COURSE INFORMATION

Course Prefix/Number: SUR 125  
Course Title: Sterile Processing Practicum (Central Service Technician)  
Lecture Hours/Week: 3.0  
Lab Hours/Week: 6.0  
Credit Hours/Semester: 5.0

VA Statement/Distance Learning Attendance  
Textbook Information  
Student Code and Grievance Policy  
Attendance Statement (3-30-4000.1)

COURSE DESCRIPTION

This course presents the applications of sterile processing theory in the clinical setting.

COURSE COMPETENCIES

Upon successful completion of this course, the student will be able to perform the following tasks as they relate to safe patient care practices in the Central Service Department:

- Explain the importance of the Central Service Department with an emphasis on the service provided and its role in quality patient care
- Diagram the work flow process in an effectively organized Central Service Department
- Identify basic knowledge and skills required for effective Central Service Technicians.
- Define job responsibilities of Central Service Technicians.
- Discuss the role of education and training in the field of Central Service.
- Explain the importance of medical terminology for Central Service technicians.
- Identify the elements “prefix”, “root”, and “suffix” in medical terminology.
- Discuss how medical terminology can refer to human anatomy, disease processes, surgical instruments and procedures.
- Recognize medical terminology used to refer to surgical procedures on the OR Schedule
- Recognize the structure, function, activities and roles of cells, tissues and organs in the body.
- Identify and describe the structure and roles of each major body system, and indicate common surgical procedures that involve each system.
- Correlate anatomical knowledge with surgical instrument identification
- Define the term “microbiology” and explain its relevance to the Central Service professional.
- Identify common ways to identify and classify microorganisms.
• Explain environmental conditions necessary for bacterial growth and survival.
• Compare basic information about non-bacterial organisms.
• Identify basic information about non-bacterial organisms:
  - Viruses
  - Protozoa
  - Fungi
  - Prions
• Differentiate how microorganisms are transmitted between persons and places.
• Evaluate the basic procedures to control and kill microorganism.

Module 2: Regulations, Standards, Infection Prevention, Decontamination; Point Of Use Preparation and Transportation, Cleaning and Decontamination
• Explain the difference between regulations and voluntary standards and regulatory standards.
• Explain the relationship between the U.S. Food and Drug Administration (FDA) and the Central Service Professional
• Explain the roles and responsibilities of other federal agencies that impact Central Service.
• Explain the role of Central Service professional’s role in a healthcare facility’s infection prevention and control efforts associated with surgical infections.
• Discuss personal hygiene and personal protective equipment precautions.
• Identify the hazards of bloodborne pathogens and how OSHA requirements impact personal safety.
• Assess the basic environmental concerns as Central Service work areas are designed.
• Discuss the chain of infection and the CS professional’s role in breaking the chain.
• Discuss the four main goals of soiled item preparation and transport.
• Identify the sources of contaminated items.
• Explain point –of-use preparation procedures.
• Review basic procedures to transport soiled items from user areas to the Central Service Decontamination area.
• Identify basic sources for education and training information applicable to the transport of contaminated items.
• Define the cleaning processes for the CS professional.
• Identify challenges that impact cleaning and decontamination of medical devices.
• Discuss the purpose and set up of the decontamination area.
• Identify and demonstrate appropriate use of personal protective equipment for safe practice.
• Define Standard precautions.
• Explain the role of common cleaning tools.
• Discuss mechanical cleaners.
• Discuss the use of chemicals in the decontamination area.
• List the steps of the cleaning process.
• Explain manual cleaning processes.

Module 3: Disinfection, Surgical Instruments, Simple & Complex, Assembly & Packaging
• Describe the term “disinfection” and explain how disinfection differs from sterilization.
• Explain disinfection levels as identified in the Spaulding Classification system.
Recognize factors that impact the effectiveness of a disinfectant and good work practices for manual disinfection and automated processes.

Discuss the importance of surgical instrumentation and the role of the CS professional in the care and handling of surgical instrumentation.

Review the process by which surgical instruments are manufactured.

