

Revised 5/19/2020

Reese Campus

### Course Syllabus

COURSE: SRGT 1244 (2:2:1) Technological Sciences for the Surgical Technologist (2 Credit Hours)  
 SEMESTER: Summer 1 (June-August; 10 Week Semester)  
 CLASS TIMES: This course is online via blackboard.  
 INSTRUCTOR: Paul Landsman, CST  
 OFFICE: RC 504  
 OFFICE HOURS: By appointment only Monday-Thursday, Friday 11:30-3:00  
 OFFICE PHONE: 806-716-4642  
 E-MAIL: [plandsman@southplainscollege.edu](mailto:plandsman@southplainscollege.edu)  
 PROGRAM FACEBOOK: <https://www.facebook.com/SPCSurgicalTechnology>

The Surgical Technology Program has a Facebook page at <https://www.facebook.com/SPCSurgicalTechnology>. In addition to the South Plains College website, this Facebook page will be used to keep students up-to-date on program activities, weather delays, South Plains College announcements and will help with program recruitment. "Liking" the Surgical Technology Facebook page is not mandatory, nor are personal Facebook accounts, in order to access this page.

Blackboard is an e-Education platform designed to enable educational innovations everywhere by connecting people and technology. This educational tool will be used in this course throughout the semester.

*"South Plains College improves each student's life."*

## GENERAL COURSE INFORMATION

\*It is the responsibility of each student to be familiar with the content and requirements listed in the course syllabus.\*

### COURSE DESCRIPTION

This course covers specialized surgical modalities. Areas covered include endoscopy, microsurgery, therapeutic surgical energies, and other integrated science technologies.

### STUDENT LEARNING OUTCOMES

Students will:
1. Demonstrate basic knowledge of sterilization F-1, F-2, F-5, F-6, C-18, C-19, C-20
2. Understand the basic concepts of electricity specific to equipment in the operating room. F-1, F-2, F-5, F-6, F-11, F-12, C-5, C-6, C-7, C-8, C-18, C-19, C-20
3. Display a working knowledge of suture and suturing techniques. F-1, F-2, F-5, F-6, F-7, F-11, F-12, C-5, C-6, C-7, C-15, C-18, C-19
4. Gain an introductory understanding of laparoscopic instrumentation and robotics in surgery. F-1, F-2, F-5, F-6, C-5, C-6, C-7, C-18, C-19, C-20
5. Prepare for the CST exam. F-1, F-2, F-4, F-5, F-6, F-7, F-8, F-9, F-10, F-11, F-12, C-5, C-6, C-7, C-8, C-15, C-16, C-17, C-18, C-19, C-20

### COURSE OBJECTIVES –

#### The Cognitive Domain Objectives:

- List and discuss the basic components and mechanisms of the laparoscopic and robotic systems
- Define electricity principles
- Define principles of LASERS and types of LASERS

- List the clinical applications of robotics in the operating room
- Outline basic concepts of robotics

### **The Psychomotor Domain Objectives:**

- Apply electrical knowledge to safe patient care practices in the OR
- Explain different types of electrical current
- Explain terms related to LASERS

### **The Affective Domain Objectives:**

- Discuss the pros and cons of robotic cases
- Apply knowledge of electricity to safe practices in the operating room
- Apply principles of physics to safe patient care
- Discuss basic concepts related to robotics
- Apply knowledge of LASER surgery

## **EVALUATION METHODS**

Computer-based exams, written assignments, quizzes, and other projects as assigned.

### **Formative assessments include:**

- Discussions
- Quizzes
- Unit exams
- Classroom activities

### **Summative assessment will be:**

- A comprehensive final research project

## **ACADEMIC INTEGRITY**

It is the aim of the faculty of South Plains College to foster a spirit of complete honesty and a high standard of integrity. The attempt of any student to present as his or her own any work which he or she has not honestly performed is regarded by the faculty and administration as a most serious offense and renders the offender liable to serious consequences, possibly suspension.

