





Medical University of Warsaw Faculty of Medicine - English Division 61 Żwirki i Wigury Street 02-091 Warsaw, Poland

http://www.wum.edu.pl/

6<sup>th</sup> YEAR CURRICULUM

6-year program

Academic year: 2023/2024

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### **AUTHORITIES OF MEDICAL UNIVERSITY OF WARSAW – TERM 2020-2024**

Rector – Professor Zbigniew Gaciong, MD, PhD Vice Rector for Student Affairs and Education – Professor Marek Kuch, MD, PhD Vice Rector for Science and Technology Transfer – Professor Piotr Pruszczyk, MD, PhD Vice Rector for Human Resources – Professor Agnieszka Cudnoch-Jędrzejewska, MD, PhD Vice Rector for Clinical Affairs and Investments – Professor Wojciech Lisik, MD, PhD Vice Rector for International Relations, Development and Promotion – Professor Paweł Włodarski, MD, PhD

### FACULTY AUTHORITIES OF MEDICAL UNIVERSITY OF WARSAW - TERM: 2020-2024

Faculty of Medicine – Professor Rafał Krenke MD, PhDEnglish Division – Faculty of Medicine – Assoc. Prof. Jacek Sieńko, MD, PhD.

### **DEAN'S OFFICE**

Head of the Dean's Office – Krystyna Jarząb, MA Student Administration Officer (1st, 2nd, 3rd -Year) – Aleksandra Chilecka Student Administration Officer (4th, 5th, 6th -Year) – Anna Rosa, MA

### **STUDENT GOVERNMENT REPRESENTATIVES:**

President – Catherine Gartside Vice President – Michail Koutentakis Secretary – Rakesh Roshan Student Rights' Representative – Loay Alayoubi Social Media Coordinator – Ishani Khanna Events Coordinator – Divil Amarnani, Alexis Vourtsis Academic Affairs Coordinator – Flynn Ott www: https://edsgwum.wixsite.com/edsg

### **CLASS REPRESENTATIVE:**

Ishani Khanna – 6 year

## SCHEDULE – ACADEMIC YEAR 2023/2024

6-year program

### WINTER SEMESTER - 01.10.2023 - 18.02.2024

| STUDENT'S ACADEMIC CLASSES: | 01.10.2023 - 17.12.2023 |
|-----------------------------|-------------------------|
|                             | 02.01.2024 - 28.01.2024 |
| WINTER HOLIDAYS:            | 18.12.2023 - 01.01.2024 |
| EXAM SESSION:               | 29.01.2024 - 04.02.2024 |
| DAYS OFF BETWEEN SEMESTER:  | 05.02.2024 - 11.02.2024 |
| RETAKE EXAM SESSION:        | 12.02.2024 - 18.02.2024 |

### SUMMER SEMESTER - 19.02.2024 - 30.09.2024

| STUDENT'S ACADEMIC CLASSES:   | 19.02.2024 - 28.04.2024 |
|-------------------------------|-------------------------|
|                               | 06.05.2024 - 09.06.2024 |
| SPRING HOLIDAYS:              | 29.04.2024 - 05.05.2024 |
| DAYS OFF BEFORE EXAM SESSION: | 10.06.2024 - 16.06.2024 |
| EXAM SESSION:                 | 17.06.2024 - 07.07.2024 |
| SUMMER HOLIDAYS:              | 08.07.2024 - 30.09.2024 |
| RETAKE EXAM SESSION:          | 02.09.2024 - 15.09.2024 |

### Curriculum of the 6<sup>th</sup> year of 6-year 2023/2024 ED program and the list of contents

| 6th ye |                                 | form         |          | Total          |         | inclue  | ding  |           |      |
|--------|---------------------------------|--------------|----------|----------------|---------|---------|-------|-----------|------|
| page   | subject                         | of<br>credit | semester | no of<br>hours | lecture | seminar | class | practical | ECTS |
| 5      | Internal Medicine-Cardiology    |              | 1&2      | 90             |         | 15      | 75    |           | 6    |
| 10     | Internal Medicine-Pulmonology   |              | 1&2      | 60             |         | 10      | 50    |           | 4    |
| 14     | Internal Medicine-Endocrinology | exam         | 1&2      | 30             |         | 5       | 25    |           | 2    |
| 19     | Internal Medicine-Diabetology   |              | 1&2      | 30             |         | 5       | 25    |           | 2    |
| 24     | Internal Medicine-Nephrology    |              | 1&2      | 30             |         | 5       | 25    |           | 2    |
| 29     | Pediatrics                      | exam         | 1&2      | 120            |         | 40      | 80    |           | 8    |
| 35     | Surgery                         | exam         | 1&2      | 120            |         | 20      | 100   |           | 8    |
| 41     | Obstetrics and Gynecology       | exam         | 1        | 60             |         | 10      | 50    |           | 4    |
| 46     | Psychiatry                      | exam         | 1        | 60             |         | 10      | 50    |           | 4    |
| 52     | Emergency Medicine              | exam         | 1        | 60             |         | 10      | 50    |           | 4    |
| 64     | Family Medicine                 | exam         | 1        | 60             |         | 10      | 50    |           | 4    |
| 69     | Specialty chosen by a student   | credit       | 2        | 180            |         | 30      | 150   |           | 12   |
|        |                                 |              |          | 900            | 0       | 170     | 730   | 0         | 60   |

