explain importance of time management
- Identify benefits of membership in professional/trade associations
- Identify professional support system
BIL: Essential

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Competency: Practice safety precautions # *

Competency Builders:
- Maintain safe work area
- Operate equipment safely
- Practice safety to prevent accidents
- Follow procedures for reporting accidents
- Follow safety procedures for special populations
- Follow sanitation and hygiene procedures
- Report emergencies to proper authorities
- Identify emergency evacuation plans
- Operate fire and safety equipment
- Develop basic first aid skills
- Analyze economic impact of poor safety practices
- Review safety policies
BIL: Essential

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Competency: Comply with government regulations *

Competency Builders:
Identify taxes affecting small businesses
Develop and/or follow policies of compliance
Monitor changing regulations
Follow government regulations (e.g., OSHA, EPA)
BIL: Essential

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Competency: Perform management activities # *

Competency Builders:
Define management
Describe basic principles of good management
Identify effective leadership traits
Develop management objectives
Explain role of management in operating a business
Identify purposes of forecasting
Develop short-term and long-term action plans
Describe importance of performance measurements and record keeping
Explain importance of keeping informed of developments and trends affecting business
Explain importance of planning for emergencies
Prepare managerial reports about production, personnel, equipment, and operational costs
Develop short/long range plans including Equal Access/Equal Employment Opportunity (EEO) guidelines
Develop procedures for handling employee complaints
Evaluate job applicants
Comply with equal employment opportunity (EEO) guidelines
Unit: Supervision

BIL: Essential

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Competency: Manage human resources # *

Competency Builders:
Communicate performance expectations
Counsel employees (e.g., career objectives)
Maintain performance records
Adhere to company policies regarding discrimination and harassment
Address employees regarding disciplinary action(s)
Recommend employees for promotion
Explain procedure for handling grievances
Evaluate employee performance
Document personnel issues
Dismiss employees
Create and/or implement organizational charts
Clarify company policies and procedures
Establish office procedures
Maintain office procedure manual(s)
Prepare managerial reports
Maintain appropriate work environment
Conduct tours
Provide and/or coordinate training for new policies
Communicate performance expectations
BIL: Essential

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Competency: Manage projects #A *

**Competency Builders:**
- Conduct needs analysis
- Set priorities
- Research information
- Develop goals and objectives
- Establish project timelines
- Develop strategic plan
- Develop project budget
- Apply forecasting techniques
- Apply prioritizing techniques
- Schedule work assignments
- Collect data
- Analyze data
- Monitor project progress
- Meet project timelines
- Monitor budget
- Apply quality measures and counter measures
BIL: Essential

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Competency: Manage work flow # *

Competency Builders:
Plan office layout for work flow
Maintain office procedure manual(s)
Identify production standards
Prioritize work
Delegate work
Provide instruction
Monitor progress
Complete productivity and/or managerial reports
BIL: Essential

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Competency: Conduct staff/team meetings # *

Competency Builders:
Plan meeting
Set agenda
Set and schedule meeting
Schedule meeting room
Invite appropriate personnel
Identify need for outside speakers
Assign someone to take minutes
Make introductions
Invite questions and comments, and group participation
Decide appropriate action, time frame, and accountability to tasks
Monitor time
Publish minutes in timely manner
BIL: Essential

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Competency: Conduct training #A *

Competency Builders:
Secure training resources, materials, and equipment
Assess training needs
Set goals/competencies/standards for employees
Train employees
Evaluate progress (to document training effectiveness)
Provide appropriate feedback
Document training participation
Unit: Quality Assurance

BIL: Essential

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Competency: Demonstrate knowledge of quality assurance # *

Competency Builders:
Define quality terms and functions
Identify features of quality planning
Explain the relationship among organizational structures, policies, procedures, and quality assurance
Describe successful efforts by industry to improve quality and/or reduced costs
Differentiate prevention and detection
Identify types of control charts
Competency: Explain importance of interdepartmental relationships to quality assurance *

Competency Builders:
Explain need for whole company commitment in assuring quality
Define quality improvement team models
Explain project selection, implementation, and evaluation
Explain continuous improvement
Evaluate downstream effects of project implementation
Unit: Telephony Functions

BIL: Essential

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Competency: Demonstrate basic electronic skills

Competency Builders:
Demonstrate basic telephony concepts (e.g., analog, digital)
Demonstrate wiring concepts
Demonstrate use of basic test equipment
BIL: Essential

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Competency: Demonstrate basic telephony skills

Competency Builders:
- Explain telephony concepts
- Operate transmission test equipment
- Explain operation of special circuit (e.g., FX, OPX, DID, DNIS, TIE)
- Explain function/operation of central office
- Explain application for telephony products (e.g., predictive dialer, V-MAIL, ACD, TAPI, CTI)
- Explain telephony network engineering and design (e.g., repairs, muxes, channel banks)
- Explain wireless communications
- Explain satellite/microwave communication
- Explain cellular/pager technology
- Explain PCS technology
Unit: Training