**Cheating** - Dishonesty of any kind on examinations or on written assignments, illegal possession of examinations, the use of unauthorized notes during an examination, obtaining information during an examination from the textbook or from the examination paper of another student, assisting others to cheat, alteration of grade records, illegal entry or unauthorized presence in the office are examples of cheating. Complete honesty is required of the student in the presentation of any and all phases of coursework. This applies to quizzes of whatever length, as well as final examinations, to daily reports and to term papers.

**Plagiarism** - Offering the work of another as one's own, without proper acknowledgment, is plagiarism; therefore, any student who fails to give credit for quotations or essentially identical expression of material taken from books, encyclopedias, magazines and other reference works, or from themes, reports or other writings of a fellow student, is guilty of plagiarism.

## BLACKBOARD

Blackboard is an e-Education platform designed to enable educational innovations everywhere by connecting people and technology. This educational tool will be used in this course throughout the semester.

## FACEBOOK

The Surgical Technology program has a Facebook page at <https://www.facebook.com/SPCSurgicalTechnology> In addition to the South Plains College website; this Facebook page will be used to keep students up-to-date on program activities, weather delays, South Plains College announcements and will help with program recruitment. "Liking" the South Plains College EMS Program Facebook page is not mandatory, nor are personal Facebook accounts, in order to access this page.

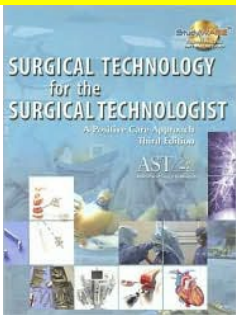
## SCANS and FOUNDATION SKILLS

Refer also to Course Objectives. SCANS and Foundation Skills attached.

## VERIFICATION OF WORKPLACE COMPETENCIES

This course does not include a Capstone component

## SPECIFIC COURSE INFORMATION



Surgical Technology for the Surgical Technologist: A Positive Care Approach, 3<sup>rd</sup> ed., AST (Text)

## METHODS OF TEACHING

- Lecture
- PowerPoint Presentations
- Question and answer
- Review
- Quizzes
- Examinations

## ATTENDANCE POLICY

### Class Attendance

Students are expected to attend all classes in order to be successful in a course. The student may be administratively withdrawn from the course when absences become excessive as defined in the course syllabus.

When an unavoidable reason for class absence arises, such as illness, an official trip authorized by the college or an official activity, the instructor may permit the student to make up work missed. It is the student's responsibility to complete work missed within a reasonable period of time as determined by the instructor. Students are officially enrolled in all courses for which they pay tuition and fees at the time of registration. Should a student, for any reason, delay in reporting to a class after official enrollment, absences will be attributed to the student from the first class meeting.

Students who enroll in a course but have “Never Attended” by the official census date, as reported by the faculty member, will be administratively dropped by the Office of Admissions and Records. A student who does not meet the attendance requirements of a class as stated in the course syllabus and does not officially withdraw from that course by the official census date of the semester, may be administratively withdrawn from that course and receive a grade of “X” or “F” as determined by the instructor. Instructors are responsible for clearly stating their administrative drop policy in the course syllabus, and it is the student’s responsibility to be aware of that policy.

It is the student’s responsibility to verify administrative drops for excessive absences through MySPC using his or her student online account. If it is determined that a student is awarded financial aid for a class or classes in which the student never attended or participated, the financial aid award will be adjusted in accordance with the classes in which the student did attend/participate and the student will owe any balance resulting from the adjustment.

([http://catalog.southplainscollege.edu/content.php?catoid=47&navoid=1229#Class\\_Attendance](http://catalog.southplainscollege.edu/content.php?catoid=47&navoid=1229#Class_Attendance))

Class attendance is mandatory. Students are allowed three (3) absences and will be administratively withdrawn on the fourth (4<sup>th</sup>) absence. A tardy will be given if the student is not present for the class or lab within the first 5 minutes of the class period. Two (2) tardies equal one (1) absence. If a student misses more than 30 minutes of any class session, an absence will be given for the day.

