

INTRODUCTION TO HUMAN HISTOLOGY

ANAT 2160/BIOL 3430

FALL 2019

Course director: Frank Smith
Department of Medical Neuroscience
Rm. 14C, Tupper Building
ph. 494-2189
email: fsmith@dal.ca

Lecture and Laboratory locations and times:

Lectures: Tupper Building Room 3H 10:35 - 11:25 Wed, Fri

Laboratory sessions: Tupper Building Room 12K, 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 (15th edition, edited by A. L. Mescher, published by McGraw-Hill Lange, 2018), available from the campus bookstore.

Teaching materials: Teaching materials relevant to each topic will be available on the Dalhousie Brightspace website for this course ahead of lectures on the topics.

Evaluation: There will be two examinations in this course, a midterm scheduled during 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 practical portion of 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 lectures 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 downloaded from the Dalhousie Brightspace website for this course. 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 outside of regular weekday hours you must use your student card to first gain entrance through the front door of the Tupper Building, then to call the elevator to get to the 12th floor, then to access the laboratory.

ANAT 2160/BIOL 3430 Lecture and Laboratory Schedule
Fall term, 2019

Date	Lecture Topic	Laboratory Topic
Sep 6 F	Course Introduction	NO LABORATORY
11 W	Epithelium	
13 F	Epithelium	Laboratory introduction
18 W	Connective tissue	
20 F	Connective tissue	Epithelium lab
25 W	Muscle	
27 F	Muscle	Connective tissue lab
Oct 2 W	Nervous tissue	
4 F	Cartilage	Muscle/Nervous tissue lab
9 W	Bone	
11 F	Bone	Cartilage/Bone lab
16 W	Blood	
18 F	Lymphatic system	Blood lab
23 W	Lymphatic system	
25 F	Gastrointestinal system	Midterm in lab - to blood
30 W	Gastrointestinal system	
Nov 1 F	Respiratory system	Lymphatic system lab
6 W	Respiratory system	
8 F	Integument	Gastrointestinal system lab
12-15	Study break	
20 W	Integument	

22 F	Blood vessels	Resp system/Integument lab
27 W	Kidney	
29 F	Kidney	Blood vessels/Kidney
Dec	Final exam during Christmas exam period	