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

**Term I**

**Instructor:** Tara Kruse

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**Office Contact:**  Email is the best way to contact the instructor for this class. Messages received between Monday at 8am and Friday at 5pm 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.

**Text:**

* This courses uses a significant amount of Open Educational Resource (OER) material
* Surgical Technology: Principles and Practice, 6th 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.

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| **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  Capstone Quiz #1 | A & P  Pathophysiology  Microbiology |

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| **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  Capstone Quiz #2 | A & P  Pathophysiology  Microbiology |

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| **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  Pathophysiology  Microbiology |

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| **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  Capstone Quiz #4 | A & P  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::
  + A = 90 – 100%
  + B = 80 – 89%
  + C = 75 - 79%
  + FAIL = < 75%

**COURSE FAILURE POLICY**

If a student fails this course, he or she must withdraw from the program.

**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 [LBCC **Center for Accessibility Resources** office (Links to an external site.)Links to an external site.](http://linnbenton.edu/go/ds), 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 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)