

**HISTOLOGY GRADUATE
COURSE
(MSCBMP # 2870)**

**Georgia Duker, Ph.D.
Course Director**

Spring Semester, 2012
MWF 8:30-10:30

HISTOLOGY GRADUATE COURSE (MSCBMP # 2870)

Spring Semester 2012, Jan 5-April 13

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DATE	TIME	ROOM	TOPIC	INSTRUCTOR
W 1/4	8:30-10:30	S373 BST	Epithelia	Duker
F 1/6	8:30-10:30	322 Scaife	Epith Lab	Duker
M 1/9	8:30-10:30	S373 BST	Connective Tissue	Duker
W 1/11	8:30-10:30	322 Scaife	Conn. Tiss. Lab	Duker
F 1/13	8:30-10:30	S373 BST	Review Quiz 1	Duker
W 1/18	8:30-10:30	S373 BST	Cartilage & Bone	Duker
F 1/20	8:30-10:30	322 Scaife	Cartilage/Bone Lab	Duker
M 1/23	8:30-10:30	S373 BST	Neurocytology	Halfter
W 1/25	8:30-10:30	322 Scaife	Neuro Lab	Duker
F 1/27	8:30-10:30	S373 BST	Muscle	Duker
M 1/30	8:30-10:30	322 Scaife	Muscle Lab	Duker
W 2/1	8:30-10:30	S373 BST	Review Quiz 2	Duker
F 2/3	8:30-10:30	322 Scaife	EXAM 1	Duker

M 2/6	8:00-10:00	S373 BST	Circulation	Duker
W 2/8	8:00-10:00	322 Scaife	Circulation Lab	Duker
F 2/10	8:30-10:30	S373 BST	Heart	Duker
M 2/13	8:30-10:30	S373 BST	Hematology	Duker
W 2/15	8:30-10:30	322 Scaife	Hematology Lab	Duker
F 2/17	8:30-10:30	S373 BST	Review Quiz 3	Duker
M 2/20	8:30-10:30	322 Scaife	Immune System	Duker
W 2/22	8:30-10:30	S373 BST	Immune Lab	Duker
F 2/24	8:30-10:30	S373 BST	Respiratory Syst	Duker
M 2/27	10:30-12:30	322 Scaife	Respiratory Lab	Duker
W 2/29	10:30-12:30	S373 BST	Endocrine	Duker
M3/5	8:30-10:30	322 Scaife	Endocrine Lab	Duker
W3/7	10:30-12:30	S373 BST	Review Quiz 4	Duker
F 3/9	8:30-10:30	322 Scaife	EXAM 2	Duker

M 3/12	8:30-10:30	S373 BST	Oral Cavity Gastrointestinal 1	Duker
W 3/14	8:30-9:30 9:30-10:30	S373 BST	Gastrointestinal 2 Accessory GI	Duker Stolz
F 3/16	10:15-12:15	322 Scaife	GI Lab 1	Duker
M 3/19	8:30-10:30	322 Scaife	GI Lab 2	Duker
W 3/21	8:30-10:30	S373 BST	Renal Lecture	Duker
F 3/23	8:30-10:30	322 Scaife	Renal Lab	Duker
M 3/26	8:30-10:30	S373 BST	Review Quiz 5	Duker
W 3/28	8:30-10:30	S373 BST	Female Histology	Duker
F 3/30	8:00-10:00	322 Scaife	Female Lab	Duker
M 4/2	8:00-10:00	S373 BST	Male Histology	Duker
W 4/4	8:30-10:30	322 Scaife	Male Lab	Duker
F 4/6	8:00-10:00	S373 BST	Eye	Student Presentations
M 4/9	8:00-10:00	S373 BST	Ear	Student Presentations
W 4/11	8:30-10:30	S373 BST	Review Quiz 6	Duker
F 4/13	8:00-10:00	322 Scaife	EXAM 3	Duker

HISTOLOGY GRADUATE COURSE (MSCBMP # 2870)
Spring Semester: January 4 – April 13, 2012
Rooms S373 BST and 322 Scaife Hall

COURSE DIRECTOR

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LECTURES

Lectures are scheduled in room S373 BST (Cell Biology Conference Room) on Monday, Wednesday, and Friday from 8:30 –10:30 am. Lectures focus on essential features of the topic so that it is desirable to have read a text before hand. The lectures serve to emphasize the basics and clarify difficult concepts. In addition, the lectures also introduce current information and clinical correlations which are not in our textbook. Effective note taking is essential. There are a few days when the course time must be changed to accommodate other teaching. Please carefully check the schedule for any conflicts of your own and note the days when the course is shifted 10:30-12:30 or 8-10. With such a small group these can be modified if you have another course conflict.

