

**MICROSCOPIC ANATOMY & CELL BIOLOGY**  
**COURSE SCHEDULE**  
**2011-2012**

1. This schedule lists the **lectures, labs, quizzes & exams** given in Microscopic Anatomy. These same Microanatomy sessions are also listed in the schedule included in each individual module guide. We provide you with this separate listing only to give you a more inclusive overview of the entire course.
2. **Consult this schedule** to find out exactly what subject matter is included on every quiz, exam, or scavenger hunt. Please do not e-mail the course director for this information.
3. This schedule includes the required **reading assignments** for lectures and labs. Lecturers and lab instructors operate under the assumption that you have read these pages and become familiar with their contents **before** coming to class.
4. Location of Classes:  
For medical students, the lectures, clinical correlations and slide reviews are held in **Cohen Auditorium (Auditorium A)** at Queen Lane. Labs are held in the **Multidisciplinary Teaching Laboratory (Lab B)** at Queen Lane.  
For Interdepartmental Medical Science (IMS) students, lectures will be simulcast to the Center City campus. Labs will be held in Center City. Consult your instructors for lecture and lab room assignments.
5. Note that most lectures last **50 minutes**, but those that are scheduled for 1.5 hours last **80 minutes** without a break.

Key for Reading Assignments:

R = Histology, A Text & Atlas by Ross & Pawlina, 6th edition (the required text)

W = Wheater's Functional Histology by Young et al., 5th edition (the required atlas)

\*A = Molecular Biology of the Cell by Alberts, et al., 5th edition (recommended reading)

\* The readings from Alberts are not required but may be helpful since they cover some of the lecture material from the early part of the course in greater detail than the required text. Use them if you need clarification of lecture material.

DAY	DATE	TIME	LECTURER	TOPIC	REQUIRED READING
<b>FUNDAMENTALS MODULE</b>					
Tues	Aug. 9	1-2:30 PM	Smith	Introduction & Microscopy	R: Chap. 1; W: pp. 426-431
Thur	Aug. 11	11 AM	Raghupathi	Mitochondria	R: Chap. 2 & 3 W: Chap. 1 & 2, & pp. 88-93 *A: Chap. 16 & the following pages: 695-730, 749-809, 813-819, 855-870, & 1131-1178.
Fri	Aug. 12	10:30-noon	Gallo	Cytoskeleton	
		1 PM	Gallo	Cell Junctions	
Mon	Aug. 15	8:30 AM	Himes	Nucleus, ER & Golgi	
		9:30 AM	Tom	Lysosomes & Peroxisomes	
Tues	Aug. 16	9 AM	Smith	The Differentiated Cell	No additional reading
<b>ABNORMAL AMNIOCENTESIS MODULE</b>					
Fri	Aug. 19	10 AM-noon		Lab 1: Microscopy, Stains, & Organelles	Lab Manual: Introduction & Lab 1
Mon	Aug. 22	10:30-noon	Gallo	Epithelia & Glands	R: Chap. 4 & 5 & pp. 545-551 W: Chap. 5 & pp. 260-262
Tues	Aug. 23	1-3 PM		Lab 2: Epithelia & Glands	Lab Manual: Lab 2
Wed	Aug. 24	10 AM-noon	Hirsch	Connective Tissue 1 & 2	R: Chap. 6 & 9; W: Chap. 4 *A: pp. 1178-1195
Thur	Aug. 25	9-11 AM		Lab 3: Connective Tissue	Lab Manual: Lab 3
Fri	Aug. 26	9-10:30 AM	Houle	Integument	R: Chap. 15; W: Chap. 9

