Glands

Iran University of Medical Sciences & Health Services

Vice-Chancellor for Education
Center for Medical Education Research and Development
Educational Planning Unit

Course Design Framework – Theoretical and Practical

Course Information

- **Department Offering the Course:** Anatomy
- **Course Title:** Endocrine Anatomical Sciences
- **Credit Type and Hours:** 0.2 Theoretical, 0.2 Practical
- **Course Coordinator:** Dr. Hamzeh Badali
- **Instructor(s):** Dr. Badali
- **Prerequisite / Corequisite:** —
- **Program / Academic Level:** Medicine (M.D.)
- **Curriculum Stage:** Basic Medical Sciences

Course Coordinator Information

- **Academic Rank:** Professor
- **Specialty:** Anatomical Sciences
- **Workplace:** School of Medicine – Anatomy Department
- **Phone:** —
- **Email:** —

General Course Description

(Not provided in the original document)

Overall Course Objectives / Competency Domains

Specific Objectives / Core Competencies

At the end of this course, the learner is expected to be able to:

1. Describe the clinically important anatomical structure and relations of the pituitary gland.
2. Explain the clinically relevant vessels and nerves of the pituitary gland.
3. Describe the clinically important microscopic structure of the pituitary gland.
4. Explain the development of the pituitary gland and congenital anomalies related to it.
5. Describe the clinically important anatomical structure and relations of the hypothalamus and adrenal glands.
6. Explain the clinically relevant blood supply and innervation of the hypothalamus and adrenal glands.
7. Describe the clinically important microscopic structures of the hypothalamus and adrenal glands.
8. Explain the development of the hypothalamus and adrenal glands.
9. Describe the clinically important anatomical structure and relations of the pancreas, thyroid, and parathyroid glands.
10. Explain the clinically relevant blood supply and innervation of the pancreas, thyroid, and parathyroid glands.
11. Describe the clinically important microscopic anatomy of the pancreas, thyroid, and parathyroid glands.
12. Explain the development of the pancreas, thyroid, and parathyroid glands.
13. Identify the anatomical positioning of endocrine glands in MRI, CT, and radiologic images.

Educational Approach

Virtual	In-person	Blended
☐	☑	☐

Teaching–Learning Methods (Based on Approach)

Virtual Approach

- Flipped Classroom
- Game-based learning
- Interactive e-learning content
- Problem-Based Learning (PBL)
- Other: —

In-person Approach

- Interactive lecture (Q&A, quizzes, group discussion, etc.)
- Small group discussions
- Team-Based Learning (TBL)
- Problem-Based Learning (PBL)
- Scenario-based learning
- Peer teaching
- Game-based learning
- Other: —

Blended Approach

A combination of methods from both virtual and in-person approaches (if applicable).

Instructional Aids

- Whiteboard ☐

- Slide projector ☐
- Skill lab educational tools ☑
- Other: —

Course Schedule – Endocrine Anatomical Sciences

Session	Topic	Learning Activity / Task	Method	Date	Instructor
1	Hypothalamic-pituitary portal system, anatomy, histology and embryology of pituitary gland, craniopharyngioma, histological anatomy of pineal gland	Theory	Lecture	11/08/1404	Dr. Badali
2	Anatomy, histology, and embryology of parathyroid, thyroid, adrenal gland, pancreas	Theory	Lecture	20/08/1404	Dr. Badali
3	Histology laboratory (pituitary, thyroid, adrenal, pancreas)	Practical	Lab	10/09/1404	Dr. Badali
4	Dissection hall (hypothalamus, pituitary, pineal gland, thyroid)	Practical	Cadaver dissection	17/09/1404	Dr. Badali
5	Dissection hall (adrenal gland, pancreas, parathyroid)	Practical	Cadaver dissection	24/09/1404	Dr. Badali

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Student Responsibilities & Expectations

General expectations include:

- Regular attendance in class sessions
- Completing assignments by deadlines
- Studying recommended resources
- Active participation in class activities

Expected Student Assignments

- Drawing anatomical illustrations of the studied endocrine glands and their anatomical relations
- Drawing the taught histological slides

Expected Learning Behaviors

- Students must review lecture material **before** both theoretical and practical class sessions.

Attendance Policy

- Students must attend class at the scheduled time.
- Attendance is required and affects evaluation.

Student Evaluation Method

Type of Assessments:

- **Formative Assessment:** (midterm / quizzes / in-class activities)
- **Summative Assessment:** (final practical and theoretical examinations)

Assessment Weighting:

Evaluation Component	Percentage
Midterm Exam	**0%**
Final Exam	**90%**
Assignments	**5%**
Active participation	**5%**
Other	—

Exam Format:

- Theoretical exam: **Multiple-choice (MCQ)**
- Practical exam: **OSPE (Objective Structured Practical Examination)**

Resources (Main and Suggested)

A) Books

- *Gray's Anatomy for Students*
- *Junqueira's Basic Histology*
- *Langman's Medical Embryology (Latest Edition)*

B) Articles

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C) Electronic Materials

- **http://www.histologyguid.com/**
- **https://www.osmosis.org/**

D) Additional References

Not specified.