CSAT 5060 Advanced Histology

Fall 2019

CLASS DAYS and TIME: Tuesdays and Fridays (October 18 – December 10, 2019), 1:00 – 5:00 pm

CLASSROOM: ALTC 2.201, CSB conference room

COURSE DIRECTOR: Dr. Ramaswamy Sharma

OFFICE LOCATION and HOURS: MED 2.024V1 (by appointment)

EMAIL: sharmar3@uthscsa.edu

TELEPHONE: 210-567 3845

READ THIS DOCUMENT CAREFULLY - YOU ARE RESPONSIBLE FOR ITS CONTENTS

COURSE DESCRIPTION AND OBJECTIVES

This course introduces students to histology of organs and organ systems.

By the end of this course, the student should be able to:

- Define an organ within the context of histology.
- Identify and describe the parenchymal and stromal components in a normal organ.
- Identify and describe the specific cell types within the organ, their function and the overall structure-function relationship that defines the organ morphology.
- Identify and describe organs that make up named systems including the integumentary, cardiovascular, respiratory, gastrointestinal, endocrine, urinary and male and female reproductive systems.
- Recognize and identify organs at low and high magnifications based on tissue specimens.
- List common and special staining methods used to identify specific cell types within an organ.

PRE-REQUISITE - Basic Histology (CSAT 5030).

SEMESTER CREDIT HOURS – 2.0

COURSE ORGANIZATION

Major teaching modalities used in this course include:

- Lectures
- Interactive self-study notes
- Class discussions requiring active student participation.
- Laboratory sessions using virtual microscope
- Laboratory portfolios
- Quizzes

Materials:

- Virtual Microscopy, Histology Atlas and EM Atlas located on external hard drive.
- Slides for each lecture will be made available in CANVAS as .pdf. Print copies will not be provided.

Computer Requirements:

Students are required to have a laptop computer (Macintosh or PC) with USB ports available to connect to and run virtual microscopy. Compatible network cards that can connect to wireless networks at UTHSCSA for uploading/downloading course materials, quizzes and exams also need to be included.

- o CANVAS access is required for course materials and the Exam
- Software required: Microsoft Powerpoint, Adobe Acrobat Reader
- o All laptops will connect to The UTHSCSA network via the HSCwave broadcast wireless connection.
- Authentication for wireless use is based on The UTHSCSA domain username and password.
- o Verification of proper operation **prior** to the start of class is highly recommended.
- Assistance is available thru the IMS Service Desk
 - Telephone: 567-7777
 - E-mail: ims-servicedesk@uthscsa.edu

Assistance is also available at the IMS Student Support Center (4.421T, DTL).

Reading Assignments – Recommended reading will be listed in the objectives section for each class.

Laboratory Sessions: Students are expected to learn to identify tissue architecture described during lectures using the Virtual Microscopy for the Health Professional (VMHP), Histology Atlas and EM Atlas located on the provided external hard drive. Students do not own the viewing software (BioLucida), but are licensed to use the program by MBF Biosciences.

ATTENDANCE

Attendance at scheduled lecture and laboratory sessions, quizzes and examinations is mandatory. Attendance is defined as being present within 15 minutes after the scheduled beginning of the class and until 15 minutes before the scheduled ending of the class.

Excused absences may be granted at the discretion of the Course Director. For pre-scheduled events, students must provide <u>advanced</u> notice to the Course Director via e-mail to be excused. In case of illness, please notify the Course Director prior to the beginning of the class and provide a doctor's certificate at the next class. Other emergencies will be evaluated on a case-to-case basis. The e-mail request to the Course Director for consideration of an excused absence must provide details regarding the circumstances and specific dates.

If a student requests an absence for religious observances (which must meet the policy requirement of the University), he/she must notify the Course Director and file the appropriate form (Notification of Planned Absence to Observe a Religious Holiday) within the first 15 days of the term. The student is responsible for obtaining the form from the Registrar's Office, completing it and organizing to meet with the Course Director to have it signed and dated. Per University policy, the Course Director will stipulate a reasonable time within which the student must complete the missed course activities for that day.

More than $\underline{\mathbf{1}}$ unexcused absence will result in a 10% penalty on the final grade for each missed class. Makeup of excused and unexcused absences is at the discretion of the Course Director.

TEXTBOOKS

None Required.

<u>Recommended:</u> "Wheaters Functional Histology: A Text and Colour Atlas", 6th edition, by Barbara Young, James S. Lowe, Alan Stevens, John W. Heath. Elsevier Publications.

