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ABSTRACT

This document lists core standards and occupational knowledge and skills that have been identified/validated by industry as necessary to all Georgia students in secondary-level health care occupations programs. First, foundation skills are grouped as follows: basic skills (reading, writing, arithmetic/mathematics, listening, speaking); thinking skills (decision making, problem solving, seeing things in the mind's eye, knowing how to learn, reasoning); and personal qualities (self-management, integrity, honesty). The second section, which lists competencies specific to the health occupations cluster, is organized by the following categories/subcategories: resources (time, money, materials and facilities, human resources); interpersonal (participating as a team member, teaching others new skills, serving clients and customers, exercising leadership, negotiating, working with diversity); information (acquiring, evaluating, organizing, and maintaining information and using computers to process information); systems (understanding systems, monitoring and correcting performance, improving and designing systems); and technology (selecting and applying technology, maintaining and troubleshooting equipment). Each section includes the following: skill statement(s); performance standard(s); list of occupational knowledge and skills; and code number under which the knowledge/skill is listed in Georgia's career cluster standards. (MN)

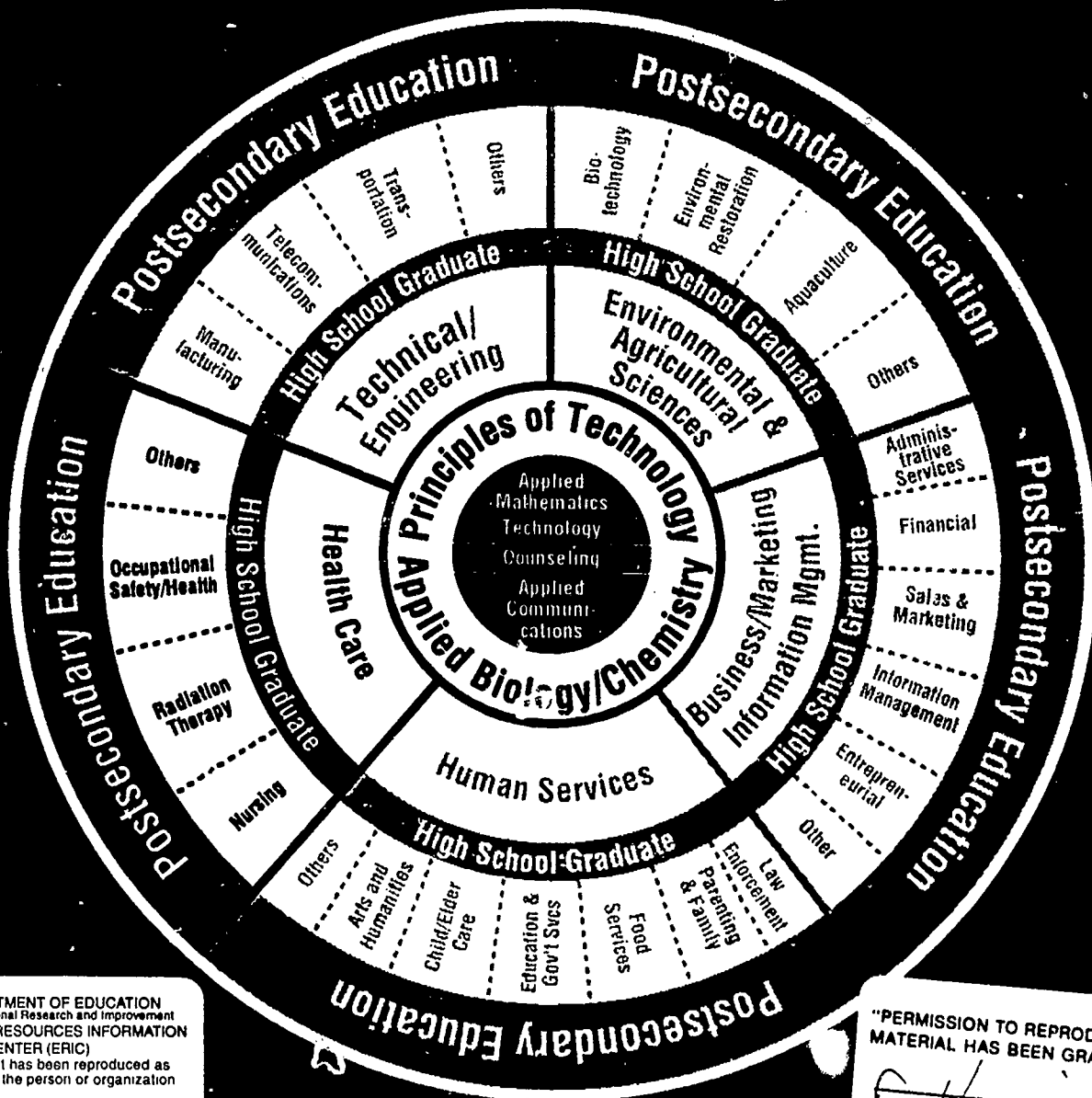
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# Georgia Core Standards For Occupational Clusters

