



**SYLLABUS of the MODULE (INTERNAL MEDICINE - NEPHROLOGY)  
General Information**

<b>Module title:</b>	
Module type	Obligatory
Faculty PMU	Faculty of Medicine
Major	Medicine
Level of study	long-cycle (S2J)
Mode of study	full-time studies
Year of studies, semester	Year 5, semester (IX, X)
ECTS credits (incl. semester breakdown)	1,5
Type/s of training	lectures (5 h) /seminars (5 h)/ practical (18 h) CSM (2 h)
Form of assessment*	<input checked="" type="checkbox"/> graded assessment: <input type="checkbox"/> descriptive <input checked="" type="checkbox"/> test <input type="checkbox"/> practical <input type="checkbox"/> oral  <input type="checkbox"/> non-graded assessment  <input type="checkbox"/> final examination <input type="checkbox"/> descriptive <input type="checkbox"/> test <input type="checkbox"/> practical <input type="checkbox"/> oral
Head of the Department/ Clinic, Unit	Prof. dr hab. n. med. Kazimierz Ciechanowski
Tutor responsible for the module	Prof. dr hab. n. med. Edyta Gołembiewska/ <a href="mailto:edyta.golembiewska@pum.edu.pl">edyta.golembiewska@pum.edu.pl</a>
Department's/ Clinic's/ Unit's website	Department of Nephrology, Transplantology and Internal Medicine, USK2, 70-111 Szczecin, al. Powstańców Wielkopolskich 72, tel. +48 91 466 11 96 <a href="https://www.pum.edu.pl/uniwersytet/dydaktyka_i_leczenie/kliniki_katedry_zaklady_i_pracownie/wm/klinika_nefrologii_transplantologii_i_chorob_wewnetrznych/">https://www.pum.edu.pl/uniwersytet/dydaktyka_i_leczenie/kliniki_katedry_zaklady_i_pracownie/wm/klinika_nefrologii_transplantologii_i_chorob_wewnetrznych/</a>
Language	English

\* replace  into  where applicable

### Detailed information

<b>Module objectives</b>		<p>The aim of nephrology course is theoretical and practical preparation in the field of:</p> <ol style="list-style-type: none"> <li>1. pre-specialist management of acute kidney injury</li> <li>2. the use of nephroprotective measures during diagnostic and therapeutic procedures in subjects at risk of acute kidney injury</li> <li>3. diagnostic and therapeutic management in:             <ol style="list-style-type: none"> <li>a. urinary tract infections</li> <li>b. interstitial nephritis</li> <li>c. glomerulonephritis</li> <li>d. systemic diseases with kidney involvement</li> </ol> </li> <li>4. diagnosis and therapeutic management of chronic kidney disease</li> <li>5. the basics of renal replacement therapy</li> <li>6. cooperation between a primary care physician and a nephrology center.</li> </ol>
Prerequisite /essential requirements	Knowledge	Basic knowledge of nephrology
	Skills	Medical history taking and physical examination of patients, with particular emphasis on nephrology, and interpretation of additional tests.
	Competences	The habit of self-education: working in a team.

Description of the learning outcomes for the subject /module			
No. of learning outcome	Student, who has passed the (subject) knows /is able to /can:	SYMBOL (referring the standards)	Method of verification of learning outcomes*
W01	Explains the environmental and epidemiological background of the most common diseases of the kidneys and urinary tract	E.W1	O, T
W02	Lists the causes, symptoms, principles of diagnosis and therapeutic management of the most common diseases of the kidneys and urinary tract occurring in adults and their complications, including acute kidney injury and chronic kidney disease, glomerular and interstitial diseases of the kidneys, kidney cysts, kidney stones, urinary tract infections, urinary tract cancers, in particular bladder and kidney cancers, as well as water-electrolyte and acid-base disorders: dehydration, overhydration, electrolyte disorders, acidosis and alkalosis	E.W7	O,T
W03	discusses the theoretical and practical background of laboratory diagnostics in kidney and urinary tract diseases, its importance and limitations	E.W40	O, T
W04	Explains the principles of qualification and performance as well as the most common	F.W3	O, T

