

Pomorski Uniwersytet Medyczny w Szczecinie

COURSE SYLLABUS

General information

Course Title: INTERNAL DISEASES-ENDOCRINOLOGY	
Module type	Obligatory
Faculty PMU	Faculty of Medicine
Major	<i>Medicine</i>
Level of study	long-cycle (S2J)
Mode of study	full-time studies
Year of studies, semester	Year III, semesters 5 and 6
ECTS credits (incl. semester breakdown)	3,5
Type/s of training	lectures 15h, simulation 4h, practical classes: 50h (winter semester), 48h (summer semester)
Form of assessment ¹	<input type="checkbox"/> graded credit: <ul style="list-style-type: none"> <input type="checkbox"/> descriptive <input checked="" type="checkbox"/> test <input checked="" type="checkbox"/> practical <input checked="" type="checkbox"/> oral <input type="checkbox"/> credit without grade <input type="checkbox"/> Final exam: <ul style="list-style-type: none"> <input type="checkbox"/> descriptive

¹ replace into where applicable

* mark as appropriate, changing to .

	<input type="checkbox"/> test <input type="checkbox"/> practical <input type="checkbox"/> oral
Head of the Department/ Clinic, Unit	<i>Prof. Dr. hab. n. med. AnHELLI Syrenicz</i> klinendo@pum.edu.pl
Tutor responsible for the module	<i>Dr n. Med. Karol Sagan</i> karol.sagan@pum.edu.pl
Department's/ Clinic's/ Unit's website	https://www.pum.edu.pl/studenci/informacje_z_jednostek/wm/katedra_endokrynologii_chorob_metabolicznych_i_chorob_wewnetrznych/klinika_endokrynologii_chorob_metabolicznych_i_chorob_wewnetrznych/
Language	English

Detailed information

Course objective	<p><i>The objective of the course is to teach the technique of taking history and conducting physical examination of patients. Moreover, the most common internal medicine disorders are discussed including etiology, epidemiology, symptomatology and basic principles of diagnosing individual disease entities. The principles of differential diagnosis of selected symptoms are also discussed.</i></p>	
Initial requirements	Knowledge	<p><i>He/she is familiar with the development, structure and functions of the human organism in normal and pathological conditions, with symptoms and course of diseases, with diagnostic and therapeutic procedures relevant to specific disease states, with ethical, social and legal conditions of practising the profession of a doctor as well as with the principles of health promotion, basing his knowledge on scientific evidence and accepted standards;</i></p>
	Skills	<p><i>He/she is able to recognize medical problems and determine priorities in medical proceedings, can recognize life-threatening conditions requiring immediate medical intervention, can plan diagnostic proceedings and interpret their results, can implement appropriate and safe therapeutic procedures and predict their</i></p>

		<i>consequences</i>
	Social competences	<i>He/she can establish and maintain a deep and respectful contact with the patient, he/she is guided by the good of the patient, putting it in the first place, he/she respects the medical confidentiality and the rights of the patient, he/she is aware of his/her limitations and has the ability of continuous training.</i>

LEARNING OUTCOMES			
Number of learning outcome	A student who has completed the COURSE knows/can:	SYMBOL (reference to) learning outcomes for the field of study	Means of verifying the effects of learning*
W01	He/she knows the environmental and epidemiological conditions of the most common diseases	K_E.W1	O
W07	<p>He/she knows and understands the causes, symptoms, principles of diagnosis and therapeutic management in relation to the most common internal diseases occurring in adults and their complications:</p> <p>a) cardiovascular diseases, including: ischemic heart disease, heart defects, endocardial diseases, myocardium, pericardium, heart failure (acute and chronic), arterial and venous vessel diseases, arterial hypertension: primary and secondary, pulmonary hypertension,</p> <p>b) respiratory system diseases, including respiratory diseases, chronic obstructive pulmonary disease, bronchial asthma, bronchial dilatation, cystic fibrosis, respiratory infections, interstitial lung diseases, pleural diseases, mediastinal diseases, obstructive and central sleep apnea, respiratory failure (acute and chronic), respiratory cancers,</p> <p>c) diseases of the digestive system, including diseases of: oral cavity, oesophagus, stomach and duodenum, intestines, pancreas, liver, bile ducts and gallbladder,</p> <p>d) diseases of the endocrine system, including diseases of: hypothalamus and pituitary, thyroid, parathyroid, adrenal cortex and medulla, ovaries and testes, as well</p>	K_E.W7	S, SP, PS

