

## COURSE SYLLABUS

SPRING SEMESTER 2004

TITLE OF COURSE: Surgical Techniques III  
PREFIX/NUMBER: ST 142  
INSTRUCTOR:  
DAYS/TIME: Wednesday, 8:30 a.m. – 2:15 p.m.  
BUILDING/ROOM:  
INSTRUCTOR OFFICE HOURS: M  
T  
R  
F

**(Name of school) is an equal opportunity educational institution and does not discriminate on the basis of age, race, religion, color, national origin, sex, or disability in its activities, programs, or employment practices as required by Title VI, Title IX, Section 504, Age Discrimination Act, and Title II of the ADA. The College has designated the Director of Human Resources as its Affirmative Action Officer with the responsibility to coordinate its civil rights compliance activities and grievance procedures. For information, contact the Human Resources Office, (address of office and college) or the Office for Civil Rights, U.S. Department of Education, Region VIII, Federal Office Building, 1244 North Speer Blvd., Suite 310, Denver, CO 80204-2512, (303) 844-5695 (TDD - 303-844-3417).**

**Students in this course who, due to a disability, have a need for non-standard note taking, test taking, or other course modifications should notify the instructor, in private, as soon as possible.**

1. TITLE OF COURSE: Surgical Techniques III  
PREFIX/NUMBER: ST 142 Credit Hours: 3
2. PREREQUISITES: PRQ: ST 131, ST 141.  
CORQ: ST 132, ST 157, ST 167.
3. REQUIRED TEXTS:  
Beckett, B. J. (1998). *Identifying surgical instruments* (3<sup>rd</sup> ed.). Thousand Oaks,

CA: Self-published.

Price, P. (Ed.). (2004). *Surgical technology for the surgical Technologist* (2<sup>nd</sup> ed.). Clifton Park, NY: Delmar Learning.

Thomas, C. L. (Ed.). (1997). *Taber's cyclopedic medical dictionary* (18<sup>th</sup> ed.). Philadelphia: F. A. Davis.

4. COURSE DESCRIPTION: The course instructs the student in the principles and skills required to assist in procedures for otorhinolaryngology, oral, plastic and reconstructive surgery, ophthalmology, and orthopedic surgery.

5. COURSE OBJECTIVES:

For the procedures listed, the learner will discuss:

- relevant anatomy
- indications for surgery
- patient preparation
- special equipment and supplies
- purpose and expected outcomes
- possible complications

**Key surgical procedures** that entry level students need to know in detail are **highlighted**. The performance objectives represent what should be known about these procedures.

**Performance Objectives**

1. Discuss the relevant anatomy.
2. Describe the pathology that prompts surgical intervention and related terminology.
3. Discuss any special preoperative diagnostic procedures/tests.
4. Discuss any special preoperative preparation procedures.
5. Identify the names and uses of special instruments, supplies, & drugs
6. Identify the names and uses of special equipment
7. Discuss the intraoperative preparation of the patient
8. Define and give an overview of the surgical procedure
9. Discuss the purpose and expected outcomes of the surgery
10. Discuss the immediate postoperative and possible complications

**Content Outline For Each Procedure Studied Should Follow This Sequence:**

1. Relevant anatomy
2. Pathology
3. Diagnostic procedures/tests
4. Special preoperative preparation
5. Special instruments, supplies, drugs
6. Special equipment
7. Intraoperative preparation
  - a. anesthesia
  - b. positioning
  - c. skin preparation
  - d. draping
8. Surgical procedures
  - a. incision
  - b. sequence of events
  - c. use of supplies and equipment
9. Prognosis
10. Postoperative care and complications

6. EVALUATION PROCEDURES:

- A. Written examinations
- B. Classroom participation
- C. Outside of classroom assignments

Grading:

- |            |   |
|------------|---|
| 92 – 100   | A |
| 84 – 91    | B |
| 76 – 83    | C |
| 68 – 75    | D |
| 67 or less | F |

**ATTENDANCE POLICY:**

**THE STUDENT IS EXPECTED TO ATTEND ALL CLASS SESSIONS. FOR EACH SESSION ATTENDED THE STUDENT WILL RECEIVE 5 POINTS. IF THE STUDENT IS LATE TO CLASS OR DOES NOT ATTEND, THE POINTS WILL NOT BE GIVEN. NO EXCUSE IS ACCEPTED FOR LATENESS OR NON-ATTENDANCE EXCEPT FOR THE FOLLOWING:**

- DEATH IN THE FAMILY
- ILLNESS IN THE FAMILY

PROOF OF THE ABOVE MUST BE PROVIDED TO THE INSTRUCTOR IN ORDER TO RECEIVE THE POINTS.

STUDENTS SHOULD READ AND BE FAMILIAR WITH THE PCC ATTENDANCE POLICY AS STATED IN THE COLLEGE CATALOG. OF SIGNIFICANCE IS THE FOLLOWING PCC STATEMENT IN THE CATALOG:

“If a student misses twenty percent of a lecture or laboratory class beginning with the first official date of enrollment, it will be taken as evidence that a student does not intend to complete the course; and the instructor may withdraw the student from the course. A student will be assigned a W grade by the instructor, and the student will be liable for all tuition and fees related to that course.”

### **ASSIGNMENTS:**

All homework and in class assignments are due in class on the day indicated in the class schedule. Late assignments are not accepted and no points will be given.

