

SABA University School of Medicine
Histology Syllabus/Lecture Schedule
September-December 2008
1st Semester

COURSE SYLLABUS

Professor:

Dr. Richard R. Shivers, AB., MA., Ph.D.

(Course Director)

rshivers@uwo.ca

416-3456 ext. 209

Teaching Assistants:

Oksana Prychyna

Sana Siddiqui

Aims and Objectives

The course is designed as an introduction to Cell Biology and Histology, that is, the study of cells, tissues and organs of the human body from a microscopic point of view. The course is designed not only to understand the structural uniqueness but also give an overview of its functional relevance. The correlations between structure and function will help the students to understand the basis of physiology & pathology. The application of these concepts to physiology and pathology will be provided as examples; this will stress the importance of the knowledge of histology in the field of medicine. At the end of the course, the students will be able to relate the normal microscopic structure of body organs with their functions with a view to applying this knowledge to further studies in their medical careers.

Methods of teaching and examination

The nature of instruction and pattern of tests will enable students to think, analyze and solve problems. This will be accomplished through lectures, Histology Problem-Based Learning Presentations and discussions.

Topics

Cell biology

1. Course introduction
2. Cell structure and function
3. Cell reproduction

4. Methodology

Basic tissues

5. Epithelial tissue
6. Connective tissue
7. Cartilage ,bone and ossification
8. Blood
9. Hematopoiesis
10. Muscle tissue
11. Nerve tissue

Organs and systems

12. Circulatory system
13. Immune system
14. Skin
15. Digestive tract and glands
16. Respiratory system
17. Urinary system
18. Endocrine glands
19. Male reproductive system
20. Female reproductive system
21. Special sense organs

Examinations:

There will be five tests, to be conducted as scheduled by the university. The first four (4) block exams will be one hour in length and include 50 multiple choice questions in the USMLE format. The Final Examination, will be a 2-hour **CUMULATIVE** test with 100 multiple choice questions and will cover the entire course. In each question, students must select the best possible answer. Each test will be valued for 100 points. The tests will have the following points which will add up to make the final grade.

Block I- 16%

Block II- 16%

Block III- 16%

Block IV- 16%

Block V - 32% (Cumulative Final Examination)

Histology PBL Presentations- 4%

How do I prepare for multiple choice questions?

1. Learn the material you are currently studying in your classes.
It is the purpose of testing to see how adept you are at taking information and figuring out an answer you consider a high probability response. You cannot do that with **MEMORIZED** material, but you can do it using material that you have **LEARNED**
2. Know how to approach multiple choice questions and practice.
Some people seem to instinctively know how to answer multiple choice questions correctly, others of us not so much. There are skills that you can learn to help you answer these kinds of test questions. Here are some recommendations on how to approach multiple choice questions:
 - a. understand precisely what is being asked
 - b. allow a few moments to think, recall and to anticipate possible answers
 - c. compare the given choices to your anticipated answer
 - d. mark choices that match best

- e. rule out choices that don't account for all findings
- f. mark the best answer
- g. review your answers but **DO NOT CHANGE YOUR ANSWER UNLESS YOU ARE CERTAIN THAT IT IS BEING REPLACED BY THE CORRECT ONE**

Histology Problem-Based Learning Presentations determine 4% of the final grade:

Histology PBL Presentations will be done in groups of three (3) students. Each group will be assigned a topic and will utilize a maximum time of 20 minutes for the presentation. The last two minutes of the session is reserved for interaction. The Histology PBL Presentations are scheduled within the teaching Blocks I to V.

Grading

University regulation will be followed.

- A = 90% and above
- B = 80% to 89%
- C = 75% to 79%
- F = 74% and below

Policy of attendance

University regulations permit a maximum of 10% absence regardless of reasons. Absences exceeding 10% will lead to failure of the course. **In addition, students are expected to be on time for classes and to remain throughout the entire lecture. Students who arrive after roll has been taken will be marked absent.**

Attendance for all student presentations is MANDATORY. Absences on scheduled presentation days will result in a 1 point deduction from the student's course mark for each day missed.