### **ASSIGNMENT POLICY**

The student is responsible for being prepared for class, which means reading the assigned chapters and/or pages from the textbook. In some instances, information from the reading assignments not covered during class may be included on a test.

### **COMPUTER USAGE**

As computer technology in the field of health occupations continues to become more popular, computers will be used in this course for several assignments. All students have access to computers and printers on the South Plains College campus. Students will be expected to utilize computers to access assignments and classroom resources. All registered students are supplied with a working email account from South Plains College. In order to take exams, students must have their user name and password.

**ALL STUDENTS ARE EXPECTED TO KNOW THEIR SPC STUDENT USER NAME AND PASSWORD.**

### **COMPUTER LAB USAGE**

The computer lab(s) on any campus may be used by students during scheduled open hours or as assigned by an instructor. Printer paper will not be provided for students to print materials but students may seek assistance from faculty or staff to request lab paper from the college if needed. Lack of computer lab paper is not an excuse for not having homework assignments, skills lab sheets, or any other required documents. Students should come prepared for class

### **EXAMS**

There are a total of 3 exams and 1 final exam reflective of the national certification exam that will be administered via blackboard and the NBSTSA website.

**GRADING POLICY** - Grades in this course will be determined using the following criteria:

The course grade will be determined by a combination of exams, quizzes, homework, a project, and a comprehensive final exam. Exam dates will be announced. The following guidelines will be followed regarding exams:

1. The student is expected to complete the exam at the scheduled time. Make-up exams will not be given.
2. Late assignments will not be accepted.
3. The Final exam is comprehensive over what you have learned ALL YEAR.

(3) Homework	15%
(6) Touch Surgery Assignments	10%
(3) Exams	25%
(1) CST Review Quiz	20%
(1) Research Project	30%

<i>Grading</i>	<i>Scale</i>	<i>91-100 = A</i>
		<i>81-90 = B</i>
		<i>75-80 = C</i>
		<i>Below 75 is failing</i>

A grade average of C (75) must be maintained in all Surgical Technology classes. You must pass all courses to proceed to the next semester

**COMMUNICATION POLICY**

- Electronic communication between instructor and students in this course will utilize the South Plains College “My SPC” and email systems. I will utilize text messaging and you may communicate with me this way also. The instructor will not initiate communication using private email accounts. Students are encouraged to check SPC email on a regular basis each week of class. Students will also have access to assignments, web-links, handouts, and other vital material which will be delivered via the classroom website. Any student having difficulty accessing the classroom website or their email should immediately contact their instructor for direction. The instructor will work with any student to ensure the student has access to a computer on campus and can obtain the needed class content that is located on the course website.

**STUDENT CONDUCT**

Rules and regulations relating to the students at South Plains College are made with the view of protecting the best interests of the individual, the general welfare of the entire student body and the educational objectives of the college. As in any segment of society, a college community must be guided by standards that are stringent enough to prevent disorder, yet moderate enough to provide an atmosphere conducive to intellectual and personal development. A high standard of conduct is expected of all students. When a student enrolls at South Plains College, it is assumed that the student accepts the obligations of performance and behavior imposed by the college relevant to its lawful missions, processes and functions. Obedience to the law, respect for properly constituted authority, personal honor, integrity and common sense guide the actions of each member of the college community both in and out of the classroom. Students are subject to federal, state and local laws, as well as South Plains College rules and regulations. A student is not entitled to greater immunities or privileges before the law than those enjoyed by other citizens. Students are subject to such reasonable disciplinary action as the administration of the college may consider appropriate, including suspension and expulsion in appropriate cases for breach of federal, state or local laws, or college rules and regulations. This principle extends to conduct off-campus which is likely to have adverse effects on the college or on the educational process which identifies the offender as an unfit associate for fellow students. Any student who fails to perform according to expected standards may be asked to withdraw. Rules and regulations regarding student conduct appear in the current Student Guide.

