Course Description
This course is an introduction to the healthcare environment and the histology laboratory. Topics include laboratory safety and infection control, healthcare professionals, medical terminology, basic anatomy and physiology, laboratory mathematics, communication, and ethics, legal and professional issues.

Course Prerequisite
Acceptance into the program.

Course Rationale
Many students either have minimal experience working in a hospital environment or none at all. This course introduces the prospective histology student to basic policies and/or procedures in the healthcare environment and pathology laboratory to provide excellent patient care as a healthcare provider.

Program Learning Outcomes
A program that prepares individuals, under the supervision of histology laboratory scientists/technologists, to perform routine procedures and tests in the histopathology laboratory. Instruction includes general laboratory procedures and skills; laboratory mathematics; medical computer applications; interpersonal and communication skills; and the basic principles of fixation, tissue processing, embedding, microtomy, H&E staining, and histochemical staining of tissue sections.

Student Learning Outcomes
After completing this course, the student will be able to:
1. Describe laboratory safety practices.
2. Perform laboratory math calculations.
3. Explain laboratory accreditation and certification, and identify the roles of laboratorians in the health care setting.
4. Describe routine laboratory tests performed in the pathology department and their purpose.
5. Demonstrate ethical and professional behavior
6. Describe basic anatomy/physiology concepts and state common pathology laboratory medical terms.
Student Learning Objectives
Student will:
1.1 Identify safe laboratory practices and principles of infection control by scoring 75% or better on lecture exams.
2.1 Review basic math concepts and apply to laboratory math calculations.
2.2 After proper instruction perform math problems related to histology.
3.1 Name the accreditation and certification agencies and state their functions.
3.2 Recognize all health care professionals, state their function and explain the laboratories’ role and interaction in the health care setting.
4.1 Identify laboratory tests and their purpose by scoring 75% or better on lecture exams.
5.1 Describe the principles of ethical behavior, the Hippocratic oath, HIPAA standards, and the Patient’s Bill of Rights.
5.2 When presented with an ethical situation, determine the most ethical method to resolve the issue.
6.1 Identify medical terms and basic anatomy/physiology concepts by scoring 75% or better on lecture exams.

Cognitive
With the use of course materials and various teaching methods, the student will demonstrate mastery of the following course objectives by scoring 75% or better on all examinations.

Exam 1
History of Histology Presentation
1. List scientists who have contributed to the development of laboratory equipment, technical procedures and histochemical testing.
2. Micrograph images: identify early microscopes and microtomes.

Common Histology Terminology/Procedures List
1. Define terminology used in the histopathology laboratory that includes personnel, equipment, and basic chemistry.

Exam 2:
Professionalism, Quality Assurance and Legal Issues
1. Describe professional standards for histology technicians and the importance of effective communication.
2. Describe quality assurance practices that are employed in the histology laboratory designed to ensure excellent patient care.
3. Describe the role of risk management and good work practices in limiting sentinel events.
4. Describe the importance of obtaining informed consent and protecting the patient’s privacy to avoid medical lawsuits.

Exam 3:
Healthcare Setting, Laboratory Tests and Math
1. Describe organizational structure of healthcare facilities, billing policies, and common tests performed in both the anatomic and clinical areas of the Pathology Department.
2. Accurately calculate percent, dilution, molar and normal solutions.

Exam 4:
Chapter 3: Infection Control and Laboratory Safety
1. Describe the chain of infection and intervention strategies to limit the spread of infection among patients, family members and employees. Describe hospitals (response to JCAHCO standards) to control the incidences of infection among patients, visitors, and employees.
2. Describe standard body/substance isolation attire (Personal Protective Equipment—“PPE”) and importance of hand washing.
3. Describe OSHA standards of practice to limit exposure to the following hazards:
   • Biohazard, chemical, electrical, fire, and radiation
4. Describe first aide methods for hemorrhaging, shock and heart attack.
5. Describe ways to manage stress and improve one’s sense of wellness.
Exam 5:  
Medical Terminology  
1. Identify word elements of medical terms.  
2. Define medical terms by associating the meanings of prefixes, root words, and suffixes.

Exam 6:  
Human Anatomy and Physiology Review  
1. Identify and describe body positions, planes, cavities, and directional terms.  
2. Identify and describe the structural components of cells, nerve cells, and blood cells.  
3. Regarding each body system, identify anatomic structure and their function and associated pathological conditions.

