

DESCRIPTION OF THE COURSE OF STUDY

Course code	0912.4.LEK.D.El	
Name of the course in	Polish	Elektrofizjologia
	English	Electrophysiology

1. LOCATION OF THE COURSE OF STUDY WITHIN THE SYSTEM OF STUDIES

1.1. Field of study	medicine
1.2. Mode of study	Full-time
1.3. Level of study	Uniform Master's studies
1.4. Profile of study*	General academic
1.5. Person preparing the course description	dr. hab. n. med. Prof. UJK Anna Polewczyk
1.6. Contact	anna.polewczyk@ujk.edu.pl

2. GENERAL CHARACTERISTICS OF THE COURSE OF STUDY

2.1. Language of instruction	English
2.2. Prerequisites*	

3. DETAILED CHARACTERISTICS OF THE COURSE OF STUDY

3.1. Form of classes	Classes: 25h (including 5h of e-learning)	
3.2. Place of classes	Courses in the teaching rooms of the UJK/ e-learning platform	
3.3. Form of assessment	Credit with grade	
3.4. Teaching methods	Classes:	
3.5. Bibliography	Required reading	Dr. David Callans. Josephson's Clinical Cardiac Electrophysiology Techniques and Interpretations. Wolters Kluwer Health, 2024
	Further reading	Kolodzińska A, Głowczyńska R, Grabowski M. Elektrokardiologia. PZWL 2022

4. OBJECTIVES, SYLLABUS CONTENT AND INTENDED LEARNING OUTCOMES**4.1. Course objectives (including form of classes)****Classes**

- C1. Obtaining information about heart rhythm disorders*
C2. Obtaining information on the indications for electrophysiological testing (EPS) and cardiac ablation as well as complications of EPS and ablation
C3. Obtaining information on the principles of cardiac pacing and complications associated with cardiac implantation electronic devices

(including e-learning)**4.2. Detailed syllabus (including form of classes)****Classes**

- 1. Diagnosis of cardiac arrhythmias. 5 h**
2. Indications for electrophysiological testing and cardiac ablation. Complications of electrophysiological testing and ablation. Prevention and treatment. 5 h e-learning
3. Indications for implantable cardiac pacemakers - principles of cardiac pacing. Complications associated with implanted permanent cardiac pacing devices. 5 h (including e-learning)

4.3. Intended learning outcomes

Code	A student, who passed the course	Relation to learning outcomes
within the scope of KNOWLEDGE :		
W01	Knows basic principles of stimulation and conduction in the nervous system and higher nervous functions, as well as physiology of striated and smooth muscles;	B.W19.
W02	Knows the functions and mechanisms of regulation of all organs and systems of the human body as well as the dependence between them;	B.W20.
within the scope of ABILITIES :		
U01	Is able to perform simple function tests evaluating the functioning of the human body as a stable regulation system (stress and exercise tests) and interpret the figures on the basic physiological variables;	B.U7.
within the scope of SOCIAL COMPETENCE :		
K01	Is able to recognize his/her own limitations and self-evaluate educational deficiencies and needs;	K.S5.
K02	Is able to use reliable information sources;	K.S7.
K03	Is able to give opinions concerning various aspects of professional activity;	K.S10.
K04	Is able to take responsibility for own decisions made during professional activities including own safety and safety of other people;	K.S11.

4.4. Methods of assessment of the intended learning outcomes

Teaching outcomes (code)	Method of assessment (+/-)																				
	Exam oral/written *			Test*			Project*			Effort in class*			Self- study*			Group work*			Others* Observat ion		
	Form of classes			Form of classes			Form of classes			Form of classes			Form of classes			Form of classes			Form of classes		
	L	C	.. .	L	C	.. .	L	C	.. .	L	C	.. .	L	C	.. .	L	C	.. .	L	C	.. .
W01									+	+		+	+		+	+					
W02									+	+		+	+		+	+					
U01									+	+		+	+								
K01-K04									+	+		+	+								

*delete as appropriate

4.5. Criteria of assessment of the intended learning outcomes

Form of classes	Grade	Criterion of assessment
Classes (C) (including e-learning)	3	From 61%-68% learning programme content on the basic level, replies chaotic, leading questions necessary.
	3,5	From 69%-76% learning programme content on the basic level, answers systematized, requires assistance from the teacher.
	4	From 77%-84% learning programme content on the basic level, answers systematized, independent. Solving of problems in typical situations.
	4,5	From 85%-92% the scope of presented knowledge exceeds the basic level based on the supplementary literature provided. Solving of problems in new complex situations.
	5	From 93% -100% the scope of presented knowledge exceeds the basic level based on independently acquired scientific sources of information.

5. BALANCE OF ECTS CREDITS – STUDENT’S WORK INPUT

Category	Student's workload
	Full-time studies
NUMBER OF HOURS WITH THE DIRECT PARTICIPATION OF THE TEACHER /CONTACT HOURS/	25
Participation in lectures*	
Participation in classes, seminars, laboratories*	25
Preparation in the exam/ final test*	
Others*	
INDEPENDENT WORK OF THE STUDENT/NON-CONTACT HOURS/	25
Preparation for the lecture*	
Preparation for the classes, seminars, laboratories*	25
Preparation for the exam/test*	
Gathering materials for the project/Internet query*	
Preparation of multimedia presentation	
Others*	
TOTAL NUMBER OF HOURS	50
ECTS credits for the course of study	2

**delete as appropriate*

Accepted for execution (date and signatures of the teachers running the course in the given academic year)

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