

**Western Technical College**

**10512142 Surgical Interventions II**

**Course Outcome Summary**

**Course Information**

<b>Description</b>	Expands knowledge of core and specialty surgical procedures by incorporating pathophysiology, diagnostic interventions, health sciences, and surgical techniques.
<b>Career Cluster</b>	Health Science
<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)

*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.

*Surgical Technology Exam Review*. 3rd Edition. Copyright 2013. Rogers, Emily M., Emily H. Boegli and Kathy LaRue. Publisher: Pearson. **ISBN-13:** 978-0-13-500048-9. Required.

*Pharmacology for Surgical Technologist*. 4th Edition. Copyright 2017. Snyder, Katherine. Publisher: Elsevier Science. **ISBN-13:** 978-0-323-34083-0. Required.

**Success Abilities**

1. Refine Professionalism: Act Ethically
2. Refine Professionalism: Improve Critical Thinking
3. Refine Professionalism: Participate Collaboratively
4. 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

**Course Competencies**

## 1. Explore surgical interventions for vascular procedures

### 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 vascular 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 and 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 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 a description of the care of the specimen (if appropriate)
- 1.12. you include surgical counts
- 1.13. you include the post-operative considerations
- 1.14. you include prognosis and potential complications
- 1.15. you include preparation of wound dressings
- 1.16. you include tissue replacement materials
- 1.17. you include special related medications (as appropriate)
- 1.18. you include wound classification and correlate to wound management

### Learning Objectives

- 1.a. Identify the relevant anatomy of the peripheral vascular system.
- 1.b. Investigate the pathology that prompts surgical intervention of the peripheral system.
- 1.c. Examine any special preoperative peripheral vascular diagnostic procedures.
- 1.d. Investigate the surgical steps of peripheral vascular procedures.
- 1.e. Analyze the various grafting, bypassing, and shunting techniques related to peripheral vascular procedures.
- 1.f. Distinguish the various medications utilized in peripheral vascular procedures.
- 1.g. Describe patient care aspects related to peripheral vascular procedures within the perioperative setting.

## 2. Explore surgical interventions for cardiothoracic 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 cardiothoracic 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 and 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 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 a description of the care of the specimen (if appropriate)

- 2.12. you include surgical counts
- 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)
- 2.18. you include wound classification and correlate to wound management

#### **Learning Objectives**

- 2.a. Identify the relevant anatomy of the cardiothoracic system.
- 2.b. Investigate the pathology that prompts surgical intervention of the cardiothoracic system.
- 2.c. Examine any special preoperative cardiothoracic diagnostic procedures.
- 2.d. Investigate the surgical steps of cardiothoracic procedures.
- 2.e. Analyze the various grafting, bypassing, shunting, and valve replacement techniques related to cardiothoracic procedures.
- 2.f. Distinguish the various medications utilized in cardiothoracic procedures.
- 2.g. Describe patient care aspects related to cardiothoracic procedures within the perioperative setting.

### **3. Explore surgical interventions for neurosurgical 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 neurosurgical 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 and 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 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 a description of the care of the specimen (if appropriate)
- 3.12. you include surgical counts
- 3.13. you include the post-operative considerations
- 3.14. you include prognosis and potential complications
- 3.15. you include preparation of wound dressings
- 3.16. you include tissue replacement materials
- 3.17. you include special related medications (as appropriate)
- 3.18. you include wound classification and correlate to wound management

#### **Learning Objectives**

- 3.a. Identify the relevant anatomy of the neurological system.
- 3.b. Investigate the pathology that prompts surgical intervention of the neurological system.
- 3.c. Examine any special preoperative neurological diagnostic procedures.
- 3.d. Investigate the surgical steps of neurological procedures.
- 3.e. Distinguish the various medications utilized in neurological procedures.
- 3.f. Describe patient care aspects related to neurological procedures within the perioperative setting.

### **4. Explore surgical interventions for plastic reconstructive surgery**

#### **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 reconstructive 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 and 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 a description of the care of the specimen (if appropriate)
- 4.12. you include surgical counts
- 4.13. you include the post-operative considerations
- 4.14. you include prognosis and potential complications
- 4.15. you include preparation of wound dressings
- 4.16. you include tissue replacement materials
- 4.17. you include special related medications (as appropriate)
- 4.18. you include wound classification and correlate to wound management

#### **Learning Objectives**

- 4.a. Identify the relevant anatomy related to plastic and reconstructive procedures.
- 4.b. Investigate the pathology that prompts plastic and reconstructive surgical intervention.
- 4.c. Investigate the surgical steps of plastic and reconstructive procedures.
- 4.d. Analyze the various skin grafting and plasty techniques related to plastic and reconstructive procedures.
- 4.e. Distinguish the various medications utilized in plastic and reconstructive procedures.
- 4.f. Describe patient care aspects related to plastic and reconstructive procedures within the perioperative setting.

## **5. Explore surgical interventions for ophthalmology 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 maxillofacial surgery

#### **Criteria**

*Performance will be 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 and 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 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 a description of the care of the specimen (if appropriate)
- 5.12. you include surgical counts
- 5.13. you include the post-operative considerations
- 5.14. you include prognosis and potential complications
- 5.15. you include preparation of wound dressings
- 5.16. you include tissue replacement materials
- 5.17. you include special related medications (as appropriate)
- 5.18. you include wound classification and correlate to wound management

#### **Learning Objectives**

- 5.a. Identify the relevant anatomy of the ophthalmic system.

- 5.b. Investigate the pathology that prompts surgical intervention of the ophthalmic system.
- 5.c. Examine any special preoperative ophthalmic diagnostic procedures.
- 5.d. Investigate the surgical steps of ophthalmic procedures.
- 5.e. Distinguish the various medications utilized in ophthalmic procedures.
- 5.f. Describe patient care aspects related to ophthalmic procedures within the perioperative setting.