Exam 7:  
The Circulatory System  
1. Describe the function of the heart, systemic circulatory system, and pulmonary circulatory system.  
2. Describe cardiovascular pathological conditions and treatment options.  
2. Describe the primary steps of hemostasis.  
3. Micrograph images: identify major structures of the heart including the conduction system.  
4. Micrograph image: identify blood cells.  

Affective Objectives: Upon receiving appropriate instruction, the student will demonstrate the following attitudes and behaviors as determined by mid-term and end-evaluations.  
During the course of the semester, the students will:  
1. attentively attend to verbal and demonstrative instruction  
2. follow written and verbal instructions  
3. communicate effectively in written and spoken English  
4. engage in class/laboratory discussions by asking pertinent questions and responding respectfully to other student’s comments  
5. demonstrate a willingness to learn and apply new ideas/technical skills to future endeavors  
6. demonstrate a positive teamwork ethic by being willing to assist and cooperate with others  
7. develop confidence by gradually working independently in a competent manner  
8. prioritize and manage work flow within a restricted time frame  
9. handle themselves at all times in a professional manner  
10. demonstrate honesty and integrity  
11. demonstrate commitment to the Histotechnician profession

SCANS Competencies and Foundations  
Houston Community College is determined to prepare students with the knowledge and skill necessary to succeed in the workplace. The following competencies and foundation skills have been designed into the curriculum of the course to accomplish this.

C10 Teach Others  
HLAB 1401 assignment: the student is required to prepare an oral presentation on a chosen disease from internet references with the idea of teaching the class what they learned about the disease. The oral report counts as an assignment grade.

C15 Understands Systems  
HLAB 1401 lecture/examination: the student’s retention of hospital systems is evaluated by examination.

C17 Improves and Designs Systems  
HLAB 1401 assignment: the student will be required to analyze case studies and make suggestions that would modify and improve treatment for the patient. This assignment must be turned in to verify completion.
Select Technology
HLAB 1401 lecture/examination: the student’s retention of identifying the use of major laboratory equipment is evaluated by examination.

F1 Reading
HLAB 1401 lecture exam: the student is required to read the textbook and course materials. Assessment will be based on their performance on lecture exams.

F2 Writing
HLAB 1401 Oral Report assignment: the student is required to give a classroom oral presentation of a medical disorder. The oral report will count toward an assignment grade.

F3/4 Arithmetic/Mathematics
HLAB 1401 lecture/examination: the student is required to solve problems pertaining to reagent preparation that is evaluated by performance on an exam.

F5 Speaking
HLAB 1401 oral report: the student is required to present an oral report. Assessment will be based upon communication skills and meeting content requirements. This will count toward an assignment grade.

F6 Listening
HLAB 1401 lecture exams: the student is required to listen to lecture material and instructions and will demonstrate their listening skills by following directions.

Course Calendar

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic of Instruction</th>
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| 1.   | UNIT 1: History and Terminology  
Histology Terminology/Procedures  
History of Histology Lecture  
Scientist’s contribution to the field. |
| 2.   | **Unit Exam 1** (History/Terminology) |
| 3.   | Unit 2: professionalism, QA & Legal Issues  
Professionalism Lecture  
Distribute Oral Report sign up list  
Cervical cancer presentation |
| 4.   | UNIT 2: Professionalism, QA & Legal Issues  
Quality Assurance/Legal Issues Lecture  
Test Review |
| 5    | Unit exam 2 test  
Lab math presentation |
| 6.   | Unit 3: Healthcare Setting, Lab Services, and Lab Math |
| 7.   | Unit 3: Healthcare Setting, Lab Services & lab math  
Healthcare Setting Lecture, part 2  
Cervical Cancer Presentation (content and normal staining results) |
| 8.   | Unit 4: Infection Control & Lab Safety  
**UNIT EXAM 3**: Health Setting, Lab Math/Services  
Infection Control and Lab Safety Lecture, part 1 |
| 9.   | Unit 4: Infection Control & Lab Safety  
Infection Control and Lab Safety Lecture, part 2 |
**Instructional Methods**
Instructional strategies will include classroom lectures and collaborative interaction.

**Instructional Materials**
Instructional materials include the textbook, online lecture PowerPoint presentations, hand-outs, video presentations (if available), and internet access.

All HLAB books are sold at the West Loop Campus Bookstore or can be ordered online. Numerous reference books are available at the HAM-TMC library and in faculty offices. The Computer Center located on the first floor is equipped with fully operational computers available for student access.

The required textbook for this course is:

*Phlebotomy Essentials (5th edition)* by McCall and Tankersley. Lippincott, Williams & Wilkins.