	complications of basic surgical procedures and invasive diagnostic and therapeutic procedures		
W05	lists the clinical forms of the most common diseases of individual systems and organs, metabolic diseases and disorders of water-electrolyte and acid-base balance	C.W34	O, T
U01	takes medical history with an adult patient	E.U1	O, T
U02	plans diagnostic, therapeutic and preventive management	E.U16	O, T
U03	defines conditions in which the life expectancy, functional state or preferences of the patient limit the guidelines management specified for a given disease	E.U21	O, T
U04	plans specialist consultations	E.U32	O, T
K01	takes action and attitude towards the patient based on ethical principles, awareness of the social background and limitations resulting from the disease	K.4	O
K02	perceives and recognizes his/her own limitations and self-assesses deficits and educational needs	K.5	O
K03	implements the principles of professional collaboration and comradeship in a team of specialists, including representatives of other medical professions, also in a multicultural and multinational environment	K.9	O
K04	establishes and maintains a deep and respectful contact with the patient, as well as shows understanding for worldview and cultural differences, abides proper relations between the examiner and the person being examined	K.1	O
K05	is guided by the patient's well-being	K.2	O
K06	respects medical confidentiality and patients' rights	K.3	O

Table presenting LEARNING OUTCOMES in relation to the form of classes								
No. of learning outcome	Learning outcomes	Type of training						
		Lecture	Seminar	Practical	Clinical classes	Simulations	E-learning	Other...
W01	E.W1	X	X		X			
W02	E.W7	X	X		X			
W03	E.W40	X	X		X			
W04	F.W3	X	X		X			
W05	C.W34	X	X		X			
U01	E.U1		X		X	X		
U02	E.U16		X		X	X		

U03	E.U21		X		X	X		
U04	E.U32		X		X	X		
K01	K.4				X	X		
K02	K.5				X	X		
K03	K.9				X	X		
K04	K.1				X	X		
K05	K.2				X	X		
K06	K.3				X	X		

**Table presenting TEACHING PROGRAMME**

No. of a teaching programme	Teaching programme	No. of hours	References to learning outcomes
<b>Winter/summer semester</b>			
<b>Lectures 5 hours</b>			
TK01	Water-electrolyte balance	1	W01-W05, U02
TK02	Nephrological diagnostics	1	W01-W05, U02
TK03	Glomerulonephritis	1	W01-W05, U02
TK04	Renal replacement therapy - dialysis	1	W01-W05, U02
TK05	Acute kidney injury	1	W01-W05, U02
<b>Seminars 5 hours</b>			
TK01	Urinary tract infections	1	W01-W05, U01-U04
TK02	Chronic kidney disease	1	W01-W05, U01-U04
TK03	Kidney stones	1	W01-W05, U01-U04
TK04	ADPKD	1	W01-W05, U01-U04
TK05	Kidneys in the elderly	1	W01-W05, U01-U04
<b>Practical classes 18 hours</b>			
TK01	Patient with chronic kidney disease, clinical cases	6	W01-W05, U01-U04, K01-K06
TK02	Metabolic and electrolyte disorders in patients with chronic kidney disease, analysis of laboratory tests based on clinical cases	6	W01-W05, U01-U04, K01-K06
TK03	Patient with acute kidney injury, clinical cases, renal replacement therapy methods	6	W01-W05, U01-U04, K01-K06
<b>Simulation 2 hours</b>			
TK01	Scenario: patient with non-respiratory acidosis	2	U01-U04, K01-K06

<b>Booklist</b>
Obligatory literature:
1. Davidson's Principles and Practice of Medicine. Edited by Penman Ian D. et al. 24 <sup>th</sup> edition 2023

<b>Student's workload</b>	
Form of student's activity (in-class participation; activeness, produce a report, etc.)	Student's workload [h]
	Tutor

Contact hours with the tutor	30
Time spent on preparation to seminars/ practical classes	5
Time spent on reading recommended literature	4
Time spent on writing report/making project	
Time spent on preparing to colloquium/ entry test	6
Time spent on preparing to exam	
Other .....	
Student's workload in total	45
<b>ECTS credits for the subject (in total)</b>	<b>1,5</b>
<b>Remarks</b>	

\* Selected examples of methods of assessment:

EP – written examination

EU – oral examination

ET – test examination

EPR – practical examination

K – colloquium

R – report

S – practical skills assessment

RZC – practical classes report, incl. discussion on results

O – student's active participation and attitude assessment

SL – lab report

SP – case study

PS - assessment of student's ability to work independently

W – entry test

PM – multimedia presentation

other...

T – test after classes completion