## 7. COURSE OUTLINE

1. Ophthalmic surgery
  - a. eyelid procedures
    - (1) **ectropion/entropion repair**
    - (2) levator resection
  - b. strabismus procedures
    - (1) recession
    - (2) resection
  - c. corneal procedures
    - (1) keratoplasty/corneal transplant
    - (2) radial keratotomy
  - d. lens procedures
    - (1) intracapsular cataract extraction (ICCE)
    - (2) **extracapsular cataract extraction (ECCE)**
      - (a) **phacoemulsification**
      - (b) **placement of intraocular lens (IOL)**
  - e. retinal procedures
    - (1) cryotherapy
    - (2) scleral buckling
  - f. vitreous procedures
    - (1) anterior vitrectomy
    - (2) posterior vitrectomy
  - g. glaucoma procedures
    - (1) iridectomy
    - (2) trabeculoplasty
  - h. miscellaneous procedures
    - (1) **excision of pterygium**
    - (2) excision of chalazion
    - (3) **lacrimal duct probing**
    - (4) dacryocystorhinostomy
    - (5) **enucleation/evisceration**

2. Ear, nose, and throat surgery (otorhinolaryngology)
  - a. ear procedures
    - (1) **myringotomy**
    - (2) mastoidectomy
    - (3) **tympanoplasty**
    - (4) **stapedectomy**
  - b. nasal procedures
    - (1) antrostomy
    - (2) turbinectomy
    - (3) **polypectomy**
    - (4) **septorhinoplasty**
  - c. throat procedures
    - (1) **adenoidectomy**
    - (2) **tonsillectomy**
    - (3) uvulopalatopharyngoplasty
    - (4) vocal cord procedures
    - (5) **oral endoscopy**
      - (a) **laryngoscopy**
      - (b) **bronchoscopy**
      - (c) **esophagoscopy**
3. Oral and maxillofacial surgery
  - a. **dental procedures**
    - (1) **extraction**
    - (2) **restoration**
  - b. maxillofacial procedures
    - (1) **repair of fx.**
      - (a) **frontal**
      - (b) **orbital floor (blowout)**
      - (c) **zygomatic**
      - (d) midface (LeFort I, II, III)
      - (e) mandibular
    - (2) craniofacial reconstruction
    - (3) orthognathic surgery
  - c. **temporomandibular joint procedures**
    - (1) **arthroscopy**
    - (2) **TMJ replacement/repair**
4. Plastic surgery
  - a. aesthetic (cosmetic) procedures
    - (1) **abdominoplasty**
    - (2) **blepharoplasty**
    - (3) dermabrasion
    - (4) liposuction
    - (5) **augmentation mammoplasty**
    - (6) reduction mammoplasty
    - (7) rhinoplasty
    - (8) rhytidectomy

- b. excision of lesion, keloid, etc**
  - c. reconstructive procedures
    - (1) repair of laceration
    - (2) scar revision**
    - (3) local flaps**
      - (a) rotation**
      - (b) advancement**
    - (4) split-thickness skin grafting (STSG)**
    - (5) full-thickness skin grafting (FTSG)
    - (6) pedicle flaps
    - (7) cleft lip repair**
  - d. burn procedures**
    - (1) debridement**
    - (2) escharotomy**
    - (3) contracture release**
- 5. Orthopedic surgery
  - a. fracture management**
    - (1) review of types of fractures**
    - (2) review of bone healing**
    - (3) closed reduction**
    - (4) external fixation**
      - (a) casting**
      - (b) splinting**
      - (c) traction**
      - (d) external fixation devices**
    - (5) open reduction; internal fixation (ORIF)**
      - (a) transfixion**
      - (b) plate and screws fixation**
      - (c) compression plating**
      - (d) intramedullary fixation**
    - (6) treatment of non-union**
      - (a) bone grafting**
      - (b) electrical stimulation**
    - (7) casting techniques**
      - (a) types of materials**
      - (b) types of casts**
      - (c) principles of handling**
  - b. shoulder procedures**
    - (1) arthroscopy**
    - (2) acromioclavicular (AC) separation repair**
    - (3) acromioplasty**
    - (4) glenohumeral dislocation repair
    - (5) rotator cuff repair**
    - (6) total shoulder arthroplasty

- c. upper limb procedures
  - (1) **humeral fracture repair**
  - (2) olecranon fracture repair
  - (3) radial/ulnar fracture repair
  - (4) elbow arthroscopy
  - (5) total elbow arthroplasty
  - (6) total wrist arthroplasty
- d. hip procedures
  - (1) **fixation of femoral head fractures**
    - (a) **compression screw/nailing**
    - (b) **hip pinning**
  - (2) **total hip arthroplasty**
- e. lower limb procedures
  - (1) femoral shaft fracture repair
  - (2) **tibia/fibula repair (tib-fib)**
- f. knee procedures
  - (1) **arthroscopy**
  - (2) **meniscectomy**
  - (3) **anterior/posterior cruciate ligament (ACL/PCL) repair**
  - (4) synovectomy
  - (5) collateral ligament repair
  - (6) patellectomy
  - (7) **total knee arthroplasty**
- g. ankle and foot procedures
  - (1) **ankle arthroscopy**
  - (2) **ankle arthrodesis**
  - (3) malleolar fx. repair
  - (4) total ankle arthroplasty
  - (5) **triple arthrodesis**
  - (6) metatarsal/phalangeal arthroplasty
  - (7) **bunionectomy**
- h. miscellaneous procedures
  - (1) **amputation of limb**
  - (2) **bone biopsy**
  - (3) **osteotomy**
  - (4) **tendon procedures**
- 6. Hand surgery
  - a. **carpal tunnel release**
    - (1) **open**
    - (2) **endoscopic**
  - b. **ganglion excision**
  - c. **palmar fasciectomy**
  - d. **syndactyl release**
  - e. **release of trigger finger**
  - f. **nerve repair**
  - g. **tendon repair**