	<p>as neuroendocrine tumours, polyglandular syndromes, different types of diabetes and metabolic syndrome: hypoglycaemia, obesity, dyslipidaemia,</p> <p>e) diseases of the kidneys and urinary tract, including: acute and chronic renal failure, glomerular and interstitial kidney diseases, kidney cysts, kidney stones, urinary tract infections, urinary tract tumours, in particular bladder cancer and kidney cancer,</p> <p>f) diseases of the haematopoietic system, including: bone marrow aplasia, anaemia, granulocytopenia and agranulocytosis, thrombocytopenia, acute leukaemias, myeloproliferative and myelodysplastic neoplasms, myelodysplastic syndromes, neoplasms from mature B and T lymphocytes, haemorrhagic diathesis, thrombophilia, immediate life-threatening conditions in haematology, blood disorders in diseases of other organs;</p> <p>g) rheumatic diseases, including: systemic connective tissue diseases, systemic vasculitis, arthritis with spinal involvement, metabolic bone diseases, in particular osteoporosis and osteoarthritis, gout,</p> <p>h) allergic diseases, including: anaphylaxis and anaphylactic shock and angioedema,</p> <p>i) water-electrolyte and acid-base disorders: states of dehydration, states of conductivity, electrolyte disturbances, acidosis and alkalosis;</p>		
U01	He/she takes a medical history of the adult patient;	K_E.U1	S, PS
U03	He/she performs a full and focused physical examination of the adult patient;	K_E.U3	S, PS
U07	He/she assesses the general condition, state of consciousness and awareness of the patient;	K_E.U7	S, SP, PS
U12	He/she carries out the differential diagnosis of the most common diseases of adults and children;	K_E.U12	S, PS
U13	He/she assesses and describes the somatic and psychological state of the patient;	K_E.U13	S, SP, PS
U14	He/she identifies life-threatening conditions;	K_E.U14	S
U16	He/she plans diagnostic, therapeutic and preventive procedures;	K_E.U16	S, PS

U17	He/she carries out an analysis of the possible side effects of individual medicines and interactions between them;	K_E.U17	S, PS
U18	He/she proposes individualisation of existing therapeutic guidelines and other methods of treatment in the event of ineffectiveness or contraindications to standard therapy;	K_E.U18	S, PS
U20	He/she qualifies the patient for home and hospital treatment;	K_E.U20	S, PS
U21	He/she defines conditions where life expectancy, functional status or patient preferences limit disease-specific management;	K_E.U21	S, PS
U24	He/she interprets laboratory tests and identify causes of deviations;	K_E.U24	S, PS
U29	He/she performs basic medical procedures and interventions including: a) taking body temperature, measuring heart rate, non-invasive blood pressure	K_E.U29	S, PS
U30	He/she assists in carrying out the following medical procedures and treatments: (f) fine needle biopsy, and interprets the results;	K_E.U30	S, PS
U31	He/she interprets the pharmaceutical characteristics of medicinal products and critically evaluates advertising material for medicines;	K_E.U31	PS
U32	He/she plans specialist consultations;	K_E.U32	PS
U38	He/she maintains the patient's medical records.	K_E.U38	PS
K01	He/she accepts the need for ethical standards;		OH, PS
K02	He/she understands the concept and the need for responsibility for entrusted goods	K_K02	OH, PS
K05	He/she demonstrates the habit of self-education, understand the need for lifelong learning, be able to inspire and organise the learning process of others	K_K05	OH, PS
K09	He/she cooperates with team members; is able to work in a group and take on different roles	K_K09	OH, PS
K10	He/she is able to formulate opinions concerning various	K_K10	OH, PS