ED 391 894

## Health Care



070 745

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# Introduction

**C**oncerns about student preparedness for the high performance workforce have spurred the development of national-level skill standards by industry representatives to improve the global competitiveness of U.S. industry. Georgia has taken the initiative at the state level to work with business and industry in identifying core occupational knowledge and skills that offer a framework for career focus in our schools. This career-cluster framework, based on an elevated standard, will afford all students in Georgia's schools the foundation they will need to enter the workforce or to continue occupational specialization and education at the postsecondary level. The concept will also allow students to personalize their learning directions and hasten their preparation in becoming productive citizens.

The Occupational Research Group (in the School of Leadership and Lifelong Learning in the College of Education) at the University of Georgia facilitated for the Georgia Department of Education the development of statewide, industry-validated curriculum standards for academic and occupational skills needed by all students in Georgia. This developmental effort helps meet the goal of establishing a career focusing process in Georgia's schools. These curriculum standards address core knowledge and skill areas common to all program areas, including both school-based and work-based competencies, and are organized around the Georgia Department of Education's five cluster areas or programs of study:

- Technical/Engineering
- Health Care
- Business/Marketing and Information Management
- Human Services
- Environmental and Agricultural Sciences

The standards for each cluster include the core academic competencies and the non-occupation specific knowledge and skills common to a broad cluster area of occupations. Georgia's skill standards were developed in a systematic manner employing the skills and input of a wide array of stakeholders in the education of Georgians. Phase one of this process involved a thorough investigation of information on existing state and national standards/skills/competencies, professional/trade associations, workforce trends, and acquisition of documents related to skill competencies for each cluster area. The information was compiled into a report on each cluster area for presentation to business/industry Standards Development Teams. This report included a master listing of tasks and competencies identified by other groups, and information on core/basic academic competencies underlying skill performance, organized by the SCANS competency areas.

Phase two of the developmental process featured the establishment of five statewide Standards Development Teams made up of business and industry representatives from across the state, one team for each of the career-cluster areas. Experienced faculty and staff from the Occupational Research Group and the Department of Occupational Studies at the University of Georgia conducted and facilitated meetings. A structured group process was used to review and validate or revise the tasks and competencies from the phase one document. The product of this validation process was then formulated into a survey by project staff and sent to additional business/industry representatives for each career-cluster for feedback. Next, a grouping of experienced teachers and curriculum specialists from across the state met to review the industry-validated curriculum standards. They identified the supporting academic knowledge and skills for each career-cluster area using the state's Quality Core Curriculum and the graduation exit exam.

The product of our efforts to date is the listing of industry-validated statewide curriculum standards, with core competencies for both work- and school-based knowledge and skills. Because of the continuing changes in occupational skills requirements, an assessment component of the project will be added for reviewing and modifying the career-clusters as necessary.

