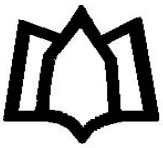
In the Name of God



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)

Instructors: Dr. Elham Shiri, Dr. Tahereh Ali Zamir

Course Coordinator: Dr. Elham Shiri

Head of Department: Dr. Maryam Bahmanzadeh

Credits: 0.8 Theory, 0.1 Practical

Student Major & Level: Doctor of Medicine (Professional Doctorate)

Academic Semester: First Semester, Academic Year 2024–2025

Teaching Location: Faculty of Medicine

Theoretical Unit – Anatomy of Special Senses (0.8 Credits)

Session	Topic	Learning Objectives	Domain	Teaching Methods	Duration	Teaching Aids	Evaluation Methods
1	Eye Anatomy I	1. Describe orbital wall bones and their cranial relations. 2. Explain eyelid layers and innervation. 3. Perform clinical tests for extraocular muscles and cranial nerves. 4. Identify lacrimal apparatus components. 5. Describe fascias and ligaments of eyeball and orbit.	Cognitive	Lecture, group discussion	120 min	PowerPoint, whiteboard, video projector, educational video	Quiz, Q&A
2	Eye Anatomy II	1. Describe branches of the ophthalmic artery and their supply. 2. Explain formation and drainage of ophthalmic	Cognitive	Lecture, group discussion	120 min	PowerPoint, whiteboard, video projector, educational video	Quiz, Q&A

		veins. 3. Describe cranial nerves III, IV, VI entry and function. 4. Identify ciliary ganglion and its role. 5. Describe structures of the eyeball in sequence. 6. Explain ciliary body, muscles, iris and their functions. 7. Describe vitreous and aqueous humors and their functions.					
–	Eye Histology	1. Identify regions and layers of the eyeball. 2. Recognize histological features of the external layer. 3. Recognize histological features of the middle layer. 4. Recognize histological features of the inner layer. 5. Describe common disorders	Cognitive	Lecture, group discussion	120 min	PowerPoint, whiteboard, video projector, educational video	Quiz, Q&A

		related to dysfunction of each part.					
–	Eye Embryology	1. Describe origin and developmental process of the eyeball. 2. Identify main genes involved in eye development. 3. Recognize disorders caused by gene expression defects or mutations.	Cognitive	Lecture, group discussion	120 min	PowerPoint, whiteboard, video projector, educational video	Quiz, Q&A
3	Ear Anatomy	1. Identify external ear structures (auricle, external acoustic meatus). 2. Describe tympanic membrane. 3. Describe middle ear walls, relations, and boundaries. 4. Identify ossicles and middle ear muscles. 5. Describe internal ear (bony/labyrinth) structure and function. 6. Identify	Cognitive	Lecture, group discussion	120 min	PowerPoint, whiteboard, video projector, educational video	Quiz, Q&A

		nerves connected to the ear and their branches.					
–	Ear Histology	1. Recognize histological features of the external ear. 2. Recognize histological features of the middle ear. 3. Recognize histological features of the inner ear. 4. Identify related disorders.	Cognitive	Lecture, group discussion	120 min	PowerPoint, whiteboard, video projector, educational video	Quiz, Q&A
–	Ear Embryology	1. Describe development of external, middle, inner ear. 2. Identify main genes involved in ear development. 3. Recognize disorders caused by gene defects or mutations.	Cognitive	Lecture, group discussion	120 min	PowerPoint, whiteboard, video projector, educational video	Quiz, Q&A

Practical Unit – Anatomy of Special Senses (0.1 Credits)

Session	Topic	Learning Objectives	Domain	Teaching Methods	Duration	Teaching Aids	Evaluation Methods
1	Practical Examination – Eye	1. Identify orbital	Cognitive (application)	Observation, demonstrati	120 min	Models, skull, dissection	Quiz, checklist

	& Ear	walls on the skull. 2. Identify eyelid layers on models. 3. Identify lacrimal apparatus on models. 4. Identify extraocular muscles. 5. Identify layers/parts of eyeball. 6. Identify external ear structures. 7. Identify middle ear walls and ossicles. 8. Identify bony/membranous labyrinth of inner ear.		on, group discussion		table	
–	Practical Histology – Eye & Ear	1. Identify microscopic histological features of eye and ear.	Cognitive (application)	Observation, demonstration, group discussion	120 min	Light microscope, histology slides	Class Q&A, quiz, checklist

		  2. Identify various regions of ear and eye under microsco pe.					

Grading Scheme

Assessment Type	Date	Assessment Tool	Weight
Quiz	Various	Multiple-choice and short-answer written questions	10%
Project Presentation	Various	Presentation quality, mastery, Q&A	10%
Final Practical Exam	Per academic calendar	Identification of structures on models	15%
Final Theoretical Exam	Per academic calendar	Multiple-choice, descriptive, short-answer	60%
Other Activities	Ongoing	Active participation, answering questions, interest, attendance	5%
Total	–	–	**100%**

Reference

1.Snell RS. Clinical anatomy for medical students. Lippincott Williams & Wilkins; 2021-2022.

2.Gray's anatomy for students E-book. Elsevier Health Sciences; February 22, 2019

3.Gray's anatomy e-book: the anatomical basis of clinical practice Standring S, editor.. Elsevier Health Sciences; 2021 May 22.

4.Clinically Oriented Anatomy. Keith L. Moore, Arthur F. Dalley, A. M. R. Agur. March 25, 2022.

5.Atlas of Human Anatomy/Frank H. Netter.Netter FH East Hannover, New Jersey. 2019;592.

6. Junqueira's Basic Histology: Text and Atlas, 17th Edition

7. Langman's Medical Embryology, 12th Edition