



Western Technical College

# 10512131 Surgical Interventions 1

## Course Outcome Summary

### Course Information

<b>Description</b>	Provides the foundational knowledge of surgical core and specialty procedures. Examines the pathophysiology, diagnostic interventions, health sciences, and surgical techniques for a variety of procedures.
<b>Career Cluster</b>	Human Services
<b>Instructional Level</b>	Associate Degree Courses
<b>Total Credits</b>	4
<b>Total Hours</b>	72

### Textbooks

*Alexander's Surgical Procedures*. Copyright 2012. Rothrock, Jane C. Publisher: Elsevier Science. **ISBN-13:** 978-0-323-07555-8. Required. (Part of Western Bundle Package **ISBN-13:** 978-0-323-46478-9)

*Suture and Surgical Hemostasis Pocket Guide*. Copyright 2006. Pieknik, Rebecca. Publisher: Elsevier Science. **ISBN-13:** 978-1-4160-2247-3. Required. (Part of Western Bundle Package **ISBN-13:** 978-0-323-46478-9)

*Pharmacology for Surgical Technologist*. 4th Edition. Copyright 2017. Snyder, Katherine. Publisher: Elsevier Science. **ISBN-13:** 978-0-323-34083-0. Required. (Part of Western Bundle Package **ISBN-13:** 978-0-323-46478-9)

*Surgical Technology for the Surgical Technologist: A Positive Care Approach*. 5th Edition. Copyright 2018. Association of Surgical Technologists. Publisher: Cengage Learning. **ISBN-13:** 978-1-305-95641-4. Required.

### Success Abilities

1. Cultivate Passion: Expand a Growth-Mindset
2. Cultivate Passion: Increase Self-Awareness
3. Live Responsibly: Foster Accountability
4. Refine Professionalism: Act Ethically

5. Refine Professionalism: Improve Critical Thinking
6. Refine Professionalism: Participate Collaboratively
7. Refine Professionalism: Practice Effective Communication

## **Program Outcomes**

1. Apply healthcare and technological science principles to the perioperative environment.
2. Maintain principles of sterile technique in the surgical environment.
3. Perform intraoperative case management in the scrub role.
4. Perform postoperative case management.

## **Course Competencies**

### **1. Explore surgical interventions for general surgery.**

#### **Assessment Strategies**

- 1.1. by answering questions that require you to apply knowledge about this competency (Your instructor may require several written exams as a part of this course. You will be notified in advance.)
- 1.2. by developing a surg tech plan for patients undergoing various types of general surgery

#### **Criteria**

*You will know you are successful when*

- 1.1. you include the pathology (i.e. tumor, cancer, classifications) that prompts the diagnostic/surgical intervention.
- 1.2. you include a description of the surgical anatomy.
- 1.3. you include a description of the diagnostic/surgical intervention.
- 1.4. you include the instruments, equipment, suturing materials, and supplies needed for the procedure.
- 1.5. you include methods of anesthesia.
- 1.6. you include patient preparation and positioning.
- 1.7. you include the role of the surgical technologist.
- 1.8. you include draping considerations.
- 1.9. you include the type of incision.
- 1.10. you include the sequence of the procedure.
- 1.11. you include surgical counts.
- 1.12. you include a description of the care of the specimen (if appropriate).
- 1.13. you include the post-operative considerations.
- 1.14. you include tissue replacement materials.
- 1.15. you include preparation of wound dressings.
- 1.16. you include prognosis and potential complications.
- 1.17. you include special related medications (as appropriate).
- 1.18. you include wound classification and correlates to wound management.

#### **Learning Objectives**

- 1.a. Describe the creation and usage of the surgical incision.
- 1.b. Apply techniques for tissue exposure.
- 1.c. Investigate the pathophysiology of tumors.
- 1.d. Classify the various surgical approaches related to general surgery.
- 1.e. Identify surgical instrumentation related to general surgery.
- 1.f. Distinguish the various medications utilized in general surgery.
- 1.g. Describe patient care aspects and preparation related to general surgery within the perioperative setting.

### **2. Explore surgical interventions for orthopedic procedures.**

#### **Assessment Strategies**

- 2.1. by answering questions that require you to apply knowledge about this competency (Your instructor may require several written exams as a part of this course. You will be notified in advance.)