The standards are an important component of Georgia's School-to-Work Transition initiative and a preliminary step in the adoption of the career-cluster concept. The career-cluster approach to curriculum design is based on the idea that a variety of different occupations/jobs require similar basic skills. It is also based on the belief that certain basic skills and knowledge are essential for all students, regardless of the profession to which they aspire. Students begin by learning these basic common skills; move on to acquire the basic skills necessary for a given group of jobs; then learn the specific applications for a specific job. The career-cluster approach provides school systems with the opportunity to involve larger numbers of students in occupational classes to build a stronger and broader base for further specialization. This broad base makes it possible for individuals to change specialties in the future as job opportunities and/or requirements change and facilitates life-long educational experiences which can enhance individual productivity and happiness.

# Acknowledgements

We wish to express our sincere appreciation to those individuals who gave their knowledge, expertise, and time to help produce these curriculum standards materials.

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# Health Care Career-Cluster Foundation

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**H**ealth care personnel must have the three part career-cluster foundation comprised of basic skills, thinking skills, and personal qualities. This career-cluster foundation is an integral part of the industry-validated competencies in each identified career-cluster. Related core academic knowledge and skills are the academic foundations which help facilitate effective learning when integrated with the occupational knowledge and skills. For course and program planning convenience the related core academic knowledge and skills section, which includes communications, math, social science, and science, are coded and included in a companion document. This document functions as a source for the code listings cited in the career-cluster standards. The codes can be referenced with the occupational knowledge and skills to develop curricula that integrate these elements into cohesive career-cluster programs of study. Common core competencies (skill standards) provide preparation at the secondary level for occupations in the Health Care field. Computer literacy is a key to almost all the standards.

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## Reading

**Locates, understands, and interprets written information in prose and in documents such as manuals, graphs, and schedules.**

**Standard:** Demonstrates the ability to locate, understand, and interpret written information, especially as it relates to health care (i.e., manuals, graphs, schedules, and publications) by determining the main idea or essential message; identify relevant details, facts, and specifications; infer or locate the meaning of unknown or technical vocabulary; and judge the accuracy, appropriateness, and plausibility of reports or other writing.

### **Occupational Knowledge and Skills:**

- Reads and writes charts, reports, and manuals

### **Academic Knowledge and Skills**

- MAT 1-8
- SOC 44, 47
- COM 19, 35-38, 41-42, 44-45, 51-63

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## Writing

**Communicates thoughts, ideas, information, and messages in writing; and creates documents such as letters, directions, manuals, reports, graphs, and flowcharts.**

**Standard:** Demonstrates the ability to communicate thoughts, ideas, information, and messages in writing by creating documents (i.e., letters, memos, directions, manuals, reports, graphs, and flowcharts); develop supporting documentation to the appropriate level of detail; revise for correct information and appropriate emphasis; and edit for form, grammar, spelling, and punctuation.

### Occupational Knowledge and Skills

- Prepares medical reports according to protocol
- Discusses word origins (roots, prefixes, and suffixes)
- Transcribes a prescription dictated by a health care professional using recognized forms and symbols
- Communicates patient education techniques
- Uses written, oral, and keyboarding skills to produce reports
- Records and reports nursing care accurately according to protocol
- Prepares an application form, writes a resume, and participate in an interview

### Academic Knowledge and Skills

- COM 21-33

## Arithmetic/Mathematics

**Performs basic computations and approaches practical problems by choosing appropriately from a variety of mathematical techniques.**

**Standard:** Demonstrates the ability to perform basic computations by using numerical concepts and calculations (addition, subtraction, multiplication, division, fractions, and percentages).

### Occupational Knowledge and Skills

- Performs mathematical functions

### Academic Knowledge and Skills

- MAT 1-8

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# Basic Skills

## Listening

**Receives, attends to, interprets, and responds to verbal messages and other cues.**

**Standard:** Demonstrates the ability to receive, attend to, interpret, and respond to verbal messages and other cues, such as body language, appropriate for an office, lab, or field situation.

### Occupational Knowledge and Skills

- Assesses others' ability to understand

### Academic Knowledge and Skills

- COM 3-5, 7, 9, 11, 13-14

11

## Speaking

**Organizes ideas and communicates orally.**

**Standard:** Demonstrates the ability to orally (or with sign language) present ideas, thoughts, and messages to listeners in a clear and concise manner.

