

**Florida Department of Education
CURRICULUM FRAMEWORK**

Program Title: Central Service Technology
Occupational Area: Health Science Education

PSAV

Program Numbers **H170502**
CIP Number 0317.050200
Grade Level 30, 31
Standard Length 500 hours
Certification TEC MED !7 G
 PRAC NURSE @7 G
 REG NURSE G
 OPR RM TEC @7 G

Basic Skills

Math 9
Language 9
Reading 9

- I. **MAJOR CONCEPTS/CONTENT:** This program is designed to prepare students for employment as supervisors, central supply, central supply workers, stock clerks: stock room or warehouse, sterilizers , central service technicians.SOC Code43-5081 (stock clerks and order fillers)

The content includes, but is not limited to, central services departmental organization and function; basic anatomy, physiology, microbiology and chemistry related to central service activities; quality assurance; infection control and isolation techniques, principles of safety; principles, methods and controls of sterilization processes; cleaning, processing, packaging, distributing, storing, and inventory control of sterile goods, instruments, trays, and equipment; medical terminology; surgical instrumentation; basic computer skills, interpersonal and job seeking skills, fundamentals of communication, and procurement of supplies and equipment.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

- II. **LABORATORY ACTIVITIES:** Skills and competencies are achieved through laboratory practice using supplies, instruments and equipment as found in central service departments. Instrumentation, sterilization processing, decontamination, inventory control and distribution are also presented. A working knowledge of computers should be achieved. Students should be rotated through the decontamination, preparation, sterilization, storage, and distribution areas. Clinical learning experiences are an integral part of this program.
- IV. **SPECIAL NOTE:** This program meets the Department of Health HIV/AIDS education requirements. Upon completion of this program, the instructor will provide a certificate to the student verifying that the HIV/AIDS requirements have been met.

Health Occupations Students of America is the appropriate Career/Technical Student Organization (CSO) for providing leadership training experience and for reinforcing specific career/technical

skills. CSOs, when provided, shall be an integral part of the vocational instructional program, and the activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065 (8), FAC.

Cooperative training - OJT is appropriate for this program. Whenever cooperative training - OJT is offered, the following are required for each student: a training plan, signed by the student, teacher, and employer, which includes instructional objectives and a list of on-the-job and in-school learning experiences; a workstation that reflects equipment, skills and tasks that are relevant to the occupation which the student has chosen as a career goal. The student must receive compensation for work performed

The minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 9.0, Language 9.0, Reading 9.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

This program may be offered in courses. Vocational credit shall be awarded to the student on a transcript in accordance with Section 1001.44 F.S.

When a student with a disability is enrolled in a vocational class with modifications to the curriculum framework, the particular outcomes and student performance standards which the student must master to earn credit must be specified in the student's individual educational plan (IEP). Additional credits may be earned when outcomes and standards are mastered in accordance with the requirements indicated in subsequent IEPs. The job title for which the student is being trained must be designated in the IEP.

To be transferable statewide between institutions, this program/course must have been reviewed, and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific program or course articulation agreements with each other.

SCANS Competencies: Instructional strategies for this program must include methods that require students to identify, organize, and use resources appropriately; to work with each other cooperatively and productively; to acquire and use information; to understand social, organizational, and technological systems; and to work with a variety of tools and equipment. Instructional strategies must also incorporate the methods to improve students' personal qualities and higher-order thinking skills.

Federal and state legislation requires the provision of accommodations for students with disabilities to meet individual needs and ensure equal access. Adult students with disabilities must self-identify and request such services. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

Inquiries about a voluntary certification for sterile processing and distribution may be made to:

CBSPD

2 Industrial Park Road-Suite 3
Alpha, NJ 08865
Or
e-mail CBSPD@att.net

The standard length of the program is 500 hours.

IV. **INTENDED OUTCOMES:**

Outcomes 01-11 are referred to as the Health Science Core and do not have to be completed if the student has previously completed the Core in another health occupations programs at any level. The Core should be taken first or concurrently with the first course in the program. Following the successful completion of the core, the student is eligible to take the national internet certification examination (Nocti) with instructor approval and the completion of a portfolio.