GRADING POLICIES AND EXAMINATION PROCEDURES

- 1. Each lecture, except for the first, will be preceded by a 10-minute quiz for 10 points examining student comprehension of the material taught in the previous lecture. Students absent for the quiz may be allowed to retake the quiz at a later date ONLY if the absence is excused by the Course Director.
- 2. Each laboratory session will require the student to upload their image portfolio to Canvas before the end of the session. Portfolios will be graded for 10 points. Any portfolio uploaded after the laboratory session will not be graded.
- 3. There will be a mid-term exam and a final comprehensive exam, each worth 100 points. Students will take exams on their laptops in the assigned rooms at the assigned time. It is the student's responsibility to familiarize

themselves with their equipment and/or the examination software. Remember to charge the laptop battery and bring the power cord. Please note that the commencement of the exam will not be delayed due to a hardware or software problem with any student's laptop nor will they be provided additional time to take their exam. Students having computer difficulty during the exam must notify the proctor immediately for instructions.

- 4. If a student arrives late for an examination, he/she will not be given any additional time to complete the test unless so decided by the Course Director after evaluating the circumstances surrounding the late arrival.
- 5. Students missing any of these exams without an excused absence will not be allowed to retake the exam. Students allowed to retake the exam at the discretion of the Course Director must meet with the Course Director within 3 days of returning to school to schedule the re-exam. Re-taking an examination to improve failing grades is not allowed
- 6. Only ONE make-up examination will be permitted for the course and will be administered within one week of the student's meeting with the Course Director. The style of the examination will be at the discretion of the Course Director and may not be identical to that given to the student's classmates on the day of the regularly scheduled examination.
- 7. If a student feels that an examination question could have been answered in more than one way, then it is the student's responsibility to present the rationale for the correctness of alternate answers to the specified question to the Course Director within 3 days after the exam.
- 8. No student will be admitted to the examination wearing a hat. No backpacks, purses, notes or any written material will be allowed in the examination room. Possession of cell phones, pagers or any electronic device other than the computer laptop to be used for the test is STRICTLY PROHIBITED in the examination room. Any student in violation of these policies will be excused from the examination, marked absent for the day and given a grade of "0" for the examination.
- 9. Quizzes and exams may have questions from both lecture and laboratory sessions, including images of micrographs that may or may not be from those on the VMHP.
- 10. Final grades will be based on scores received in the 10 quizzes (20%), the 10 uploaded laboratory portfolios (15%), mid-term exam (30%) and final exam (35%).

A = 90-100% B = 80-89% C = 70-79% F = < 69%

- 11. The grade, "F", will be reported to the Registrar when a student is absent from a scheduled examination without permission from the Course Director and/or does not complete all course requirements.
- 12. A student who receives an F grade must retake the course in order obtain a change of grade.
- 13. Final grades will be reported to and recorded by the Registrar. Final grades may be obtained only from the Registrar. Under no circumstances will these grades be given to students by the teaching faculty.

E-MAIL POLICY

All correspondence will be sent to the student using the student's LiveMail address and via CANVAS. It is the responsibility of the student to make sure that there is sufficient space in their mailbox to receive any such notices. Course Directors will not attempt other means to provide you with a notice if they receive a course notice because of "an exceeded email limit". All correspondence from the student to the Course Director should be sent to the course director's e-mail as listed on the first page of this syllabus.

USE OF RECORDING DEVICES

Lectures may only be recorded with the permission of the Course Director, **obtained in advance**. Please do not show up to class and ask if that day's lecture may be recorded.

ELECTRONIC DEVICES

Cell phones should be turned off or put away during class. Computers and tablets may be used to follow along with slides, take notes, look up the occasional unfamiliar term, and perform other activities directly related to the course material. Texting, tweeting, e-mailing, web-surfing, gaming, or any use of electronic devices that is not directly connected with classroom activities is not permitted. Any student in violation of this policy will be excused from the learning environment and marked absent for the day. An e-mail will then be sent to the Associate Deans of Student Affairs apprising them of the incidence.

REQUESTS FOR ACCOMODATIONS FOR DISABILITIES

In accordance with policy 4.2.3, Request for Accommodation Under the ADA and the ADA Amendments Act of 2008

(ADAAA), any student requesting accommodation must submit the appropriate request for accommodation under the American with Disabilities Act (ADA, form 100). To his/her appropriate Associate Dean of their School and a copy to the ADA Coordinator. Additional information may be obtained at http://uthscsa.edu/eeo/request.asp.

ACADEMIC INTEGRITY AND PROFESSIONALISM

Any student who commits an act of academic dishonesty is subject to discipline as prescribed by the UT System Rules and Regulations of the Board of Regents. Academic dishonesty includes, but is not limited to, cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an exam for another person, signing attendance sheets for another student, and any act designed to give unfair advantage to a student or the attempt to commit such an act. Additional information may be obtained at http://catalog.uthscsa.edu/generalinformation/generalacademicpolicies/academicdishonestypolicy

TITLE IX AT UTHSCSA

Title IX Defined:

Title of the Education Amendments of 1972 is a federal law that prohibits sex discrimination in education. It reads "no person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance." University of Texas Health Science Center San Antonio's Commitment:

University of Texas Health Science Center San Antonio (UTHSCSA) is committed to maintaining a learning environment that is free from discriminatory conduct based on gender. As required by Title IX, UTHSCSA does not discriminate on the basis of sex in its education programs and activities, and it encourages any student, faculty, or staff member who thinks that he or she has been subjected to sex discrimination, sexual harassment (including sexual violence) or sexual misconduct to immediately report the incident to the Title IX Director.