## SPECIAL REQUIREMENTS

- **Cell Phones** – Cell phones are to be turned OFF during scheduled class periods, unless prior approval has been given from the instructor. This includes text messaging. Cell phones are to be used outside the classroom only.

## Dropping a class

Students should submit a [Student Initiated Drop Form](#) online. **Students will not be required to obtain an instructor signature to drop**, however, we do encourage students to communicate with instructors or advisors prior to dropping a course when they are able. **There will be no charge for drops for the fall or spring semesters.**

## Withdrawing from all classes

If a student wishes to withdraw from all courses, they should initiate that process with the Advising Office. They can schedule an appointment with an advisor by visiting <http://www.southplainscollege.edu/admission-aid/advising/spcadvisors.php> or by calling 806-716-2366.

**found to have cell phone within the OR suite, disciplinary actions will be taken.**

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## ACCOMMODATIONS

### STATEMENT

In this class, the teacher will establish and support an environment that values and nurtures individual and group differences and encourages engagement and interaction. Understanding and respecting multiple experiences and perspectives will serve to challenge and stimulate all of us to learn about others, about the larger world and about ourselves. By promoting diversity and intellectual exchange, we will not only mirror society as it is, but also model society as it should and can be.

### DIVERSITY STATEMENT

In this class, the teacher will establish and support an environment that values and nurtures individual and group differences and encourages engagement and interaction. Understanding and respecting multiple experiences and perspectives will serve to challenge and stimulate all of us to learn about others, about the larger world and about ourselves. By promoting diversity and intellectual exchange, we will not only mirror society as it is, but also model society as it should and can be.

### DISABILITIES STATEMENT

Students with disabilities, including but not limited to physical, psychiatric, or learning disabilities, who wish to request accommodations in this class should notify the Disability Services Office early in the semester so that the appropriate arrangements may be made. In accordance with federal law, a student requesting accommodations must provide acceptable documentation of his/her disability to the Disability Services Office. For more information, call or visit the Disability Services Office at Levelland Student Health & Wellness Center 806-716-2577, Reese Center (also covers ATC) Building 8: 806-716-4675, Plainview Center Main Office: 806-716-4302 or 806-296-9611, or the Health and Wellness main number at 806-716-2529.

### 4.1.1.3 Non-Discrimination Statement

South Plains College does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs and activities. The following person has been designated to handle inquiries regarding the non-discrimination policies: Vice President for Student Affairs, South Plains College, 1401 College Avenue, Box 5, Levelland, TX 79336. Phone number 806-716-2360.

#### 4.1.1.4 Title IX Pregnancy Accommodations Statement

If you are pregnant, or have given birth within six months, Under Title IX you have a right to reasonable accommodations to help continue your education. To activate accommodations you must submit a Title IX pregnancy accommodations request, along with specific medical documentation, to the Director of Health and Wellness. Once approved, notification will be sent to the student and instructors. It is the student's responsibility to work with the instructor to arrange accommodations. Contact the Director of Health and Wellness at 806-716-2362 or email [cgilster@southplainscollege.edu](mailto:cgilster@southplainscollege.edu) for assistance.

#### 4.1.1.5 - Campus Concealed Carry Statement

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in South Plains College buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and South Plains College policy, license holders may not carry a concealed handgun in restricted locations. For a list of locations and Frequently Asked Questions, please refer to the Campus Carry page at: <http://www.southplainscollege.edu/campuscarry.php>

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all South Plains College campuses. Report violations to the College Police Department at 806-716-2396 or 9-1-1.