DAY	DATE	TIME	LECTURER	TOPIC	REQUIRED READING
Mon	Aug. 29	1-2:30 PM		Lab 4: Integument	Lab Manual: Lab 4
Tues	Aug 30	8:30 AM	DePace	Breast	R: pp. 863-870, 892-895; W: pp. 386-390
		*10:30-noon	DePace	Fetal Membranes/Placenta	R: pp. 852-853 (implantation), 854-860 (placenta), 886-889; W: pp. 378-385
		1 PM	Smith	Slide Review, Aud. A (Epithelium)	See notes in module guide
Wed	Aug. 31	9-11 AM		<b>SCAVENGER HUNT #1 (Covers Labs 1 thru 4)</b>	
				Lab 5: Placenta & Breast	Lab Manual: Lab 5
Thur	Sept. 1	9-11 AM	Smith	Slide Review, Aud. A (Conn. Tissue through Breast)	See notes in module guide
Fri	Sept. 2	9 AM	Hanau	Pathology Correlates	No additional reading
<b>Fri</b>	<b>Sept. 9</b>	<b>9 AM start</b>	<b>WRITTEN EXAM (Covers Fundamentals &amp; Abnormal Amniocentesis) PRACTICAL EXAM (Covers Fundamentals &amp; Abnormal Amniocentesis)</b>		
MUSCLE WEAKNESS MODULE					
Tues	Sept. 20	11 AM	Goldman	Skeletal Muscle	R: Chap. 11; W: Chap. 6
		1 PM	Goldman	Cardiac & Smooth Muscle	
Wed	Sept. 21	2-3:30 PM		Lab 6: Muscle	Lab Manual: Lab 6
Thur	Sept. 22	8:30-10 AM	Gao	Peripheral Nerve & Ganglia	R: Chap. 12; W: pp. 122-140
Fri	Sept. 23	9 AM	Tom	Motor & Sensory Endings	R: pp. 322-325, 500-503 & 522-523 W: pp. 134-135 & 148-150
Thur	Sept. 29	10:30-noon		Lab 7: Nerve	Lab Manual: Lab 7

\* This lecture is part of both the Gross Anatomy and Microscopic Anatomy courses. Students who are taking only Microscopic Anatomy should attend the full lecture, but will be tested **mainly** on the histology that is presented.

DAY	DATE	TIME	LECTURER	TOPIC	REQUIRED READING
<b>WEIGHT LOSS MODULE</b>					
*Thur	Oct. 6	10:30-11	Fischer	Hypophysis (Pituitary)	R: pp. 740-752, 772-775; W: pp. 328-332
*Mon	Oct. 10	9:00-9:45 AM	DePace	Thyroid & Parathyroid	R: pp. 755-762, 778-779; W: pp. 333-337
Wed	Oct. 12	10 AM	DePace	Adrenals (Suprarenals)	R: pp. 762-771, 780-783; W: pp. 338-341
Thur	Oct. 13	8:30-10 AM		Lab 8: Endocrine Glands	Lab Manual: Lab 8
		10 AM-noon	Goldman	Cartilage & Bone 1 & 2	R: Chap. 7 & 8; W: Chap. 10
Tues	Oct. 18	10:30-noon		Lab 9: Cartilage & Bone	Lab Manual: Lab 9
Wed	Oct. 19	10:30-noon	Goldman	Bone Formation & Joints	See notes in module guide
Thur	Oct. 20	1 PM	Smith	Slide Review, Aud. A (Muscle)	See notes in module guide
<b>Fri</b>	<b>Oct. 21</b>	11 AM	Smith	Slide Review, Aud A (Nerve & Endocrine)	See notes in module guide
		<b>1:30-3:30</b>		<b>SCAVENGER HUNT #2 (Covers Labs 6 thru 9)</b>	
				Lab 10: Bone Formation/Joints	Lab Manual: Lab 10
Mon	Oct. 24	8 AM	Hanau	Pathology Correlates	No additional reading
		9-11	Smith	Slide Review, Aud A (Cartilage, Bone & Bone Formation)	See notes in module guide
<b>Wed</b>	<b>Oct. 26</b>	<b>8:30 AM start</b>	<b>WRITTEN EXAM (Covers Muscle Weakness &amp; Weight Loss) PRACTICAL EXAM (Covers Muscle Weakness &amp; Weight Loss)</b>		

\* Each of these lectures is a part of a 1.5-hour lecture that is being co-taught by Physiology & Microanatomy. The Microanatomy half precedes the Physiology half on both dates (Oct. 6 & Oct. 10). Students taking only Microscopic Anatomy should attend the full lecture on both dates, but will be tested **mainly** on the histology that is presented.

