



<ul style="list-style-type: none"> Imprint 	
<i>Faculty name:</i>	The Department of Internal Medicine and Endocrinology
<i>Syllabus (field of study, level and educational profile, form of studies, e.g., Public Health, 1st level studies, practical profile, full time):</i>	Practical profile
<i>Academic year:</i>	2016/2017
<i>Module/subject name:</i>	Cases based medicine – Endocrinology
<i>Subject code (from the Pensum system):</i>	
<i>Educational units:</i>	1 WN
<i>Head of the unit/s:</i>	Prof. Tomasz Bednarczuk
<i>Study year (the year during which the respective subject is taught):</i>	
<i>Study semester (the semester during which the respective subject is taught):</i>	Summer
<i>Module/subject type (basic, corresponding to the field of study, optional):</i>	Optional
<i>Teachers (names and surnames and degrees of all academic teachers of respective subjects):</i>	Prof Tomasz Bednarczuk PhD, MD, MD. Urszula Ambroziak PhD, MD. Marek Czarkowski PhD, MD. Janusz Pachucki PhD, MD. Piotr Miśkiewicz PhD, MD. Marek Rosłon PhD, MD, Anna Kępczyńska-Nyk MD. Dorota Kaczmarek-Turek MD. Aleksander Kuś MD. Michał Popow PhD, MD.
<i>ERASMUS YES/NO (Is the subject available for students under the ERASMUS programme?):</i>	YES
<i>A person responsible for the syllabus (a person to which all comments to the syllabus should be reported)</i>	Michał Popow
<i>Number of ECTS credits:</i>	2
<ul style="list-style-type: none"> Educational goals and aims 	
<ul style="list-style-type: none"> The aim of the course is to provide the medical students with knowledge of uncommon endocrine disorders. 	

<ul style="list-style-type: none"> Initial requirements 		
<ul style="list-style-type: none"> Past an exam in polish language 		
<ul style="list-style-type: none"> Learning outcomes corresponding to the subject 		
A list of learning outcomes		
Symbol	Description	
(a number of a learning outcome and its category: W-knowledge, U-abilities, K-competence)		
W1	E.W3. Growth retardation , and puberty delay. Thyroid and parathyroid gland disorders. Pituitary and adrenal glands diseases. Secondary diabetes and obesity.	
W2	E.W7. Endocrine diseases their pathophysiology and diagnostic procedures. Knowledge of therapeutic options and treatment in the most common endocrine diseases: hypothalamus, pituitary gland, thyroid gland parathyroid glands adrenal glands (of cortex and medulla), ovaries, testes. The basic knowledge about diagnosis of neuroendocrine tumors, hypoglycemia, secondary obesity and electrolyte homeostasis.	
W3	E.U24. The knowledge how to interpret laboratory test results with identification of deviation reasons. The students are taught to select patients who should be diagnosed and treated in reference centers (i.e University Hospitals). Information about recent advances in endocrinology is also presented.	
<ul style="list-style-type: none"> Forms of classes 		
<i>Form</i>	<i>Number of hours</i>	<i>Number of groups</i>
<i>Lecture</i>	30	1
<i>Seminar</i>	-	-
<i>Practical classes</i>	-	-
<ul style="list-style-type: none"> Subject topics and educational contents 		
<p>W1, W2, W3 Meeting 1 22 of March 2017 4.00 – 6.30 PM tutor: M. Popow MD, PhD Workshops with active participation of students in solving clinical problems. Presentation of patients with calcium-phosphate metabolism disturbances.</p> <ul style="list-style-type: none"> Case report 1 Hypophosphatemic ricket (30 min.) Case report 2: FGF23 induced osteomalatia (45 min) Case report 1 Osteoporosis of pregnancy and lactation (PLO) (30 min.) Case report Tetany (30 min) 		
<p>W1, W2, W3 Meeting 2 29 of March 2017 4.00 – 6.30 PM tutor: M. Roslon MD, PhD Workshop with active participation of students in solving clinical problems. Hypopituitarism with a special concern to secondary hypogonadism: causes, diagnosis and treatment on the bases on the presentations of cases. Case report 1 and 2 Hypopituitarism in children and adults (60 min)</p>		

Case report 3: Post-traumatic hypopituitarism in boxers (30 min)

Case report 4: Difficulties in the treatment of hypopituitarism (45 min)

W1, W2, W3 Meeting 3 5 of April 2017 4.00 – 6.30 PM

tutors: M. Góralaska MD

Workshop with active participation of students in solving clinical problems. Presentation of patients with multiple endocrine neoplasm.

Case 1: Patient with multiple endocrine neoplasia type-1

Case 2: *Hereditary paraganglioma-pheochromocytoma syndrome*

Case 3: *Von Hippel-Lindau disease*

Case 4: *Neurofibromatosis type1*

W1, W2, W3 Meeting 4 12 of April 2017 4.00 – 6.30 PM

tutors: prof. T. Bednarczuk MD, PhD and prof. K Jażdżewski MD, PhD

Workshops with presentation topic of personalized medicine in tyreology with active participation of students in solving clinical problems.

