I. INTRODUCTION

A. **Histology** is the study of the microscopic anatomy of cells and tissues of plants and animals. It is commonly performed by examining cells and tissues under a light microscope or electron microscope, which have been sectioned, stained and mounted on a microscope slide. Histological studies may be conducted using tissue culture, where live human or animal cells are isolated and maintained in an artificial environment for various research projects. The ability to visualize or differentially identify microscopic structures is frequently enhanced through the use of histological stains. Histology is an essential tool of biology and medicine. Histopathology, the microscopic study of diseased tissue, is an important tool in anatomical pathology, since accurate diagnosis of cancer and other diseases usually requires histopathological examination of samples.

B. The courses are designed to meet basic curriculum requirements for the Central Texas College Histologic Laboratory Technician Program. These courses are designed to fulfill the clinical requirements set forth by the National Accrediting Agency for Clinical Laboratory Sciences.

C. The course is occupationally related and serves as the preparation course in clinical histologic laboratory techniques.

D. Prerequisite(s): Refer to the CTC Catalog.

II. LEARNING OUTCOMES

Upon successful completion of this course, Special Topics Histotechnology, the student will:

A. Demonstrate a sense of professionalism by exhibiting the following characteristics: attends lecture and clinical site sessions regularly and punctually, seeks activities which further learning, admits mistakes and takes steps to correct them, repeats procedures when test results are in doubt, cooperates with lecture and clinical site instructor, takes pride in laboratory medicine, complies with stated dress code of the student and clinical laboratory, and precipitates in continuing education activities.
B. Maintain ethical and professional standards according to HIPPA regulations.

C. Achieve skills and knowledge in histology necessary to pass the board of certification exam by ASCP.

D. Stay abreast of current topics in histology in order to maintain applicable skills and knowledge to be able to enter the histology workforce.

E. Understand how cytology interfaces with histology.

III. INSTRUCTIONAL MATERIALS

The instructional materials identified for his course are viewable through www.ctcd.edu/books.

IV. COURSE REQUIREMENTS

A. To receive transferable credits for this course, you must earn a grade of 2.5 or better.

B. Class attendance is mandatory. A student who is late for 15 minutes or more will be marked absent. A student who is late for less than 15 minutes late will be marked tardy. 2 tardy will count as an absence. 3 absences result in loss of a letter grade for the course. 4 absences will disqualify a student from the MLT program and the student will be required to meet with the program director for readmission.

C. Students with a grade of 2.4 or less should make an appointment with the instructor to discuss the reason for low performance. Any material not understood by the student can be discussed with the instructor privately during office hours. Office hours are posted; please try to schedule an appointment at your convenience.

D. Lecture examinations will be taken from class notes, assigned pages in your text, and any additional information such as computer assignments or videos.

E. Laboratory examinations will be taken from a combination of lecture and any laboratory information covered in any format. Often theory of procedures is required to perform the procedure and evaluate your results.

V. EXAMINATIONS

A. Five lecture, three laboratory examinations, and a laboratory assessment will be given. A comprehensive final examination will be given.

B. Makeup examinations will not be given. If you must miss an exam, you can use your final exam grade to replace your missed exam grade. Any additional missed exams would result in a “0” and cannot be made up.
VI. SEMESTER GRADE COMPUTATION

<table>
<thead>
<tr>
<th>Lecture Examinations</th>
<th>Point Value</th>
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<tbody>
<tr>
<td>Lecture 1</td>
<td>100</td>
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<tr>
<td>Lecture 2</td>
<td>100</td>
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<tr>
<td>Lecture 3</td>
<td>100</td>
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<tr>
<td>Lecture 4</td>
<td>100</td>
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<tr>
<td>Lecture 5</td>
<td>100</td>
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</table>

Total Lecture Points Possible 500

*Professionalism 50

Final Examination 200

Total Lecture/Lab/Final Points Possible 750

<table>
<thead>
<tr>
<th>Number of Points</th>
<th>Grade</th>
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<tbody>
<tr>
<td>675-750</td>
<td>A</td>
</tr>
<tr>
<td>600 – 674</td>
<td>B</td>
</tr>
<tr>
<td>562.5 – 599</td>
<td>C</td>
</tr>
<tr>
<td>450 – 562</td>
<td>D</td>
</tr>
<tr>
<td>449 – Below</td>
<td>F</td>
</tr>
</tbody>
</table>

*Professionalism Grade: 50 Points (This grade cannot be replaced by final)

Grading for Professionalism Grade: Subtract 2 pts per tardy or absence, 1 pt for other infractions
Includes:
Preparation for Class
Completion of assignments (Homework assignments: Full credit at start of class, half points at end of day, 0 points after 1st day. See attendance below.)
Attendance (Must bring a doctor’s note for each absence due to illness to accept assignments the following day)
Tardies
Unlawful Use of electronics (cell phones, etc)
Observation (Team player, Participation, Stay on Task –minimal Distractions, cheating, plagiarism, talking)

Extra credit: Maximum of 3% of total grade. Extra credit for lecture portion only. Lab has lab participation points. No extra assignments without approval of professor for lecture. Again, must fit within 3% of total extra points.

NOTE: Plagiarism in any form will not be tolerated. A student who chooses to plagiarize will be given a zero on the assignment. A formal charge may be made to the College Disciplinary Board.

