

El Paso Community College

Syllabus

Part II

Official Course Description

SUBJECT AREA	<u>Surgical Technology</u>
COURSE RUBRIC AND NUMBER	<u>SRGT 1541</u>
COURSE TITLE	<u>Surgical Procedures I</u>
COURSE CREDIT HOURS	<u>5 4 : 4</u> Credits Lec Lab

I. Catalog Description

Introduces surgical procedures and related pathologies with emphasis on surgical procedures related to the general, obstetrics/ gynecology, genitourinary, otorhinolaryngology and orthopedic surgical specialties incorporating instruments, equipment, and supplies. A grade of “C” or better is required in this course to take the next course. **Prerequisites: SRGT 1405 and SRGT 1509. Corequisites: SRGT 1244 and SRGT 2560. (4:4).**

II. Course Objectives

Upon satisfactory completion of this course, the student will be able to:

- A. Unit I. Introduction to Surgical Procedures
 - 1. Utilize common prefixes, stems and suffixes related to surgical intervention.
 - 2. Explain the organization and general plan of the human body.
 - 3. Describe characteristics of benign and malignant tumors.
 - 4. Identify risk related factors for cancer.
 - 5. Define the terms used to determine the extent of the disease.
 - 6. Describe the tumor identification system.
 - 7. Discuss methods of cancer treatment.
 - 8. Correlate anatomy of the anterior abdominal wall to commonly used surgical approaches to the abdomen.
 - a. Vertical
 - i. Median (midline)
 - ii. Paramedian
 - b. Oblique
 - i. Lower oblique inguinal
 - ii. Lumbar (flank)
 - iii. McBurney
 - iv Subcostal (Kocher)
 - v. Thoraco-abdominal
 - vi Chevron
 - c. Transverse
 - i. Midabdominal
 - ii. Pfannenstiel

B. Unit II. General Surgery I

1. Correlate the relevant anatomy and physiology of the gastrointestinal system, biliary system, pancreas, and spleen
2. Correlate the relevant pathophysiology of the .gastrointestinal system, biliary system, pancreas, and spleen that prompts surgical intervention
3. Relate preoperative diagnostic procedures/tests to relevant pathology.
4. Discuss special considerations that are unique to general surgery procedures.
5. List the supplies, equipment and instrumentation required for general surgery procedures..
6. Review specific procedural steps as a guide for clinical procedure consideration.
 - a. Appendectomy.
 - b. Cholecystectomy
 - c. Colon resection
 - d. Gastric resection
 - e. Hemorrhoidectomy
 - f. Laparoscopic Nissen fundoplication
 - g. Liver resection
 - h. Pancreaticoduodenectomy. (Whipple)
7. Discuss the postoperative care of the patient according to the procedure.
8. List the wound classification and correlate to wound management.
9. Apply broad general surgical concepts and knowledge to clinical practice for provision of quality, safe patient care.

C. Unit III. General Surgery II

1. Correlate the relevant anatomy and physiology of the anterior abdominal wall, breast, thyroid gland and associated structures.
2. Correlate pathophysiology of the abdominal wall, breast, and thyroid gland that prompts surgical intervention.
3. Relate preoperative diagnostic procedures/tests to relevant pathology.
4. Determine any special considerations that are unique to general surgery procedures.
5. List the supplies, equipment and instrumentation required for these procedures
6. Review specific procedural steps as a guide for clinical procedure consideration
 - a. Herniorraphy - Open/Laparoscopic
 - i. Incisional
 - ii. Inguinal
 - iii. Umbilical
 - b. Breast procedures
 - i. Breast biopsy
 1. Sentinel node biopsy
 2. Needle localization
 - ii. Modified radical mastectomy with axillary node dissection
 - iii. Axillary node dissection
 - c. Thyroidectomy/Parathyroidectomy
7. Discuss the postoperative care according to the procedure.
8. List the wound classification and correlate to wound management
9. Apply broad general surgical concepts and knowledge to clinical practice for enhanced surgical care.