### **Occupational Knowledge and Skills**

- Adapts communication to individual needs, including paraphrasing or translating
- Applies psycho-social principles in self-understanding and in developing communication with patients' families, the public, and other health team members

### **Academic Knowledge and Skills**

- Com 1-5, 7-8, 11-12, 14-15

12

## Decision Making

**Specifies goals and constraints, generates alternatives, considers risks, and evaluates and chooses best alternative.**

**Standard:** Demonstrates the ability to specify goals, generate alternatives, consider risks, and evaluate and choose best alternative.

### Occupational Knowledge and Skills

- Asks for clarification when needed
- Documents actions
- Follows legal aspects and regulations of documentation in requests for information

### Academic Knowledge and Skills

- MAT 9-10
- SOC 34, 37, 43, 51, 55
- COM 21, 23, 26, 53-63

## Problem Solving

**Recognizes problems and devises and implements a plan of action.**

**Standard:** Demonstrates the ability to recognize that a problem exists, the reasons for a problem, a plan to solve the problem, an evaluation of the plan to solve the problem, and revise a plan when warranted.

### Occupational Knowledge and Skills

- Discusses appropriate evaluation tools and instruments
- Applies knowledge of life sciences, such as biology, chemistry, physics, and human growth and development
- Recognizes the importance of client need over other considerations
- Assists in determining the need for follow-up or alternative care

### Academic Knowledge and Skills

- MAT 30, 32, 35-40

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## Thinking Skills

# Seeing Things in the Mind's Eye

**Organizes and processes symbols, pictures, graphs, objects, and other information.**

**Standard:** Demonstrates the ability to visualize problems and their solutions.

### Occupational Knowledge and Skills

- Measures and reports client vital signs or other indicators of health status
- Transcribes health information

### Academic Knowledge and Skills

- MAT 11-16
- SOC 47, 49, 59
- COM 23

15

# Knowing How to Learn

**Uses efficient learning techniques to acquire and apply new knowledge and skills.**

**Standard:** Demonstrates the ability to use efficient learning techniques in both familiar and changing situations.

## **Occupational Knowledge and Skills**

- Follows emergency procedures and protocols
- Ensures data security and confidentiality by controlling access and release of information

## **Academic Knowledge and Skills**

- MAT 1-4, 7

16

F O U N D A T I O N



## Reasoning

**Discovers a rule or principle underlying the relationship between two or more objects and applies it when solving a problem.**

**Standard:** Demonstrates the ability to use reasoning when faced with problems or ill-defined situations requiring clarification.

### Occupational Knowledge and Skills

- Uses analytical skills to solve problems and make decisions
- Properly manages hazardous materials according to guide lines

### Academic Knowledge and Skills

- SCI 1
- MAT 8
- SOC 55
- COM 62

## Self-Management

**Assesses self accurately, sets personal goals, monitors progress, and exhibits self-control.**

**Standard:** Demonstrates the ability to assess one's own knowledge, skills, and abilities accurately.

### Occupational Knowledge and Skills

- Exhibits personal skills such as attendance, time management, and individual responsibility
- Understands various career options and the preparation required for them

### Academic Knowledge and Skills

- SOC 36-37, 42-43

# Personal Qualities

## Integrity/Honesty

**Chooses ethical courses of action.**

**Standard:** Demonstrates the ability to be trusted and exhibits trustworthiness.

### Occupational Knowledge and Skills

- Describes the Georgia laws governing the practice of health care
- Maintains professional conduct and appearance
- Is aware of malpractice and liability issues
- Discusses the medicolegal issues and professional code of ethics regarding the health care profession

### Academic Knowledge and Skills

- SOC 37, 43



## Health Care Competencies

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The skill standards listings which follow were identified by Georgia business and industry representatives as the generic skills necessary for the broad cluster of occupations in this field. They are organized according to the Secretary's Commission on Achieving Necessary Skills (SCANS) report. The essential general workplace skills and safety skills were also identified by the Standards Development Team for this project.

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## Time

**Selects goal-relevant activities, ranks them, allocates time, and prepares and follows schedules.**

**Standard:** Demonstrates the ability to select goal-relevant activities, rank activities, allocate time, and prepare and follow a schedule.

