



Syllabus 2020/2021	
Description of the course	
Module/Course	Typical electrocardiographic changes in geriatric population Group of detailed education results Group code: B, E Group name: Basic Sciences and Non-interventional Clinical Sciences
Faculty	Medicine
Major	medicine
Specialties	Not applicable
Level of studies	Uniform magister studies X * 1 st degree studies <input type="checkbox"/> 2 nd degree studies <input type="checkbox"/> 3 rd degree studies <input type="checkbox"/> postgraduate studies <input type="checkbox"/>
Form of studies	X full-time <input type="checkbox"/> part-time
Year of studies	II-IV Semester: X Winter or X Summer
Type of course	<input type="checkbox"/> obligatory <input type="checkbox"/> limited choice <input checked="" type="checkbox"/> free choice / elective
Course	Xmajor <input type="checkbox"/> basic
Language of instruction	<input type="checkbox"/> Polish <input checked="" type="checkbox"/> English <input type="checkbox"/> other
* mark <input type="checkbox"/> with an X	
Amount of hours	
Form of education	
Unit teaching the course	Lectures (L) Seminars (SE) Auditorium classes (AC) Major Classes – not clinical (MC) Clinical Classes (CC) Laboratory Classes (LC) (CSC)Classes in Simulated Conditions Practical Classes with Patient (PCP) (SCM)Specialist Classes – magister studies Foreign language Course (FLC) Physical Education obligatory (PE) Vocational Practice (VP) Self-Study (Student's own work) E-learning (EL)
Winter Semester	
	10
Summer Semester	
	10



TOTAL per year:												
			10									
Educational objectives (max. 6 items)												
C1. General description of the geriatric population and its basic ecg problems												
C2. Practical exercises with typical ecg changes of the geriatric population												
C3. Characteristics of the ecg with pacemaker and implantable cardioverter												
C4. Paying students' attention to main problems and typical difficulties in analysis of ecg of the elderly												
Education result matrix for module/course in relation to verification methods of the intended education result and the type of class												
Number of course education result	Number of major education result	Student who completes the module/course knows/is able to	Methods of verification of intended education results (forming and summarising)	Form of didactic class <i>**enter the abbreviation</i>								
K 01	B.W.25 E. W.1 B.W.28	Student defines basic heart diseases in geriatric population and explains what kind of changes in electrocardiography they cause	Discussion, ECG exercise	MC								
K02	A. W.1 B. W. 30	Student describes the relations between pathological changes including morphological ones in cardiovascular system and electrocardiographic changes that is thickness of myocardium, enlargement of heart chambers, scar tissue in the heart muscle	Power point presentation ECG exercise	MC								
K03	B.W.19 B.W.25	Student analyzes relationships between decreased and increased body mass and explains difficulties in interpreting such recordings	Discussion, ECG exercise	MC								
K04	B. W.28 E.W.8 B.W.29	Student describes electrocardiographic recordings of the patients with pacemakers and implantable cardioverters-defibrillators (ICD) and explains why in geriatric population the number of implantable devices increase	Discussion, ECG exercise	MC								
K05	E.W.7 E. U.16	Student defines the indications to 24-hour ECG Holter monitoring and explains why in geriatric population it is more common necessity, and then student is able make conclusions from this test	Discussion Exercises in ECG	MC								
S 01	B.U.7	Student resolves problems of ecg changes in the elderly people after myocardial infarct, with hypertrophy of ventricles, with arterial hypertension, with valvular diseases	Evaluation of the ability of the simple ECG description	MC								
S 02	B. U.8	Student uses ecg to determine the basic activity of implantable devices eg. pacemakers -student performs simple analysis of the result of Report from 24-ech Holter monitoring and make conclusions	Evaluation of the ability of the diagnosing basic types of stimulation in ECG Evaluation of the ability	MC								