BIL: Essential

Competency: Determine training and development needs in an organization #A *

Competency Builders:
- Explain the difference between training needs and development needs
- Identify training and development needs
- Analyze training and development needs
Competency:  Explain the role of training with an organization #A *

**Competency Builders:**
- Explain how supervisors interact with the human resource and training departments
- Explain the role of funding/budgeting in the development of training
- Explain criteria used for the prioritizing of training needs
**BIL:** Essential

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**Competency:** Write effective course objectives *

**Competency Builders:**
- Explain the criteria for effective training objectives
- Prepare effective training objectives related to an organization’s needs
**BIL:** Essential

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**Competency:** Explain major characteristics of adult learners *

**Competency Builders:**
- Explain pedagogy vs. andragogy
- Explain different adult learning styles
- Explain ways to facilitate adult learning
BIL: Recommended

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Competency: Demonstrate different teaching techniques

Competency Builders:
- Explain different teaching techniques
- Explain advantages of different teaching techniques
- Explain disadvantages of different teaching techniques
- Develop lesson plans utilizing different teaching techniques
- Demonstrate different teaching techniques
BIL: Essential

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Competency: Demonstrate effective use of major types of multi-media equipment # *

Competency Builders:
Explain best ways to integrate multi-media equipment into the training environment
Use major types of multi-media equipment effectively in a training session
BIL: Essential

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Competency: Use evaluative instruments #A *

Competency Builders:
- Explain differences between pre- and post-testing
- Explain and design various types of testing
- Use various types of testing
- Explain non-test evaluation
Unit: Statistics

BIL: Essential

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Competency: Make frequency distributions

Competency Builders:
Make ungrouped frequency distributions using raw data
Make grouped frequency distributions using raw data
Explain ungrouped frequency distributions
Explain grouped frequency distribution
**BIL:** Essential

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**Competency:** Present data graphically *

**Competency Builders:**
- Make line charts/frequency polygons
- Make bar charts/histograms
- Explain line charts/frequency polygons
- Explain bar charts/histograms
**BIL:** Essential

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**Competency:** Explain measures of central tendency

**Competency Builders:**
- Define mean, median, and mode central tendency
- Compute mean, median, and mode central tendency
- Explain mean, median, and mode central tendency
BIL: Essential

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Competency: Explain measures of dispersion *

Competency Builders:
Define variance, average deviation, standard deviation, coefficient of variation
Compute variance, average deviation, standard deviation, coefficient of variation
Explain variance, average deviation, standard deviation, coefficient of variation
BIL: Essential

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Competency: Solve probability problems # *

Competency Builders:
Define joint, marginal, and conditional probabilities
Solve joint probability programs using addition, multiplication, permutation, and combination formulas
Solve marginal probability programs using addition, multiplication, permutation, and combination formulas
Solve conditional probability programs using addition, multiplication, permutation, and combination formulas
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**Competency:** Use binomial and normal probability distributions *

**Competency Builders:**
- Explain binomial probability distributions
- Explain normal probability distributions
- Use binomial probability distributions
- Use normal probability distributions
### Competency: Demonstrate knowledge of statistical inference

#### Competency Builders:
- Explain sampling
- Select appropriate method for selecting a sample
- Explain hypothesis testing
- State a hypothesis
- Test a hypothesis

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Unit: Banking Basics

BIL: Essential

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Competency: Describe basic structure of banks

Competency Builders:
Define terminology related to the banking industry
Explain the role of the Federal Reserve System in the banking industry
Describe types of financial institutions and services
Identify banking career paths (e.g., commercial, retail, operations)
Identify technology and software used in banking

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**BIL:** Essential

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**Competency:** Describe services provided by banks

**Competency Builders:**
- Identify basic services a bank provides for customers
- Describe components of banks' deposit function
- Describe the credit function of banks
- Explain the importance of banks' credit function
- Explain the role of customer sales in banking functions
Competency: Describe reconciliation of checking accounts

Competency Builders:
Define terminology related to checking accounts (e.g., negotiable instruments)
Describe the procedure for transferring funds between accounts by telephone
BIL: Essential

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Competency: Explain teller functions

Competency Builders:
Identify primary areas of teller responsibility
Identify types of negotiable instruments
Explain the use of different types of negotiable instruments
Describe procedures for processing various types of negotiable instruments
Determine by examination if an instrument is negotiable
Describe the effect of dates on negotiable instruments
Explain the purpose of endorsements
Describe types of acceptable endorsements
Identify criteria for check acceptability
Explain identification procedures
Distinguish between acceptable and unacceptable sources of identification
Identify characteristics of genuine currency and instruments
Describe how to identify counterfeit currency and instruments
Demonstrate currency-handling techniques
Use a 10 key calculator quickly and accurately
BIL: Essential

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Competency: Demonstrate bookkeeping systems 