### 6th year



## Internal Medicine – Practical Cardiology

| 1. IMPRINT                                   |                                                                                                                                                                            |
|----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Academic Year                                | 2023/2024                                                                                                                                                                  |
| Department                                   | Faculty of Medicine                                                                                                                                                        |
| Field of study                               | Medicine                                                                                                                                                                   |
| Main scientific discipline                   | Medical Science                                                                                                                                                            |
| Study Profile                                | General academic                                                                                                                                                           |
| Level of studies                             | Uniform MSc                                                                                                                                                                |
| Form of studies                              | Full time studies                                                                                                                                                          |
| Type of module/ course                       | obligatory                                                                                                                                                                 |
| Form of verification of learning<br>outcomes | exam                                                                                                                                                                       |
| Educational Unit / Educational Units         | 1st Department of Cardiology (1WR), 1A Banacha St., 02-097 Warsaw, POLAND<br>Phone: 22 599 29 58 e-mail: <u>cardiology@wum.edu.pl</u><br>WWW: http://cardiology.wum.edu.pl |

| Head of Educational Unit / Heads of<br>Educational Units | prof. dr hab. Marcin Grabowski                                                                                                                                                                                                                                                                                                                                                                                                                              |
|----------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Course coordinator                                       | Assoc. Professor Michał Marchel, MD PhD, phone: 22 599 19 58, e-mail:<br>michal.marchel@wum.edu.pl                                                                                                                                                                                                                                                                                                                                                          |
| Person responsible for syllabus                          | Assoc. Professor Michał Marchel, MD PhD, phone: 22 599 19 58, e-mail:<br>michal.marchel@wum.edu.pl                                                                                                                                                                                                                                                                                                                                                          |
| Teachers                                                 | Marcin Grabowski MD, Paweł Balsam MD, Aleksandra Gąsecka MD, Renata Główczyńska<br>MD, Ewa Szczerba MD, Martyna Zaleska MD, Jakub Maksym MD, Agata Tymińska MD, ,<br>Krzysztof Ozierański MD, Karol Zbroński MD, Łukasz Januszkiewicz MD, Michał Peller MD,<br>Szymon Jonik MD, Agnieszka Kołodzińska MD, Michał Konwerski MD, Dorota Ochijewicz<br>MD, Michał Kowara MD, Cezary Maciejewski MD, Jakub Rokicki MD, Marek Wawrzacz MD,<br>Michał Marchel MD. |

| 2. BASIC INFORMATION                         |                     |          |                           |      |
|----------------------------------------------|---------------------|----------|---------------------------|------|
| Year and semester<br>of studies 6th year, 11 | . and 12th semester |          | Number of ECTS<br>credits | 6.00 |
| FORMS O                                      | F CLASSES           | Number   | ECTS credits calculat     | ion  |
| Contacting hours with academic tead          | cher                | of hours |                           |      |
| Lecture (L)                                  |                     |          |                           |      |
| Seminar (S)                                  |                     | 15       | 1                         |      |
| Classes (C)                                  |                     | 75       | 4                         |      |
| e-learning (e-L)                             |                     |          |                           |      |
| Practical classes (PC)                       |                     |          |                           |      |
| Work placement (WP)                          |                     |          |                           |      |
| Unassisted student's work                    |                     |          |                           |      |
| Preparation for classes and completion       | ons                 | 30       | 1                         |      |

