



Course Syllabus  
Histology  
BIOL 4444  
Lecture: TR 12:30-1:50 PM BO 209  
Lab: T 2:00-4:50 PM BO 207  
Fall 2024

### **Contact Information**

Instructor: Dr. Mike Shipley  
Office: Pierce Hall 106  
Office hours: MW 10:30-11:30 AM; TR 10:30-12:00 PM; or by appointment  
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### **Required Text**

Leboffe, Michael J. A Photographic Atlas of Histology 2<sup>nd</sup> ed. Morton Publishing, Englewood, CO

### **Goals and Objectives**

The goal of this course is to introduce you to the microscopic anatomy of the human body, with emphasis on light microscopy of human cells, tissues and organs. It is expected that you will achieve a working knowledge of the structure and function of the human body at the level of the tissue and their constituent cells. You will be able to apply this information in pre-professional areas such as medical and dental schools, as well as clinical lab science or graduate school.

### **Prerequisites**

One year (8 credit hours) of biology.

### **Student Expectations**

You are expected to abide by a proper mode of conduct in the histology class, which includes attending all scheduled class meetings and being on time. Additionally, you are expected to achieve a high level of competence in histology by devoting extra time to the study of microscope slides. Any additional study time of microscope slides should be done in BO 207, so you should become familiar with the fall schedule of courses in BO 207 to plan additional study time. Please refer to the current MSU Handbook and Activities Calendar for university policy on academic dishonesty, class attendance, student rights and activities.

### **Examination Material**

The exams will consist of three (3) exams that include tissue identification from photographic and microscope slides, and one take-home written exam, which is a comprehensive exam based on lecture material. Each ID exam will contain 3 point-outs (described in class) that will provide a bonus of up to 6 points per exam. Students should study the assigned text chapters, review lecture notes, and study assigned microscope slides and Internet images in preparation for the exams. See the schedule below for exam dates.

## Detailed Lecture Schedule

Date	Topic	Chapter
Tuesday August 27	Histology Intro	1
Thursday August 29	Epithelium	3
Tuesday September 3	Connective Tissue – Fibrous	4
Thursday September 5	Connective Tissue – Cartilage & Bone	5
Tuesday September 10	Connective Tissue – Blood & Bone Marrow	6
Thursday September 12	Muscle & Nervous Tissue	7, 8
Tuesday September 17	Nervous System	8
Thursday September 19	Nervous System; The Ear; <b>Practice Exam</b>	8, 9
Tuesday September 24	<b>EXAM 1</b>	
Thursday September 26	The Eye	9
Tuesday October 1	Cardiovascular System	12
Thursday October 3	Endocrine System – Hypophysis	10
Tuesday October 8	Endocrine System – Other Organs	10
Thursday October 10	Integumentary System	11
Tuesday October 15	Integumentary System	11
Thursday October 17	Lymphatic System	13
Tuesday October 22	Lymphatic System	13
Thursday October 24	Respiratory System; <b>Practice Exam</b>	9, 15
Tuesday October 29	<b>EXAM 2</b>	
Thursday October 31	Respiratory System	15
Tuesday November 5	Digestive System – Oral Cavity	9, 14
Thursday November 7	Digestive Tract	14
Tuesday November 12	Digestive Tract	14
Thursday November 14	Digestive System – Accessory Organs	14
Tuesday November 19	Urinary System	16
Thursday November 21	Male Reproductive System	17
Tuesday November 26	Male & Female Reproductive Systems	17
Thursday November 28	<b>Thanksgiving – No Class</b>	
Tuesday December 3	Female Reproductive System; <b>Practice Exam</b>	17
Thursday December 5	<b>EXAM 3; Pick Up Written Final</b>	
Thursday December 12 (10:30 am)	<b>Turn in Written Final; Lab Check in</b>	