D. Unit IV. Obstetric and Gynecologic Surgery

1. Correlate e the relevant anatomy and physiology of the female reproductive system.
2. Correlate pathophysiology of the female reproductive system that prompts surgical intervention.
3. Relate preoperative diagnostic procedures/tests to relevant pathology.
4. Determine any special considerations that are unique to obstetrical and gynecologic procedures.

5. List the supplies, equipment and instrumentation required for these procedures.
6. Review specific procedural steps as a guide for clinical procedure consideration.
 - a. Cervical procedures
 - i. Cervical biopsy
 - ii. Cervical cerclage
 - iii. Dilation and curettage
 - iv. Hysteroscopy
 - b. Uterine, ovarian and fallopian tubes procedures
 - i. Uterine
 1. Cesarean section
 2. Endometrial ablation
 3. Hysterectomy
 - a. Laparoscopic
 - b. Robotic assisted
 - c. Total abdominal
 - d. Vaginal
 - ii Ovarian
 1. Oophorectomy
 - ii. Fallopian tubes
 1. Ectopic pregnancy
 2. Salpingectomy
 3. Sterilization procedures
 4. Tuboplasty
 - c. External genitalia procedures
 - i. Labioplasty
 - ii. Perineal laceration
 - iii. Vulvectomy
 - d. Vaginal procedures
 - i. Ablation of condylomata
 - ii. Marsupialization of Bartholin's gland (cystectomy)
 - iii. Anterior and posterior repair (colporrhaphy)
 - e. Pelvic procedures
 - i. Diagnostic laparoscopy
 - ii. Total pelvic exenteration
 - iii. Wertheim procedure
7. List the wound classification and correlate to wound management.
8. Apply broad gynecological concepts and knowledge to clinical practice for enhanced surgical care.

E. Unit V. Genitourinary Surgery

1. Correlate the relevant anatomy and physiology of the male reproductive system and the urinary system.
2. Correlate pathophysiology of the male reproductive system and the urinary system that prompts surgical intervention.
3. Relate preoperative diagnostic procedures/tests to relevant pathology.
4. Determine any special considerations that are unique to genitourinary procedures
5. List the supplies, equipment, and instrumentation required for these procedures.
6. Review specific procedural steps as a guide for clinical procedure consideration.
 - a kidney
 - i. Nephrectomy
 - ii. Kidney transplant
 - iii. Wilm's tumor excision
 - b Ureter
 - i. Ureteroscopy
 - ii Ureteropyelolithotomy
 - c. Bladder
 - i. Cystoscopy
 1. TURBT

- ii Cystectomy with creation of ileal conduit
 - iii.Suspension (TVT/ sling)
 - d. Prostate
 - i. TURP
 - ii Prostatectomy
 - 1. Laparoscopic with robot
 - 2. Suprapubic
 - iii Prostate seeding
 - e.Penile
 - i. Circumcision
 - ii Epispadias repair
 - iii.Hypospadias repair
 - iv Penile implant insertion
 - v. Penectomy
 - f. Testicular
 - i. Hydrocelectomy
 - ii Orchiopexy
 - iiiOrchiectomy
8. List the wound classification and correlate to wound management
7. Apply broad genitourinary concepts and knowledge to clinical practice for enhanced surgical care.

F. Unit VI. Orthopedic Surgery

1. Correlate relevant anatomy and physiology of the musculoskeletal system.
2. Correlate pathophysiology of the musculoskeletal system that prompts surgical intervention.
3. Relate preoperative diagnostic procedures/tests to relevant pathology.
4. Determine any special considerations that are unique to orthopedic procedures.
5. List the supplies, equipment and instrumentation required for orthopedic procedures.
6. Review the procedural steps as a guide for clinical procedure consideration.
 - a.Shoulder
 - i. Acromioplasty
 - 1. Open
 - 2. Arthroscopic
 - ii. Arthroscopy
 - iii Bankart procedure
 - iv Rotator cuff repair
 - v.Total arthroplasty
 - b..Radius
 - i. ORIF
 - ii External fixator
 - c.Hip
 - i. Total arthroplasty
 - ii. ORIF
 - d.Femur
 - i. Femoral shaft fracture (Rodding)
 - e. Knee
 - i. Arthroscopy
 - ii. ACL repair
 - iii.Amputation
 - 1. Above the knee (A/K)
 - 2. Below the knee (B/K)
 - ivTotal arthroplasty
 - f. Ankle/foot
 - i. Achilles tendon repair
 - ii. Triple arthrodesis
 - iii. Bunionectomy

7. List the wound classification and correlate to wound management
8. Apply broad orthopedic concepts and knowledge to clinical practice for enhanced surgical care.

