INTRODUCTION TO HUMAN HISTOLOGY

ANAT 2160/BIOL 3430

FALL 2014

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Lecture and Laboratory locations and times:

Lectures: Tupper Building Theatre B, 8:35 - 9:25 Wed, Fri

Laboratory sessions: Rm. 12K, Tupper Building, 2:30 - 4:30 Fri

Course description: This is a one-term course intended to introduce you to the histology of the human body. Histology is the study of the microanatomical structure of cells, tissues and organ systems. These are studied by examining thin, transparent slices cut from body structures and observed with the aid of light or electron microscopes. Cells in the body are organized into three-dimensional structures called tissues, and tissues are combined in a variety of ways to make up the overall structures of organs and systems. The primary concept in the study of histology is that the forms of cells, tissues, organs and systems are determined by their functions. Therefore, in order to help understand histology, some material on function is incorporated into the course. This course thus provides a basic histological foundation for the understanding of normal human tissue structure and function.

Required textbook: Junquiera's Basic Histology Text and Atlas (13th edition, edited by A. L. Mescher, published by McGraw-Hill Lange), available from the Carleton campus bookstore.

Evaluation: There will be two examinations in this course, a midterm scheduled during a laboratory period in October, and a final examination scheduled in the December examination period. The midterm covers the first part of the course, to the end of material on blood, and is worth approximately 40 % of the total course mark. The final examination is worth approximately 60 % of the course mark. Each examination consists of a written part and a practical part. No laboratory reports, term papers or extra assignments are given in this course.

Practical material: Learning histology is primarily a visual process, so an important part of the course involves looking at material in the form of tissue slices mounted on glass slides. These tissues are examined using microscopes in the laboratory. The course

is designed as a series of learning modules on specific topics, as shown in the course schedule. Lectures and practical material on each subject are grouped so that laboratory material for a given topic follows the lecture material on that topic. The lecture and practical material are essential parts of each module and should be studied together.

You will be expected to use microscopes in this course. In the laboratory, microscopes and slide boxes are kept in lockers at each bench. Instructions for the laboratory modules are given as a series of PDF files that may be dowloaded from the course website, located within the Dalhousie University online system, under "Department of Medical Neuroscience" within the Faculty of Medicine webpages. The Departmental web address is "**medical-neuroscience.medicine.dal.ca**" When you access this page, select "Educational Courseware", then select the link to "Anatomy 2160/Biology 3430". This will take you to a page containing links to the PDFs for each laboratory topic, as well as any lecture slides that are not included in your text. It is the responsibility of students in the course to obtain and review the relevant laboratory information, lecture and textbook material before each laboratory session.

Laboratory access: Outside of the scheduled laboratory time for this class, you can use the laboratory room (Tupper Room 12K) during regular weekday daytime hours (provided no other class is using the laboratory). Laboratory access is also available during evenings and weekends. In order to gain access to the laboratory you must first identify yourself at the security desk in the Tupper Building lobby, then use your student card to activate the elevator to get to the 12th floor. There is an electronic access code for the laboratory room, which will be provided to you at the first laboratory session.

ANAT 2160/BIOL 3430 Lecture and Laboratory Schedule

Date		**Lecture Topic**	**Laboratory Topic**
Sep	10 W	Course Introduction	
	12 F	Epithelium	Laboratory introduction
	17 W	Epithelium	
	19 F	Connective tissue	Epithelium
	24 W	Connective tissue	
	26 F	Muscle	Connective tissue/Muscle
Oct	1 W	Nervous tissue	
	3 F	Cartilage	Nervous tissue/Cartilage
	8 W	Bone	
	10 F	Blood	Bone/Blood
	15 W	Lymphatic system	
	17 F	Lymphatic system	Lymphatic system
	22 W	Gastrointestinal system	
	24 F	Gastrointestinal system	**Midterm in lab period**
	29 W	Respiratory system	
	31 F	Respiratory system	Gastrointestinal system
Nov	5 W	Integument	
	7 F	Integument	Respiratory system
	12 W	Blood vessels	
	14 F	Kidney	Integument/Blood vessels
	19 W	Kidney	

21 F	Reproduction	Kidney
26 W	Reproduction	
28 F	Review	Reproduction