

Course summary:

Discipline	Lectures	Practical	Seminars
Anatomy	3	1	
Physiology	12	1	
Biochemistry	8	1	
Histology	2	1	
Pathology	6	2	
Microbiology	-		
Immunology	3		
Pharmacology	8		
Multidisciplinary	-		2
Total	42	6	2

Teaching Methods:**A. Theoretical Sessions (TS)**

Lecture No	Lecture title	Depart.
1+2	Anatomy of hypothalamus and hypophysis. Anatomy of the endocrine glands (thyroid, parathyroid, thymus and adrenal gland)	Anatomy
3	Embryology of endocrine gland	Anatomy
4+ 5	Histology of endocrine system	Histology
6+7	Types of chemical control, types of stimuli and types of responses	Physiology
8+ 9	Hypothalamus releasing factors and neurohypophysis of the pituitary gland hormones	Physiology
10+11	Mechanisms of action for adenohypophyseal hormones	Physiology
12	Pathology of adenohypophysis and neurohypophysis of the pituitary gland	Pathology
13	Pharmacology of hypothalamic and hypophysis hormones	Pharmacology
14+15	Introduction biochemical endocrinology Signal transduction, 2 nd messengers and receptors:	Biochemistry
16	Mechanism of hormone actions	Biochemistry
17+18	Thyroid and parathyroid hormones	Physiology
19+20+21	Biochemical aspects of thyroid hormones metabolism Clinical case on hyperthyroidism Integrated metabolism and hormonal regulation	Biochemistry
22+23	Pathology of thyroid and parathyroid glands (part I and II)	Pathology
24 + 25	Thyroid and anti-thyroid drugs	Pharmacology

26+27	Pharmacology of parathyroid (vitamin D, calcitonin and osteoporosis)	Pharmacology
28+29	Intestinal and pancreas hormones	Physiology
30+31	Diabetes mellitus and insulin Clinical case on insulinoma	Biochemistry
32	Pathology of the endocrine pancreas	Pathology
33+34	Insulin and oral hypoglycaemic agents	Pharmacology
35	Adrenal gland hormones	Physiology
36+37	Pathology of the adrenal gland	Pathology
38	Adrenocorticosteroids, glucocorticoids and mineralo- corticoids	Pharmacology
39	Sex hormones	Physiology
40+41+42	Autoimmune diseases of the endocrine system	Immunology

B. Practical sessions (PS)

Section	Lab. Title	Department
1	Morphological and Microscopic Anatomy of Endocrine Glands	Anatomy
2	Histology of Endocrine glands	Histology
3	Glucose Tolerance test (GTT) in normal Rats and Diabetic Rats treated with Streptozotocin and after Pancreatectomy	Physiology
4	Pathology of Endocrine Glands-I Thyroid tumors and FNA based diagnosis, thyroiditis, and parathyroid hyperplasia	Pathology
5	Pathology of Endocrine Glands-II Cushing syndrome and adrenal gland pathology	Pathology
6	Thyroid Function and Serum Electrolytes: Calcium, Magnesium, and Phosphate Use of Glycated Haemoglobin (HbA1c) in diagnosis of Diabetes Mellitus	Biochemistry

C. Discussion Sessions (DS)

Thyroid Diseases
Diabetes Mellitus