# ST 150 Essentials of Human Anatomy & Physiology I for Surgical Technicians (4 credits) Term I

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Office Contact: Email is the best way to contact the instructor for this class. Messages received between Monday at 8 am and Friday at 5 pm are generally returned within 24 hours. Messages received on Saturdays, Sundays, or holidays will be returned on the next business day. By appointment, please email to set up a mutually convenient time.

Program Chair Office Number: 541-918-8844

#### Text:

- This course uses a significant amount of Open Educational Resource (OER) material
- Surgical Technology: Principles and Practice, 7th edition
- Illustrated Guide to Medical Terminology
- Journal of Medical Insight (JOMI)

**Course Description:** The second in a 2-course series that covers the basic structures and functions of the human body. This course addresses the following body systems: cardiovascular, lymphatic, respiratory, digestive, urinary, endocrine, and reproductive.

- This course contains 40 hours of instructor-created content with the expectation that the average student will have 120 160 hours
  of engagement within the quarter.
- This is an online asynchronous course
- Students progress in a prescribed linear methodology through the course demonstrating competency.
- Grading rubrics are provided for every Competency Assessment

### **Program Outcomes:**

- Demonstrate competence in the technological aspects of the surgical technologist profession.
- Demonstrate competence in surgical technologist duties, procedures and cases.

## **Course Outcomes:**

- Identify the basic organizational structures of the human body.
- Analyze the basic structure of cells and relate cellular components to integrated cell function.
- Analyze the types of tissue that make up organs and the characteristics of each.
- Contrast and compare organs of the skeletal, muscular, integumentary and nervous system.
- Analyze the skeletal, muscular, integumentary and nervous system for composition and function.

WEEK 1:	AST CORE CURRICULUM
Read: Introduction: Integumentary System	
Competency Assessment: Define Medical Terms	Medical Terminology
Activity: Definition Practice	
Lecture Materials: Integumentary System	
Activity: Layers of the Skin	
Self-check: Integumentary System MC (20)	
Competency Assessment: Integumentary System Review	A & P
Video: Integumentary System	

Activity: What Do you Know?	
Competency Assessment: Function and Structure of the Integumentary System	A & P Pathophysiology
Video: Integumentary System Surgical Procedures	
Self-check: Integumentary Surgical Procedures (10)	
Competency Assessment: Integumentary Surgical Procedures	Biopsychological Needs of the Patient
WEEK 2:	
Read: Introduction: Blood	
Competency Assessment: Define Medical Terms	Medical Terminology
Lecture Materials: Blood	
Self-check: Blood MC (20)	
Competency Assessment: Blood Review	A & P
Video: What's Inside Blood	
Activity: What Do you Know?	
Competency Assessment: Laparoscopic Appendectomy	Pathophysiology
Competency Assessment: Distal Gastrectomy	Pathophysiology
Self-check: General Surgery Surgical Procedures (10)	
Competency Assessment: Emergency Procedures	Counts
WEEK 3:	
Capstone Project #1	A & P
Capstone Quiz #1	Pathophysiology
	Microbiology

WEEK 4:	
Read: Introduction: Skeletal System	
Competency Assessment: Define Medical Terms	Medical Terminology
Activity: Definition Practice	
Lecture Materials: Skeletal System	
Activity: Joints	
Self-check: Skeletal System MC (20)	

Competency Assessment: Skeletal System Review	A & P
Video: Skeletal System	
Activity: What Do You Know?	
Competency Assessment: Function and Structure of the Skeletal System	A & P
	Pathophysiology
Competency Assessment: Total Knee Arthroplasty	Pathophysiology
Competency Assessment: Arthroscopic Bankart Shoulder Repair	Pathophysiology
Self-check: Skeletal Surgical Procedures (10)	
Competency Assessment: Orthopedics and Asepsis	Professionalism
	Microbiology
WEEK 5:	
Capstone Project #2	A & P
Capstone Quiz #2	Pathophysiology
	Microbiology