LABORATORY

Laboratory sessions are held in room 322 Scaife Hall. Materials include a caramate projector, a collection of seven carousel boxes of 2x2 Kodachrome slides, individual as well as dual-head microscopes, and large and small glass slide boxes. Each laboratory session involves the study of 40 or more Kodachrome slides and 5-15 glass microscope slides. The Kodachrome series will mimic the sequence of magnifications a student would follow in a thorough examination of a particular microscopic specimen. Some features are tedious to find in the actual glass slides, and are therefore clearly illustrated in the Kodachrome series. Your course of study should include both the Kodachrome and glass slide sets. Many of these slide sets have been digitized and are also available as web collections.

There are two major objectives to the laboratories. The first is to be able to recognize cells and tissues, and the adaptations that occur as function demands; the second is to appreciate the interactions between cells and tissues that result in the creation of specific organs. These

objectives are achieved through a close inspection of diagnostic features of each tissue or organ. Students are strongly encouraged to interact with each other to discuss the principles of slide identification and to give each other informal quizzes. This approach not only facilitates learning, but also makes the progress more entertaining.

REVIEW QUIZES

The course will also include ungraded application sessions. These sessions include a review and clinical applications of the material covered during that week. In the past, students have found these a most informative and yet enjoyable method of assessing their own study progress. Two review application sessions will be given prior to each examination.

TEXTBOOK

A variety of textbooks will serve you through this course. However, I would recommend purchasing a book with a more complete text, rather than an atlas with only minimal text information. Recommended: Histology & Cell Biology, by Keiszenbaum, 2007. Please see the course director to discuss alternative textbooks.

EXAMINATIONS

There will be three noncomprehensive examinations during this course. Each exam will contribute 25% to the final grade. Each exam will include three components:

- 1.) Multiple Choice – These questions are presented in multiple choice, single best answer format used by the National Board of Medical Examiners.
- 2.) Practical – This involves projected Kodachrome slides of light and electron micrographs. Students are asked to identify the slide and to list the diagnostic features that lead to their conclusion. Structure/function correlations will also be tested through these practical questions. Short answer format.
- 3.) Discussion Questions – Usually 7 -8 essay questions are given, from which you must choose two. Answers can be completed in one page.

STUDENT EXAM QUESTION PROJECT

This course has an underlying purpose: helping to develop your teaching skills in the field of Histology in order to serve as a teaching fellow in the first and second years of the medical school curriculum. To facilitate that end, your outside project for the term will be to write 20 multiple choice questions. Format for the question should be single best answer with five choices. Please limit yourself to two questions on any particular topic covered in the course. A well-constructed question requires considerable thought; the incorrect answers should be viable alternatives. You will discover that in order to create a truly good question one must have a firm grasp of the information involved. Make an effort to include a few questions that integrate material over several topics. The assignment is due in class on Friday, March 23. An advisable practice is to write a question or two on each topic as you proceed through the course. This project will contribute 12.5% to your final grade.

STUDENT LECTURE EXPERIENCE

Many graduate students often present their first lecture to a small audience and focus on their own research work or related literature. However, as an academic professional, you will be

expected to have the ability to organize material and to lecture on a variety of topics, even those outside of your specific research focus. Again, with the purpose in mind of facilitating the development of teaching skills, all participants will present a student lecture. Each student will choose one of four topics involving the histology and function of the EYE or the EAR. It is anticipated that each student will present a 30-40 minute lecture with a handout. You will receive a written critique of your teaching including evaluation of clarity of presentation, knowledge, preparation, organization, visual aids, and handouts. This feedback is to help you assess and therefore improve your own skills. This project will contribute 12.5% to your final grade in the course.