

What is the main purpose for this course?

- After successful completion of the course, the student will be able to understand and acquire knowledge of Anatomical terms, recognize the structure of the different organs and systems of the human body and its relationship to function as well as its relationship to each other, recognize basic human histology which will cover the microscopic structure and function of human cells and tissues that make up the organ systems.

References

- 1.1 Gray's Anatomy (2005): 39th ed., Sandring, S.; Ellis, H.; Healy, J.C.; Johnson, D. and Williams, A. -Edinburgh. London. New York.
- 1.2-Clinical Anatomy (2004):, 7th ed., by Snell, R.S. Lippincott Williams & Wilkins, Philadelphia. Baltimore. New York. London.
- 1.3 Ross and Wilson Anatomy and Physiology in Health and Illness by Kathleen, J.W. and Waugh, A (10ed ed).
- 1.4 Basic Histology Text and Atlas, Luiz Carlos Junqueira and Jose Carneiro, 11th Ed., McGraw-Hill Publishing, 2005 (with CD).
- 1.5 Color Atlas of Histology (Paperback) by Leslie P Gartner, James L Hiatt 4th Ed. (April 1, 2005)
- 1.6 R&P Ross, Michael H. and Wojciech pawlina. 2006. Histology: A Text and Atlas. Fifth Edition. Lippincott Williams & Wilkins. ISBN-10: 0- 7817-7221-4 (with CD)
- 1.7 Ross and Wilson Anatomy and Physiology in Health and Illness by Kathleen, J.W. and Waugh, A (10ed ed).

Lecture (1)

An Introduction to Anatomy

Objectives:

By the end of this lecture, students should understand:

- Definition of anatomy & Branches of anatomy
- Structural organization of human body

Introduction to Anatomy

- Anatomy is a broad field of science in which the body is studied at different levels.
- **Definition of anatomy: Greek(ana=up, tome=cutting) (to cut up, or dissect)**
mastectomy, tonsillectomy, etc)
- Scientific study of body structure: **morphology**

Structural organization from simplest to most complex

- ❖ **Chemical**
- ❖ **Cellular**
- ❖ **Tissue** : group of cells similar in structure and function
- ❖ **Organ** : 2 or more tissue types performing specific function
- ❖ **Organ system** : group of organs acting together to perform specific function
- ❖ **Human organism**

Organ systems

❖ **Skeletal**

❖ **Muscular**

❖ **Integumentary**

❖ **Nervous**

❖ **Endocrine**

❖ **Cardiovascular**

❖ **Lymphatic/immune**

❖ **Respiratory**

❖ **Digestive**

❖ **Urinary**

❖ **Reproductive**

Branches of anatomy

❖ **Gross anatomy**

❖ **Microscopic anatomy**

- Cytology
- Histology

❖ **Developmental anatomy**

- Embryology

❖ **Comparative anatomy**

Gross Anatomy

- **Definition:**

That which can be seen with the naked eye

- **Kinds:**

- Regional:**

- body studied by area

- Systematic:**

- body studied by system

Microscopic Anatomy

- **Definition:**

That which can be seen with the assisted eye

- **Kinds:**

Cytology:

- The study of cells

Histology:

- The study of tissues

Developmental Anatomy

- **Definition:**

The study of anatomical changes in a life cycle

- **Kinds:**

 - **Embryology:**

 - The study of prenatal development

 - **Postnatal development:**

 - The study of structures after birth

Comparative Anatomy

- **Definition:**
Comparison of structures between organisms

Thank you