

KINGSBOROUGH COMMUNITY COLLEGE

Of

The City University of New York

Department of Nursing

ST 4 – Surgical Procedures IV

Prerequisites: ST 3, ST3P

Pre/Corequisites: BIO 12

Corequisites: ST4P

Course Syllabus: 2009

Credit Hours: 4

Catalogue Overview: This is an orientation to specific surgical specialties including General surgery, surgery of the gastrointestinal tract, biliary system, gynecology, urology, and surgery of the ear, nose and throat. This course intends to introduce the student to each anatomical system with a focused review of pathology in conjunction with those specific procedures performed. The instrumentation and surgical modalities of each specialty will be discussed as it relates to the practice of Surgical Technology. This course will be taught as a 4-hour weekly lecture in conjunction with Practicum II which will provide an active hands-on component.

Course Objectives: Upon successful completion of this course the student will be able to

1. Discuss the relevant anatomy of the body systems
2. Describe the pathology that prompts surgical intervention.
3. Discuss preoperative diagnostic tests and preparations.
4. Identify the names and uses of instruments, supplies and drugs pertinent to each body system,
5. Identify the names and uses of specialized equipment for each system.
6. Define and give an overview of the surgical procedures
7. Discuss the expected outcomes of the surgical intervention.
8. Discuss the postoperative care and possible complications.

Topical Outline:

Unit I - General Surgery

Unit II - Gastrointestinal Surgery

Unit III - Biliary Surgery

Unit IV - Gynecologic Surgery

Unit V - Ear, Nose, & Throat Surgery

Unit VI - Urological Surgery

Teaching Strategies:

Lecture

Teacher-guided discussion

Audio-visual materials

Demonstration/Return Demonstration

Course Requirements:

1. Textbooks

Required:

Goldman, Maxine A., *Pockett Guide to the Operating Room, 3rd Edition*, F.A. Davis, 2008
AORN, *Standards, Recommended Practices and Guidelines*, AORN, Inc., 2008
Fuller, Joanna K., *Surgical Technology: Principles and Practice, 4th Edition*, Elsevier, 2005
Ehrlich, A and Schroeder, Carol, L., *Medical Terminology for Health Professions*, Delmar Thomson, 5th edition, 2004
Rutherford, Colleen J., *Differentiating Surgical Instruments*, F.A. Davis Company, Philadelphia, 2005

Recommended:

Meeker, Margaret H. and Jane C. Rothrock, *Alexander's Care of the Patient in Surgery*, Mosby, St. Louis, Missouri, 13th Edition, 2007
Caruthers, Bob L., *Surgical Technology for the Surgical Technologist: A Positive Care Approach*, AST Publishers, 3rd Edition, 2008
Thomas, L. Clayton, *Taber's Cyclopedia Medical Dictionary*, F.A. Davis Company, Philadelphia, Pennsylvania, 20th Edition, 2006

2. Attendance:

A student is deemed excessively absent when he or she has been absent 15% of the number of contact hours a class meets during a semester. When a student is excessively absent, a grade of "W" or "WU" will be assigned as described in the college catalog.

3. Health Clearance – CPR Training – Malpractice Insurance:

Students are required to have health clearance, malpractice insurance and evidence of CPR training prior to registration.

During the semester any change in the student's health clearance (e.g., serious illness, accident, pregnancy, etc.) necessitates evaluation by student health service. Student responsibility includes notification of the instructor and course coordinator. Health clearance must be maintained to continue course enrollment.

4. Evaluation:

Grades will be calculated according to college and departmental policy as follows:

A+	98-100
A	95-97
A-	90-94
B+	88-89
B	85-87
B-	80-84
C+	78-79
C	75-77
C-	70-74
D+	68-69
D	65-67
D-	60-64
F	59 and below
W	Withdrew without penalty
WU	Unofficial Withdrawal (Counts as failure)
INC	Term's Work Incomplete. Counts as "F" grade unless work is completed within six months.

Grades will be determined as described below:

Unit Tests	60%
Final Exam	40%

The Department of Nursing adheres to the Policies and Procedures on Academic Integrity as set forth by CUNY. See the Surgical Technology Student Handbook, the KCC Catalog and website for further details.

Students are expected to take all tests when scheduled. Exceptions to this rule will be for emergency situations and the faculty must know in advance.

Students who do not take a test on the scheduled date are required to take a makeup test. All makeup tests will be given at the end of the semester.

