# **SYLLABUS**

Coordinators:	Prof. Ze'ev Silverman
Course Name:	Human Anatomy: Thorax
Course Number:	481-8-3363
Prerequisites:	None
Attendance:	Lectures – mandatory
	Labs - mandatory
	PBA sessions - mandatory
Teaching Method:	Frontal lectures/ small groups/independent study
	(radiologic anatomy)
<b>Total Course Hours:</b>	65
Credits:	4

## Abstract:

Human Anatomy is a systems and cased-based course emphasizing medicalanatomical concepts and structural relationships in the body. While any course in anatomy inevitably involves memorization, fine details are not typically stressed here. Dissection is employed, but state-of-the-art imaging and internet-based resources are also employed and even emphasized.

The use of senior medical students as teaching assistants in the dissection laboratory, an innovation developed at BGU, provides another critical component to the course. These students bring their clinical experience and particularly their appreciation for anatomy as a key tool in the diagnosis and treatment of pathology to the dissection laboratory.

#### Lectures:

- 1. Anterior chest wall
- 2. Imaging
- 3. The spinal nerve
- 4. Pleural cavity
- 5. Trilaminer disc (embryology)
- 6. Lungs (histology)
- 7. Development of lungs (embryology)
- 8. Pericardium & great vessels
- 9. Development of heart (embryology)
- 10. Mediastinum
- 11. Cardiac muscle (histology)
- 12. Heart
- 13. Autonomic nervous system
- 14. Coronary circulation
- 15. Heart and aortic arches (embryology)
- 16. Surface anatomy
- 17. Fetal vs postnatal circulation

## \*PBL/Small group tutorials\*

To promote active learning, we have adopted a modified case-based approach for the course. This will be implemented as follows:

The class will be divided into 4 groups of 8-10 students. A faculty 'tutor' will attend each tutorial and serve to facilitate the discussions. The tutor will not answer questions and will only ask questions in order to initiate discussion. A realistic clinical case will be distributed at the 1<sup>st</sup> tutorial for each case (two cases in all for Thorax). The group will elect one of its members to be the spokesman and one as its 'recorder'. One member will read aloud the case, sentence by sentence; the recorder will write the key points on the white board. The initial goal of the tutorial is to generate a list of possible reasons for the problems expressed by the patient – i.e., a differential diagnosis (DDx). The emphasis in these cases is always Anatomy, but other disciplines, where relevant, are dealt with as well.

By the end of the first tutorial, the group will have generated not only a DDx, but also a list of 'learning issues' which they will research and solve on their own before the next tutorial, using resources made available to them by the course director, usually available via HighLearn, and those that they discover on their own, such as books and videos, etc. in the library or online material. The 2<sup>nd</sup> tutorial will cover the learning issues previously generated, arrive at a diagnosis based on the evidence provided by the case material and research on the learning issues. Treatment and follow-up issues will conclude this tutorial session.

A short quiz on material presented in class and relevant to the case will be followed by a 'wrap-up session' in which a list of questions generated by the groups relating to the diagnosis or treatment will be generated and then answered by the faculty tutors who are attending.

Several forms of evaluations will be conducted to establish student participation in and achievement of competence in Anatomy. Written exams will stress principles of Anatomy and structural relationships. Laboratory exams will be timed exams on student dissections, as well as radiographic, microscopic and osteologic anatomy. They will emphasize the material covered in the laboratory dissections. The practical (laboratory) exam will be given in the morning, and will take approximately 60 minutes. In Human Anatomy, the material on the exams will not be comprehensive, in the sense that each will utilize only material covered in a series of dissections. The objectives in the syllabus will form the main criteria for written and laboratory components of the exams. The written exam will be given over a 2 hour period, in the afternoon.

Several scheduled as well as (potentially) unscheduled quizzes on the material covered in class and in the tutorials will contribute up to 10% of the final course grade.

Finally, the participation in the tutorial discussions will be evaluated by the group tutor. This evaluation will reflect the degree to which a student contributes usefully to the discussion, which in turn depends to a large degree to the effort he/she makes to independently gather information regarding the clinical cases. It will also take into account the manner in which the student interacts with his/her colleagues in the group (see the evaluation form to be filled out by the tutor for each of the group members). The evaluation will not impact on the final grade, unless it is unsatisfactory, in which case it may lead to the awarding of a failing grade for the unit.

Final performance in the course will be evaluated in the following manner:

Comprehensive Examinations:Written Component)50%Lab Component50%Quizzes5% (bonus)

Total 100%

### **Required Texts:**

Any of those listed are acceptable:

*Clinically Oriented Anatomy*, Moore, K.L. (Williams and Wilkins) *Clinical Anatomy for Medical Students*, Snell, R.S. (Little Brown)

Atlas (one)

*Grants Atlas of Anatomy*, Agur, A.M., (Williams and Wilkins) *Regional Atlas of the Human Body*, Clemente (Lea & Fibiger) *Color Atlas of Anatomy*, Rohan & Yokochi (Igaku-Shoin) *Atlas of Human Anatomy*, Netter, F. (Ciba-Geigy)

Dissector: Grants Dissector, Sauerland, E.K., 10th ed. (Williams and Wilkins)

<u>Embryology</u> Medical Embryology, Langman, J. 5th ed. (Lippincott, Williams and Wilkins)

<u>Histology</u>

Histology: A Text and Atlas, Ross, Pawlina and Ross, 5th ed. (Lippincott, Williams and Wilkins)