General rules and rules of conduct:

NO AUDIO OR VIDEO RECORDING OF THE HISTOLOGY LECTURES IS PERMITTED

Refer to "The Students Handbook" of the university.
Students must retrieve the power point files from the classroom computer before the lecture.

Amendments to the course outline can be made during the course.

Required Textbooks & Atlas (one only)

1 Wheater's Functional Histology (Fifth Edition), Edited by B.Young and J.W.Heath. (ISBN NO. 0443056129) Churchill Livingstone Inc.

2. Histology a Text and Atlas (Fifth Edition) by Michael H. Ross, Gordon I. Kaye, Wojciech Pawlina (ISBN NO. 0683302426) Lippincott, Williams & Wilkins

Recommended Atlas:

3. Color Atlas of Histology (4th Edition) by L.P. Gartner and J.L. Hiatt, (ISBN NO: 0781752167)
Lippincott William & Wilkins

HISTOLOGY COURSE SCHEDULE
Lecture from 8.00 AM to 10.00 AM in CR # 1

| Week 1 | Date | Subject | Professor |
|---------------|-------------|-----------------------------|------------------|
| Tues. | Sept 2 | Introduction | Dr. Shivers |
| Wed. | Sept 3 | Cell structure and Function | Dr. Shivers |
| Thurs. | Sept 4 | Cell structure and function | Dr. Shivers |
| Fri. | Sept 5 | Cell structure and function | Dr. Shivers |

| Week 2 | Date | Subject | |
|---------------|-------------|--------------------------------|-------------|
| Mon. | Sept 8 | Microscopy | Dr. Shivers |
| Tues. | Sept 9 | Histochemistry & Cytochemistry | Dr. Shivers |
| Wed. | Sept 10 | Epithelium | Dr. Shivers |
| Thurs. | Sept 11 | Epithelium | Dr. Shivers |
| Fri. | Sept 12 | Epithelium | Dr. Shivers |

| Week 3 | Date | Subject | |
|---------------|-------------|------------------|-------------|
| Mon. | Sept 15 | Review | Dr. Shivers |
| Tues. | Sept 16 | EXAM 1 | |
| Wed. | Sept 17 | Review of Exam 1 | |
| Thurs. | Sept 18 | Hematology | Dr. Shivers |
| Friday | Sept 19 | Hematopoiesis | Dr. Shivers |

| Week 4 | Date | Subject | |
|---------------|-------------|--------------------------------------|-------------|
| Mon | Sept 22 | Cardiovascular System | Dr. Shivers |
| Tues | Sept 23 | <i>Histology PBL Presentations 1</i> | Dr. Shivers |
| Wed | Sept 24 | Cardiovascular System | Dr. Shivers |
| Thurs. | Sept 25 | Connective Tissue | Dr. Shivers |
| Friday | Sept 26 | Connective Tissue | Dr. Shivers |

| Week 5 | Date | Subject | |
|---------------|-------------|--------------------------------------|-------------|
| Mon. | Sept 29 | Connective tissue | Dr. Shivers |
| Tues. | Sept 30 | Cartilage and Bone | Dr. Shivers |
| Wed. | Oct 1 | Cartilage and Bone | Dr. Shivers |
| Thurs. | Oct 2 | Review | Dr. Shivers |
| Fri. | Oct 3 | <i>Histology PBL Presentations 2</i> | Dr. Shivers |

| Week 6 | Date | Subject | |
|---------------|-------------|-------------------|-------------|
| Mon. | Oct 6 | Review | Dr. Shivers |
| Tues. | Oct 7 | Exam II | |
| Wed. | Oct 8 | Review of Exam II | |
| Thursday | Oct 9 | Muscle | Dr. Shivers |
| Fri. | Oct 10 | Muscle | Dr. Shivers |