#### COVID STATEMENT

Consistent with the latest CDC recommendations, we have revised our guidance for students, faculty, and staff who have a known exposure or have tested positive. Anyone with a known exposure should wear a mask for 10 days and should seek a COVID-19 test on day five after exposure. If you test positive or develop symptoms, you should immediately self-isolate and seek a COVID-19 test. **Please immediately notify your instructor, supervisor, and DeEtte Edens, Associate Director of Health and Wellness, any time you test positive for COVID-19.** Anyone who tests positive is required to self-isolate for five days. Following the five-day isolation period, if you are asymptomatic or your symptoms are resolving, you may return to work or class but should wear a mask for five additional days. If you are still symptomatic, please contact DeEtte Edens at [dedens@southplainscollege.edu](mailto:dedens@southplainscollege.edu) or 806-716-2376 prior to your return date

## COURSE OUTLINE

Course Outline is subject to change by instructor.

### Surgical Technologist Certifying Exam Study Guide

#### CST – Certification Surgical Technology

The student will prepare for the national certification exam given by the NBSTSA one week before graduation. Students who pass this exam will have the credential of CST- Certified Surgical Technologist.

#### Lecture Topics

- A. Electricity
- B. LASERS
- C. Positioning
- D. Sterilization Review

**You will have something due most Sundays by midnight.**

#### Week 1:

Look over syllabus and respond in the forum that you acknowledge that you have read over and fully acknowledge that you have read it and understand it.

Use your phone or tablet and download Touch Surgery from the app store. Create a free account under allied health professional and familiarize yourself with the app.

Week 2: *Lecture, PowerPoint Presentations, Question and answer*

**\* TOUCH SURGERY ASSIGNMENT : TLIF – DUE DATE 6/19**

Week 3 *Examination, lecture, PowerPoint Presentations*

#### Understanding basics of Electricity

- Fundamentals of electrical currents
- Fundamentals of electrical equipment in the OR
- Types of electrocautery used and safety when in use

**\* EXAM ELECTRICITY and HOMEWORK  
TOUCH SURGERY ASSIGNMENT DUE : Femoral Bypass  
Due Date – 6/26**



Week 4: **Examination, lecture, PowerPoint Presentations**

**LASERS**

- Laser energy
- Laser standards and regulations
- Laser Safety
- Laser Precautions and Guidelines

\* **EXAM LASERS, HOMEWORK Due**  
**TOUCH SURGERY ASSIGNMENT: Positioning – DUE DATE 7/3**

Week 5: No lecture or homework this week

Week 6: **Lecture, PowerPoint Presentations**

**\*TOUCH SURGERY ASSIGNMENT #3 : Cataract – DUE DATE 7/17**  
**Research Papers are due 7/17/2022 by midnight**

Week 7: **Lectures: Positioning and Sterilization**

- Various positions
- Importance of correct technique
- Safety standards
- Positioning devices

**\*EXAM POSITIONING and STERILIZATION**  
**TOUCH SURGERY ASSIGNMENT: Femoral Nailing–DUE DATE 7/24**

Week 8:

\* **TOUCH SURGERY ASSIGNMENT: Laparoscopic Sigmoidectomy - DUE DATE 7/31**

Week 9:

**CST Review Quiz in class 8/4/22**

**\*END OF SUMMER PARTY / Potluck/water balloon fight to follow!**

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**FOUNDATION SKILLS**

**BASIC SKILLS—Reads, Writes, Performs Arithmetic and Mathematical Operations, Listens and Speaks**

F-1 Reading—locates, understands, and interprets written information in prose and in documents such as manuals, graphs, and schedules.

F-2 Writing—communicates thoughts, ideas, information and messages in writing and creates documents such as letters, directions, manuals, reports, graphs, and flow charts.

- F-3 Arithmetic—performs basic computations; uses basic numerical concepts such as whole numbers, etc.
- F-4 Mathematics—approaches practical problems by choosing appropriately from a variety of mathematical techniques.
- F-5 Listening—receives, attends to, interprets, and responds to verbal messages and other cues.
- F-6 Speaking—organizes ideas and communicates orally.