After successfully completing this program, the student should be able to:

**HEALTH SCIENCE CORE (01-11) OCP A-Basic Healthcare Worker- SOC code 31-9099
Healthcare Support Workers, all others**

- 01.0 Demonstrate knowledge of the health care delivery system and health occupations.
- 02.0 Demonstrate the ability to communicate and use interpersonal skills effectively.
- 03.0 Demonstrate legal and ethical responsibilities.
- 04.0 Demonstrate an understanding of and apply wellness and disease concepts.
- 05.0 Recognize and practice safety and security procedures.
- 06.0 Recognize and respond to emergency situations.
- 07.0 Recognize and practice infection control procedures.
- 08.0 Demonstrate computer literacy.
- 09.0 Demonstrate employability skills.
- 10.0 Demonstrate knowledge of blood borne diseases, including AIDS.
- 11.0 Apply basic math and science skills.

**CENTRAL SUPPLY WORKER (12-20) OCP-B - SOC Code-43-5081- Stock Clerks
and Order Fillers**

- 12.0 Recognize basic principles of microbiology.
- 13.0 Receive, decontaminate, clean, prepare, disinfect and sterilize reusable items.
- 14.0 Demonstrate the use of sterilization process monitors, including temperature and frequency of appropriate chemical indicators and bacterial spore tests for all sterilizers.
- 15.0 Describe how central service is involved in controlling infections in hospitals.
- 16.0 Explain the purpose of Occupational Safety and Health Act (OSHA).
- 17.0 Describe supply distribution systems and the principles of inventory control.
- 18.0 Demonstrate the ability to recall and dispose of or reprocess outdated sterile supplies.
- 19.0 Interpret and apply medical terminology and anatomical terms as they relate to equipment and supplies issued by central service personnel.
- 20.0 Identify fundamentals of procurement skills.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Central Service Technology
Secondary Number:
Postsecondary Number: H170502

HEALTH SCIENCE CORE: The Health Science Core is a core of basic knowledge necessary for any health occupations career. Students who have previously completed the Health Science Core in any other health occupations program do not have to repeat intended outcomes 01-11.

OCP A-Basic Healthcare Worker-

01.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS -- The student will be able to:

- 01.01 Identify the basic components of the health care delivery system.
- 01.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
- 01.03 Describe the composition and functions of a health care team.
- 01.04 Identify the general roles and responsibilities of the individual members of the health care team.
- 01.05 Develop a basic understanding of human needs throughout the lifespan.
- 01.06 Explain the importance of maintaining professional competence through continuing education.
- 01.07 Describe trends affecting the delivery system of health care.

02.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY -- The student will be able to:

- 02.01 Develop basic listening skills.
- 02.02 Develop basic observational skills and related documentation strategies in written and oral form.
- 02.03 Identify characteristics of successful and unsuccessful communication including barriers.
- 02.04 Respond to verbal and non-verbal cues.
- 02.05 Compose written communication using correct spelling, grammar, and format.
- 02.06 Use appropriate medical terminology and abbreviations.
- 02.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
- 02.08 Recognize the importance of patient/client education regarding health care.
- 02.09 Adapt communication skills to varied levels of understanding and cultural orientation.
- 02.10 Demonstrate telephone usage including taking messages.
- 02.11 Demonstrate ability to give and follow directions.
- 02.12 Distinguish between factual reports and personal opinion.
- 02.13 Read and discuss technical material.

03.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES
-- The student will be able to:

- 03.01 Discuss the legal framework of the health care occupation.
- 03.02 Explain the medical liability of health care workers.
- 03.03 Explain the patients' "Bill of Rights."
- 03.04 Describe a Code of Ethics consistent with the health care occupation.
- 03.05 Discuss the importance of maintaining confidentiality of information, including computer information.
- 03.06 Recognize the limits of authority and responsibility of health care workers.
- 03.07 Recognize and report illegal and unethical practices of health care workers.
- 03.08 Recognize and report abuse and neglect.
- 03.09 Recognize sexual harassment and domestic violence.

04.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS

-- The student will be able to:

- 04.01 Develop a basic understanding of the structure and function of the body systems.
- 04.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
- 04.03 Identify psychological reactions to illness including defense mechanisms.
- 04.04 Recognize the steps in the grief process.
- 04.05 Explain basic concepts of positive self image, wellness and stress.
- 04.06 Develop a wellness and stress control plan that can be used in personal and professional life.
- 04.07 Explain the nutrition pyramid.
- 04.08 Discuss the adverse effects of the use of alcohol, illegal drugs and steroids on the human body.