WEEK 6:	
Read: Introduction: Muscular System	
Competency Assessment: Define Medical Terms	Medical Terminology
Activity: Definition Practice	
Lecture Materials: Muscular System	
Activity: Front Musculature	
Self-check: Muscles and Joints MC (10)	
Competency Assessment: Muscular System Review	A & P
Video: Muscular System	
Activity: What Do You Know?	
Competency Assessment: Function and Structure of the Muscular System	A & P
	Pathophysiology
Competency Assessment: Fasciotomy Surgery	Pathophysiology
Reading: Death and Dying	
Self-check: Death and Dying (10)	

Competency Assessment: Necrotizing Fasciitis	Biopsychological Needs of the Patient
WEEK 7:	
Capstone Project #3 Capstone Quiz #3	A & P
Capstone Quiz #3	Pathophysiology
	Microbiology

WEEK 8:	
Read: Introduction: Nervous System	
Competency Assessment: Define Medical Terms	Medical Terminology
Activity: Definition Practice	
Lecture Materials: Nervous System	
Activity: Neurons	
Self-check: Nervous System MC (20)	
Competency Assessment: Nervous System Review	A & P
Video: Nervous System	
Activity: What Do You Know?	
Competency Assessment: Function and Structure of the Nervous System	A & P
	Pathophysiology
Competency Assessment: Brain Biopsy	Pathophysiology
Competency Assessment: Acute Subdural Hematoma Evacuation	Pathophysiology
Self-check: Nervous System Surgical Procedures (10)	
Competency Assessment: Anterior Cervical Decompression and Fusion	Pathophysiology
WEEK 9:	
Read: Introduction: Eyes and Ears	
Competency Assessment: Define Medical Terms	Medical Terminology
Lecture Materials: Eyes and Ears	
Activity: The Eye	
Activity: The Ear	
Self-check: Eyes and Ears MC (20)	

Competency Assessment: Eyes and Ears Review	A & P
Video: The Eye and Ear	
Activity: What Do You Know?	
Competency Assessment: The Function and Structure of the Senses	A & P
	Pathophysiology
Competency Assessment: Cataract Surgery	Pathophysiology
Competency Assessment: Emergency Tympanoplasty	Pathophysiology
WEEK 10:	
Capstone Project #4	A & P
Capstone Quiz #4	Pathophysiology
	Microbiology

#### GRADING:

#### A minimum of 75% is required on all Assessments

- This is a two (2) credit, letter grade course with the final grading scale as:
  - o A = 90 100%
  - $\circ$  B = 80 89%
  - o C = 75 79%
  - o FAIL = < 75%

#### **COURSE FAILURE POLICY**

If a student fails this course, he or she must follow the Surgical Tech Program Failing Grade Policy.

#### **LBCC Center for Accessibility Resources Policy**

Students who use accommodations in a regular classroom should contact their Instructors as soon as possible. If you have not accessed services and think you may need them, please contact the <u>LBCC Center for Accessibility Resources</u> office (Links to an external site.)Links to an external site.) you can send an email or call 541.917.4789.

Accommodations for online courses may be different than those for traditional classrooms. It is important that you contact the LBCC Center for Accessibility Resources as soon as possible to discuss solutions and options.

You should meet with your instructor during the first week of class if:

- You have a documented disability and need accommodations,
- Your instructor needs to know medical information about you, or
- You need special arrangements in the event of an emergency.

If you have not accessed services and think you may need them, please contact the Center for Accessibility Resources (CFAR), 541-917-4789.

### STATEMENT OF INCLUSION

The LBCC community is enriched by diversity. Everyone has the right to think, learn, and work together in an environment of respect, tolerance, and goodwill. I actively support this right regardless of race, creed, color, personal opinion, gender, sexual orientation, or any of the countless other ways in which we are diverse. (Related to Board Policy #1015)