*ISBN 1605476374*

HAM-TMC Library
1133 John Freeman Blvd.
Houston, Texas  77030
713-795-4200

Circulation Privileges:
Present your student ID, current registration invoice, and registration form. The registration form can be downloaded at [http://resource.library.tmc.edu/circ/docs/memberregisform.pdf](http://resource.library.tmc.edu/circ/docs/memberregisform.pdf)

Remote TMC Educational Access:
Go to [http://resource.library.tmc.edu/resources/](http://resource.library.tmc.edu/resources/)

Other HCC libraries:

HCC Central Campus
1300 Holman, 3rd floor
Houston, Texas  77004
713-718-6133
Web Sites of Interest:
Professional Organizations
American Society of Clinical Pathologist:  http://www.ascp.org/
Joint Commission on Accreditation of Healthcare Organizations:  http://www.jcaho.org/
College of American Pathologists:  http://www.cap.org/
Occupational Safety and Health Administration:  http://osha.gov/
National Accrediting Agency for Clinical Laboratory Sciences:  http://www.naacs.org/
Centers for Disease Control and Prevention:  http://www.cdc.gov/
National Society for Histotechnology**:  http://www.nsh.org/
Texas Society for Histotechnology**:  http://www.txsh.org/
Histonet (email between histology technicians):  http://www.histonet.org/site_sendpics.asp
The Histotechs’ Home Page (various links-jobs, procedures, and theory):  http://www.histology.to/

**It is recommended that you join one or both of the histology professional organizations.

Research related Web Sites:
Centers for Disease Control and Prevention:  http://www.cdc.gov/
The Histotechs’ Home Page:  http://www.histology.to/
Web MD:  http://www.webmd.com/
Histology Resource:  http://swehsc.pharmacy.arizona.edu/exppath/micro/histology.html
Martindale Histology:  http://www.martindalecenter.com/MedicalAnatomy.html
Web Path:  http://medlib.med.utah.edu/WebPath/webpath.html#MENU
Search Engines: “Histology” and specific names of diseases.

Student Assignments
Email or hand-in a signed “syllabus acknowledgement form” by the start of the second scheduled lecture.
If done electronically, please sign your name using italics.

NOTE: Five points will be deducted from your final grade if it is handed in late.

Oral Report:
Students will be paired off to research a disease of an organ system. Only two diseases of a particular organ system will be allowed. The oral reports should be approximately 10-15 minutes. Possible online reference sources can be found in this syllabus, such as Web MD (see above). A sign-up sheet will be distributed to the students to choose a topic. You cannot pick cervical cancer because this disease will be covered in class. The content of this cervical cancer presentation can be used as a model to complete the oral report assignment.

The content of the oral report must include symptoms, usual age of onset and/or societal prevalence, causes (suspected causes), diagnostic tests, standard treatment and its’ effectiveness, and your website references. If possible, include relevant images pertaining to the disease. Cite your references in APA format by opening the links on the APA citations document. It is recommended that you download the sample APA citations for future use in the Program.

Students are encouraged to start researching their topic early in the semester. It recommended that Microsoft Powerpoint or a similar program be used to present your report. Download presentations for editing purposes. Upload your oral report using “Assignments” tool by the due date to avoid 5 points being deducted from your grade. The due date for the oral report can be found online, as well as, on the course outline. For backup purposes, save your presentation on a CDROM disc or flash drive in case the internet is offline on the day of oral presentations.
Online Assignments:
The first assignment involves writing a brief synopsis of a scientist’s contribution to the field of Histotechnology (1-2 paragraphs). The second assignment involves understanding standard quality control work practices in the histopathology laboratory pertaining to limiting loss of biopsy tissue. For each assignment, read the instructions, grading criteria and the due date. Late assignments will be given a grade of “0”.

Medical Ethics Assignment:
After medical ethics is discussed in class, the instructor will read both ethical case scenarios found online. Each student is expected to independently complete the assignment at home and make 2 copies. One copy is to be given to the instructor at the beginning of the next class period for grading. The students will be divided into several groups to discuss breaches of ethical behavior and alternative helpful behaviors using the other assignment copy. A group spokesperson will share the group’s ideas with the rest of the class. Students, who are not present, must submit the assignment before the start of class the following week. Five points will be deducted from the grade. Submission of the assignment after this date will be considered “LATE” and students will be given a score of “0”.

