HOUSTON COMMUNITY COLLEGE SYSTEM

HISTOLOGIC TECHNICIAN PROGRAM (HT)

COURSE SYLLABUS

HLAB 1446 FUNCTIONAL HISTOLOGY II Spring 2013 \ CRN: 38134

Coleman Campus – Room 368 \ 5:00 – 9:00 pm \ Tuesday 4 credits (4 lecture) \ 64 hours per semester \ 8 weeks Course level – Introductory \ Web Enhanced Instruction

Instructor: Larry Langlois

Contact Information: 713-718-5518 office

713-718-7653 fax larry.langlois@hccs.edu

Note: Utilize email for questions, advanced notice of missing class, on-line tutoring, or

scheduling time for face-to-face tutoring.

Office hours: M-T, 2:00 – 5:00; W-Th 1:00 – 4:00 pm

Suite 216, room 215

Course Description

A continuation of Functional Histology I. Emphasis on the recognition, composition and function of organ systems. Includes skeletal tissues, central nervous system, circulatory system, endocrine glands, and reproductive system.

Course Prerequisite

HLAB 1405: Functional Histology I

Course Rationale

It is essential that histology technicians understand the structure and function of both normal and diseased tissues to select appropriate diagnostic procedures. Information gained from this course will be essential for successful completion of the tissue identification and the special stains sections of the registry exam and for obtaining employment as an entry-level histology technician.

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 cognitive theories of organ systems function and disease processes.
- 2. Identify normal and histopathology in tissues.
- 3. Identify ethical and professional behavior.

Student Learning Objectives

1. Demonstrate recall of organ systems functions and disease processes by scoring 70% or better

- on all lecture exams.
- 2. Demonstrate recognition of normal and abnormal tissues by scoring 70% or better on all lecture exams.
- 3.1 Illustrate ethical and professional behavior by adhering to attendance policies, dress codes, and general rules and regulations.
- 3.2 Demonstrate respect and appropriate interpersonal skills with classmates and instructors.

Cognitive

With the use of course materials and various teaching methods, the student will demonstrate mastery of the following course objectives by scoring 70% or better on all examinations.

UNIT EXAM 1: Chapter 6 (Muscle)

- 1. Describe the anatomic structures, function and conduction processes in muscle tissue.
- 2. Micrograph images: Identify muscle types, internal structures and mode of cellular respiration.

UNIT EXAM 1: Chapter 9 (Skin)

- 1. Describe anatomic features of the epidermis, dermis and hypodermis.
- 2. Micrograph images: Identify cells, structures and skin layers.
- 3. Distinguish between merocrine, apocrine and sebaceous glands.
- 4. Identify gross and microscopic images of 3 types of skin cancer.

UNIT EXAM 2: Chapter 10 (Skeleton)

- 1. Describe the stages of growth and anatomic features of cartilage and bone.
- 2. Differentiate between synovial joints and non-synovial joints, and give examples of each.

UNIT EXAM 2: Chapter 12 (Respiration)

1. Describe the anatomic changes and associated functioning of tissues/cells throughout the respiratory system.

UNIT EXAM 3: Chapter 14: (Gastrointestinal Tract)

- 1. Describe anatomic structures/cells that regulate digestion throughout the G.I. tract.
- 2. Images: Identify tissue types and transition junction sites.
- 3. Describe the metabolic breakdown of carbohydrates, proteins, and fatty acids.

UNIT EXAM 4: Chapter 15 (Liver and Pancreas)

- 1. Describe the primary structures/cells of the liver and pancreas and their function.
- 2. Differentiate between the exocrine and endocrine glands in the pancreas.
- 3. Identify gross and microscopic pathology of the liver.

UNIT EXAM 4: Chapter 16 (Urinary System)

- 1. Describe the major structures/cells of the kidney and their function.
- 2. Describe the role of the Juxtaglomerular apparatus in conjunction with the pituitary and adrenal gland in regulating blood pressure and electrolyte balance.
- 3. Identify gross and microscopic pathology of the kidney.

UNIT EXAM 5: Chapter 7 (Nervous Tissues)

- 1. Describe the anatomy of nerves and the process of nerve excitability.
- 2. Distinguish between myelinated and unmyelinated nerves on EM plates.
- 3. Describe the function of neuroglial cells and identify them on micrograph images.

UNIT EXAM 5: Chapter 20 (Central Nervous System)

- 1. Describe the major anatomic divisions of the CNS and their function to include cerebral faculties.
- 2. Identify gross pathology of the brain.

Affective

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

F1 Reading

HLAB 1405 lecture exam: the student is required to read the textbook and course materials. Assessment will be based on their performance on lecture exams.

F6 Listening

HLAB 1405 lecture exam: the student is required to listen to lecture material and instructions and will demonstrate their listening skills by following directions.

Course Calendar

Week	Topic of Instruction
1.	Muscle: chapter 6
2.	Skin: chapter 9 Test Review
3.	Unit Exam 1 (Muscle and skin)
4.	Skeletal bone: chapter 10
5.	Lung: chapter 12 Test Review
6.	Unit Exam 2 (Bone and Lung)
7.	GI tract: chapter 14
8.	GI tract test review
9.	Unit Exam 3 (GI tract)
	Spring Break
10.	Liver/Pancreas: chapter 15 Kidney: Chapter 16
11.	Kidney: Chapter 16 Test Review
12. 13.	Unit Exam 4 (Liver/Pancreas/Kidney) Nervous System: Chapter 7

14. CNS: Chapter 20

15. CNS: Chapter 20

Test review

16. Unit Exam 5 (Nervous system, CNS)

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Instructional Methods

Instructional strategies will include classroom lectures and collaborative interaction.

Instructional Materials

Instructional materials include the textbook, online lecture PowerPoint presentations, Ross images PowerPoint presentation on campus intranet server, hand-outs, video presentations (if available), and internet access.

The required textbook for this course is:

Wheater's Functional Histology-a text and colour atlas (5th edition) by Young, Lowe, Stevens, Heath and Deakin. Churchill-Livingston. ISBN: 044306850X

All HLAB books are sold at the Central 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.

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

Remote TMC Educational Access:

Go to http://resource.library.tmc.edu/resources/

Other HCC libraries:

HCC Central Campus 1300 Holman, 3rd floor Houston, Texas 77004 713-718-6133

HCC West Loop Campus 5601 West Loop South Houston, Texas 77081 713-718-7880

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.naacls.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/

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 1:00 pm on the second day of classroom instruction. 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.

Student Assessments

Five unit exams

Syllabus Acknowledgement form

Program/Discipline Requirements

HLAB 1446 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

Unit exams 100%

Late Syllabus Ack. Form 5 points deducted from final grade

There will be 5 unit exams for this course. A thorough knowledge of unit objectives will ensure adequate performance on exams. Students will be allowed to repeat <u>one</u> exam that they scored below 75%, except the final exam. This repeat exam must be taken within one week of the return date of the original exam and the highest grade allowed will be 75. **An overall average of all scores must be 75% or higher to receive a passing grade for the course**.

Exams include multiple choice, true and false, and matching questions with images taken from all PowerPoint presentations and online references.

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.

Instructor's Requirements

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

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
- 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

EGLS₃ – 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 EGLS₃ 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 mean 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 three-credit hour lecture, a student may be dropped after six 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 3/25/13 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. Your success is very important.

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

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.