Case 1: Individual approach to the patient with hyperthyroidism (30 min)

Case 2: Individual approach to the patient with hypothyroidism (30 min)

Case 3: Criminal puzzles in tyreology (15 min)

Case 4: From physical examination to molecular analysis – individual approach to the patient with thyroid nodule (60 min)

W1, W2, W3 Meeting 5 26 of April 2017 4.00 – 6.30 PM

tutor: P. Miśkiewicz MD, PhD

Workshops with the active participation of students in solving clinical problems. Presentation of the most complicated and interesting cases and ultrasound of the thyroid.

The 1st and the 2nd case: Sight threatening orbitopathy- neuropathic, keratopathy (40 min.)

The 3rd case: moderate to severe orbitopathy (30 min.)

Workshops:

ultrasound of the thyroid (65 min.)

W1, W2, W3 Meeting 6 10 of May 2017 4.00 – 6.30 PM

tutor : U. Ambroziak MD, PhD

Workshop entitled Drug induced thyrotoxicosis with active students participation in solving clinical problems.

Presentation of endocrine cases .

- Patient with drug resistant thyrotoxicosis (45 min.)
- Patient with thyrotoxicosis and liver disease (45 min.)
- Patient with thyrotoxicosis and neuroendocrine tumor (45 min.)

W1, W2, W3 Meeting 7 17 of May 2017 4.00 – 6.30 PM

Part 1 tutor: A. Kuś MD

Workshop entitled “The most common endocrine consultations in the hospital” with active students participation in solving clinical problems.

Case reports 1: Reduced or elevated TSH level (45 min)

Case reports 2: Accidentally founding in the adrenal gland (45 min)

Part 2 A Kępczyńska-Nyk MD

Workshop entitled “Endocrine treatment of transsexual persons” with active students participation in solving clinical problems. (45 min)

Case 1: Patient female to male

Case 2: Patient male to female

W1, W2, W3 Meeting 8 25 of May (**Thursday!!**) 2017 4.00 – 6.30 PM

tutor: J. Pachucki MD, PhD (3 x 45 min)

Workshop entitled “Hypoglycemia”

1. Case presentation with short quiz to evaluate background knowledge and clinical intuition regarding first step diagnostic procedures and initial therapy.

2. Seminars:

“Decision making for hospital diagnostics procedures”

“72-hour fasting test the diagnostic criteria for insulinoma”

„Radiological technique for localization of insulinomas”

3. Case presentations: “From clinical symptoms through diagnostic procedures to appropriate therapy”

4. Presentation of research clinical data from one to two articles.

5. Final multiple choice test assessing the acquired knowledge.

W1, W2, W3 Meeting 9 31 of May 2017 4.00 – 6.30 PM

tutors: Z. Bartoszewicz MSc, PhD and A. Kondracka MSc, PhD

Workshop entitled “Interpretation of the hormonal test results. How to approach the results which do not confirm the patient's clinical status” with active students participation in solving diagnostic problems.

- Examples of problematic test results. Explanations how to solve the problems (prolactin, vitamin D, thyroid autoantibodies, ACTH, PTH and thyroglobulin) (90 min).
- Problems in the interpretation of TSH, fT4 and fT3 results (45 min).

1, W2, W3 Meeting 10 7 of June 2017 4.00 – 6.30 PM

tutor: M. Czarkowski MD, PhD

Workshop with active participation of students in solving clinical problems. Presentation of patients with secondary endocrine hypertension.

Case 1: Low-symptomatic pheochromocytoma as an example of diversified clinical course in patients with pheochromocytoma (45 min).

Case 2: Severe hypertension with hypokalaemia (45 min)

Case 3: Is hypertension caused by thyroid abnormalities e.g.:

• Methods of verification of learning outcomes			
Learning outcome corresponding to the subject (symbol)	Forms of classes (symbol)	Methods of verification of a learning outcome	Credit receiving criteria
W1	Lectures Seminars Practical Classes	participation	presence
W2	Lectures Seminars Practical Classes	participation	presence
W3	Lectures Seminars Practical Classes	participation	presence
• Evaluation criteria			
Form of receiving credit in a subject:			
grade		criteria	
Hours score		<i>Proportional to the presences</i>	
• Literature			
<ul style="list-style-type: none"> Harrison's Principles of Internal Medicine 17th ed Mc Graw Hill 2008: Basic & Clinical Endocrinology ed FS Greenspan, DG Gardner 8th ed Mc Graw Hill 2007 			
• ECTS credits calculation			
Form of activity	Number of hours	Number of ECTS credits	
<i>Direct hours with an academic teacher:</i>			
Lectures	30	2	
Seminars	-	-	
Practical classes	-	-	
<i>Student's independent work (examples of the form of work):</i>			
Student's preparation for a seminar	-	-	
Student's preparation for a class	-	-	
Preparation for obtaining credits	-	-	
Other (please specify)	-	-	
Total	30	2	
• Additional Information			
<i>(e.g., information on a scientific association operating within the unit, information on commuting to university, etc.)</i>			

Signature of the Head of the Unit

Signature of the person responsible for the syllabus

Signatures of the Teachers