Define basic categories of surgical instruments based on their functions.

Identify solutions that can damage stainless steel instruments.

Explain procedures to test instruments for sharpness.

Discuss the importance of instrumentation lubrication.

Discuss procedures to care for and effectively process powered equipment.

Explain basic concerns when handling and processing endoscopic instruments.

Discuss detailed information about rigid and flexible endoscopes.

Review general processing and inspection requirements for rigid and semi-rigid endoscopes and laparoscopic instruments.

Identify concerns related to loaner instrumentation.

Explain the set up and function of the assembly area.

Explain the basic objectives of the packaging process, and review basic selection factors for materials to be used with specific sterilization method.

Compare reusable and disposable packaging materials.

Describe basic package closure methods.

Explain general packaging concepts.

Module 4: Point of use Sterilization, High And Low Temperature Sterilization, Sterile Storage Transport

Define the term, “immediate use steam sterilization” and review industry standards for the process.

Explain the need for and basic procedures to undertake ‘immediate use steam sterilization”.

Describe quality control monitoring procedures for ‘immediate use steam sterilization”.

Discuss factors that impact the effectiveness of and the four conditions required for steam sterilization.

Diagram the anatomy of steam sterilizer.

Diagram the sterilization cycle of steam sterilizers.

Explain the basics of dry heat sterilization.

Discuss sterilization process indicators that help assure quality control.

Discuss basic requirements important for any type of low temp sterilization system.

Explain the specific requirements for the three low temperature sterilization methods: ethylene oxide, hydrogen peroxide (gas plasma) and ozone.

Compare important parameters of the three low temperature sterilization methods commonly used by health care facilities.

Review Sterile Storage considerations to include, shelving, and basic storage guidelines.

Explain event-related sterility.

Describe appropriate transportation guidelines.
Module 5: Monitoring and Record Keeping, Quality Assurance, Inventory Management

- Discuss monitoring, processes and recordkeeping in the CS department.
- Review the sterilization process indicators and quality control.
- Discuss employee training and continuing education records.
- Define quality assurance related to CS operations.
- Discuss common quality programs.
- Explain failure mode, effects analysis and root cause analysis.
- Explain inventory management and the role of the CS professional.
- Define inventory terminology used in the healthcare facility.
- Describe the relationship between CS and Materials Management.
- Define the importance of sustainability efforts and waste reduction.
- Discuss the role of the CS department in supporting ancillary departments.
- Discuss management of patient care equipment.

Module 6: Information Technology, Risk Management, Communication, Personal and Professional Development for the Central Service Professional

- Describe information management systems in the CS department.
- Discuss the use of computers to support the healthcare facility and CS department.
- Describe how tracking systems enhance CS operations and their features.
- Discuss the importance of safety and risk management in the CS department.
- Explain the three common CS workplace hazards.
- Discuss ergonomics and health awareness for the CS professional.
- Discuss the importance of a professional and a personal disaster plan.
- Review procedures for reporting employee accidents and injuries.
- Define professionalism, effective communication and its impact on the CS profession.
- Discuss tactics to improve teamwork, communication and professional behavior.
- Define diversity and explain its importance in the workplace.
- Discuss resume development, and the interview process, and promotions.
- Explore Central Service Career Paths.
- Define personal and professional development and discuss its relevance on the CS professional.

METHODS OF INSTRUCTION

Instruction will consist of lecture, lab, multimedia, demonstrations, and role-play.

MINIMAL STANDARDS

Students must have a final average of 80% or better in lecture and a final average of 80% or better in lab component of this course. If either the lecture or the lab average is below 80%, the student will not successfully complete this course. The student must earn a satisfactory final grade (80% or higher) in this course to merge into the Surgical Technology Program if an opening into the program would occur.
COURSE REQUIREMENTS

In order to successfully complete SUR 125, the student is required to fulfill the following requirements:

- Complete all reading assignments prior to class sessions.
- Successfully complete all competency based exams, quizzes, projects and assignments with a minimum average grade of 80% in order for a student to merge into the surgical technology program should a space become available.