Students who fail to take the scheduled exams or makeup will receive a grade of zero for that test.

All written assignments must comply with college standards for written work. Written assignments are to be turned in during the class period on the date that they are due. All assignments must be handed in by the end of the course to complete the requirements of the course. A late assignment will meet the requirements of the course but will not receive full credit. If written assignments are not submitted by the end of the course, the student will receive a grade of "F" for the course.

A conference with the instructor is required at mid-semester and at the end of the course to discuss the student's progress. Students may initiate conferences at other times.

5. Classroom Decorum:

All pagers, wireless phones, electronic games, radios, tape or CD players or other devices that generate sound must be turned off when any member of the academic community enters a classroom. Cellular devices are allowed to be on in the classroom only if the owner is using the caller ID, voice messages or a vibrating battery mechanism. Members of the academic community must exit the classroom to make or receive calls.

6. Retention Criteria:

Criteria for retention in the Program mandates that students must:

- a. receive no more than two grades under "C" in any pre or corequisites
- b. earn a minimum final grade of "C" in every Surgical Technology course.
- c. the student must repeat a Surgical Technology course once if the grade is below "C"
- d. a second grade below "C" will result in the student's dismissal from the program.
- e. Students who fail a course achieving a grade of not less than "C-" may apply to repeat the course one time only. Repeating the course is subject to space availability.
- f. Students must submit an **"Intent to Return to Surgical Technology Form"** outlining what they thought caused them to be unsuccessful and include a plan for success that demonstrates significant changes in how they will approach the course when repeated.

7. Dress Requirements:

Students must present themselves as professional role models. Students are to travel to and from health agencies in street clothes.

"In Uniform" refers to the standard uniform of KCC Department of Nursing/Surgical Technology Program

1. All students are to change into appropriate scrubs provided by the agencies
2. A knee-length, white lab coat is to be worn when necessary.
3. The KCC patch is to be sewn on the left upper sleeve of the lab coat.
4. Current KCC Student ID card is to be worn at all times.
5. No jewelry other than plain wedding ring.
6. Nails should not extend beyond the fingertips and should be rounded and clean.
7. No nail polish is permissible in the clinical agencies.
8. Hair is to be clean, off the face and above collar line.
9. Subdued makeup.
10. In the clinical setting, all requirements of the AORN for attire must be maintained.

Unit 1	General Surgery		
Learner Objectives	Content/Lecture Discussion	Related Learner Experiences	Laboratory Objectives
<p>Upon completion of this unit the student shall be able to:</p> <p>1. Discuss the role of the surgical technologist as it relates to those procedures in General Surgery</p>	<p>1. General Surgical Procedures</p> <p>Hernia repair</p> <p>Inguinal</p> <p>Femoral</p> <p>Ventral</p> <p>Umbilical</p> <p>Other</p> <p>Breast Procedures</p> <p>Biopsy</p> <p>Lumpectomy</p> <p>Simple Mastectomy</p> <p>Modified radical mastectomy</p> <p>Transverse rectus abdominis</p> <p>Musculocutaneous flap</p> <p>Venous surgery</p> <p>Ligation and stripping</p>	<p style="text-align: center;">WEEK 1</p> <p>Handout:</p> <p>Syllabus</p> <p>Week to week</p> <p>Reading Assignment:</p> <p>Fuller P 422-427, 501-508</p> <p>Ehrlich & Schroeder, <i>Medical Terminology for Health Professions</i>, P 173-176.</p> <p>Media Center:</p> <ol style="list-style-type: none"> 1. Introduction to Surgical Instruments 2. General Surgery Instruments 	<p>The student will:</p> <ol style="list-style-type: none"> 1. Demonstrate the procedure for cord isolation and use of synthetic patches for repair. 2. Demonstrate the procedure for draping multiple areas for possible multiple procedures. 3. Demonstrate the use of surgical supplies specific to venous surgery; ie vein strippers.
<p>2. Discuss the role of the surgical technologist as it relates to those procedures in Endoscopy</p>	<p>1. Endoscopy procedures</p> <p>Colonoscopy</p> <p>Esophagogastroduodenoscopy</p> <p>Gastroscopy</p> <p>Sigmoidoscopy</p>		
<p>3. Discuss the role of the surgical technologist as it relates to those miscellaneous procedures.</p>	<p>1. Procedures</p> <p>Excision of lipoma, lesions</p> <p>Incision and drainage</p> <p>Insertion of implanted infusion catheters/ports</p>	<p>Handout:</p> <p>Ports/catheters: Uses and Types</p>	<p>The student will demonstrate the proper method of preparation of a port for implantation.</p>