aspects of professional classes								
Table of learning outcomes in relation to the form of classes								
Number of learning outcome	Learning outcomes A student:	Form of the classes						
		Lecture	Seminar	Practical classes	Clinical practical	Simulations	E-learning	Other forms
W01	knows the environmental and epidemiological conditions							
W07	knows and understands the causes, symptoms, principles	X			X			
U01	takes a medical history of the adult patient;	X			X		X	
U03	performs a full and focused physical examination of the	X			X		X	
U07	assesses the general condition, state of consciousness	X			X	X		
U12	carries out the differential diagnosis of the most	X			X			
U13	assesses and describes the somatic and psychological	X			X			
U14	identifies life-threatening conditions;	X			X	X		
U16	plans diagnostic, therapeutic and preventive procedures;	X			X			
U17	carries out an analysis of the possible side effects of				X			
U18	proposes individualisation of existing therapeutic				X			
U20	qualifies the patient for home and hospital treatment;				X			
U21	defines conditions where life expectancy, functional				X			
U24	interprets laboratory tests and identify causes of				X			
U29	performs basic medical procedures and interventions				X			
U30	assists in carrying out the following medical procedures				X			
U31	interprets the pharmaceutical characteristics of				X			
U32	plans specialist consultations;				X			
U38	maintains the patient's medical records.				X			
K01	accepts the need for ethical standards;	X			X			
K02	understands the concept and the need for responsibility				X			
K05	demonstrates the habit of self-education, understand				X			
K09	cooperates with team members; is able to work in a				X			
K10	Is able to formulate opinions concerning various aspects				X			

TABLE OF CURRICULUM CONTENTS			
curriculum content	Curriculum content	Number of hours	Reference to the learning outcomes for the CLASSES
Winter, summer semester			
Lectures			
TK01	Physical examination. Some aspects of medical history. Pain and its characteristics. Dyspnea and its	3	W01 W07 U01 U03 U07 U12 U13 U14 U16

	characteristics. Cyanosis and its manifestation. Edema - pathomechanism of formation, clinical significance.		U17 U18 U20 U21 U24 U29 U30 U31 U32 U38 K01 K02 K05 K09 K10
TK02	Physical examination. Assessment of the patient's general condition, its elements and significance. Coma state - diagnosis. Body structure and some dimorphic features. Nutritional status. Examination of adipose tissue distribution and its significance.	3	W07 U01 U03 U07 U12 U13 U14 U16 U17 U18 U20 U21 U24 U29 U30 U31 U32 U38 K01 K02 K05 K09 K10
TK03	Importance of skin examination. Circumferential circulation - pathophysiology and diagnostic conclusions. Causes of lymph node enlargement. Abnormalities in head and neck examination and their diagnostic significance.	3	W01 W07 U01 U03 U07 U12 U13 U14 U16 U17 U18 U20 U21 U24 U29 U30 U31 U32 U38 K01 K02 K05 K09 K10
TK04	Methods of assessing respiratory performance. Abnormalities in the examination of the respiratory system. Respiratory system - differentiation of abnormalities in the physical examination. Cardiovascular system - the heart as an organ. Cardiac rhythm and conduction disturbances - their manifestation in the physical examination.	3	W01 W07 U01 U03 U07 U12 U13 U14 U16 U17 U18 U20 U21 U24 U29 U30 U31 U32 U38 K01 K02 K05 K09 K10
TK05	Cardiovascular system. Principles of drawing conclusions from the physical examination of the heart. Abnormalities in the examination of peripheral arteries, venous system, lymphatic system and their clinical significance. Examination of the abdominal cavity. Conclusions from viewing and palpation and auscultation of the abdominal cavity. Symptomatology of diseases of the urinary system.	3	W01 W07 U01 U03 U07 U12 U13 U14 U16 U17 U18 U20 U21 U24 U29 U30 U31 U32 U38 K01 K02 K05 K09 K10
Practical classes			
TK01	Physical examination. Organisational meeting. Discussion of safety rules, hygiene measures (masks), hand disinfection. Technique of medical history taking. Examination conditions, preparation for the examination, active listening to the patient, targeted interview, the patient as a person, informing the patient, common goal setting. The scheme: Demographics, Current complaints, History of current	4	U01 U03 U07 U12 U13 U14 U16 U17 U18 U20 U21 U22 U24 U29 U30 U31 U32 U38 K01 K02 K05 K09 K10

