

**J. Sargeant Reynolds Community College  
Course Content Summary**

**Course Prefix and Number:** CSP 106

**Credits:** 1

**Course Title:** Surgical Instrumentation

**Course Description:** Prepares the student to visually identify surgical instruments and distinguish category, use, and name of each instrument. Emphasizes quality assurance and provides the student with the skills to package and inspect instrumentation and equipment for sterilization. Laboratory 3 hours per week.

**General Course Purpose:** This course is designed with an emphasis on the knowledge and recognition of medical instruments, as well as instrumentation practice skills. The course covers topics, such as instrument identification, categories, use, and inspection. Emphasizes quality assurance testing, instrument tray set-up, packaging, tamper-evident seals, robotic and laser instruments, endoscopes, complex instruments, regulations, and proper inspection of medical instrumentation.

**Course Prerequisites and Co-requisites:**

None

**Student Learning Outcomes:**

Upon completing the course, the student will be able to

- a. Identify basic surgical instruments by category, name, and use;
- b. Demonstrate the different methods used to test and inspect various types of surgical instrumentation;
- c. Describe the use of surgical instrumentation;
- d. Perform instrument quality assurance testing;
- e. Demonstrate the proper procedures for assembling instruments/procedure trays;
- f. Differentiate between various categories of special instrumentation utilized in operating rooms;
- g. Demonstrate inspection and testing of endoscopic and robotic instrumentation;
- h. Demonstrate how to select the appropriate packaging material for instrumentation sets and medical equipment;
- i. Demonstrate how to check packaging materials for defects, cleanliness, and function;
- j. Demonstrate how to package sets in peel pouches, sterile wraps, and rigid pans; and
- k. Describe the function and how to use tamper-evident seals.

**Major Topics to Be Included:**

- a. Instruments by category and function
- b. Proper inspection of surgical instruments
- c. Use of surgical instruments
- d. Differentiate between working instruments and damaged instruments
- e. Procedures for assembling instrument trays

- f. Leak testing of endoscopes
- g. Differentiate between various types of complex instruments utilized in operating rooms
- h. Quality assurance and inspection of surgical instruments
- i. Regulations regarding instrumentation reuse
- j. Packaging materials
- k. Testing materials

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