



Utah System of Higher Education

The Gateway, Salt Lake City, UT 84101

801-646-4784

Sterile Processing Technician

Course Description

Catalog Year: 2024, Required Hours: 900, Credits: 24

Foundational Courses (Required Hours: 900, Credits: 24)

Aligned Courses (Required Hours: 900, Credits: 24)

Credits Hours

TESP 1010	Intro to Sterile Processing and Decontamination	3.00	100.00
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Sterile processing technicians play an important role to ensure patient safety, infection prevention, and providing clean, sterile instruments on a regular basis for surgical procedures. Numerous processes and lab activities will help enhance the understanding of surgical instruments going from dirty, to clean, to becoming sterile, also known as One-Way-Flow. Each area in sterile processing is a building block of achieving sterile instrumentation for surgeries.

The decontamination of surgical instruments is an integral part of a sterile technician's job. Review and practice of standard operating procedures for bloodborne pathogens, standard precautions, decontamination of surgical instruments from the OR, and decontaminated to an acceptable level. Introduction of OSHA approved PPE and how to don and doff PPE will be practiced in the lab, along with other hands-on activities to practice in the lab. These activities will help reinforce the step-by-step processes the students must understand and follow through with the current standards and guidelines for decontamination in sterile processing.

Objectives:

- Explain the importance of the Sterile Processing Department, with an emphasis on the service provided and role of CS in quality patient care.
- Identify the various elements used in medical terminology including prefixes, roots, and suffixes.
- Discuss how medical terminology can refer to the human anatomy, disease processes, surgical instruments, and surgical procedures to assist the OR when specific items are needed for surgeries.
- Review the structure, function, activities, and role of cells, tissues, and organs in the body and identify common surgical procedures that involve each system.
- Identify pathogenic microorganisms such as bacteria, viruses, fungi and parasites, and how to prevent the spread of each pathogenic microorganism.
- Recognize the differences between federal and state laws/regulations versus voluntary standards and guidelines.
- Identify the need and use for thermal disinfection for infection prevention, the hazards of bloodborne pathogens.
- Describe Point-of-use preparation and safety guidelines for transporting contaminated items from the OR to the decontamination area.
- Discuss the purpose and set up of the decontamination sink areas including the importance of OSHA approved PPE.
- The role of detergents/enzymatic cleaners, three levels of disinfection, and the steps in the pre-cleaning process.

TESP 1110	Preparation and Packaging	3.00	90.00
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Identification of surgical instruments, their function and each specialty they're used for (e.g., ortho, neuro, spine, etc.), testing methods used for specific instruments such as but not limited to laparoscopic sheath testing, scissor sharpness, tip protections and inspection for wear and tear of each instrument. Students will practice simultaneous wrapping methods, the most commonly used in the OR's, and learn to identify sterilizing methods for each instrument set. Recognize the difference and become familiar with chemical indicators, tamper-evident seals, rigid container system and list of contents with instructions on how to assemble the instrument sets for the OR.

Objectives:

- Explain the function, accurate, and neat, methodology for assembling instrument sets.
- Recognize the areas of each instrument for inspection of debris and functionality.
- Explain sterilization and the two most commonly used methods.
- Identify the sterilization method and the use of chemical indicators, tamper-evident seals and packaging material for sterilization.
- Understand and become familiar with count sheets or "recipes," a list of contents and details originated by the OR staff on how to assemble each instrument set.
- Practice simultaneous wrapping, the most commonly used in the OR.
- Demonstrate how to use "peel packs" to package single instruments when needed.
- Label instrument sets for each packaging methods (rigid containers, wrapping, peel packs).
- Provide an overview of reusable and disposable packaging materials and packaging concepts including closure methods and selection factors.

TESP 1210	Sterilization and Disinfection	4.00	120.00
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High temperature and low temperature sterilization methods are the two methods of sterilization used in sterile processing. Discussion of daily testing procedures for each sterilization method, performance monitoring such as physical, biological, and chemical. Knowledge of which endospore is used for each sterilization method is crucial in order to assure sterility of surgical instruments. Record keeping and monitoring of each sterilization cycle will be practiced in the lab, as well as loading a sterilizer cart correctly.