**THINKING SKILLS—Thinks Creatively, Makes Decisions, Solves Problems, Visualizes and Knows How to Learn and Reason**

- F-7 Creative Thinking—generates new ideas.
- F-8 Decision-Making—specifies goals and constraints, generates alternatives, considers risks, evaluates and chooses best alternative.
- F-9 Problem Solving—recognizes problems, devises and implements plan of action.
- F-10 Seeing Things in the Mind’s Eye—organizes and processes symbols, pictures, graphs, objects, and other information.
- F-11 Knowing How to Learn—uses efficient learning techniques to acquire and apply new knowledge and skills.
- F-12 Reasoning—discovers a rule or principle underlying the relationship between two or more objects and applies it when solving a problem.

**PERSONAL QUALITIES—Displays Responsibility, Self-Esteem, Sociability, Self-Management, Integrity and Honesty**

- F-13 Responsibility—exerts a high level of effort and perseveres towards goal attainment.
- F-14 Self-Esteem—believes in own self-worth and maintains a positive view of self.
- F-15 Sociability—demonstrates understanding, friendliness, adaptability, empathy and politeness in group settings.
- F-16 Self-Management—assesses self accurately, sets personal goals, monitors progress and exhibits self-control.
- F-17 Integrity/Honesty—chooses ethical courses of action.

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**SCANS COMPETENCIES**

- C-1 **TIME** - Selects goal - relevant activities, ranks them, allocates time, prepares and follows schedules.
- C-2 **MONEY** - Uses or prepares budgets, makes forecasts, keeps records and makes adjustments to meet objectives.
- C-3 **MATERIALS AND FACILITIES** - Acquires, stores, allocates, and uses materials or space efficiently.
- C-4 **HUMAN RESOURCES** - Assesses skills and distributes work accordingly, evaluates performances and provides feedback.

**INFORMATION - Acquires and Uses Information**

- C-5 Acquires and evaluates information.
- C-6 Organizes and maintains information.
- C-7 Interprets and communicates information.
- C-8 Uses computers to process information.

**INTERPERSONAL—Works With Others**

- C-9 Participates as members of a team and contributes to group effort.
- C-10 Teaches others new skills.
- C-11 Serves Clients/Customers—works to satisfy customer’s expectations.

C-12 Exercises Leadership—communicates ideas to justify position, persuades and convinces others, responsibly challenges existing procedures and policies.

C-13 Negotiates—works toward agreements involving exchanges of resources; resolves divergent interests.

C-14 Works With Diversity—works well with men and women from diverse backgrounds.

**SYSTEMS—Understands Complex Interrelationships**

C-15 Understands Systems—knows how social, organizational, and technological systems work and operates effectively with them.

C-16 Monitors and Corrects Performance—distinguishes trends, predicts impacts on system operations, diagnoses systems performance and corrects malfunctions.

C-17 Improves or Designs Systems—suggests modifications to existing systems and develops new or alternative systems to improve performance.

**TECHNOLOGY—Works with a Variety of Technologies**

C-18 Selects Technology—chooses procedures, tools, or equipment, including computers and related technologies.

C-19 Applies Technology to Task—understands overall intent and proper procedures for setup and operation of equipment.

C-20 Maintains and Troubleshoots Equipment—prevents, identifies, or solves problems with equipment, including computers and other technologies.



**SRGT – 1244 Technological Science for the Surgical Technologist**

By signing and initialing below I affirm that I have received a copy or shown the online location of the following documents and furthermore acknowledge that I am solely responsible for the content of each.

\_\_\_\_ Syllabus SRGT 1244

\_\_\_\_ SPC SRGT Program Handbook

\_\_\_\_ SPC SRGT Clinical Handbook

\_\_\_\_ South Plains College Grievance Policy

\_\_\_\_ South Plains College GRADE AND ACADEMIC DISCIPLINE APPEALS

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Signature

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Date