### Occupational Knowledge and Skills

- Monitors quality of sample or specimen
- Organizes own work and assignments
- Categorizes and prioritizes health information requests
- Practices time management

### Academic Knowledge and Skills

- SCI 112
- MAT 1-8
- SOC 32, 47, 58

# Resources

## Money

**Uses or prepares budgets, makes forecasts, keeps records, and makes adjustments to meet objectives.**

**Standard:** Demonstrates the ability to use and prepare budgets, make forecasts, keep records, and make adjustments to meet objectives for a health care business-related activity.

### Occupational Knowledge and Skills

- Produces proper documentation
- Is aware of how reimbursement affects care delivery

### Academic Knowledge and Skills

- MAT 1-17

23

## Materials and Facilities

**Acquires, stores, allocates, and uses materials or space efficiently.**

**Standard:** Demonstrates the ability to manage materials and facilities.

### Occupational Knowledge and Skills

- Describes how to contain costs and reduce waste
- Knows and uses inventory appropriately
- Practices recycling and waste management
- Uses appropriate supplies and equipment
- Recognizes and matches resources to needs

### Academic Knowledge and Skills

- SCI 112, 153-155
- MAT 26-27



## Human Resources

**Assesses skills and distributes work accordingly, evaluates performance, and provides feedback.**

**Standard:** Demonstrates the ability to understand the human element of a health care workplace.

### Occupational Knowledge and Skills

- Fully uses available facility resources such as where to find help or information
- Interprets results of procedure to assure a quality product

### Academic Knowledge and Skills

- MAT 11, 14-15

# Participating as a Member of a Team

**Contributes to group effort.**

**Standard:** Demonstrates the ability to participate as a member of a health care business team and contributes to the group effort.

**Occupational Knowledge and Skills**

- Respects inter- and intra-disciplinary issues
- Practices team membership skills such as cooperation, leadership, and listening
- Uses facility guidelines for giving health care information
- Provides feedback to treatment team
- Recognizes the aspects of a good relationship with patients and team members
- Differentiates among the roles of each team member and relates theory to clinical practice in problem solving

**Academic Knowledge and Skills**

- SCI 112
- COM 1-9, 11, 13-15

26

## ***Interpersonal***

# Teaching Others New Skills

**Acts as trainer, mentor, and instructor; coordinates instruction.**

**Standard:** Demonstrates the ability to teach others new skill in a health care workplace setting.

### **Occupational Knowledge and Skills**

- Demonstrates how to perform weights and measures exercises
- Determines clients' ability to understand
- Educates and orients staff to administrative and technical systems use

### **Academic Knowledge and Skills**

- MAT 1-4
- COM 1-15

27

C O M P E T E N C I E S

## Serving Clients/Customers

**Works to satisfy customers' expectations.**

**Standard:** Demonstrates the ability to satisfy a customer/client in a business situation.

### Occupational Knowledge and Skills

- Anticipates needs of clients and coworkers
- Respects client rights and self-determination
- Uses language appropriate to the situation
- Reassures clients and informs them of what to expect during activity
- Explains procedures and gives related information to client as appropriate
- Discusses patient transfer/transport

### Academic Knowledge and Skills

- COM 7, 11, 13

## Exercising Leadership

**Communicates ideas to justify position, persuades and convinces others, and responsibly challenges existing procedures and policies.**

**Standard:** Demonstrates the ability to provide leadership in a health care business organization.

### Occupational Knowledge and Skills

- Reports any activity that adversely affects the health, safety, or welfare of clients or fellow workers
- Manages conflict within the workplace through consideration of others' points of view

### Academic Knowledge and Skills

- SOC 16-17, 36, 57
- COM 46-48, 62

## Negotiating

**Works toward agreements involving exchange of resources, and resolves divergent interests.**

**Standard:** Demonstrates the ability to resolve conflicts.

### **Occupational Knowledge and Skills**

- Is aware of the implications of the health care hierarchy in interacting with others
- Adapts to changing situations
- Exhibits loyalty to fellow workers and the organization

### **Academic Knowledge and Skills**

- COM 46-48, 62

30

## Working with Diversity

**Works well with men and women from diverse backgrounds.**

**Standard:** Demonstrates the ability to work in a business environment with individuals of different gender, cultures, lifestyles, attitudes, and abilities.

