ACB9561

Course Outline 2023-2024

Overview:

This course is a detailed study of the cellular and microscopic structure of the various tissues and organ systems of the body, with an emphasis on humans and other mammals used in medical research. Systems are examined stressing the relations of structure to function. The course expects, and highly encourages, student participation and uses microscopic exploration of histologically sectioned material and demonstrations. The course has the following components:

1) **Lectures and Labs:** Students are enrolled in the 3rd year Undergraduate Histology Course **ANATCELL3309**. Lectures are delivered and recorded with Panopto, or students may attend live with the F2F group. Course materials, including the schedule, lecture notes and PowerPoint slides will be available on the **ANATCELL3309 OWL site**. Please review the 3309 syllabus for important lecture dates.

- **Before each Tutorial, students are expected to have viewed the relevant lectures on Panopto (Tuesdays and Thursdays) and submit 2 MCQ style questions (1 per lecture hour). <u>ALL</u> students are expected to be prepared to discuss that week's lectures and lab content. Each Friday the topic will focus on the ANATCELL 3309 lab scheduled for the following week.**
- **Student presentations will begin in the third week of classes, covering the previous week's content. During the first week, students will sign up for their presentations for the entire year, ensuring an equal distribution of presentations among all students.**
    - **Each week, two students will present, with each student focusing on one of the two lecture hours from the previous week.**
    - **The presentations should have a duration of approximately 15 minutes, followed by a 5-minute question-and-answer session.**
    - **The first half of the presentation should include a review of the most important content covered in the previous week, addressing any challenging or conceptually difficult points.**
    - **The second half of the presentation should be dedicated to researching and presenting a clinically relevant topic based on the histology covered, including the background information and relevant histopathology principles necessary to understand the pathology slides presented.**
    - **The course instructor will grade the student presentations, and students will also receive feedback from their peers.**
    - **These presentations provide an additional opportunity for students to apply the pedagogy learned in other courses and enhance their presentation skills.**

Learning Outcomes:

By the end of the course students will be able to:

a) explain structure/function relationships of tissues, organs, and their parts at the microscopic level.

b) navigate histological sections using both a real and a virtual microscope.
c) identify and name tissues, organs and their parts in microscopic images.
d) discuss clinical scenarios and their histological manifestations.
e) lead small group discussions on histology content.
f) write and assess effect MCQ style exam questions.

Recommended Texts:

- Histology: A Text and Atlas, Pawlina, W. 8th Edition
- A Photographic Atlas of Histology, Leboffe, M.J., 2nd Edition
- Netter's Histology, Ovalle and Nahirney

Note: *If you already have a histology text there is no need to purchase the recommended texts. Any other histology text is acceptable as well.*

Online Virtual Slide Boxes:

http://histologyguide.org/index.html
http://www.mbfbioscience.com/iowavirtualslidebox
http://histology.medicine.umich.edu/full-slide-list

Assessments and Mark Breakdown:

Assessment (Fall term): 20%

Weekly Histology discussions, presentation and participation.

Fall Exam: 30%

Multiple choice questions (100pt).
Practical exam consisting of 10 unlabeled slides which students must identify, with follow-up short answer style questions (50 pt).

Assessment (Winter term): 20%

Weekly Histology discussions, presentation and participation.

Winter Assessment: 30%

Multiple choice questions (100pt).
Practical exam consisting of 10 unlabeled slides which students must identify, with follow-up short answer style questions (50 pt).