Online self assessment quizzes:
Each unit exam is accompanied by a self assessment quiz. These quizzes are reflective of the student learning objectives for each unit of instruction. If a student does not take the self assessment quiz before the designated deadline, they will not receive any Participation Points. The quizzes are to be taken before midnight on the day prior to the unit exam. These self quizzes can be taken as often as needed with no time limit restrictions.

Student Assessments
Seven Unit Exams
Oral report presentation
Syllabus Acknowledgement form
Scientist’s Contribution online assignment
Lost Biopsy online assignment
Participation Points
Timely completion of online self-quizzes

Program/Discipline Requirements
HLAB 1401 is a required course to earn the Histologic Technician AAS degree. All students must obtain a grade of 75 or better to receive a passing grade. Any student whose scores 74 or below will fail the class.

A = 100 – 90:
B = 89 – 80:
C = 79 – 75:
F = 74 and below

Instructor Grading Criteria
HLAB 1401 is a Four-hour lecture course. Students will be graded according to the following:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Unit exams</td>
<td>45%</td>
</tr>
<tr>
<td>Oral Report</td>
<td>25%</td>
</tr>
<tr>
<td>Lost Biopsy Assignment</td>
<td>10%</td>
</tr>
<tr>
<td>Scientist’s Contribution</td>
<td>5%</td>
</tr>
<tr>
<td>Self Assessment quizzes</td>
<td>10%</td>
</tr>
<tr>
<td>Medical ethics</td>
<td>5%</td>
</tr>
<tr>
<td>Late Syllabus Ack. Form</td>
<td>Deduct 5 points from final average</td>
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</table>
Unit Examinations:
Materials for the exams will come from the textbook, lecture presentations, assigned readings, and any handouts given to students during class. Exams include multiple choice, true and false, and matching questions. A thorough knowledge of unit objectives will ensure adequate performance on exams. Students will be allowed to repeat one of the unit exams that they scored below 75% except Unit Exam 7. This repeat exam must be taken within one week of the original exam and the highest grade allowed is 75%.

Students must maintain a 75% average on all unit exams to pass the class regardless of their grades on the other assignments. After meeting this first condition, your overall average for all assessments must also be 75% to pass the course.

No makeup exams are given for unexcused absences. An absence on test day will result in a grade of “0”. If a student must be absent for a test, the student is responsible for informing the instructor in advance and providing the instructor with appropriate documentation to explain the absence in order to take a makeup exam.

It is in your best interest to study for the exams and take the self assessment quizzes to test your retention of the information. As a reminder, participation points will be given for self-assessments that are taken on the day before the scheduled unit exam.

Instructor’s Requirements
As your instructor, it is my responsibility to:
1. Provide the course syllabus and course outline that describes student expectations, assignments, exam content, and grading policies
2. Facilitate an effective learning environment through class activities, discussions, and lectures
3. Inform students of policies such as attendance, withdrawal, tardiness and making up missed exams
4. Be available to tutoring and discussing other issues outside of the classroom whether during office hours or online communication.

To be successful in this class, it is the student’s responsibility to:
1. Read lecture material before class, define unknown terms and come prepared to ask questions
2. Attend all classes, pay close attention to instructions given by the instructor, follow procedures and participate to the fullest extent
3. Immediately after the lecture, review lecture material covered and answer learning objectives
4. Students should not study the night before the exam. Rather, plan to study a certain amount each day to achieve academic success

EGLS$_3$ – Evaluation for Greater Learning Student Survey System
At Houston Community College, professors believe that thoughtful student feedback is necessary to improve teaching and learning. During a designated time, you will be asked to answer a short online survey of research-based questions related to instruction. The anonymous results of the survey will be made available to your professors and division chairs for continual improvement of instruction. Look for the EGLS$_3$ as part of the Houston Community College Student System online near the end of the term.

HCC Policy Statement: Disability Notification
Any student with a documented disability (e.g. physical, learning, psychiatric, vision, hearing, etc.) who needs to arrange reasonable accommodations must contact the Disability Services Office at their respective college at the beginning of each semester. Faculty are authorized to provide only the accommodations requested by the Disability Support Services Office. If you have any questions, please contact the Disability Counselor at your college or the District Disability Office at 713-718-5165.

HCC Policy Statement: Academic Honesty
Plagiarism, cheating, and other forms of academic dishonesty are not only violations of the college system and the rules of this class, but are unethical and unprofessional. Students engaging in any form of academic dishonesty are subject to immediate dismissal from the program.
You are expected to be familiar with the College's Policy on Academic Honesty, found in the catalog and student handbook. Students are responsible for conducting themselves with honor and integrity in fulfilling course requirements. Penalties and/or disciplinary proceedings may be initiated by College System officials against a student accused of scholastic dishonesty. “Scholastic dishonesty”: includes, but is not limited to, cheating on a test, plagiarism, and collusion.