### Occupational Knowledge and Skills

- Is sensitive to multicultural and multilingual needs
- Promotes justice and equal treatment of all persons
- Respects cultural and religious differences of team members
- Responds to clients' concerns and fears
- Respects clients' cultural differences

### Academic Knowledge and Skills

- SOC 7-8, 38, 46, 57
- COM 46-48, 62

# Organizing and Maintaining Information

**Interprets and clarifies directions, data, and information prepared by self and others.**

**Standard:** Demonstrates the ability to prepare, maintain, and interpret quantitative and qualitative data.

## **Occupational Knowledge and Skills**

- Involves appropriate persons in planning
- Is aware of the range of services offered
- Is knowledgeable of available preventive health screening and examinations
- Follows facility policies and procedures
- Knows requirements of external agencies such as insurance companies, courts, and regulatory bodies
- Obtains and records client information using appropriate terminology

## **Academic Knowledge and Skills**

- COM 21



## Information

# Acquiring and Interpreting Information

**Describes and defines applied sciences terminology, procedures, knowledge, and skill standards information.**

**Standard:** Demonstrates an understanding and the ability to apply knowledge of health sciences such as anatomy and physiology, chemistry, diagnostic skills, first aid, disease, nutrition, pharmacology, and radiology.

### **Occupational Knowledge and Skills\***

- Identifies and describes basic anatomy and physiology
- Demonstrates an understanding of microbiology
- Discusses purpose and use of diagnostic skills in health care
- Defines and discusses disease categories
- Describes basic first aid procedures
- Demonstrates awareness of nutritional health
- Explains the role of pharmacology in health sciences
- Identifies the basic principles of radiology and radiation protection

\* (Refer to detailed occupational knowledge and skills listings in Addendum # 1)

## Using Computers to Process Information\*

**Demonstrates the basic knowledge of computing.**

**Standard:** Identifies the hardware used in computing.

### **Occupational Knowledge and Skills**

- Selects and uses automated systems related to health care specialty
- Describes medical, dental, and personal histories, and vital signs
- Accesses and uses electronically produced information
- Uses computer programs to process information

\* (From the CORD document: National Voluntary Skills Standards, Hazardous Materials Management Technology)

## Understanding Systems

**Knows how social, organizational, and technological systems work and operates effectively with them.**

**Standard:** Understands how parts of systems are connected and anticipates consequences of system changes.

### Occupational Knowledge and Skills

- Recognizes therapeutic and functional aspects of color, decor, and furnishings
- Is aware of the history of health care
- Operates within scope of practice
- Uses Universal Precautions to control the spread of infection
- Applies pertinent regulatory guidelines including OSHA standards
- Locates information in the record for various purposes such as filing, coding, or processing
- Provides quality service

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# Monitoring and Correcting Performance

**Distinguishes trends, predicts impacts on system operations, diagnoses deviations in systems' performance, and corrects malfunctions.**

**Standard:** Continually monitors and evaluates health care business operations as they relate to systems.

## **Occupational Knowledge and Skills**

- Recognizes standardized coding systems and uniform data definitions
- Converts narrative information into a statistical database
- Monitors, observes, and reports unsafe practices
- Continuously evaluates policies and procedures
- Identifies and solves potential problems and anticipates client needs
- Maintains facility in good repair
- Ensures high quality of food for staff and clients including presentation, taste, and service

## **Academic Knowledge and Skills**

- MAT 16

36

C O M P E T E N C I E S

## Improving or Designing Systems

**Suggests modifications to existing systems and develops new or alternative systems to improve performance.**

**Standard:** Demonstrates the ability to provide insight into the factors that may hinder a health care business operation and identifies suggested improvements or modifications to improve performance.