- 2.2. by developing a surg tech plan for patients undergoing various types of orthopedic surgery

#### **Criteria**

*You will know you are successful when*

- 2.1. you include the pathology (i.e. tumor, cancer, classifications) that prompts the diagnostic/surgical intervention.
- 2.2. you include a description of the surgical anatomy.
- 2.3. you include a description of the diagnostic/surgical intervention.
- 2.4. you include the instruments, equipment, suturing materials and supplies needed for the procedure.
- 2.5. you include methods of anesthesia.
- 2.6. you include patient preparation and positioning.
- 2.7. you include the role of the surgical technologist.
- 2.8. you include draping considerations.
- 2.9. you include the type of incision.
- 2.10. you include the sequence of the procedure.
- 2.11. you include surgical counts.
- 2.12. you include a description of the care of the specimen (if appropriate).
- 2.13. you include the post-operative considerations.
- 2.14. you include prognosis and potential complications.
- 2.15. you include preparation of wound dressings.
- 2.16. you include tissue replacement materials.
- 2.17. you include special related medications (as appropriate)you compare and contrast synthetic and biological adhesives
- 2.18. you include wound classification and correlates to wound management

#### **Learning Objectives**

- 2.a. Examine the operative procedures related to joint repair.
- 2.b. Classify the various types of bone fractures.
- 2.c. Investigate the pathophysiology of the human joint.
- 2.d. Analyze the different surgical techniques to repair orthopedic abnormalities.
- 2.e. Identify surgical instrumentation related to orthopedic surgery.
- 2.f. Distinguish the medications related to orthopedic surgery.
- 2.g. Describe patient care aspects and preparation related to orthopedic surgery within the perioperative setting.

### **3. Explore surgical interventions for otorhinolaryngologic procedures.**

#### **Assessment Strategies**

- 3.1. by answering questions that require you to apply knowledge about this competency (Your instructor may require several written exams as a part of this course. You will be notified in advance.)
- 3.2. by developing a surg tech plan for patients undergoing various types of otorhinolaryngologic surgery

#### **Criteria**

*You will know you are successful when*

- 3.1. you include the pathology (i.e. tumor, cancer, classifications) that prompts the diagnostic/surgical intervention.
- 3.2. you include a description of the surgical anatomy.
- 3.3. you include a description of the diagnostic/surgical intervention.
- 3.4. you include the instruments, equipment, suturing materials and supplies needed for the procedure.
- 3.5. you include methods of anesthesia.
- 3.6. you include patient preparation and positioning.
- 3.7. you include the role of the surgical technologist.
- 3.8. you include draping considerations.
- 3.9. you include the type of incision.
- 3.10. you include the sequence of the procedure.
- 3.11. you include surgical counts.
- 3.12. you include a description of the care of the specimen (if appropriate).
- 3.13. you include the post-operative considerations.
- 3.14. you include prognosis and potential complications.
- 3.15. you include tissue replacement materials.
- 3.16. you include preparation of wound dressings.

- 3.17. you include special related medications (as appropriate).
- 3.18. you include wound classification and correlates to wound management.

**Learning Objectives**

- 3.a. Investigate the pathophysiology of the auditory, nasal, oral, and throat regions.
- 3.b. Analyze the various surgical procedures for the outer, middle, and inner ear.
- 3.c. Identify the various surgical procedures for the nasal and sinus anatomy.
- 3.d. Investigate the various surgical approaches for the oral and throat anatomy.
- 3.e. Identify the surgical instrumentation related to otorhinolaryngologic surgery.
- 3.f. Distinguish the medications related to otorhinolaryngological surgery.
- 3.g. Describe patient care aspects and preparation related to otorhinolaryngology surgery within the perioperative setting.

**4. Explore surgical interventions for genitourinary.**

**Assessment Strategies**

- 4.1. by answering questions that require you to apply knowledge about this competency (Your instructor may require several written exams as a part of this course. You will be notified in advance.)
- 4.2. by developing a surg tech plan for patients undergoing various types of genitourinary surgery

**Criteria**

*You will know you are successful when*

- 4.1. you include the pathology (i.e. tumor, cancer, classifications) that prompts the diagnostic/surgical intervention.
- 4.2. you include a description of the surgical anatomy.
- 4.3. you include a description of the diagnostic/surgical intervention.
- 4.4. you include the instruments, equipment, suturing materials, and supplies needed for the procedure.
- 4.5. you include methods of anesthesia.
- 4.6. you include patient preparation and positioning.
- 4.7. you include role of the surgical technologist.
- 4.8. you include draping considerations.
- 4.9. you include the type of incision.
- 4.10. you include the sequence of the procedure.
- 4.11. you include surgical counts.
- 4.12. you include a description of the care of the specimen (if appropriate).
- 4.13. you include the post-operative considerations.
- 4.14. you include prognosis and potential complications.
- 4.15. you include tissue replacement materials.
- 4.16. you include preparation of wound dressings.
- 4.17. you include special related medications (as appropriate).
- 4.18. you include wound classification and correlates to wound management.

