



Course Number and Title: HTT 100 Introduction to Histotechnology

Campus Location:

Wilmington

Effective Date:

2020-51

Prerequisite:

BIO 100 (concurrent), BIO 120 (concurrent), SSC 100 or concurrent

Co-Requisites:

None

Course Credits and Hours:

3.00 credits

2.00 lecture hours/week

2.00 lab hours/week

Course Description:

This course introduces the study of histology. Topics include laboratory safety and conduct, record keeping, careers in histotechnology, core values, communication skills, and the basic use of histology equipment.

Required Text(s):

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

Additional Materials:

Histotechnician Program Manual

Allied Health/Science Department Student Policy Manual

Schedule Type:

Classroom Course

Disclaimer:

None

Core Course Performance Objectives (CCPOs):

1. Discuss the following laboratory safety policies: Fire and Life Safety, Infection Control Basics, Tuberculosis, Blood Borne Pathogens, Occupational Safety and Health Administration (OSHA) Right-To-Know Law, and Pathology Chemical Hygiene Plan. (CCC 4, 5; PGC 8, 10, 12)
2. Summarize building a culture of patient safety. (CCC 4, 5; PGC 8, 10)
3. Discuss the practice of core values and confidentiality policies for health professionals. (CCC 4; PGC 9, 10, 12)
4. Practice and explain the basic use of histology lab equipment that includes tissue grossing, fixation, processing, microtomy, cryotomy, embedding, staining, and the proper handling of reagents. (CCC 6; PGC 2, 3, 5, 6, 7, 8)
5. Define *professional ethics*, and discuss the responsibilities. (CCC 4; PGC 9, 10, 12)
6. Describe and discuss interpersonal communication skills for health professionals. (CCC 1, 2, 3, 4; PGC 9, 10)
7. Explain various specialty areas within the field of histotechnology. (CCC 1; PGC 11)
8. Discuss quality assurance programs. (CCC 1, 2, 6; PGC 6, 7)

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. Discuss the following laboratory safety policies: Fire and Life Safety, Infection Control Basics, Tuberculosis, Blood Borne Pathogens, Occupational Safety and Health Administration (OSHA) Right-To-Know Law, and Pathology Chemical Hygiene Plan.
 1. Identify the code name for a fire emergency.
 2. Translate rescue, alarm, contain, extinguish (RACE) acronym, and summarize the individual procedures corresponding to each letter.
 3. Explain and/or demonstrate use of a fire extinguisher.
 4. Locate fire safety equipment within the histology lab.
 5. Summarize the correct response for unusual odor and smoke detection.
 6. Explain standard precautions and personal protective equipment.

7. Identify how infections are spread.
 8. Identify biohazard trash, and explain proper disposal.
 9. Recognize mode of tuberculosis (TB) transmission.
 10. Describe TB infection versus active pulmonary TB.
 11. Describe environmental and respiratory protection for TB.
 12. Define *blood borne pathogens*.
 13. Identify high risk groups for blood borne pathogens.
 14. Discuss the handling of needles and sharps.
 15. Explain the policy for injury caused by a used sharp.
 16. Explain basic information contained in Right-to-Know laws.
 17. Describe employee and employer responsibilities concerning right-to-know.
 18. Explain the reasons for the necessity of a chemical hygiene plan.
 19. In the lab, identify the location of the Christiana Care Health System (CCHS) Chemical Hygiene Plan.
 20. Locate and explain examples of the Safety Data Sheets (SDS).
2. Summarize building a culture of patient safety.
 1. Explain the 1999 Institute of Medicine report.
 2. Discuss patient safety terminology.
 3. Identify patient safety issues.
 4. Describe system issues versus personnel problems.
 5. Explain the culture of blame versus the culture of safety.
 3. Describe and discuss the practice of core values and confidentiality policies for health professionals.
 1. Explain employee responsibility concerning confidentiality and release of information.
 2. Identify and define core value behaviors.
 3. Discuss different levels of behavior.
 4. Describe how behaviors impact performance as a histotechnologist.
 4. Practice and explain the basic use of histology lab equipment that includes tissue grossing, fixation, processing, proper handling of reagents, microtomy, cryotomy, embedding, staining, and coverslipping.
 1. Demonstrate basic techniques in grossing of tissue specimens.
 2. Explain the fixation process for tissue specimens.
 3. Demonstrate proper processing of tissue specimens using the automated processor.
 4. Explain the reagents used to process tissue specimens.
 5. Demonstrate proper handling and safety of reagents.
 6. Demonstrate proper use and care of the microtome.
 7. Practice basic microtomy techniques on paraffin blocks to produce quality sections.
 8. Demonstrate proper use and care of the tissue cryostat.
 9. Practice frozen sectioning on various types of tissue using the cryostat.
 10. Demonstrate proper use and care of the embedding center.
 11. Practice basic embedding techniques for tissue sections.
 12. Practice manual hematoxylin and eosin (H&E) staining for paraffin and frozen section slides.
 13. Practice basic coverslipping techniques for paraffin and frozen section slides.
 5. Define *professional ethics*, and discuss the responsibilities.
 1. Define *professional ethics*.
 2. Explain professional responsibility.
 3. Recognize professional relationships.
 4. Explain the patient's bill of rights.
 6. Discuss interpersonal communication skills for health professionals.
 1. Explain body language, and demonstrate examples.
 2. Identify non-verbal messages.
 3. Describe and discuss listening and paraphrasing.
 4. Define *empathy*, and give an example.
 5. Explain interaction of feelings.
 6. Describe the difference between open-ended and closed questions.
 7. Discuss the steps to follow in receiving feedback and identify when to give feedback.
 8. Explain and discuss a basic understanding of psychology.
 9. Identify the hierarchy of human needs.
 10. Explain and discuss major stressors.
 11. Identify less than helpful responses.
 12. Define *active listening*.
 13. Describe "I" messages, and give examples of when they are appropriate.
 14. Explain how anticipation and anxiety affect the student.
 7. Explain various specialty areas within the field of histotechnology.
 1. Describe the relationship between histology and cytology.
 2. Explain histology technician versus histotechnologist.
 3. Describe plant, veterinary, marine, research, and clinical-based laboratories.
 8. Discuss quality assurance programs.
 1. Define *quality assurance*.
 2. Give examples of quality assurance issues.

Evaluation Criteria/Policies:

Students must demonstrate proficiency on all CCPOs at a minimal 75 percent level to successfully complete the course. The grade will be determined using the Delaware Tech grading system:

92	-	100	=	A
83	-	91	=	B
75	-	82	=	C
0	-	74	=	F

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

Final Course Grade:

Calculated using the following weighted average

Evaluation Measure	Percentage of final grade
Lecture Exam: 3 exams are weighted at 10% each (summative)	30%
Final Exam: 1 Exam weighted at 30% (summative)	30%
Discussion Board: 3 Discussion Board Assignments are weighted 2.5% each (formative)	7.5%
Histology Laboratory Competency Checklist (summative)	2.5%
Laboratory Assignment Checklist (summative)	2.5%
Quality Assurance Assignment (formative)	5%
Histology Research Paper (summative)	20%
Generic Abilities-Affective Objectives Assessment (summative)	2.5%
TOTAL	100%

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 health care 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 [disabilities services - https://www.dtcc.edu/disabilitysupport](https://www.dtcc.edu/disabilitysupport) web page or visit the campus Advising Center.