### **Occupational Knowledge and Skills**

- Discusses specialty registries
- Discusses upgrading of technology skills as needed

## Selecting Technology

**Chooses procedures, tools, or equipment including computers and related technology.**

**Standard:** Demonstrates the ability to operate and maintain laboratory equipment.

### Occupational Knowledge and Skills

- Describes instruments used in health occupations and their function
- Recognizes various wheelchair components and their manageability around architectural barriers
- Describes sutures and stapling devices
- Discusses needles used in medical practice
- Lists and defines the classifications of surgical instruments by function
- Lists basic surgical instrumentation and equipment
- Explains and demonstrates effective use of patient care communication systems

### Academic Knowledge and Skills

- SCI 143

## Applying Technology to Task

**Understands overall intent and proper procedures for setup and operation of equipment.**

**Standard:** Demonstrates the ability to operate hand and power tools.

### **Occupational Knowledge and Skills**

- Demonstrates the proper use and maintenance of health care equipment
- Uses correct equipment and instruments according to manufacturer guidelines
- Recognizes abnormal results and takes action consistent with level of training
- Utilizes available technology to document information
- Uses and maintains information retrieval systems
- Demonstrates the appropriate preparation and method of disinfection/sanitization for health care instruments, equipment, and supplies
- Demonstrates techniques for patient transfer such as wheelchair to table/table to wheelchair, stretcher to table/table to stretcher, wheelchair to bed/bed to wheelchair, stretcher to bed/bed to stretcher, three-man lift, and drawsheet lift
- Performs computer applications

# Maintaining and Troubleshooting Equipment

**Prevents, identifies, or solves problems with equipment including computers and other technologies.**

**Standard:** Maintains associated medical and office equipment.

**Occupational Knowledge and Skills**

- Describes and implements the appropriate sterilization methods for instruments, equipment, and supplies

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This addendum provides a detailed competency list of occupational knowledge and skills for the information category: Acquiring and Interpreting Information (page 32).

# Acquiring and Interpreting Information

**Describes and defines applied sciences terminology, procedures, knowledge, and skill standards.**

**Standard:** Demonstrates an understanding and the ability to apply knowledge of health sciences such as anatomy and physiology, chemistry, diagnostic skills, first aid, disease, nutrition, pharmacology, and radiology.

## Anatomy and Physiology

### Occupational Knowledge and Skills

- Describes the basic function of body tissues
- Identifies and explains the terms used in describing the normal anatomy and physiology of these specific organ systems: skeletal, muscular, nervous, endocrine, circulatory, urinary, digestive, respiratory, and reproductive
- Describes the function of the salivary glands
- Explains the normal function of cells in reproduction
- Identifies and describes the function of the following organs: integumentary, skeletal, muscular, nervous, endocrine, circulatory, urinary, digestive, respiratory, and reproductive
- Describes cell structure and functions of tissue, glands, and membrane classifications and how inflammation affects each
- Identifies the bones and principal markings of the bones of the axial and appendicular skeleton
- Discusses muscle types, structure, and functions
- Describes the respiratory system characteristics and functions

- Discusses the digestive system functions and processes
- Identifies urinary system functions, processes, effects of aging, and disorders
- Explains the structure and functions of the reproductive system of both males and females
- Lists the risk factors involved in heart disease
- Discusses the basic structure and function of the nervous system including the brain and spinal cord

### Academic Knowledge and Skills

- SCI 80-81, 86-95, 97, 101, 104-106, 109-111
- MAT 1-9, 14, 18-21

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A D D E N D U M

# Acquiring and Interpreting Information *continued*

## Microbiology

### Occupational Knowledge and Skills

- Discusses the chemical basis of life
- Describes the classification, structure, and behavior of pathogenic microbes
- Defines the terms DNA and RNA
- Discusses characterization, classification, and description of microorganisms
- Summarizes the morphology of bacteria
- Discusses gram positive and gram negative bacteria
- Explains reproduction and growth of bacteria
- Describes viral diseases and their effect on the body systems
- Discusses the host-parasite relationship
- Describes cell structure
- Explains the system of bacterial nomenclature and how various microorganisms are characterized and described
- Differentiates between sanitization, infection, sterilization, and antisepsis
- Lists viral system disorders and their differences
- Describes the purpose of vaccination for the prevention of Hepatitis A, B, and C
- Discusses disease and trauma to the skin
- Explains the causes and symptoms of sexually transmitted diseases