Additional Attendance Requirements

Late Arrivals / Early Departures
Attendance in a class meeting requires being in the classroom and prepared for class at the time the class is scheduled to begin and remaining in the classroom until the instructor concludes the class session. Students are expected to arrive to class meetings at or before the scheduled start time and stay for the entire class session. Three (3) late arrivals and/or early departures will equal one (1) absence. **Students are required to phone the instructor for all absences and late arrivals.**

Clinical Attendance
The student must attend clinical as scheduled. Any time missed must be made up as soon as possible by scheduling it with the clinical instructor. If a student must be absent, the lab instructor is to be notified as soon as possible. Students must attend clinical regularly, as scheduled, as an employee would be responsible to the workplace.

Other Requirements
Students are expected to attend all lecture and clinical sessions of SUR 125. If an absence is unavoidable, the student must contact the instructor prior to the class and/or lab session. Failure to attend class will result in an absence. After two absences a written warning will be issued. A third absence could result in withdrawal from the program at the discretion of the program. SUR students are responsible for explaining EACH absence.

It is the judgment and experience of the program administrators that more than two absences make successful satisfactory completion of course requirements very difficult. Therefore, students with more than two absences may be withdrawn from the program at the discretion of the instructor.

The student may apply to be considered for re-admission if all other grades and lab performance are satisfactory according to York Tech policy. Refer to the York Technical College Student Handbook. Students should realize the direct relationship that exists between good grades and class attendance.

Academic Integrity
The policies stated in the *York Technical College Catalog & Handbook* will be enforced. Any student violating these policies will be subject to academic discipline.
EVALUATION STRATEGIES/ GRADING PROCEDURES

Grading
Grades will be based on performance on written competency-based tests, class work, and quizzes and lab component. Exam material will come from text book, lecture material, handouts and class discussion.

Evaluation of Performance

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<thead>
<tr>
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<th>Grade</th>
<th>Range</th>
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<tbody>
<tr>
<td>Module Exams</td>
<td>A</td>
<td>93 - 100</td>
</tr>
<tr>
<td>Classwork/Homework</td>
<td>B</td>
<td>85 - 92</td>
</tr>
<tr>
<td>Instrument Exams</td>
<td>C</td>
<td>80 - 84</td>
</tr>
<tr>
<td>Clinical</td>
<td>D</td>
<td>75 - 79</td>
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<tr>
<td></td>
<td>F</td>
<td>Below 75</td>
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Grade Scale

Lab Component
The lab component includes both the instrument exams scores and clinical grades. All competency skills assessments will be announced a minimum of one (1) week prior to the check-off. If a student is not present on “check-off” day, each missed competency will be dropped one letter grade. She/he must make-up the missed competency(s) on a designated date set by the instructor. In the event the student fails to attend the makeup day, a grade of zero “0” will be earned and the student may be dismissed from the Central Service Program.

Instrument Exams
There will be two Instrument Exams administered.

Clinical
Clinical grade will consist of your attendance, professionalism and skill check offs that will be completed in either the lab or at the clinical site.

Exams
Each Module will have an exam. Exams will be administered in the Assessment Center. Exam Schedule will be posted in D2L and on the Course Addendum.

Classwork/Homework
There will be a classwork or homework assignment for each Module. Schedule will be posted in D2L and on the Course Addendum.

ENTRY LEVEL SKILLS
A student entering SUR 125 should have appropriate entrance scores for the Surgical Technology Program, and the ability and willingness to read, comprehend, and communicate effectively.

PREREQUISITES
None
CO-REQUISITES

SUR 101 and SUR 102 are co-requisite courses for the Central Service Certificate, and the Surgical Technology Diploma program. This course must be taken in fall semester in order to merge into the surgical Technology program should a spot become available.

Disabilities Statement
Any student who feels s/he may need an accommodation based on the impact of a disability should contact the Special Resources Office (SRO) at 803-327-8007 in the 300 area of Student Services. The SRO coordinates reasonable accommodations for students with documented disabilities.