Testing: If professor elects to use testing center, tests will only be available on Tues-Thursday only. No exceptions. Tests will only be for same time period as the class. Class must meet during original scheduled class time for extra lectures and/or labs. Professor will take test on Monday, pick up tests on Friday to be able to grade by next class period.
VII. NOTES AND ADDITIONAL INSTRUCTIONS FROM THE INSTRUCTOR

A. Course Withdrawal: It is the student’s responsibility to officially withdraw from a class if circumstances prevent attendance. Any student who desires to, or must, officially withdraw from a course after the first scheduled class meeting must file a Central Texas College Application for Withdrawal (CTC Form 59). The withdrawal form must be signed by the student.

CTC Form 59 will be accepted at any time prior to Friday of the 12th week of classes during the 16-week fall and spring semesters. The deadline for sessions of other lengths is as follows:

- 10-week session: Friday of the 7th week
- 8-week session: Friday of the 6th week
- 5-week session: Friday of the 3rd week

The equivalent date (75% of the semester) will be used for other sessions of other lengths. The specific last day to withdrawal is published each semester in the Schedule Bulletin.

A student who officially withdraws will be awarded the grade of “W” provided the student’s attendance and academic performance are satisfactory at the time of official withdrawal. Students must file a withdrawal application with the college before they may be considered for withdrawal.

A student may not withdraw from a class for which the instructor has previously issued the student a grade of “F” or “FN” for nonattendance.

B. Administrative Withdrawal: An administrative withdrawal may be initiated when the student fails to meet College attendance requirements. The instructor will assign the appropriate grade on CTC Form 59 for submission to the registrar.

C. Incomplete Grade: The College catalog states, “An incomplete grade may be given in those cases where the student has completed the majority of the course work but, because of personal illness, death in the immediate family, or military orders, the student is unable to complete the requirements for a course…” Prior approval from the instructor is required before the grade of “I” for Incomplete is recorded. A student who merely fails to show for the final examination will receive a zero for the final and an “F” for the course.

D. Cellular Phones and Beepers: Student cellular phones and beepers will be turned off while the student is in the classroom or laboratory. Students choosing to disregard this policy will be asked to leave and will be recorded as absent. If a cell phone rings or is
used during testing, the test will be taken and a grade of zero will be given.

E. **American’s with Disabilities Act (ADA):** Disability Support Services provide services to students who have appropriate documentation of a disability. Students requiring accommodations for disabilities are responsible for contacting the Office of Disability Support Services (DSS) located on the central campus. This service is available to all students, regardless of location. Explore the website at [www.ctcd.edu/disability-support](http://www.ctcd.edu/disability-support) for further information. Reasonable accommodations will be given in accordance with the federal and state laws through the DSS office.

F. **Instructor Discretion:** The instructor reserves the right or final decision in course requirements.

G. **Civility:** The collegiate expectation is that students will conduct themselves with civility at all times in classrooms. Minimal civility includes:

1. Being in class on time
2. Staying in class for the entire class period
3. Leaving early occurs only after informing the teacher, prior to class, of an unavoidable conflict requiring your early departure (if possible, position yourself close to the door for a minimum disruption of the class)
4. Avoiding such uncivil conduct as talking, sleeping, reading papers/magazines, or working on some other class homework assignment
5. Using socially unacceptable language in classroom discussions

Failure to do so can result in disciplinary action up to and including expulsion.

VIII. **COURSE OUTLINE**

A. **Cervical and Vaginal Cytology**

1. **Learning Outcomes:** Upon completion of this lesson, the student will:

   a. Know and explain the history of the Papanicolaou Test and its current practice.
   
   b. Know how to perform automated screening.
   
   c. Understand Bethesda system.
   
   d. Understand how to identify and perform a normal pap.
e. Be able to identify and differentiate different organisms and infections.

f. Be able to differentiate benign and reactive changes from squamous and glandular abnormalities.

g. Recognize other malignant neoplasms.

B. **Respiratory Tract and Mediastinum**

1. **Learning Outcomes**: Upon completion of this lesson, the student will:
   a. Understand normal anatomy, histology, and cytology of the respiratory tract.
   b. Understand and be able to identify and differentiate sampling techniques, and molecular testing of lung cancer.
   c. Understand benign cellular changes and neoplasms, vs. tumors.

C. **Urine and Bladder Washings**

1. **Learning Outcomes**: Upon completion of this lesson, the student will:
   a. Understand specimen collection, including processing, adequacy criteria, and accuracy.
   b. Be able to differentiate normal elements, benign lesions, urothelial neoplasms, other malignant lesions.
   c. Be able to diagnose difficult or borderline specimens, common patterns.

D. **Pleural, Pericardial, Peritoneal, CSF**

1. **Learning Outcomes**: Upon completion of this lesson, the student will:
   a. Understand specimen collection, including processing, accuracy.
   b. Understand and differentiate benign elements, non-neoplastic conditions as well as eosinophilic and malignant effusions, and tumors.

E. **Gastrointestinal Tract**

1. **Learning Outcomes**: Upon completion of this lesson, the student will:
   a. Know clinical indications, sample collection and preparation procedures for the stomach, esophagus, duodenum, and colon.
F. FNA’s

1. **Learning Outcomes:** Upon completion of this lesson, the student will:
   
a. Know procedure for FNA and how to prepare the sample.

G. Organs, Tissues, Glands

1. **Learning Outcomes:** Upon completion of this lesson, the student will:
   
a. Be able to differentiate benign conditions from neoplasms, tumors, cysts, and infections of the breast, thyroid, salivary glands, lymph nodes, liver, pancreas, kidney and adrenal gland, ovary, and soft tissues.

   b. Understand specimen types and how to evaluate them.