	complaints, Past illnesses, medications taken, allergies, Family history, Social history, Systemic history.		
TK02	Interview. Technique of medical history taking. Examination conditions, preparation for the examination, active listening to the patient, targeted interview, the patient as a person, informing the patient, common goal setting. The scheme: Demographics, Current complaints, History of current complaints, Past illnesses, medications taken, allergies, Family history, Social history, Systemic history.	4	U01 U03 U07 U12 U13 U14 U16 U17 U18 U20 U21 U22 U24 U29 U30 U31 U32 U38 K01 K02 K05 K09 K10
TK03	Interview and taking medical history. Taking medical history. General condition of the patient. Assessment of cognitive functions: level of consciousness (GCS scale), orientation, memory, attention and concentration, intelligence. Body structure. Skin and subcutaneous tissue. Body temperature. Muscles. Oedemas. Examination of lymph nodes. Detailed examination of the head and neck. Examination of the thyroid gland.	4	U01 U03 U07 U12 U13 U14 U16 U17 U18 U20 U21 U22 U24 U29 U30 U31 U32 U38 K01 K02 K05 K09 K10
TK04	Physical examination of the chest - respiratory system. Examination: viewing, palpation and percussion of the chest. Credit for practical classes 1,2,3.	4	U01 U03 U07 U12 U13 U14 U16 U17 U18 U20 U21 U22 U24 U29 U30 U31 U32 U38 K01 K02 K05 K09 K10
TK05	Physical examination of the chest - respiratory system. Chest auscultation examination.	4	U01 U03 U07 U12 U13 U14 U16 U17 U18 U20 U21 U22 U24 U29 U30 U31 U32 U38 K01 K02 K05 K09 K10
TK06	Physical examination of the chest - cardiovascular system. Examination: by viewing, palpating and tapping the chest. Apical thump. Heart silhouettes. Pass grade 4.5	4	U01 U03 U07 U12 U13 U14 U16 U17 U18 U20 U21 U22 U24 U29 U30 U31 U32 U38 K01 K02 K05 K09 K10
TK07	Physical examination of the chest - cardiovascular system. Chest auscultation examination. Tones and murmurs. Pulse examination. Measurement of blood pressure.	4	U01 U03 U07 U12 U13 U14 U16 U17 U18 U20 U21 U22 U24 U29 U30 U31 U32 U38 K01 K02

			K05 K09 K10
TK08	Physical examination of the abdominal cavity. Examination: by viewing, groping and tapping the abdominal cavity. Points and land grades within the abdominal cavity. Abdominal symptoms. Credit of practical classes 6,7	4	U01 U03 U07 U12 U13 U14 U16 U17 U18 U20 U21 U22 U24 U29 U30 U31 U32 U38 K01 K02 K05 K09 K10
TK09	Physical examination of the abdominal cavity. Superficial and deep palpation examination. Auxiliary methods in the examination of abdominal organs. Evaluation of intestinal peristalsis. Examination of the genitourinary system. Examination per rectum. The use of the ear and the tongue to examine the kidneys and bladder. Auscultation of renal artery murmurs. Goldflam's sign.	4	U01 U03 U07 U12 U13 U14 U16 U17 U18 U20 U21 U22 U24 U29 U30 U31 U32 U38 K01 K02 K05 K09 K10
TK10	The osteoarticular system and the nervous system. Examination by viewing, groping, examination of active and passive mobility of joints. Symptoms of damage to the central and peripheral nervous system. Meningeal symptoms. Credit of classes 8, 9	4	U01 U03 U07 U12 U13 U14 U16 U17 U18 U20 U21 U22 U24 U29 U30 U31 U32 U38 K01 K02 K05 K09 K10
TK11	Assessment of the critically ill patient. Assessment by ABCDE scheme. SAMPLE interview. Assessment of the patient in the ABCDE scheme. A. Airway obstruction B. Respiratory - respiratory arrest, obstructed, damaged airways, respiratory rate, respiratory distress, pulse oximeter - conditions that may interfere with pulse oximeter readings, principles of oxygen therapy in hypoxia patients and patients with hypoxia and hypercapnia, causes of acute respiratory failure C. Circulation : cardiac arrest, blood pressure, pulse, shock, causes of acute circulatory disorders D. Disorders of consciousness - GCS scale, CNS and non-CNS related causes of disorders of consciousness E. Patient Exposure: Examine body surfaces, presence of lacerations and contusions, deep body temperature, Assess the environment in which the incident occurred. Working in a team, coordinating person in a team	6	U01 U03 U07 U12 U13 U14 U16 U17 U18 U20 U21 U22 U24 U29 U30 U31 U32 U38 K01 K02 K05 K09 K10