05.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES

-- The student will be able to:

- 05.01 Demonstrate the safe use of medical equipment.
- 05.02 Recognize and report safety hazards.
- 05.03 Identify and practice security procedures for medical supplies and equipment.
- 05.04 Demonstrate proper body mechanics.
- 05.05 Demonstrate the procedure for properly identifying patients.
- 05.06 Demonstrate procedures for the safe transport and transfer of patients.
- 05.07 Describe fire safety and evacuation procedures.
- 05.08 Discuss JCAHO patient safety goals. (www.JCAHO.org)

06.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS

-- The student will be able to:

- 06.01 Monitor and record vital signs.
- 06.02 Describe legal parameters relating to the administration of emergency care.
- 06.03 Obtain and maintain CPR skills.
- 06.04 Demonstrate basic understanding of first aid and emergency care.
- 06.05 Recognize adverse drug related emergencies and take appropriate first aid action.

07.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES

-- The student will be able to:

- 07.01 Demonstrate knowledge of medical asepsis and practice procedures such as handwashing and isolation.
 - 07.02 Demonstrate knowledge of surgical asepsis as utilized in sterilization.
 - 07.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.
- 08.0 DEMONSTRATE COMPUTER LITERACY -- The student will be able to:
- 08.01 Define terms and demonstrate basic computer skills.
 - 08.02 Describe the uses of computers in health care.
- 09.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:
- 09.01 Conduct a job search.
 - 09.02 Secure information about a job.
 - 09.03 Identify documents that may be required when applying for a job.
 - 09.04 Complete a job application form correctly.
 - 09.05 Demonstrate competence in job interview techniques.
 - 09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
 - 09.07 Identify acceptable work habits.
 - 09.08 Demonstrate knowledge of how to make job changes appropriately.
 - 09.09 Demonstrate desirable health habits.
 - 09.10 Recognize appropriate affective/professional behavior.
 - 09.11 Write an appropriate resume.
- 10.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS
-- The student will be able to:
- 10.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
 - 10.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
 - 10.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.
 - 10.04 Apply infection control techniques designed to prevent the spread of diseases caused by blood borne pathogens to the care of all patients following Centers for Disease Control (CDC) guidelines.
 - 10.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.
- 11.0 APPLY BASIC MATH AND SCIENCE SKILLS -- The student will be able to:
- 11.01 Draw, read, and report on graphs, charts and tables.
 - 11.02 Measure time, temperature, distance, capacity, and mass/weight.
 - 11.03 Make and use measurements in both traditional and metric units.
 - 11.04 Make estimates and approximations and judge the reasonableness of the result.
 - 11.05 Convert from regular to 24 hour time.
 - 11.06 Demonstrate ability to evaluate and draw conclusions.
 - 11.07 Organize and communicate the results obtained by observation and experimentation.
 - 11.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.
 - 11.09 Calculate ratios.