DAY	DATE	TIME	LECTURER	TOPIC	REQUIRED READING	
<b>CHEST PAIN MODULE</b>						
Tues	Nov. 1	1 PM	Smith	Blood 1	R: Chap. 10; W: Chap. 3	
Wed	Nov. 2	9:30-11 AM	Smith	Blood 2		
Fri	Nov. 4	11 AM-noon	Raghupathi	Hematopoiesis		
Mon	Nov. 7	8:30-10 AM		Lab 11: Blood/Hematopoiesis	Lab Manual: Lab 11	
Tues	Nov. 8	9-10:30 AM	Houle	Cardiovascular System	R: Chap. 13; W: Chap.8	
Thur	Nov. 10	10:30-noon		Lab 12: Cardiovascular Syst.	Lab Manual: Lab 12	
Mon	Nov. 14	10:30-noon	Smith	Slide Review, Aud. A (Blood, Hematopoiesis & CV System)	See notes in module guide	
<b>Wed</b>	<b>Nov. 16</b>	<b>9:00 AM start</b>	<b>WRITTEN EXAM (Covers Chest Pain) in Lab B</b>			<b>PRACTICAL EXAM with projected slides in Auditorium A (Covers Chest Pain)</b>
<b>Mon</b>	<b>Nov. 28</b>	<b>Peer evaluation for Microanatomy opens at 4 PM</b>				
<b>SUSPICIOUS LUMP MODULE</b>						
Wed	Nov. 30	10 AM	Raghupathi	Lymphoid Organs 1	R: Chap. 14; W: Chap. 11	
Thur	Dec. 1	10:30-noon	Raghupathi	Lymphoid Organs 2		
<b>Fri</b>	<b>Dec. 2</b>	10:30-noon		Lab 13: Lymphoid Organs	Lab Manual: Lab 13	
<b>Peer evaluation for Microanatomy closes at 4 PM</b>						
<b>Mon</b>	<b>Dec. 5</b>	<b>9:00 AM</b>		<b>QUIZ (Lymphoid Organs)</b>		
<b>Peer evaluation data opens for review at 4 PM</b>						
<b>Fri</b>	<b>Dec 9</b>	<b>Peer evaluation data closes for review at 4 PM</b>				

