What knowledge and skills should an ambulatory surgery sterile processing tech with 1 year’s experience possess to be considered competent? The Certification Board for Sterile Processing & Distribution identified these 6 areas:

1. Roles and Responsibilities
- purpose of processing area responsibilities
- manufacturer’s recommendations regarding operation, maintenance, cleaning and troubleshooting of departmental equipment
- basic care and handling of instruments and equipment
- potential workplace hazards, such as wet floors, fumes, body fluids and sharps
- ergonomic considerations and body mechanics
- policies and procedures related to processing functions
- federal, state and local guidelines, standards and regulations (OSHA, FDA, CDC, EPA)
- professional standards and ethics related to patient and employee confidentiality, personal hygiene and dress codes
- continuous quality assessment programs
- health and safety related to environmental requirements, such as airflow and traffic control
- safety competency

2. Life Sciences
- microbiology related to cleaning, disinfecting and sterilizing
- factors in disease transmission (blood, skin, air, contaminated medical devices)
- modes of cross contamination
- types of microorganisms (bacteria, virus, fungus, prions)
- basic anatomy and physiology
- relationship between instrument type and types of tissue and body structure
- life sciences competencies
- basic medical terminology
- body’s defenses against infection
- microbial growth conditions (temperature, humidity, oxygen)
- procedures for handling Creutzfeldt-Jakob Disease (CJD) contaminated supplies and equipment
- anatomy/physiology
- microbiology

3. Decontamination Competencies
- function and workflow of the decontamination room
- types of chemicals and their uses (including detergents, disinfectants, enzymatics and germicides)
- characteristics of chemicals (concentration, pH, expiration date, level of disinfection, contact time)
- disposal methods of biohazardous substances, chemicals and medical waste
- universal standards and personal protective equipment
- manufacturer’s instructions for use of chemicals
- methods of cleaning, disinfecting and decontaminating instruments and equipment
- factors affecting decontamination (water temperature, loading procedures, water impurities)
- instruments, including general surgical instruments (clamps, scissors, retractors, suction tips) and specialty instruments (power tools, immersible/non-immersible, lumens, flexible and rigid scopes)

4. Prep and Handling Competencies
- instrument terminology and anatomy (jaws, shanks, box locks, ratchet, rings)
- types and functions of instruments
- types of instrument construction (finish, composition)
- basic principles of packaging
- characteristics of packaging materials in relationship to sterilization methods
- testing and preventative maintenance procedures for instruments and equipment
- linen pack and instrument tray construction (size, shape, density, weight)
- device manufacturer’s processing requirements for instruments and equipment
- methods of monitoring sterilization (mechanical, biological, chemical)

5. Sterilization Competencies
- types of sterilizers and methods of sterilization (plasma, peracetic acid, steam)
- sterilization cycles and parameters (time, temperature, concentration, steam under pressure, humidity)
- operation and monitoring of sterilizers
- purpose, interpretation and documentation of sterilization indicators and integrators
- recall procedures
- loading and unloading criteria and procedures
- documentation procedures for lot number, date and load contents

6. Sterile Storage and Distribution Competencies
- factors that affect shelf life (damage, handling, temperature, humidity)
- storage requirements and shelving design (humidity, air exchange, placement)
- stock rotation (first-in, first out)
- inventory systems
- distribution systems (case carts, par level, exchange cart, “just in time” delivery, automated)
- sterility maintenance covers
- tamper-evident seals
- receiving procedures for handling medical supplies (corrugated boxes, breakout area, containers)

— Nancy Chobin, RN, CSPDM