**Cheating** on a test includes:
- Copying from another students’ test paper;
- Using materials not authorized by the person giving the test;
- Collaborating with another student during a test without authorization;
- Knowingly using, buying, selling, stealing, transporting, or soliciting in whole or part the contents of a test that has not been administered;
- Bribing another person to obtain a test that is to be administered.

**Plagiarism** means the appropriation of another’s work and the unacknowledged incorporation of that work in one’s own written work offered for credit.

**Collusion** means the unauthorized collaboration with another person in preparing written work offered for credit.

Possible punishments for academic dishonesty may include a grade of 0 or F in the particular assignment, failure in the course, and/or recommendation for probation or dismissal from the College System. (See the Student Handbook).

**HCC Policy Statement: Attendance**

**Attendance**: Students are expected to attend all classes and labs regularly. Students are responsible for [any and all] materials covered during their absences, and it is the student’s responsibility to consult with the professors for make-up assignments. A student may be dropped from a course for excessive absences in excess of 12.5% of the hours of instruction. For example: For a four-credit hour lecture, a student may be dropped after eight hours of absence. HCCS professors cannot assign a “W” for any student after the official withdrawal date. “Administrative withdrawals are the discretion of the professor. If you are doing poorly in the class, but you have not contacted your professor to ask for help, and you have not withdrawn by the official withdrawal date, it will result in you receiving a grade of “F” in the course.

**HCC Policy Statement: Withdrawals**

**Students are responsible for officially withdrawing from classes.** The last day to drop with a “W” is 11/2/2012 by 4:30 pm. Students who fail to withdraw from a class before this date will receive a grade of “F”. Before you withdraw from your course, please take the time to meet with the instructor to discuss why you feel it is necessary to do so. The instructor may be able to provide you with suggestions that would enable you to complete the course.

To help you avoid having to drop/withdraw from any class, contact your professor regarding your academic performance. You may also want to contact your counselor to learn about helpful HCC resources (e.g. online tutoring, child care, financial aid, job placement, etc.). HCC has instituted an Early Alert process by which your professor may “alert” you and the counselors that you might fail a class because of excessive absences and/or poor academic performance.

- **Students should check HCC’s Academic Calendar by Term for drop/withdrawal dates and deadlines. Student may also check the course syllabus for the withdrawal date.**
- **If a student decides to drop or withdraw from a class upon careful review of other options, the student can drop online prior to the deadline through their HCC Student Service Center:**
  
  [https://hccsaweb.hccs.edu:8080/psp/csprd/?cmd=login&languageCd=ENG](https://hccsaweb.hccs.edu:8080/psp/csprd/?cmd=login&languageCd=ENG)

**Course Withdrawals-First Time Freshmen Students-Fall 2007 and Later**

Under Section 51.907 of the Texas Education Code “an institution of higher education may not permit a student to drop more than six courses, including any course a transfer student has dropped at another institution of higher education.” Beginning in fall 2007, the Texas Legislature passed a law limiting first time entering freshmen to no more than **SIX** total course withdrawals **throughout** their educational career in obtaining a certificate and/or degree.
HCC Policy Statement: Early Report Program

Early Alert Program: To help students avoid having to drop/withdraw from any class, HCC has instituted an Early Alert process by which your professor may “alert” you and HCC counselors that you might fail a class because of excessive absences and/or poor academic performance. It is your responsibility to visit with your professor or a counselor to learn about what, if any, HCC interventions might be available to assist you – online tutoring, child care, financial aid, job placement, etc. – to stay in class and improve your academic performance.

HCC Policy Statement: Repeating a course 3 times

Repeat Course Fee: The State of Texas encourages students to complete college without having to repeat failed classes. To increase student success, students who repeat the same course more than twice, are required to pay extra tuition. The purpose of this extra tuition fee is to encourage students to pass their courses and to graduate. Effective fall 2006, HCC will charge a higher tuition rate to students registering the third or subsequent time for a course. If you are considering course withdrawal because you are not earning passing grades, confer with your instructor/counselor as early as possible about your study habits, reading and writing homework, test taking skills, attendance, course participation, and opportunities for tutoring or other assistance that might be available.

THIS SYLLABUS IS SUBJECT TO CHANGE WITHOUT FURTHER NOTICE