**Learning Objectives**

- 4.a. Examine the pathophysiology related to the kidney, ureter, bladder, and urethral anatomy.
- 4.b. Compare the various surgical procedures related to kidney repair.
- 4.c. Differentiate the various surgical procedures related to ureteral repair.
- 4.d. Classify the various surgical procedures related to bladder repair.
- 4.e. Investigate the various surgical procedures related to urethral repair.
- 4.f. Identify the surgical instrumentation related to genitourinary surgery.
- 4.g. Distinguish the medications related to genitourinary surgery.
- 4.h. Describe patient care aspects and preparation related to genitourinary surgery within the perioperative setting.

**5. Explore surgical interventions for OB/GYN surgery.**

**Assessment Strategies**

- 5.1. by answering questions that require you to apply knowledge about this competency (Your instructor may require several written exams as a part of this course. You will be notified in advance.)
- 5.2. by developing a surg tech plan for patients undergoing various types of OB/GYN surgery

**Criteria**

*You will know you are successful when*

- 5.1. you include the pathology (i.e. tumor, cancer, classifications) that prompts the diagnostic/surgical intervention.
- 5.2. you include a description of the surgical anatomy.
- 5.3. you include a description of the diagnostic/surgical intervention.
- 5.4. you include the instruments, equipment, suturing materials, and supplies needed for the procedure.
- 5.5. you include methods of anesthesia.
- 5.6. you include patient preparation and positioning.
- 5.7. you include the role of the surgical technologist.
- 5.8. you include draping considerations.
- 5.9. you include the type of incision.
- 5.10. you include the sequence of the procedure.
- 5.11. you include surgical counts.
- 5.12. you include a description of the care of the specimen (if appropriate).
- 5.13. you include the post-operative considerations.
- 5.14. you include prognosis and potential complications.
- 5.15. you include tissue replacement materials.
- 5.16. you include preparation of wound dressings.
- 5.17. you include special related medications (as appropriate).
- 5.18. you include wound classification and correlates to wound management.

### **Learning Objectives**

- 5.a. Examine the pathophysiology related to the vaginal, uterine, fallopian, and ovarian anatomy.
- 5.b. Classify the various surgical procedures related to the ovaries.
- 5.c. Analyze the various surgical procedures related to fallopian tubes.
- 5.d. Classify the various surgical procedures related to the uterus.
- 5.e. Investigate the various surgical procedures related to the vaginal anatomy.
- 5.f. Identify the surgical instruments related to obstetrics and gynecology.
- 5.g. Distinguish the medications utilized in obstetric and gynecological surgery.
- 5.h. Describe patient care aspects and preparation related to OB/GYN surgery within the perioperative setting.

## **6. Explore surgical interventions for oral and maxillofacial surgery.**

### **Assessment Strategies**

- 6.1. by answering questions that require you to apply knowledge about this competency (Your instructor may require several written exams as a part of this course. You will be notified in advance.)
- 6.2. by developing a surg tech plan for patients undergoing various types of maxillofacial surgery

### **Criteria**

*You will know you are successful when*

- 6.1. you include the pathology (i.e. tumor, cancer, classifications) that prompts the diagnostic/surgical intervention.
- 6.2. you include a description of the surgical anatomy.
- 6.3. you include a description of the diagnostic and surgical intervention.
- 6.4. you include the instruments, equipment, suturing materials, and supplies needed for the procedure.
- 6.5. you include methods of anesthesia.
- 6.6. you include patient preparation and positioning.
- 6.7. you include role of the surgical technologist.
- 6.8. you include draping considerations.
- 6.9. you include the type of incision.
- 6.10. you include the sequence of the procedure.
- 6.11. you include a description of the care of the specimen (if appropriate).
- 6.12. you include surgical counts.
- 6.13. you include the post-operative considerations.
- 6.14. you include prognosis and potential complications.
- 6.15. you include tissue replacement materials.
- 6.16. you include preparation of wound dressings.
- 6.17. you include special related medications (as appropriate).
- 6.18. you include wound classification and correlates to wound management.

### **Learning Objectives**

- 6.a. Examine the pathophysiology of the oral and maxillofacial anatomy.
- 6.b. Classify the various surgical procedures related to oral and maxillofacial anatomy.
- 6.c. Identify the surgical instrumentation related to oral and maxillofacial surgery.
- 6.d. Distinguish the medications utilized in oral and maxillofacial surgery.
- 6.e. Describe patient care aspects and preparation related to oral and maxillofacial surgery within the perioperative setting.