	<p>Interview with a conscious person:</p> <p>S signs/symptoms A Allergies M Medicines P Past medical history L Lunch - last meal (Lastoralintake) E Events leading up to the injury and/or illness Ability to assess chest and abdominal radiographs, with particular reference to acute conditions. Ability to interpret blood gasometry, morphology, general urine examination including the presence of ketones.</p>		
Simulation			
	<ol style="list-style-type: none"> 1. Patient with exacerbation of COPD - total chronic respiratory failure 2. Pulmonary oedema in a patient with high blood pressure 	4	U01 U03 U07 U12 U13 U14 U16 U17 U18 U20 U21 U22 U24 U29 U30 U31 U32 U38 K01 K02 K05 K09 K10
Practical classes:			
TK01	<p>General and physical examination - a reminder</p> <p>Organisational meeting. Discussion of safety rules, hygiene measures (masks), hand disinfection. Recalling the technique of taking medical history and physical examination. Fundamentals of ECG.</p>	4	U01 U03 U07 U12 U13 U14 U16 U17 U18 U20 U21 U22 U24 U29 U30 U31 U32 U38 K01 K02 K05 K09 K10
TK02	<p>Symptomatology of respiratory diseases - (Part 1). Bronchitis. Chronic obstructive pulmonary disease. Respiratory failure. Fundamentals of ECG.</p>	4	U01 U03 U07 U12 U13 U14 U16 U17 U18 U20 U21 U22 U24 U29 U30 U31 U32 U38 K01 K02 K05 K09 K10
TK03	<p>Symptomatology of the respiratory system - (Part 2). Pneumonia. Bronchial asthma. Lung tumours. Pleural diseases - emphysema, pleural fluid. Atelectasis Fundamentals of ECG.</p>	4	U01 U03 U07 U12 U13 U14 U16 U17 U18 U20 U21 U22 U24 U29 U30 U31 U32 U38 K01 K02 K05 K09 K10
TK04	<p>Symptomatology of cardiovascular diseases - (Part 1). Endocarditis. Acquired heart defects. Bedside examination. Basics of ECG.</p> <p>Credit to awarded for practical classes 1,2,3</p>	4	U01 U03 U07 U12 U13 U14 U16 U17 U18 U20 U21 U22 U24 U29 U30 U31 U32 U38 K01 K02 K05 K09 K10