G. Unit VII Otorhinolaryngology

1. Correlate relevant anatomy and physiology of the ear, nose and throat.
2. Correlate pathophysiology of the ear, nose, and throat that prompts surgical intervention.
3. Relate preoperative diagnostic procedures/tests to relevant pathology.
4. Determine any special considerations that are unique to otorhinolaryngologic procedures.
5. List supplies, equipment, and instrumentation required for otorhinolaryngologic procedures.
6. Review the procedural steps as a guide for clinical procedure considerations.
 - a. Ear
 - i. Cochlear implant
 - ii Mastoidectomy
 - iii Myringotomy
 - iv. Stapedectomy
 - v. Tympanoplasty
 - b. Nose
 - i. Endoscopic sinus surgery (FESS)
 - ii Nasal antrostomy
 - iii Nasal polypectomy
 - iv .Septoplasty
 - v. Turbinectomy
 - c. Oral
 - i Laryngectomy
 - ii. Parotidectomy
 - iii Radical neck dissection
 - iv Temporomandibular joint arthroscopy (TMJ)
 - v. Tonsillectomy and adenoidectomy (T&A)
 - vi Tracheotomy/tracheostomy
 - vii Uvulopalatopharyngoplasty (UPPP)

III. THECB Learning Outcomes (WECM)

1. Relate anatomy and pathology for selected procedures
2. Demonstrate patient preparation.
3. Utilize instruments, equipment, and supplies.
4. Demonstrate case management skills, sequentially.
5. Identify outcomes and possible complications.

IV. Evaluation

- A. Preassessment
The student must have completed SRGT 1405 and SRGT 1509.
- B. Postassessment
 1. Written examinations will be administered at the completion of each unit of instruction.
 2. Quizzes may be administered during lecture periods without prior announcement.
 3. Assignments will be completed in The Anatomy Coloring Book and the Study Guide /Lab Manual
 4. A comprehensive final exam will be administered at the end of the course.
- C. Remediation
The instructor will provide individual procedures for students needing remediation after an individual conference has been scheduled. Such procedures may include, but are not limited to, supplementary assignments, tutorial assistance, etc.
- D. Grading

1. All unit exams will be weighted equally.
2. All unit exams will be averaged together and computed as 75% of the semester grade.
3. Quizzes will be averaged together and weighted as one exam.
4. Assignments in the Anatomy Coloring Book and Study Guide/Lab Manual will be averaged together and computed as 5% of the final grade.
Distribution of Percentages
Completion of Assignment = 100%
Incomplete = 50%
No completion = 0%
5. The comprehensive final exam will be computed as 20% of the final grade.
6. Grading Scale
A = 93 - 100
B = 85 - 92
C = 77 - 84
D = 70-76
7. Grades are rounded.
8. SRGT 1541 must be completed with a "C" or above.

V. Disability Statement (Americans with Disabilities Act [ADA])

EPCC offers a variety of services to persons with documented sensory, mental, physical, or temporary disabling conditions to promote success in classes. If you have a disability and believe you may need services, you are encouraged to contact the Center for Students with Disabilities to discuss your needs with a counselor. All discussions and documentation are kept confidential. Offices located: VV Rm C-112 (831-2426); TM Rm 1400 (831-5808); RG Rm B-201 (831-4198); NWC Rm M-54 (831-8815); and MDP Rm A-125 (831-7024).

VI. Six Drop Rule

Students who began attending Texas public institutions of higher education for the first time during the Fall 2007 semester or later are subject to a 6-Drop limit for all undergraduate classes. Developmental, ESL, Dual Credit and Early College High School classes are exempt from this rule. All students should consult with their instructor before dropping a class. Academic assistance is available. Students are encouraged to see Counseling Services if dropping because exemptions may apply. Refer to the EPCC catalog and website for additional information.