CENTRAL SUPPLY WORKER: (12-20) OCP-B

- 12.0 RECOGNIZE BASIC PRINCIPLES OF MICROBIOLOGY -- The student will be able to:
- 12.01 Identify the four main categories of microorganisms.
 - 12.02 Describe three (3) life functions of bacteria.
 - 12.03 Describe conditions affecting the growth of bacteria.
 - 12.04 Describe special methods used to destroy harmful microorganisms.
 - 12.05 List the helpful microorganisms.
 - 12.06 Describe 5 ways the body controls the growth of pathogenic microorganisms.
 - 12.07 Identify pathogenic microorganisms found in central service departments.
 - 12.08 Identify terminology related to microbiology.
- 13.0 RECEIVE, DECONTAMINATE, CLEAN, PREPARE, DISINFECT AND STERILIZE REUSABLE ITEMS--The student will be able to:
- 13.01 Recognize the importance of thorough cleaning to the overall objectives of making items safe for patient use.
 - 13.02 Explain how instruments, syringes, needles, rubber goods and equipment should be cleaned.
 - 13.03 Describe how the ultrasonic machines and washer/sterilizers work.
 - 13.04 Explain the importance of following manufacturers' instructions in cleaning.
 - 13.05 Explain at least three reasons why detergents are preferred over soaps.
 - 13.06 Explain the primary objectives in selecting the correct packaging materials.
 - 13.07 Demonstrate the wrapping of procedure trays, instruments and other supplies.
 - 13.08 Describe how sterile supplies should be handled.
 - 13.09 Explain the principles involved in loading different kinds of wrapped packs or packages into a sterilizer to be assured of steam or gas penetration.
 - 13.10 Recognize equipment malfunction and list corrective actions.
 - 13.11 Identify basic surgical instruments and accessories.
- 14.0 DEMONSTRATE THE USE OF STERILIZATION PROCESS MONITORS, INCLUDING TEMPERATURE AND FREQUENCY OF APPROPRIATE CHEMICAL INDICATORS AND BACTERIAL SPORE TESTS FOR ALL STERILIZERS--The student will be able to:
- 14.01 List the guidelines for the safe use of ethylene oxide sterilization.
 - 14.02 Name the two spores used for spore testing and identify which types of sterilizers they are used for.
 - 14.03 Explain the purpose and proper procedure for performing the residual of air test in a vacuum sterilizer and other chemical and biological indicators.
 - 14.04 Demonstrate the basic reading of temperature and pressure recordings.
 - 14.05 Explain the reasons for biological monitoring.
- 15.0 DESCRIBE HOW CENTRAL SERVICE IS INVOLVED IN CONTROLLING INFECTIONS IN HOSPITALS--The student will be able to:

- 15.01 Describe the proper dress code in the clean and soiled sections of CS and outside of CS department in hospital.
 - 15.02 Explain infection control practices in C.S. i.e. traffic control patterns, personal health, work flow and housekeeping.
 - 15.03 Apply infection control techniques according to Center for Disease Control (CDC) guidelines.
 - 15.04 Explain the importance of handwashing in controlling infection, and how bacteria are transmitted from one person to another.
 - 15.05 Describe nosocomial infections.
 - 15.06 Describe the types of isolation.
 - 15.07 Describe the organization and functions of C.S.
 - 15.08 Describe the organizational patterns of health care facilities.
- 16.0 EXPLAIN THE PURPOSE OF OCCUPATIONAL SAFETY AND HEALTH ACT--The student will be able to:
- 16.01 Describe how employees are protected under OSHA.
 - 16.02 Describe at least six different things that can cause accidents in C.S.
 - 16.03 Describe the role preventive maintenance plays in patient and personnel safety in the hospital.
 - 16.04 Explain the purpose of Florida's "Right to Know" law and its provisions.
 - 16.05 Recognize the importance of filling out incident reports and reports to the Emergency Room.
 - 16.06 Implement appropriate JCAHO patient safety goals.
- 17.0 DESCRIBE SUPPLY DISTRIBUTION SYSTEMS AND THE PRINCIPLES OF INVENTORY CONTROL--The student will be able to:
- 17.01 List five (5) reasons for inventory control.
 - 17.02 Compare the advantages and disadvantages of four distribution methods.
 - 17.03 Define the benefits of computer inventory.
 - 17.04 Process a requisition marked "stat" - locate article, price, etc.
- 18.0 DEMONSTRATE THE ABILITY TO RECALL AND DISPOSE OF OR REPROCESS STERILE SUPPLIES--The student will be able to:
- 18.01 Explain the factors that effect how long a package can be considered safe for use.
 - 18.02 State the methods of determining expiration dates.
 - 18.03 List the steps in reprocessing outdated hospital packaged items.
 - 18.04 List four (4) conditions that would make a product unsafe for use.
 - 18.05 Describe the shelf life of stored sterile goods.
 - 18.06 Describe the methods of reprocessing.
- 19.0 INTERPRET AND APPLY MEDICAL TERMINOLOGY AND ANATOMICAL TERMS AS THEY RELATE TO EQUIPMENT AND SUPPLIES ISSUED BY CENTRAL SERVICE PERSONNEL--The student will be able to:
- 19.01 Identify components for medical terms.
 - 19.02 Relate anatomical concepts to orthopedic devices and other supplies and equipment issued by the C.S. Department.
- 20.0 IDENTIFY FUNDAMENTALS OF PROCUREMENT SKILLS--The student will be able to:

- 20.01 Describe procurement system.
- 20.02 Communicate with other hospitals for procurement of supplies and equipment.
- 20.03 Describe several different methods of procurement of supplies.
- 20.04 Describe basics of receiving items.