The difference between disinfectants and the disinfection process will be discussed in great detail. Knowledge of these differences will ensure the student can recognize the three levels of disinfection; high, intermediate and low. Use of high-level disinfectants require OSHA approved PPE, while intermediate and low require minimal level of PPE to work with them. Activities on how to read different types of disinfectants, their intended use, contact times and which pathogens, if any, do they advertise to kill within the required contact time. The Chain of Infection will also be discussed in class and students will become familiar with each link and how to break in the infection process.

Objectives:

- Define the term Immediate Use Steam Sterilization and review the industry standards and procedures for use.
- Describe point-of-use processing and heat-sensitive medical devices.
- Discuss the advantage of steam sterilization, types and anatomy of different steam sterilizers, the sterilization cycles, conditions necessary for an effective process, and the indicators.
- Recognize daily testing procedures for each sterilization method.
- Understand how to document and read performance monitors for each sterilization method.
- Explain the requirements and parameters of the low-temperature sterilization methods.
- Understand the three levels of disinfectants and what they're used for.
- Practice reading various types of disinfectants to learn how to read the instructions for use correctly.
- Practice wearing PPE for lab activities which will require working with disinfectants.
- Discuss the Chain of Infection and how it relates to everyday life.
- Identify and break each link in the Chain of Infection.



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TESP 1310	Storage and Distribution, QA, and Equipment	3.00	90.00
<p>Sterile storage is where the instruments are stored after the sterilization process has been completed. Items will be picked for scheduled surgical procedures and be used in the OR on a patient. Items in sterile storage must have gone through the decontamination process, assembly and packaging process, and then the sterilization process.</p> <p>Distribution refers to the process of distributing sterile single use or reusable items to the OR and other areas within the hospital or facility. Sterile single use or sterile reusable items can be stored in the Sterile Storage area and picked by sterile processing personnel as the OR and/or other departments have requested. Par levels and other required processes of sterile item replenishment will be discussed in class.</p> <p>Quality Assurance is the daily testing of each sterilization method, high level disinfection process, decontamination and thermal disinfection process. Daily tests are performed and results are recorded for quality assurance and auditing purposes. Learning the record keeping processes, especially with daily testing of each sterilization method, will be practiced in the lab alongside the sterilization lab activities. Various items of equipment are used with the OR and throughout the hospital or facility. Equipment items can include: morphine drips, epidural pumps, feeding pumps, other pain management devices, etc. These equipment items are usually picked up by the sterile processing departments and disinfected using low level disinfectants. Not every hospital or facility will require sterile processing staff to complete these tasks; Distribution technicians will assume the duties in such cases and perform the necessary disinfection procedures.</p> <p>Objectives:</p> <ul style="list-style-type: none"> • Discuss sterile storage and transport considerations, concerns, and guidelines. • Explain the importance of monitoring work areas and processes and recordkeeping for quality control. • Describe common quality assurance programs and procedures in the Sterile Processing department. • Explain the basics of failure mode and effects analysis and root cause analysis. • Identify the importance of inventory management and the role of Sterile Processing technicians. • Describe common inventory replenishment systems and the cycle of consumable items. • Provide an overview of the use of information management systems in Central Service Departments including features of instrument and equipment tracking systems. • Explain the importance of safety and risk management in the Central Service department including education and reporting procedures. • Review three common workplace hazards: fire, hazardous substances, and bloodborne pathogens. 			
TESP 1900	Externship	11.00	500.00
<p>Externship is arranged by the program coordinator with participating hospitals and facilities to accommodate students to work in the sterile processing departments. Students will be able to put their skills learned in the classroom and lab to use in the field. The externship may be paid if the student gains employment, as well as unpaid, if the student chooses to work in the hospital or facility on a volunteer only basis. Students will submit the hours worked and in what area (decontamination, assembly, sterilization, sterile storage, QA) to their instructor for verification of proper externship work and hours. Once the student reaches 400 externship hours, they're eligible to sit for the HSPA CRCST exam. When the student has completed 450 hours, they will have completed the program in its entirety.</p> <p>Objectives:</p> <ul style="list-style-type: none"> • Apply the knowledge learned in the classroom to real world situations. • Demonstrate the hands-on skills mastered in the lab to the Sterile Processing departments in hospitals or facilities (Ambulatory Surgery Centers, Dental Clinics, Plastic Surgery Centers). 			