| Week 7 | Date | Subject | |
|---------------|-------------|--------------------------------------|-------------|
| Mon. | Oct 13 | <i>Histology PBL Presentations 3</i> | Dr. Shivers |
| Tues. | Oct 14 | Skin | Dr. Shivers |
| Wed. | Oct 15 | Skin | Dr. Shivers |
| Thurs. | Oct 16 | BODY WORLDS | Dr. Shivers |
| Fri. | Oct 17 | Nervous Tissue | Dr. Shivers |

| Week 8 | Date | Subject | |
|---------------|-------------|--------------------------------------|-------------|
| Mon. | Oct 20 | Nervous Tissue | Dr. Shivers |
| Tues. | Oct 21 | Nervous Tissue | Dr. Shivers |
| Wed. | Oct 22 | Nervous Tissue | Dr. Shivers |
| Thursday | Oct 23 | <i>Histology PBL Presentations 4</i> | Dr. Shivers |
| Fri. | Oct 24 | Review | Dr. Shivers |

| Week 9 | Date | Subject | |
|---------------|-------------|--------------------|-------------|
| Mon. | Oct 27 | Review | |
| Tue | Oct 28 | Exam III | |
| Wed. | Oct 29 | Review of Exam III | |
| Thurs. | Oct 30 | Endocrine System | Dr. Shivers |
| Fri. | Oct 31 | Endocrine System | Dr. Shivers |

| Week 10 | Date | Subject | |
|----------------|-------------|--------------------------------------|-------------|
| Mon. | Nov 3 | Urinary System | Dr. Shivers |
| Tues. | Nov 4 | Urinary System | Dr. Shivers |
| Wed. | Nov 5 | Respiratory system | Dr. Shivers |
| Thurs. | Nov 6 | Respiratory system | Dr. Shivers |
| Fri. | Nov 7 | <i>Histology PBL Presentations 5</i> | Dr. Shivers |

| Week 11 | Date | Subject | |
|----------------|-------------|--------------------------------------|-------------|
| Mon. | Nov 10 | Respiratory system | Dr. Shivers |
| Tues. | Nov 11 | Digestive Tract | Dr. Shivers |
| Wed. | Nov 12 | Digestive Tract | Dr. Shivers |
| Thurs. | Nov 13 | Digestive Tract | Dr. Shivers |
| Fri. | Nov 14 | <i>Histology PBL Presentations 6</i> | Dr. Shivers |

| Week 12 | Date | Subject | |
|----------------|-------------|-------------------|-------------|
| Mon. | Nov 17 | Review | Dr. Shivers |
| Tues. | Nov 18 | EXAM IV | |
| Wed. | Nov 19 | Review of Exam IV | |
| Thurs. | Nov 20 | Immune System | Dr. Shivers |
| Fri. | Nov 21 | Immune System | Dr. Shivers |

| Week 13 | Date | Subject | |
|----------------|-------------|--------------------------------------|-------------|
| Mon. | Nov 24 | Special Sense Organs | Dr. Shivers |
| Tues. | Nov 25 | Special Sense organs | Dr. Shivers |
| Wed. | Nov 26 | <i>Histology PBL Presentations 7</i> | Dr. Shivers |
| Thurs. | Nov 27 | Female Reproductive System | Dr. Shivers |
| Fri. | Nov 28 | Female Reproductive System | Dr. Shivers |

| Week 14 | Date | Subject | |
|----------------|-------------|--------------------------------------|-------------|
| Mon. | Dec 1 | Female Reproductive system | Dr. Shivers |
| Tues. | Dec 2 | Male Reproductive system | Dr. Shivers |
| Wed. | Dec 3 | Male Reproductive System | Dr. Shivers |
| Thurs. | Dec 4 | Review | Dr. Shivers |
| Fri. | Dec 5 | <i>Histology PBL Presentations 8</i> | Dr. Shivers |

| | | | |
|----------------|--------|--|--|
| Week 15 | Dec 11 | CUMULATIVE FINAL EXAM (2 Hours) | |
|----------------|--------|--|--|