In an emergency, victims of sexual abuse should call 911. For non-emergencies, they may contact UPD at 210-567-2800. Additional information may be obtained at http://students.uthscsa.edu/titleix/

CLASS SCHEDULE

CSAT 5060: Advanced Histology

Fall 2019

WEEK (N)	DATE	TIME/FACULTY	ROOMS	SUBJECT
	(M/D)			
WEEK 1	10/18	1:00-3:00 PM	ALTC	Orientation
	Friday	Dr. Sharma	2.201	Lecture: Cardiovascular System
		3:00-5:00 PM		Lab: Cardiovascular System
		Dr. Sharma		
WEEK 2	10/22	1:00-3:00 PM	ALTC	Quiz 1
	Tuesday	Dr. Sharma	2.201	Lecture: Integumentary System
		3:00-5:00 PM		Lab: Integumentary System
		Dr. Sharma		
	10/25	1:00-3:00 PM	ALTC	Quiz 2
	Friday	Dr. Sharma	2.201	Lecture: Oral Cavity
		3:00-5:00 PM		Lab: Oral Cavity
		Dr. Sharma		,
WEEK 3	10/29	1:00-3:00 PM	ALTC	Quiz 3
	Tuesday	Dr. Sharma	2.201	Lecture: Gastrointestinal System
		3:00-5:00 PM		Lab: Gastrointestinal System
		Dr. Sharma		·
	11/01	1:00-3:00 PM	ALTC	Quiz 4
	Friday	Dr. Sharma	2.201	Lecture: Liver, Gall Bladder and Pancreas
		3:00-5:00 PM		Lab: Liver, Gall Bladder and Pancreas
		Dr. Sharma		
WEEK 4	11/05	1:00-3:00 PM	ALTC	Quiz 5
	Tuesday	Dr. Sharma	2.201	Conference
	11/08	1:00-3:00 PM	ALTC	Mid-Term Exam
	Friday	Dr. Sharma	2.201	(course material covered from Oct 20 to
AAFEK E	11/12	4.00.2.00.004	ALTC	Nov 3)
WEEK 5	11/12	1:00-3:00 PM	ALTC	Lecture: Respiratory System
	Tuesday	Dr. Sharma	2.201	
		3:00-5:00 PM		Lab: Respiratory System
		Dr. Sharma		
	11/15	1:00-3:00 PM	ALTC	Quiz 6
	Friday	Dr. Sharma	2.201	Lecture: Urinary System
		3:00-5:00 PM		Lab: Urinary System
		Dr. Sharma		

11/10	1.00 2.00 DM	ALTC	O i - 7
,			Quiz 7
Tuesday	Dr. Sharma	2.201	Lecture: Endocrine System
	3:00-5:00 PM		Lab: Endocrine System
	Dr. Sharma		
11/22	1:00-3:00 PM	ALTC	Quiz 8
Friday	Dr. Sharma	2.201	Lecture: Reproductive System –Male
			,
	3:00-5:00 PM		Lab: Reproductive System - Male
	Dr. Sharma		
11/26	1:00-3:00 PM	ALTC	Quiz 9
Tuesday	Dr. Sharma	2.201	Lecture: Reproductive System –Female
	3:00-5:00 PM		Lab: Reproductive System - Female
	Dr. Sharma		
12/03	1:00-3:00 PM	ALTC	Quiz 10
Tuesday	Dr. Sharma	2.201	Conference
12/10	1:00-3:00 PM	ALTC	FINAL EXAM
Tuesday	Dr. Sharma	2.201	(course material covered from Nov 12 to
			Nov 26)
	11/26 Tuesday 12/03 Tuesday 12/10	Tuesday Dr. Sharma 3:00-5:00 PM Dr. Sharma 11/22 1:00-3:00 PM Friday Dr. Sharma 3:00-5:00 PM Dr. Sharma 11/26 1:00-3:00 PM Tuesday Dr. Sharma 3:00-5:00 PM Dr. Sharma 12/03 1:00-3:00 PM Tuesday Dr. Sharma 12/10 1:00-3:00 PM	Tuesday Dr. Sharma 2.201 3:00-5:00 PM Dr. Sharma 11/22 1:00-3:00 PM ALTC Friday Dr. Sharma 2.201 3:00-5:00 PM Dr. Sharma 11/26 1:00-3:00 PM ALTC Tuesday Dr. Sharma 2.201 3:00-5:00 PM Dr. Sharma 12/03 1:00-3:00 PM ALTC Tuesday Dr. Sharma 2.201 12/10 1:00-3:00 PM ALTC