| 3. | Course objectives                                                                                                                                                                                                                       |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 01 | Ability to diagnose and treat of common cardiovascular diseases as: ischemic heart diseases, valvular diseases, diseases of pericardium, endocardium and myocardium, acute and chronic heart failure, arterial hypertension primary and |
|    | secondary, common diseases of artery and veins, pulmonary hypertension.                                                                                                                                                                 |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | s of LEARNING – DETAILED DESCRIPTION OF EFFECTS OF LEARNING (concerns fields of study regulated by the Regulation of<br>of Science and Higher Education from 26 of July 2019; does not apply to other fields of study)                                                                                                                                                                                                                                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Code and number of of learning in accor with standards of learning in accor with standards of learning in accord by the standards of learning in a standards of learning in a standard | dance E.W.7                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Knowledge – Gradu                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | ate* knows and understands:                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| G.K1/ E.W3 p. 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Knowledge of etiology, symptoms, diagnostics and treatment of common cardiovascular diseases as: ischemic heart<br>diseases, valvular diseases, diseases of pericardium, endocardium and myocardium, acute and chronic heart failure,<br>arterial hypertension primary and secondary, common diseases of artery and veins, pulmonary hypertension.                                                                                                           |
| G.K1/ E.W7 p.1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <ul> <li>Knowledge of reasons, symptoms, diagnostic and treatment procedures of the most frequent internal diseases and their complications in adult patients:</li> <li>1) circulatory system diseases, including coronary heart disease, heart defects, endocardium disease, cardiomyopathy, pericardium diseases, cardiac failure (acute and chronic), artery and vein diseases, hypertension: essential and secondary, pulmonary hypertension,</li> </ul> |
| Skills– Graduate* is                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | s able to:                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| G.S1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Skills: history taking and physical examination of patients with cardiovascular diseases, basic interpretation of electrocardiography, indication for visualization tests like echocardiography, computed tomography, magnetic resonance imaging and coronary angiography                                                                                                                                                                                    |
| G.S1/ E.U1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | collect medical history from adult patients                                                                                                                                                                                                                                                                                                                                                                                                                  |
| G.S2/ E.U3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | conduct a complete and targeted physical examination in adults;                                                                                                                                                                                                                                                                                                                                                                                              |
| G.S3/ E.U12                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | perform the differential diagnosis of the most common diseases in adults and children;                                                                                                                                                                                                                                                                                                                                                                       |
| G.S4/ E.U13                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | assess and describe the patient's somatic and psychological states;                                                                                                                                                                                                                                                                                                                                                                                          |
| G.S5/ E.U16                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | plan diagnostic, therapeutic and preventive treatment;                                                                                                                                                                                                                                                                                                                                                                                                       |
| * In appendix to the l                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Regulation of Minister of Science and Higher education from 26th of July 2019 "graduate", not student is mentioned.                                                                                                                                                                                                                                                                                                                                          |

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| 5. Addition                        | AL EFFECTS OF LEARNING (non-compulsory) |
|------------------------------------|-----------------------------------------|
| Number of<br>effect of<br>learning | Effects of learning in time             |
| Knowledge – Grad                   | luate knows and understands:            |
| К1                                 | As above                                |
| Skills– Graduate is                | able to:                                |

| \$1                | As above                    |
|--------------------|-----------------------------|
| Social Competencie | es – Graduate is ready for: |
| SC1                | As above                    |

| Form of class                       | Class contents                                             | Effects of<br>Learning |
|-------------------------------------|------------------------------------------------------------|------------------------|
| Seminars/e-learning/bedside classes | Signs and symptoms of cardiovascular diseases (K1, S1, C1) | E.W.7                  |
| Seminars/e-learning/bedside classes | Chest Pain (K1, S1, C1)                                    |                        |
| Seminars/e-learning/bedside classes | Dyspnea (K1, S1, C1)                                       |                        |
| Seminars/e-learning/bedside classes | Palpitations (K1, S1, C1)                                  |                        |
| Seminars/e-learning/bedside classes | Syncope (K1, S1, C1)                                       |                        |
| Seminars/e-learning/bedside classes | Cardiovascular Prevention (K1, S1, C1)                     |                        |
| Seminars/e-learning/bedside classes | Cardiovascular Pharmacotherapy (K1, S1, C1)                |                        |
| Seminars/e-learning/bedside classes | Intensive Care (K1, S1, C1)                                |                        |
| Seminars/e-learning/bedside classes | Interventional Treatment (K1, S1, C1)                      |                        |
| Seminars/e-learning/bedside classes | Cardiosurgery (K1, S1, C1)                                 |                        |
| Seminars/e-learning/bedside classes | ECG - the normal cases (K1, S1, C1)                        |                        |
| Seminars/e-learning/bedside classes | ECG - basic abnormalities (K1, S1, C1)                     |                        |
| Seminars/e-learning/bedside classes | ECG – ischeamia (K1, S1, C1)                               |                        |
| Seminars/e-learning/bedside classes | ECG – arrhythmias (K1, S1, C1)                             |                        |
| Seminars/e-learning/bedside classes | ECG – interpretation (K1, S1, C1)                          |                        |

