

# In the Name of God



**Hamadan University of Medical Sciences and Health Services  
Educational Deputy of the University  
Center for Studies and Development of Medical Sciences Education**

## **Theory/Practical Lesson Plan Form**

**Dear Colleagues,**

As the teaching-learning process is one that requires careful planning to achieve its objectives, the preparation of a lesson plan at the beginning of the educational process (as a map and guide for instructors and students) is essential. It serves as one of the main tools for the educational activities of instructors. Therefore, we kindly ask all instructors to pay utmost attention to completing the lesson plan.

**Course and Instructor Details (Completing all items in this section is essential)**

### **Course Information**

<b>Course Title</b>	<b>Introduction to Anatomy and Histology</b>
<b>Instructors</b>	Dr. Iraj Amiri, Dr. Tayebah Artimani, Dr. Zahra Gholami Mahmoudian, Dr. Abbas Bakhtiari
<b>Course Coordinator</b>	Dr. Abbas Bakhtiari
<b>Department Head</b>	Dr. Maryam Bahmanzadeh
<b>Credits</b>	Theory: 2.25 units (19 sessions); Practical: 0.25 units (4 sessions)
<b>Student Major &amp; Level</b>	Doctor of Medicine – Basic Medical Sciences
<b>Semester</b>	First Semester
<b>Location</b>	Faculty of Medicine, Hamadan University of Medical Sciences

## Histology – Theory (0.85 Units, Dr. Bakhtiari)

<b>Sessi on</b>	<b>Topic</b>	<b>Behavioral Objectives (Students will be able to...)</b>	<b>Learnin g Domain</b>	<b>Teachi ng Metho d</b>	<b>Durati on</b>	<b>Teachin g Aids</b>	<b>Assesm ent Method</b>
1	Introductio n to Histology, Tissue Study Methods, Cell & Cytology	1. Define histology. 2. Explain tissue preparation and microscope use. 3. Describe the cell and its functions. 4. Explain intracellular organelles and their functions.	Knowled ge	Lecture, group discussi on	90 min	PowerPoi nt, whiteboa rd	Q&A
2	Epithelial Tissue	1. Name the types of body tissues. 2. Describe epithelial tissue. 3. Name types of epithelial tissue. 4. Explain the functions of epithelial tissues. 5. State the role of epithelial tissue disorders in diseases.	Knowled ge	Lecture, group discussi on	90 min	PowerPoi nt, whiteboa rd	Quiz, Q&A
3	Connective & Adipose Tissue	1. Describe connective tissue. 2. Name types of	Knowled ge	Lecture, group discussi on	90 min	PowerPoi nt, whiteboa rd	Quiz, Q&A

		connective tissue. 3. Explain functions of connective tissues. 4. Describe adipose tissue. 5. Name functions of adipose tissue.					
4	Bone & Joint Tissue	1. Describe bone tissue. 2. Name types of bone tissue. 3. List bone functions. 4. Explain ossification. 5. Describe bone repair. 6. Name types of joints. 7. Describe histological structure of joints.	Knowledge	Lecture, group discussion	90 min	PowerPoint, whiteboard	Quiz, Q&A
5	Cartilage Tissue	1. Describe cartilage tissue. 2. Name types of cartilage. 3. Explain cartilage functions. 4. Describe chondrogenesis.	Knowledge	Lecture, group discussion	90 min	PowerPoint, whiteboard	Quiz, Q&A
6	Blood Histology & Hematopoiesis	1. Describe blood tissue. 2. Name blood functions. 3. Explain blood cell production.	Knowledge	Lecture, group discussion	90 min	PowerPoint, whiteboard	Quiz, Q&A

		4. Describe blood-related diseases.					
7	Muscle Tissue	1. Describe muscle tissue. 2. Name types of muscle tissue. 3. Explain contraction mechanism. 4. Differentiate muscle types. 5. State role of muscle disorders in diseases.	Knowledge	Lecture, group discussion	90 min	PowerPoint, whiteboard	Quiz, Q&A

### Histology – Grading Scheme (Theory)

Assessment Type	Method	Points
Quiz	Multiple-choice and short-answer written questions	0.5
Project Presentation	Delivery, mastery of topic, response to questions	0.5
Final Exam	Multiple-choice, short-answer, and essay questions	18
Other	Class participation, Q&A, interest, attendance	1
<b>Total</b>		<b>20</b>

### References (Histology)

- Junqueira's Basic Histology, 2021 Edition (Main)
- DiFiore's Atlas of Histology (Supplementary)
- Practical Histology Atlas (Supplementary)
- Histology by Dr. Soleimani Rad (Supplementary)

### Anatomy – Theory (0.6 Units, Dr. Shiri)

Session	Topic	Behavioral Objectives	Learning Domain	Teaching Method	Duration	Teaching Aids	Assessment Method
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1	Anatomic Terminology	1. Describe anatomy and its sub-branches. 2. Describe body planes and axes. 3. Define directional terms (e.g., superior, inferior). 4. Define movement terms (e.g., flexion, extension).	Knowledge	Lecture, group discussion	90 min	PowerPoint, whiteboard	Quiz, Q&A
2	Bones	1. Describe bone shapes. 2. Define bone-related terminology. 3. Name axial and appendicular skeleton bones. 4. Describe fixed, semi-fixed, and movable joints. 5. Explain synovial joint types.	Knowledge	Lecture, group discussion	90 min	PowerPoint, whiteboard	Quiz, Q&A
3	Skeletal Muscle & Circulation	1. Define muscle terminology (origin, insertion). 2. Describe tendons and aponeuroses. 3. Explain basis of muscle naming. 4. Describe pulmonary and systemic	Knowledge	Lecture, group discussion	90 min	PowerPoint, whiteboard	Quiz, Q&A

		<p>circulation.</p> <p>5. Define artery, vein, capillary. 6. Describe heart chambers. 7. Explain portal and caval venous systems. 8. Name lymphatic system components. 9. Name lymphatic organs and outline lymph flow.</p>					
4	Nervous System	<p>1. Name parts of CNS. 2. Describe neurons and neuroglia. 3. Name divisions of CNS. 4. Define “nucleus” in CNS context. 5. Name divisions of PNS. 6. Explain spinal nerve formation. 7. Describe ganglia types and formation. 8. Explain sympathetic and parasympathetic systems.</p>	Knowledge	Lecture, group discussion	90 min	PowerPoint, whiteboard	Quiz, Q&A
5	Medical Imaging	<p>1. Define medical</p>	Knowledge	Lecture, group	90 min	PowerPoint,	Quiz, Q&A

	& Anatomic Variation	imaging and common modalities. 2. Explain X-ray basics, advantages, disadvantages, applications. 3. Explain CT basics, advantages, disadvantages, applications. 4. Explain MRI basics, advantages, disadvantages, applications. 5. Explain Ultrasound basics, advantages, disadvantages, applications. 6. Explain PET basics, advantages, disadvantages, applications. 7. Define anatomical variation.		discussion		whiteboard	
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### Anatomy – Grading Scheme

Assessment Type	Method	Weight
Quiz	Multiple-choice and short-answer questions	10%
Project Presentation	Delivery, mastery of topic, Q&A	20%
Midterm Exam	Identification of labeled structures on models	25%
Final Exam	Multiple-choice, short-answer, and essay questions	40%
Other	Class participation, Q&A, interest	5%
<b>Total</b>		<b>100%</b>

### References (Anatomy)

- Snell's Clinical Anatomy, 10th Edition