

# Course Number and Title: HTT 201 Histology

**Campus Location:** 

Wilmington

**Effective Date:** 

2021-51

Prerequisite:

BIO 121, HTT 100

Co-Requisites:

None

Course Credits and Hours:

2.00 credits

2.00 lecture hours/week

1.00 lab hours/week

### Course Description:

This course is the study of human organs and tissues to develop students' histotechnological skills. Emphasis is placed on recognition, composition, and functions of organs and tissues. Gross and microscopic laboratory examination and evaluation of the specimens are included.

### Required Text(s):

Obtain current textbook information by viewing the <u>campus bookstore - https://www.dtcc.edu/bookstores</u> online or visit a campus bookstore. Check your course schedule for the course number and section.

### Additional Materials:

Allied Health/Science Department Program Student Policy Manual

# Schedule Type:

Classroom Course

#### Disclaimer:

None

# Core Course Performance Objectives (CCPOs):

- 1. Identify and describe various human cellular components. (CCC 1; PGC 4)
- 2. Discuss and differentiate various types of epithelial tissue. (CCC 1, 5; PGC 4)
- 3. Describe and compare various types of connective tissue. (CCC 1, 5; PGC 4)
- 4. Identify and compare various types of muscle tissue. (CCC 1, 5; PGC 4)
- 5. Identify and compare various types of nerve tissue. (CCC 1, 5; PGC 4)
- 6. Identify and discuss various parts of the digestive system. (CCC 1; PGC 2, 4)
- 7. Describe and discuss the relationship between the digestive glands and the digestive system. (CCC 1, 2; PGC 4)
- 8. Describe the morphology and structure of the human integument. (CCC 1; PGC 4)
- 9. Identify and correlate various components of the human respiratory system. (CCC 1; PGC 4)
- 10. Describe and distinguish the organs of the urinary system. (CCC 1; PGC 4)
- 11. Identify and discuss the functions of the endocrine glands. (CCC 1; PGC 4)
- 12. Identify, discuss, and correlate the female reproductive organs. (CCC 1; PGC 4)
- 13. Identify and describe the function of each of the male reproductive organs. (CCC 1; PGC 4)
- 14. Identify and describe the components of the circulatory system. (CCC 1; PGC 4)
- 15. Identify and describe the various components of the human lymphatic system. (CCC 1; PGC 4)

See Core Curriculum Competencies and Program Graduate Competencies at the end of the syllabus. CCPOs are linked to every competency they develop.

## Measurable Performance Objectives (MPOs):

Upon completion of this course, the student will:

