Attachment to the Ordinance of the Rectorno 186/WST/2018

Subject name
Pulmonology

ECTS Code

Name of unit teaching the subject
THE ZBIGNIEW RELIGA FACULTY OF MEDICAL SCIENCES IN ZABRZE, THE UNIVERSITY OF TECHNOLOGY IN KATOWICE

Studies

Field of study	degree	mode	major	specialization
medical	Uniform Master's	Stationary/non-stationary		

Surname of instructor (instructors)

Type of class, method of implementation and specified number of hours

A.Type of class
- **lecture,**
- **clinical exercise classes,**
- **exercise classes under simulated conditions**
- **seminars,**

* mark where applicable

B.Method of implementation
- **classes in a didactic room**
- **clinical classes**
- **classes in a simulation workshop**

C. Amount of hours in accordance with the approved curriculum
25h of lectures + 35h of exercise classes

Amount of ECTS points

Description of awarding ECTS points:

Activity	Student workload
Participation in lectures	15 hours
Participation in practical classes	35 hours
Preparation for practical classes and colloquiums	- hours
Test preparation	3 hours
Consultations	2 hours
Total number of hours	55 hours / 30
Amount of ECTS points per module	**1.5 ETCS**

Didactic cycle
Semester 10

Subject status
- **mandatory** / facultative

Language of instruction
Polish

Didactic methods
Lectures
Test,
Demonstration of simulators and patients
Presentations,
Presentations with the use of additional examinations (e.g. ultrasound, computed tomography, radiography)
Discussion on a clinical case – case analysis
Practical exercises with the use of simulators
Clinical exercises in contact with the patient
Practicing medical procedures on simulators
Exercises will be implemented within the framework of clinical blocks
And classes in a simulation workshop
Simulators will be used to learn a physical examination, percussion and auscultation as well as the basic medical procedures including injections, thoracentesis, intubation

Forms and methods of passing and general grading criteria or examination requirements

A. Method of passing
- passing with a grade
- receiving a credit for a practical test

* mark where applicable

B. Forms of passing:
- written test
- practical assessment

C. Basic grading criteria
Are individually specified, correspond to the educational effects

Definition of preparatory subjects and initial requirements
Familiarity with autonomy, biochemistry, physiology, pharmacotherapy, microbiology, pathophysiology, propedeutics of internal diseases

Subject aim
1.Becoming familiar with the principles and organization of clinical work, basics of ethics in the everyday work of a doctor
2. Acquiring the abilities to conduct a medical interview and a physical examination and becoming familiar with clinical terminology, medical way of thinking in the diagnostic process in pulmonology
3. Independent gathering of case history
4. Preparing medical documentation (disease history)
5. performing basic medical procedures and interventions regarding pulmonology
6. Becoming familiar with and understanding the causes, symptoms, principles of diagnosis and therapeutic treatment of the most common diseases of the respiratory system

Curriculum
1. Symptoms – diagnosis of the diseases of the respiratory system
2. ATOPY, ALLERGY diagnosis, function and provocation tests, PRN and chronic medications
3. ASTHMA – treatment guidelines and GINA diagnosis
4. Chronic obstructive pulmonary disease – GOLD treatment guidelines
5. Respiratory tract infection – treatment, diagnosis according to the standards of the Polish National Program for the Protection of Antibiotics
6. Tuberculosis, sarcoidosis – treatment, diagnosis
7. Oncology in pulmonology
8. Respiratory failure – acute and chronic
9. Cystic fibrosis, sleep apnea

Exercise classes
1. Physical examination, clinical symptoms, diagnosis of pulmonary diseases – clinical exercises and exercises on a simulator
2. Lung cancers
3. Oxygen therapy and aerosol therapy in pulmonary practice, gasometry
4. Basics of spirometry, bronchoscopy, types of tomographic examinations in pulmonary diagnosis, sleep apnea syndrome
5. Life-threatening conditions in pulmonology – decompression of the pneumothorax, thoracentesis – practical exercises on simulators
6. Pulmonary education and rehabilitation, techniques used in treating tobacco addictions
7. Pulmonary embolism, pulmonary hypertension, interstitial lung diseases
8. Behavior in severe viral infections of the lungs
9. Occupational diseases of the respiratory system