Competency Builders:
Define terminology related to bookkeeping
Describe bookkeeping systems and functions
Follow procedures for filing debits and credits
Follow procedures for rendering and preparing statements
Identify encoded groups of numbers on the bottom of debit slips and credit slips
BIL: Essential

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Competency: Describe credit investigation procedures

Competency Builders:
Identify types of credit
Describe sources of credit information
Complete a credit application form
Explain the categories of credit report information provided by credit bureaus
Explain the Fair Credit Reporting Act
Describe the steps of the credit investigation process
BIL: Essential

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Competency: Describe loans/leases

Competency Builders:
Define terminology associated with loans/leases and interest/charges
Identify types of loans/leases (e.g., unsecured, secured, closed-ended, open-ended)
Identify purposes of loans/leases
Match types and purposes of loans/leases
Identify factors that influence loan/leases interest rates
Describe standard repayment terms
Describe how lending/leasing decisions are made
Explain the Truth in Lending Act
**BIL:** Essential

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**Competency:** Calculate interest

**Competency Builders:**
- Explain the purpose of interest
- Compute simple interest on single payment loans
- Compute simple interest for discounted notes
- Compute add-on interest for installment loans
- Demonstrate method of computing loan payoff
BIL: Recommended

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Competency: Describe banking regulations

Competency Builders:
Identify federal agencies that provide regulation of financial intermediaries (e.g., FDIC)
Describe the regulatory role of each federal agency
BIL: Essential

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Competency: Describe investment instruments

Competency Builders:
Define terminology related to investments (e.g., principal, maturity)
Describe certificates of deposit (CDs)
Describe money market funds/accounts
Describe mutual funds
Describe treasury bills
Describe treasury notes and bonds
Describe securities
Unit: World Cultures

BIL: Recommended

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Competency: Describe how cultural components differ among cultures

Competency Builders:
Define “culture”
Identify cultural components (e.g., language, beliefs, technology, institutions)
Describe the difference between culture and civilization
Compare components of various cultures
Describe factors that influence culture (e.g., geography, trade, diversity)
Define “cultural diffusion”
BIL: Recommended

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Competency: Relate cultural ideas and information to life experience

Competency Builders:
Collect information about diverse cultures, environments, and people
Relate cultural similarities and differences to personal life experiences
Analyze how the presentation of information is influenced by culture
Illustrate how humans depend upon culture
BIL: Recommended

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Competency: Evaluate obstacles to cultural understanding

Competency Builders:
Define “ethnocentrism”
Identify ethnocentric attitudes
Define “stereotype”
Identify cultural stereotypes
Explain the dangers of ethnocentrism and stereotypes
Explain the concept of “The Ugly American”
Analyze own ideas about other cultures to identify stereotypes
Generate ideas for overcoming ethnocentrism and stereotypes
Define “human rights”
Evaluate arguments surrounding international human rights issues
BIL: Recommended

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Competency: Analyze cultural demographics of major world regions

Competency Builders:
Compare the major cultural groups of the United States and another country
Compare the major cultural groups of two countries
Compare cultural groups within a country
Identify major cultural groups of East Asia
Identify major cultural groups of the Asian Sub-continent
Identify major cultural groups of the Middle East
Identify major cultural groups of Sub-Saharan Africa
Identify major cultural groups of Eastern Europe
Identify major cultural groups of Western Europe
Identify major cultural groups of Latin America
BIL: Recommended

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Competency: Analyze the impact of cultural environment on business

Competency Builders:
Identify social and cultural factors that affect the conduct of business
Compare and contrast business practices in different cultures
Illustrate how culture influences business operations
Identify U.S. cultural attitudes and practices that could inhibit successful business operations in another country
Analyze necessary modifications to American business practices for success in the global marketplace
Describe the steps to receive business visitors from specific countries
Describe negotiation tactics and decision-making processes of various cultures
Identify types of business relationships in various cultures
Compare business entertainment among people in various parts of the world
**BIL:** Recommended

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**Competency:** Describe customs that impact international business

**Competency Builders:**
- Identify cultural differences in food, dress, and social behaviors
- Compare the use of calendars in different societies
- Identify major holidays of various cultures and how they are celebrated
- Assess the importance of gift giving in various cultures
Unit: Basic Principles of Marketing

BIL: Recommended

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Competency: Demonstrate understanding of basic marketing principles

Competency Builders:
Define basic marketing terminology (e.g., “market,” “marketing mix,” “market penetration”)
Identify purpose of marketing
Identify marketing activities
Identify elements in the marketing mix (e.g., price, product, promotion, place)
Explain market share
Identify factors affecting market share
Explain margin analysis
**BIL:** Recommended

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**Competency:** Describe marketing strategy 

**Competency Builders:**
- Identify marketing strategies for differing products and services
- Differentiate between industrial and consumer marketing
- Differentiate between mass market and market segmentation approaches
- Describe the process of identifying a market for a product or service
- Describe the role of margin analysis in developing marketing strategy
- Give examples of product positioning
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