			to determine basic conclusions from 24-hour ECG monitoring	
<p>** L - lecture; SE - seminar; AC – auditorium classes; MC – major classes (non-clinical); CC – clinical classes; LC – laboratory classes; SCM – specialist classes (magister studies); CSC – classes in simulated conditions; FLC – foreign language course; PCP practical classes with patient; PE – physical education (obligatory); VP – vocational practice; SS – self-study, EL – E-learning .</p>				
<p>Please mark on scale 1-5 how the above effects place your classes in the following categories: communication of knowledge, skills or forming attitudes: Knowledge: .4... Skills: 5....</p>				
Student's amount of work (balance of ECTS points)				
Student's workload (class participation, activity, preparation, etc.)			Student Workload (h)	
1. Contact hours:			10	
2. Student's own work (self-study):			3	
Total student's workload			13	
ECTS points for module/course			0.5	
Comments				
<p>Content of classes (please enter topic words of specific classes divided into their didactic form and remember how it is translated to intended educational effects)</p>				
<p>Lectures</p> <ol style="list-style-type: none"> 1. 2. 3. 				
<p>Seminars</p> <ol style="list-style-type: none"> 1. 2. 3. 				
<p>Practical classes</p> <p>Practical classes</p> <ol style="list-style-type: none"> 1– Repetition of standard ECG description and discussing the characteristic changes in geriatric population. 2-Electrocardiographic changes in the elderly patients with arterial hypertension 3-Electrocardiographic changes in the elderly patients with coronary artery disease. 4-Electrocardiographic changes in the elderly patients with valvular diseases and discussing the most common abnormalities. 5-Discussing ecg in patients with implantable devices (ICD, pacemaker) and analysis of ecg. 6-Discussing most common arrhythmias in geriatric patients including lethal ones. 7- Exercising with electrocardiograms of the elderly people. 8- Discussion of basic mistakes in analysis of geriatric ecg. 9- Making own description of ECG of the geriatric patients 10-Practical exercises in ECG 				
<p>Other</p> <ol style="list-style-type: none"> 1. 				



2.

3.

etc. ...

Basic literature (list according to importance, no more than 3 items)

1. Advanced ECG: Boards and Beyond. Brendan Phibbs. Elsevier Health Sciences, 2006 - 294
2. 2013 ESC Guidelines on cardiac pacing and cardiac resynchronization therapy The Task Force on cardiac pacing and resynchronization therapy of the European Society of Cardiology (ESC). Developed in collaboration with the European Heart Rhythm Association (EHRA). Authors/Task Force Members The disclosure forms of the authors and reviewers are available on the ESC website www.escardio.org/guidelines. European Heart Journal (2013), 34, 2281–2329.
3. Epidemiology of Arrhythmias and Conduction Disorders in Older Adults. Grant V. Chow, Joseph E. Marine, Jerome L. Fleg. Clin Geriatr Med. 2012 Nov; 28(4): 539–553.

Additional literature and other materials (no more than 3 items)

1. 2015 ESC Guidelines for the management of patients with ventricular arrhythmias and the prevention of sudden cardiac death: The Task Force for the Management of Patients with Ventricular Arrhythmias and the Prevention of Sudden Cardiac Death of the European Society of Cardiology (ESC), Endorsed by: Association for European , Eur Heart J (2015) 36 (41): 2793-2867.
2. Cardiac Pacemakers Step-by-Step: An Illustrated Guide. S. Serge Barold, Roland X. Stroobandt, Alfons F. Sinnaeve.

Didactic resources requirements (e.g. laboratory, multimedia projector, other...)

PowerPoint projector, blackboard'

Preliminary conditions (minimum requirements to be met by the student before starting the module/course)

Basic information on anatomy of the heart, heart physiology and basic electrocardiography

Conditions to receive credit for the course

- Presence must be 100%
- In case of each absence including rector's days or dean's hours all the absences must be made up – preparation of the presentation or the essay
- Final test passed

Each absence must be made up, including rector's days or dean's hours.

Grade:	Criteria for course
Very Good (5.0)	obtaining result of 91-100 % in the final test
Good Plus (4.5)	obtaining result of 90-80 % in the final test
Good (4.0)	obtaining result of 70-80 % in the final test
Satisfactory Plus (3.5)	obtaining result of 61-70 % in the final test
Satisfactory (3.0)	obtaining result of 51% -60 % in the final test
Grade:	Criteria for exam (if applicable)
Very Good (5.0)	
Good Plus (4.5)	
Good (4.0)	



Satisfactory Plus (3.5)	
Satisfactory (3.0)	

Name of unit teaching course:	Department of Pathophysiology
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Person responsible for course:	Dr hab. n. med. Małgorzata Poręba
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List of persons conducting specific classes:	degree/scientific or professional title	Discipline	Performer profession	Form of classes
Małgorzata Anna Poręba	Dr hab. n. med.	medicine	physician	Classes non-clinical

Date of Syllabus development

24.05.2020....

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Syllabus developed by
..... Dr hab. n. med.

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kierownik

Signature of Head of teaching unit

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Signature of Faculty Dean

Wrocław Medical University
Faculty of Health Sciences
Vice-Dean for Academic Studies
prof. Ewelina Sobieszczkańska, PhD