Literature
Basic literature
1. INTERNA Szczeklika 2019, Medycyna Praktyczna
2. BADANIE KLINICZNE Macleoda. ed. Douglas G., wyd. EslevierEdraUrban&Partner, Wrocław 2017
3. SPIROMETRIA DLA LEKARZY – Wydawnictwo Górnicki, 2016, joint study
4. DIAGNOSTYKA OBRAZÓW KLATKI PIERSIOWEJ ATLAS PRZYPADKÓW KLINICZNYCH Gerald F. Abbott, Wydawca: MediPage, 2018
Supplementaryliterature
1. WIELKA INTERNA PULMONOLOGIA CZĘŚĆ 1 – 2018, seria/cykl : WIELKA INTERNA, Adam Antczak
2. European guidelines for treating bronchial asthma (GINA) COPD (GOLD). Polish guidelines for treating infections of the respiratory tracts (PNPPA)

Educational effects:

Effect no	**Description of an educational effect** **Number of the educational effect**	Type of grade Type of didactic classes
Knowledge:		

W1	E.W1 Knows the environmental and epidemiologic conditions of the most common disease	Written examination, practical written examination, presentation, oral response. Discussion and solving clinical problems in groups. Demonstration of medical techniques and imaging examinations. Independent completion of medical procedures under simulated conditions **L (Lecture) + CE (clinical exercise classes** **SE (exercises under simulated conditions)**
W2	E.W7.2 Knows and understands the causes, principles of diagnosis and therapeutic treatment of the most common diseases and their complications Respiratory diseases, including respiratory tracts, COPD, bronchial asthma, bronchiectasis, pulmonary embolism, infections of the respiratory system, interstitial lung diseases, mediastinal pleura, central and obstructive sleep apnea, respiratory failure, cancers of the respiratory system	
W3	E.W8 Knows and understands the course and the symptoms of the ageing process, as well as the principles of full geriatric assessment and interdisciplinary care regarding elderly patients, as far as pulmonology	
W4	E.W39 Knows the types of biological materials used in laboratory diagnosis and principles of collecting materials for examinations	
W5	E.W41 Knows the possibilities and limitations of laboratory examinations in medical emergencies in pulmonology	
W6	E.W40 Knows the theoretical and practical basis of laboratory diagnosis in pulmonology	
Abilities:		
U1	E.U1 Conducts a medical interview with an adult patient	Written examination, practical written examination, presentation, oral response. Discussion and solving clinical problems in groups. Demonstration of medical techniques and imaging examinations. Independent completion of medical procedures under simulated conditions **L (Lecture) + CE (clinical exercise classes** **SE (exercises under simulated conditions)**
U2	E.U3 Conducts a full and targeted physical examination of an adult patient	
U3	E.U7 Evaluates the general condition and the state of awareness and consciousness of the patient	
U4	E.U13 Evaluates and describes the somatic and mental condition of the patient	
U5	E.U14 Diagnoses direct life-threatening conditions	
U6	E.U16 Plans diagnostic, therapeutic and prophylactic treatment	
U7	E.U17 Conducts and analysis of possible harmful side effects of individual drugs as well as the interactions between them	
U8	E.U18 Suggests an individual approach to the therapeutic guidelines in force as well as other treatment methods in face of an unsuccessful or contradictive standard therapy	
U9	E.U20 Qualifies a patient for home-based and hospital treatment	
U10	E.U23 Suggest a rehabilitative program for the most common pulmonary diseases	
U11	E.U29 Performs the basic medical procedures and interventions	
U12	E.U32 Plans specialized consultations	
U13	E.U38 Maintains the patient’s medical documentation	

Social competencies:		
K1	Is aware of his own diagnostic and therapeutic limitations, educational needs, plans his educational activities	Clinical exercise classes Lectures
K2	Can work in a professional team, in a multi-cultural and multi-national community	
K3	Can establish and maintain a deep, respectful contact with the patient	
K4	Protects patient confidentiality and all patient rights	

Criteria of evaluating educational effects			
Educational effect	**For a grade of 3**	**For a grade of 4**	**For a grade of 5**
W1-W6 **U1-U13** **K1-K4**	The final test consists of 50 multiple choice questions. It is required to receive credit for practical classes to be allowed to take the final test In order to receive a credit for the examination a student must complete at least 61% of it correctly Insufficient (2.0) – below 61% Sufficient (3.0) – 61-69% Satisfactory (3.5) – 70-76% Good (4.0) – 77-84% Very Good (4.5) – 85-92% Excellent (5.0) – 93-100% The practical examination is based on correctly interpreting the results of a spirometry, gasometry and radiological examinations as well as taking case history, performing a physical examination and suggesting diagnosis and therapy for 2 patients. Grade: Pass/fail – pass means the student is allowed to take a written test		