- 1. Identify and describe various human cellular components.
  - 1. Identify and describe cytoplasmic components.
  - 2. Identify and describe nuclear components.
  - 3. Distinguish among the phases of cell division.
  - 4. Identify cellular components and relate how each contributes to overall cellular function.
- 2. Discuss and differentiate various types of epithelial tissue.
  - 1. Discuss, identify, and compare simple, stratified, and glandular epithelial tissue.
- 3. Describe and compare various types of connective tissue.
  - 1. Compare connective tissue proper with supporting connective tissue.
  - 2. Give examples of and describe special connective tissues.
- 4. Identify and compare various types of muscle tissue.
  - 1. Identify smooth, cardiac, and skeletal muscle.
  - 2. Differentiate among the three types of muscle tissue.
- 5. Identify and compare various types of nerve tissue.
  - 1. Identify neurons, neuralgia, and myelin.
  - 2. Compare the types of nerve tissue.
- 6. Identify and discuss various parts of the digestive system.
  - 1. Describe the functions of each component of the digestive system.
  - 2. Discuss the components of the digestive system grossly and on a cellular level.
  - 3. Identify the parts of the digestive system grossly.
  - 4. Identify digestive system tissues microscopically.
- 7. Describe and discuss the relationship between the digestive glands and the digestive system.
  - 1. Relate the digestive functions of the liver, pancreas, gallbladder, and salivary glands to the digestive system.
  - 2. Identify and discuss the various components of each digestive system gland.
  - 3. Identify and discuss the functions of various digestive glandular cells.
- 8. Describe the morphology and structure of the human integument.
  - 1. Give examples of dermal, epidermal, and hypodermal tissue and of pigments.
  - 2. Identify and explain functions of the various types of human integument.
- 9. Identify and correlate various components of the human respiratory system.
  - 1. Relate the functions of the trachea, bronchi, bronchioles, and alveolar sacs to overall respiration.
  - 2. Identify respiratory system tissue grossly and microscopically.
- 10. Describe and distinguish the organs of the urinary system.
  - 1. Discuss the components of the kidney, ureter, and urethra grossly.
  - 2. Identify urinary system tissue grossly and microscopically.
  - 3. Discuss and distinguish the functions of the urinary system components.
- 11. Identify and discuss the functions of the endocrine glands.
  - 1. Identify pituitary, thyroid, and adrenal tissue microscopically.
  - 2. Discuss and identify endocrine glands grossly and their components.
- 12. Identify, discuss, and correlate the female reproductive organs.
  - 1. Identify female reproductive organs grossly.
  - 2. Discuss the functions of the various female reproductive organs.
  - 3. Identify female reproductive tissue microscopically.
  - 4. Relate the functions of each female reproductive organ to human reproduction.
- 13. Identify and describe the function of each of the male reproductive organs.
  - 1. Identify male reproductive organs grossly.
  - 2. Identify male reproductive tissue microscopically.
  - 3. Relate the functions of each of the male reproductive organs to reproduction.
- 14. Identify and describe the components of the circulatory system.
  - 1. Identify heart and blood vessel tissue microscopically.
  - 2. Identify the heart and blood vessels grossly.
  - 3. Outline the human circulatory system.
  - 4. Discuss and explain the exchange of oxygen and carbon dioxide.
  - 5. Describe the difference between arteries and veins.
- 15. Identify and describe the various components of the human lymphatic system.
  - 1. Identify and locate lymph nodes grossly.
  - 2. Identify and describe lymph nodes, spleen, thymus, and tonsils.
  - 3. Identify various lymphoid tissue microscopically.

# **Evaluation Criteria/Policies:**

The grade will be determined using the Delaware Tech grading system:

90	-	100	=	Α
80	-	89	=	В
70	-	79	=	С
0	-	69	=	F

Students should refer to the <u>Student Handbook - https://www.dtcc.edu/handbook</u> for information on the Academic Standing Policy, the Academic Integrity Policy, Student Rights and Responsibilities, and other policies relevant to their academic progress.

## Core Curriculum Competencies (CCCs are the competencies every graduate will develop):

- 1. Apply clear and effective communication skills.
- 2. Use critical thinking to solve problems.
- 3. Collaborate to achieve a common goal.
- 4. Demonstrate professional and ethical conduct.
- 5. Use information literacy for effective vocational and/or academic research.
- 6. Apply quantitative reasoning and/or scientific inquiry to solve practical problems.

# Program Graduate Competencies (PGCs are the competencies every graduate will develop specific to his or her major):

- 1. Receive and accession tissue specimens accurately.
- 2. Prepare tissue specimens for microscopic examinations, including all routine procedures.
- 3. Assist with frozen section procedures in histopathology.
- 4. Identify tissue structures and their staining characteristics.
- 5. Perform preventive and corrective maintenance of equipment and instruments or refer to appropriate sources for repairs.
- 6. Explain factors that affect procedures and results, and take appropriate action within predetermined limits when corrections are indicated.
- 7. Perform and monitor quality control within predetermined limits.
- 8. Apply principles of safety to all clinical laboratory procedures.
- 9. Demonstrate professional conduct and interpersonal communications skills with patients, the public, laboratory and other health care personnel.
- 10. Describe the responsibilities of other laboratory and healthcare personnel and interact with them with respect for their jobs and patient care.
- 11. Explain and act upon individual needs for continuing education as a function of growth and maintenance of professional competence.
- 12. Exercise principles of management, safety and supervision within the clinical laboratory environment.

### **Disabilities Support Statement:**

The College is committed to providing reasonable accommodations for students with disabilities. Students are encouraged to schedule an appointment with the campus Disabilities Support Counselor to request an accommodation needed due to a disability. A listing of campus Disabilities Support Counselors and contact information can be found at the <u>disabilities services - https://www.dtcc.edu/disabilitysupport</u> web page or visit the campus Advising Center.