Unit 2	Gastrointestinal Surgery		
Learner Objectives	Content/Lecture Discussion	Related Learner Experiences	Laboratory Objectives
<p>Upon completion of this unit the student shall be able to:</p> <ol style="list-style-type: none"> Discuss the role of the surgical technologist as it relates to gastrointestinal surgical procedures. 	<p>1. Gastrointestinal procedures.</p> <p>Gastric Procedures</p> <ul style="list-style-type: none"> Gastrostomy Gastroduodenostomy Gastrojejunostomy Total gastrectomy Vagotomy Pyloroplasty Hiatal hernia repair Laparoscopic Nissen <p>Small Bowel Procedures</p> <ul style="list-style-type: none"> Resection Roux – en – Y jejunostomy Ileostomy <p>Large Bowel Procedures</p> <ul style="list-style-type: none"> Appendectomy Colostomy Subtotal colectomy Sigmoid resection Abdominoperineal resection <p>Anorectal Procedures</p> <ul style="list-style-type: none"> Hemorrhoidectomy Pilonidal cystectomy Fissure/fistula repair Sphincterotomy Rectal polypectomy anoplasty 	<p style="text-align: center;">WEEK 2</p> <p>Reading Assignment: Fuller P 434-476</p> <p>Rutherford, <i>Differentiating Surgical Instruments</i>, Chapter 1</p> <p>Ehrlich & Schroeder, <i>Medical Terminology for Health Professions</i>, P 217-247, Chapter 8</p> <p>Media Center:</p> <ol style="list-style-type: none"> Intestinal and Gall Bladder Instruments 	<p>The student will demonstrate</p> <ol style="list-style-type: none"> GI technique Loading stapling devices

Unit 3		Biliary Surgery	
Learner Objectives	Content/Lecture Discussion	Related Learner Experiences	Laboratory Objectives
<p>Upon completion of this unit the student shall be able to:</p> <p>1. Discuss the role of the surgical technologist as it relates to those procedures of the biliary system</p>	<p>1. Biliary Tract Procedures Cholecystectomy Cholangiogram Common duct exploration Choledochojejunostomy Liver biopsy Liver resection Laparoscopy</p>	<p style="text-align: center;">WEEK 3</p> <p>Reading Assignment: Fuller, P 477-500</p> <p>Rutherford, <i>Differentiating Surgical Instruments</i>, Chapter 1</p>	<p>The student will:</p> <ol style="list-style-type: none"> 1. Demonstrate the proper method for use of biliary catheters and laparoscopic instrumentation. 2. Demonstrate the proper use of liver biopsy needles.
<p>2. Discuss the role of the surgical technologist as it relates to those procedures of the biliary system</p>	<p>1. Pancreas and Splenic Procedures Excision of pancreatic cyst Pancreaticoduodenectomy Repair of splenic laceration Splenectomy Hepatic pump insertion</p>		

Unit 4	GYN/OB Surgery		
Learner Objectives	Content/Lecture Discussion	Related Learner Experiences	Laboratory Objectives
<p>Upon completion of this unit the student shall be able to:</p> <p>1. Discuss the role of the surgical technologist as it relates to those procedures in gynecology.</p>	<p>1. Vaginal Procedures Dilation and curettage Bartholin cystectomy Cervical conization and biopsy Colporrhaphy/anterior-posterior Repair Vaginal hysterectomy Endometrial ablation Hysteroscopy Colposcopy Perineorrhaphy Vulvectomy Ablation of conhylomata Fistula repair Vaginoplasty</p> <p>2. Abdominal Procedures Laparoscopy Tubal ligation Tuboplasty Oophorectomy Salpingectomy Abdominal hysterectomy Myomectomy Laparoscopically assisted vaginal hysterectomy (LAVH)</p>	<p style="text-align: center;">WEEK 4</p> <p>Reading Assignment: Fuller, P 509-550</p> <p>Rutherford, <i>Differentiating Surgical Instruments</i>, Chapter 2</p> <p>Ehrlich & Schroeder, <i>Medical Terminology for Health Professions</i>, P 393-428</p> <p>Media Center: 1. GYN Instruments</p>	<p>The student will:</p> <ol style="list-style-type: none"> 1. Demonstrate the use of uterine manipulator. 2. Demonstrate the assembly of a uterine suction apparatus.
<p>2. Discuss the role of the surgical technologist as it relates to those procedures in Obstetrics</p>	<p>1. Obstetric Procedures Ectopic pregnancy Cervical cerclage Uterine aspiration Episiotomy Caesarean section</p>		