DAY	DATE	TIME	LECTURER	TOPIC	REQUIRED READING
<b>SHORTNESS OF BREATH</b>					
Tues	Jan. 3	8:30-10 AM	Gallo	Respiratory Tract	R: Chap. 19; W: Chap.12 & p. 401. Recommended reading: Moore, <u>The Developing Human</u> , 7th ed., Chap.11
Wed	Jan. 4	8:30-10 AM		Lab 14: Respiratory Tract	Lab Manual: Lab 14
<b>Fri</b>	<b>Jan. 6</b>	<b>8:30 AM</b>		<b>QUIZ (Respiratory Tract)</b>	
<b>FAILURE TO THRIVE MODULE</b>					
Fri	Jan. 13	11 AM	Goldman	Teeth	R: pp. 534-547 (teeth); W: pp. 251-257
Tues	Jan. 17	10 AM-noon	Hirsch	Upper GI Tract 1 & 2	R: pp. 526-534, 545-586, 606-615 W: pp. 258-273, 227-228 & 400
Thur	Jan. 19	8:30-10 AM		Lab 15: Upper GI Tract	Lab Manual: Lab 15
Fri	Jan. 20	8:30-10 AM	Hirsch	Lower GI Tract	R: pp. 586-604, 616-627; W: pp. 228 & 274-287
Tues	Jan. 24	10:30-noon	Smith	Slide Review, Aud. A (Lymphoid & Respiratory)	See notes in module guide
Wed	Jan. 25	8:30-10:30		Lab 16: Lower GI Tract	Lab Manual: Lab 16
Thur	Jan. 26	9:30-11 AM	Smith	Liver/Gall Bladder/Pancreas	R: Chap. 18; W: Chap. 15
<b>Fri</b>	<b>Jan. 27</b>	<b>10 AM-noon</b>		<b>SCAVENGER HUNT #3 (Covers Labs 13 thru 16)</b>	
				Lab17: Liver/Gall Blad./Pancr.	Lab Manual: Lab 17
Mon	Jan. 30	9 AM	Hanau	Pathology Correlates	No additional reading
Tues	Jan. 31	9-11 AM	Smith	Slide Review, Aud A (GI Tract)	See notes in module guide
<b>Wed</b>	<b>Feb. 8</b>	<b>8:30 AM start</b>	<b>WRITTEN EXAM (Covers Failure to Thrive) PRACTICAL EXAM (Covers Suspicious Lump, Shortness of Breath, Failure to Thrive)</b>		

DAY	DATE	TIME	LECTURER	TOPIC	REQUIRED READING
<b>ABDOMINAL PAIN MODULE</b>					
Thur	Feb. 9	10:30-noon	DePace	Urinary System	R: Chap. 20; W: Chap. 16
Tues	Feb. 14	8:30-10 AM		Lab 18: Urinary System	Lab Manual: Lab 18
Fri	Feb. 17	9 AM	Goldman	Ovary	R: pp. 830-845, 872-877; W: pp. 359-367
		10 AM	Goldman	Female Reproductive Tract	R: pp. 845-854, 860-863, 878-885, & 890-891 W: pp. 367-377 & 391
Mon	Feb. 20	1-2:30 PM		Lab 19: Ovary/Female Repro.	Lab Manual: Lab 19
Tues	Feb. 21	10 AM	Himes	Testis	R: Chap. 22; W: Chap. 18
		11 AM	Himes	Male Reproductive Tract	
Fri	Feb. 24	1-3 PM		<b>SCAVENGER HUNT #4 (Covers Labs 18 &amp; 19)</b>	
				Lab 20: Testis/Male Repro.	Lab Manual: Lab 20
Mon	Feb. 27	8:30 AM	Hanau	Pathology Correlates	No additional reading
		9:30-11:00 AM	Smith	Slide Review (Urinary System & Female Reproductive)	See notes in module guide
Tues	Feb. 28	1 PM	Smith	Slide Review (Male Repro.)	See notes in module guide
<b>Wed</b>	<b>March 7</b>	<b>9:00 AM start</b>	<b>WRITTEN EXAM (Covers Abdominal Pain) PRACTICAL EXAM (Covers Abdominal Pain)</b>		
<b>Mon</b>	<b>March 12</b>	<b>9 AM start</b>	<b>CUMULATIVE FINAL EXAM: WRITTEN EXAM ONLY (Covers entire course)</b>		

**THIS IS THE END OF THE MICROSCOPIC ANATOMY COURSE**

NOTE: The three sessions listed below are presented by the Microanatomy faculty but are part of the Neuroscience course and count toward your Neuroscience grade.

DAY	DATE	TIME	LECTURER	TOPIC	REQUIRED READING
SYMPTOMS OF NEUROLOGICAL DISORDER MODULE					
Mon	April 23	2 PM	Himes	Histology of the Ear	R: Chap. 25; W: pp. 414-425
Mon	April 30	2 PM	Himes	Histology of the Eye	R: Chap. 24; W: pp. 402-413
Fri	May 4	10:30-noon		Lab: Eye and Ear	See neuro lab guide