### Detailed Lab Schedule

Date	Topic	Assigned Slides
Tuesday August 27	Lab Check-in	
Tuesday September 3	Epithelium; Connective Tissue (Fibrous)	1-6, 66, 72, 74, 77, 95, 7, 14-16
Tuesday September 10	Cartilage & Bone; Blood & Bone Marrow	8-10, 74, 11-13, 21-23
Tuesday September 17	Muscle & Nervous Tissue	25-27, 83, 95, 52
Tuesday September 24	<b>No Lab Meeting</b>	
Tuesday October 1	Nervous System; The Ear & Eye; Cardiovascular System	51, 53-56, 69-70, 24, 28
Tuesday October 8	Endocrine System	76-80, 91
Tuesday October 15	Integumentary System	1, 4, 17-20
Tuesday October 22	Lymphatic System	58-62, 94, 97
Tuesday October 29	<b>No Lab Meeting</b>	
Tuesday November 5	Respiratory System; Digestive System (Oral Cavity)	71-75, 82-89
Tuesday November 12	Digestive System (Digestive Tract)	93-100
Tuesday November 19	Digestive System (Accessory Organs); Urinary System	90-92, 63-66
Tuesday November 26	Male & Female Reproductive System	43-49, 34-38
Tuesday December 3	Female Reproductive System	39-42

### Grade Determination

The grade for this class will be based upon your performance on the exams. There will be a short Practice Exam given in class before each actual exam (not counted in the grade). The breakdown for the grade and the grading scale is as follows:

Category	Percent of Grade	Grade Range	Letter Grade
Lab ID Exams (3)	75%	90-100	A
Lecture Written Take-Home Exam (1)	25%	80-89	B
		70-79	C
		60-69	D
		< 60	F

### Additional Sources

Additional texts and atlases are available to you during the laboratory portion of the course. You are encouraged to explore sources outside of your textbook and microscope slides. Histology is a visual discipline, and the World Wide Web is a good source for images and information on microscopic anatomy. Helpful sites include:

Website	URL
LUMEN (Loyola University)	<a href="http://www.meddean.luc.edu/lumen/MedEd/Histo/frames/histo_frames.html">http://www.meddean.luc.edu/lumen/MedEd/Histo/frames/histo_frames.html</a>
Atlas of Histology University of Illinois at Urbana-Champaign)	<a href="https://histo.life.uiuc.edu/histo/">https://histo.life.uiuc.edu/histo/</a>
SIU SOM Histology (Southern Illinois University)	<a href="http://www.siumed.edu/~dking2/index.htm">http://www.siumed.edu/~dking2/index.htm</a>
Histology and Virtual Microscopy Learning Resources (University of Michigan)	<a href="https://histology.medicine.umich.edu/full-slide-list">https://histology.medicine.umich.edu/full-slide-list</a>
Histology Website Resources (University of Wisconsin)	<a href="http://histologyatlas.wisc.edu/slides/425">http://histologyatlas.wisc.edu/slides/425</a>
Histology Learning System (Boston University)	<a href="http://www.bu.edu/histology/m/index.htm">http://www.bu.edu/histology/m/index.htm</a>
MedPics (University of San Diego School of Medicine)	<a href="https://medpics.ucsd.edu/">https://medpics.ucsd.edu/</a>
Ed's Basic Histology Gallery	<a href="http://www.pathguy.com/histo/000.htm">http://www.pathguy.com/histo/000.htm</a>
Mammalian Histology (The University of Delaware)	<a href="http://www.udel.edu/Biology/Wags/histopage/histopage.htm">http://www.udel.edu/Biology/Wags/histopage/histopage.htm</a>

### Campus Carry

Senate Bill 11 passed by the 84th Texas Legislature allows licensed handgun holders to carry concealed handguns on campus, effective August 1, 2016. Areas excluded from concealed carry are appropriately marked, in accordance with state law. For more information regarding campus carry, please refer to [Campus Carry Rules and Policies](#). If you have questions or concerns, please contact MSU Chief of Police Patrick Coggins at [patrick.coggins@mwsu.edu](mailto:patrick.coggins@mwsu.edu).