Unit 5	ENT SURGERY		
<p>Upon completion of this unit the student shall be able to:</p> <p>1. Discuss the role of the surgical technologist as it relates to procedures of the ear, nose and throat.</p>	<p>1. Ear Procedures Myringotomy Myringoplasty Mastoidectomy Tympanoplasty Stapedectomy</p> <p>2. Nasal Procedures Antrostomy Turbinectomy Polypectomy Submucous resection Functional endoscopic sinus Surgery (FESS)</p> <p>3. Throat Procedures Adenoidectomy Tonsillectomy Uvulopalatopharyngoplasty (UPP) Vocal cord procedures Oral endoscopy</p>	<p style="text-align: center;">WEEK 5</p> <p>Reading Assignment: Fuller P 627-679</p> <p>Rutherford, <i>Differentiating Surgical Instruments</i>, Chapter 6</p> <p>Ehrlich & Schroeder, <i>Medical Terminology for Health Professions</i>, p 321-336</p> <p>Media Center: 1. ENT Instruments</p>	<p>The student will:</p> <p>1. Demonstrate the preparation and use of a tonsil snare.</p>
<p>Upon completion of this unit the student shall be able to:</p> <p>1. Discuss the role of the surgical technologist as it relates to procedures of the head and neck</p>	<p>Head and Neck Procedures Glossectomy Laryngectomy Mandibulectomy Parotidectomy Radical Neck Dissection Salivary duct stone extraction Parathyroidectomy Thyroidectomy Thyroglossal cystectomy Tracheostomy</p>	<p>Rutherford, <i>Differentiating Surgical Instruments</i>, Chapter 9</p>	

<p>Upon completion of this unit the student shall be able to:</p> <p>1. Discuss the role of the surgical technologist as it relates to oral and maxillofacial surgery.</p>	<p>Dental Procedures Extraction Restoration Implantation Maxillofacial Procedures Repair of fractures Craniofacial reconstruction Temporomandibular Joint Procedures</p>		

Unit 6	Urological Surgery		
Learner Objectives	Content/Lecture Discussion	Related Learner Experiences	Laboratory Objectives
<p>Upon completion of this unit the student shall be able to:</p> <ol style="list-style-type: none"> 1. Discuss the role of the surgical technologist as it relates to those procedures of the Genitourinary System. 	<ol style="list-style-type: none"> 1. Kidney <ul style="list-style-type: none"> Adrenalectomy Nephroscopy Nephrostomy Nephrectomy Nephrolithotomy Pyeloureteroplasty Extracorporeal shock wave lithotripsy (ESWL) <p>Ureteral Procedures</p> <ul style="list-style-type: none"> Ureteroscopy Ureterostomy Ureterolithotomy <p>Bladder and Urethral Procedures</p> <ul style="list-style-type: none"> Cystoscopy Urethroscopy Suprapubic cystotomy Percutaneous stone extraction Cystourethropexy/bladder suspension Ileal conduit Urethral dilatation Urethral meatotomy 	<p style="text-align: center;">WEEK 6</p> <p>Reading Assignment: Fuller P 627-679</p> <p>Rutherford, <i>Differentiating Surgical Instruments</i>, Chapter 3</p> <p>Ehrlich & Schroeder, <i>Medical Terminology for Health Professions</i>, P 248-272, Chapter 9</p> <p>Media Center:</p> <ol style="list-style-type: none"> 1. GU Instruments 	<p>The student will:</p> <ol style="list-style-type: none"> 1. Demonstrate the uses of various catheters used in urological surgery. 2. Demonstrate the proper assembly of endoscopic equipment. 3. Demonstrate the proper insertion of a urinary catheter.

Male Reproduction System

Procedures

- Circumcision
- Hydospadias repair
- Chordee release
- Orchiopexy
- Hydrocelectomy/varicocelectomy
- Vasectomy
- Testicular torsion repair
- Orchiectomy
- Prostatectomy
 - TURP
 - Suprapubic
 - Retropubic
 - Perineal
- Prostate seeding
- Penile implant