TK05	Symptomatology of cardiovascular diseases - (part 2). Ischaemic heart disease. Hypertensive heart disease. Bedside examination. Fundamentals of ECG.	4	U01 U03 U07 U12 U13 U14 U16 U17 U18 U20 U21 U22 U24 U29 U30 U31 U32 U38 K01 K02 K05 K09 K10
TK06	Symptomatology of cardiovascular diseases - (part 3). Circulatory failure - acute and chronic. Cardiac rhythm disturbances. Bedside examination. Fundamentals of ECG.	4	U01 U03 U07 U12 U13 U14 U16 U17 U18 U20 U21 U22 U24 U29 U30 U31 U32 U38 K01 K02 K05 K09 K10
TK07	Symptomatology of gastrointestinal disorders - (Part 1). Diseases of the oesophagus. Peptic ulcer disease. Stomach cancer. Fundamentals of ECG. Credit to awarded for practical classes 4,5,6	4	U01 U03 U07 U12 U13 U14 U16 U17 U18 U20 U21 U22 U24 U29 U30 U31 U32 U38 K01 K02 K05 K09 K10
TK08	Symptomatology of gastrointestinal disorders - (part 2). Liver diseases - inflammation, cancer, cirrhosis. Diseases of the bile ducts - lithiasis, inflammation, cancer. Bedside examination. Fundamentals of ECG.	4	U01 U03 U07 U12 U13 U14 U16 U17 U18 U20 U21 U22 U24 U29 U30 U31 U32 U38 K01 K02 K05 K09 K10
TK09	Symptomatology of gastrointestinal disorders - (part 3). Inflammatory bowel diseases. Colorectal cancer. Pancreatitis. Pancreatic cancer. Bedside examination. Fundamentals of ECG.	4	U01 U03 U07 U12 U13 U14 U16 U17 U18 U20 U21 U22 U24 U29 U30 U31 U32 U38 K01 K02 K05 K09 K10
TK10	Symptomatology of kidney diseases. Nephrotic syndrome, nephrotic syndrome. Urinary tract infections Urinary tract stones Acute and chronic renal failure Basics of ECG. Credit for classes 7,8,9.	4	U01 U03 U07 U12 U13 U14 U16 U17 U18 U20 U21 U22 U24 U29 U30 U31 U32 U38 K01 K02 K05 K09 K10
TK11	Medical history - independent work with the patient. Discussion and credit for medical history Credit to awarded for practical classes ECG	4	U01 U03 U07 U12 U13 U14 U16 U17 U18 U20 U21 U22 U24 U29 U30 U31 U32 U38 K01 K02 K05 K09 K10
Simulation			

	1. Asthma attack with hypoxia		
--	-------------------------------	--	--

Recommended literature:
Reference literature
1. Bates' guide to physical examination and history taking. 11th ed. / Lynn S. Bickley, Peter G. Szilagy. Philadelphia etc. : Wolters Kluwer/Lippincott Williams & Wilkins 2013
2. Davidson's principles & practice of medicine. 23rd edition / edited by Stuart H. Ralston, Edinburgh, Elsevier 2018
3. The ECG Made Easy, Hampton, John R, London: Elsevier Health Sciences 2013
Complementary literature
1. Harrison's principles of internal medicine. Tinsley Randolph Harrison. New York: McGraw-Hill Education 2018
2. Macleod's essentials of examination. Euan A Sandilands; Katharine Strachan, Edinburgh: Elsevier 2021
3. The ECG Workbook, Angela Rowlands; Andrew Sargent, Keswick M&K Publishing 2014,

Student workload	
Form of student workload (course attendance, student's involvement, report preparation, etc.)	Student workload [h]
	In the teacher's assessment (opinion)
Contact hours with the teacher	34
Preparation for practical classes/seminar	50
Reading of designated literature	100
Writing a lab/practical classes report/preparing a project/reference paper, etc.	20
Preparation for the test/colloquium	
Preparation for the examination	
Other	
Total student workload	204

ECTS credits	
--------------	--

Notes
<p>*Example ways to verify learning outcomes:</p> <p>EP - written exam</p> <p>EU - oral test</p> <p>ET - test exam</p> <p>EPR - practical test</p> <p>K - colloquium</p> <p>R - paper</p> <p>S - testing of practical skills</p> <p>RZĆ - report on practical classes with discussion of results</p> <p>O - assessment of student's course involvement and attitude</p> <p>SL - Laboratory report</p> <p>SP - case study</p> <p>PS - assessment of ability to work independently</p> <p>W - a test before the beginning of class</p> <p>PM - multimedia presentation</p> <p>and other</p>