### Academic Knowledge and Skills

- SCI 70-71, 73-77, 83-85

# Acquiring and Interpreting Information *continued*

## Disease

### Occupational Knowledge and Skills

- Differentiates between innate and acquired immunity and describes the allergic immune response
- Lists viral system disorders and their differences
- Describes the use of vaccination for the prevention of Hepatitis A, B, and C
- Discusses disease and trauma to the skin
- Describes types of nose and eye injuries and required emergency care
- Explains the causes and symptoms of sexually transmitted diseases
- Defines disease transmission and infection control

### Academic Knowledge and Skills

- SCI 72, 76

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A D D E N D U M

# Acquiring and Interpreting Information *continued*

## Diagnostic Skills

### Occupational Knowledge and Skills

- Discusses primary and secondary patient assessment
- Identifies symptoms which manifest the following conditions: cardiac arrest, anaphylactic shock, convulsion, seizure, hemorrhage, apnea, vomiting, aspiration, fracture, and diabetic coma/insulin reaction
- Utilizes diagnostic, surgical, and procedural terms and abbreviations related to a specific medical field (i.e., MRI, OBN, PAP)
- Describes heart attack risk factors
- Lists the major clinical symptoms of each of the following disorders of the nervous system: cerebrovascular accident, epilepsy, transient ischemic attack, brain tumors, poliomyelitis, cerebral palsy, Parkinson's disease, multiple sclerosis, dyslexia, Tay-Sachs disease, headache, Reye's syndrome, Alzheimer's disease, and delirium
- Describes the clinical symptoms of the following disorders: acquired immune deficiency syndrome, autoimmune diseases and Hodgkin's disease

### Academic Knowledge and Skills

- SCI 70, 92-95, 97, 101

# Acquiring and Interpreting Information *continued*

## First Aid

### Occupational Knowledge and Skills

- Discusses wound healing
- Describes a fracture, several common kinds of fractures, and the sequence of events involved in fracture repair
- Lists the causes, symptoms, and initial first aid procedures for shock, hypertension, aneurysms, coronary artery disease, and deep venous thrombosis
- Performs and earns CPR certification
- Discusses the basic responsibilities and procedures for treating emergencies including how emergency personnel are contacted and provided information
- Defines and discusses the classifications for triage
- Describes categories and actions for: burns, poisoning emergencies, strokes, seizures, and heat or cold exposure

### Academic Knowledge and Skills

- SCI 70

## Nutrition

### Occupational Knowledge and Skills

- Describes basic physiological needs: nutrition and fluid intake; elimination; oxygen needs
- Explains the difference between saturated and unsaturated fatty acids and identifies their food sources
- Identifies and defines the function of RDA and classifications of proteins
- Describes the appropriate methods for handling, storing, processing, and preparing of food products
- Defines the principles of diet therapy including low fat and diabetic diets

### Academic Knowledge and Skills

- SCI 107-108

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A D D E N D U M

# Acquiring and Interpreting Information *continued*

## Pharmacology

### Occupational Knowledge and Skills

- Describes the basic terminology and principles of pharmacology
- Recognizes the various classifications of drugs and how they may be administered
- Explains the legal aspects of a pharmacy technologist's functions such as accountability, pharmacy regulations, and use and storage of controlled substances
- Discusses basic drug dosage and solution calculations

### Academic Knowledge and Skills

- MAT 1-4, 8, 18-21, 40

## Radiology

### Occupational Knowledge and Skills

- Discusses basic principles of radiation protection and exposure: time, distance, and shielding
- Describes each of the radiological modalities such as radiation therapy, nuclear medicine, "CAT" scans, and magnetic resonance imaging
- Discusses basic procedures for dental x-ray and patient exposure protection

### Academic Knowledge and Skills

- SCI 29

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A D D E N D U M

# Additional Reviewers

## Health Care

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