### 7. LITERATURE

### Obligatory

- 1. Eugene Braunwald, ed., Heart Disease. A Textbook of Cardiovascular Medicine, 11th edition, Philadelphia: W.B. Saunders Company, 2018.
- 2. John Camm, Thomas F. Lüscher, Gerard Maurer Patrick Serruys The ESC Textbook of Cardiovascular Medicine (3 edn), OUP Oxford, 2019.
- 3. Brian P. Griffin Manual of Cardiovascular medicine, 4th edition, Lippincott Williams & Wilkins, 2013.
- 4. Guidelines of the European Society of Cardiology (http://www.escardio.org/guidelines-surveys/esc-guidelines/Pages/GuidelinesList.aspx)

#### Supplementary

| ode of the cours<br>effect of learning |             | Completion criterion |
|----------------------------------------|-------------|----------------------|
| V.7                                    | Oral credit | Oral credit          |

| Dress code      | Medical clothing with short sleeves is recommended. Avoid wearing private clothing on the hospital grounds. If medical coats are used for private clothing, they must be fastened. Long hair must be tied up. It is necessary to change footwear to work footwear in accordance with the regulations. If diagnostic gloves are used, they should be put on after hand washing and / or disinfection, immediately prior to contact with the patient. |  |
|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Cardiology Club | contact: Marek Wawrzacz MD; marekjakub.wawrzacz@gmail.com                                                                                                                                                                                                                                                                                                                                                                                           |  |

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ATTENTION The final 10 minutes of the last class in the block/semester/year should be allocated to students' Survey of Evaluation of Classes and Academic Teachers.



## Internal Medicine – Advanced Pulmonology

| 1. Imprint                                               |                                                                                                                                                                                                                                                                                                         |
|----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Academic Year                                            | 2023/2024                                                                                                                                                                                                                                                                                               |
| Department                                               | Faculty of Medicine                                                                                                                                                                                                                                                                                     |
| Field of study                                           | Medicine                                                                                                                                                                                                                                                                                                |
| Main scientific discipline                               | Medical Science                                                                                                                                                                                                                                                                                         |
| Study Profile                                            | General academic                                                                                                                                                                                                                                                                                        |
| Level of studies                                         | Uniform MSc                                                                                                                                                                                                                                                                                             |
| Form of studies                                          | Full time studies                                                                                                                                                                                                                                                                                       |
| Type of module / course                                  | Obligatory                                                                                                                                                                                                                                                                                              |
| Form of verification of learning outcomes                | Credit                                                                                                                                                                                                                                                                                                  |
| Educational Unit / Educational Units                     | <ul> <li>3rd Department of Lung Diseases and Oncology, National Tuberculosis and Lung Diseases</li> <li>Research Institute</li> <li>26 Płocka Str., 01-138 Warsaw, ph: 48 22 43 12 108, e-mail: <u>3klinika@igichp.edu.pl</u></li> <li>www: https://www.igichp.edu.pl/3-klinika-chorob-pluc/</li> </ul> |
| Head of Educational Unit / Heads of<br>Educational Units | Mateusz Polaczek MD PhD, e-mail: m.polaczek@igichp.edu.pl                                                                                                                                                                                                                                               |
| Course coordinator                                       | Janusz SZOPIŃSKI, MD, PhD, email: <u>szopinski@tlen.pl</u> , phone: 22 4312279                                                                                                                                                                                                                          |

| Person responsible for syllabus | Janusz SZOPIŃSKI, Md, PhD                                                  |
|---------------------------------|----------------------------------------------------------------------------|
| Teachers                        | Mateusz POLACZEK, MD, PhD, Janusz SZOPIŃSKI, Md, PhD and Department's team |

| 2. BASIC INFORMATION                    |                               |          |                           |      |
|-----------------------------------------|-------------------------------|----------|---------------------------|------|
| Year and semester<br>of studies         | 6th year 11th & 12th semester |          | Number of ECTS<br>credits | 4.00 |
|                                         | FORMS OF CLASSES              | Number   | ECTS credits calculation  |      |
| Contacting hours with a                 | academic teacher              | of hours |                           |      |
| Lecture (L)                             |                               | -        |                           |      |
| Seminar (S)                             |                               | 10       | 1                         |      |
| Classes (C)                             |                               | 50       | 2                         |      |
| e-learning (e-L)                        |                               | -        |                           |      |
| Practical classes (PC)                  |                               | -        |                           |      |
| Work placement (WP)                     |                               | -        |                           |      |
| Unassisted student's work               |                               |          |                           |      |
| Preparation for classes and completions |                               | 5        | 1                         |      |

| 3. | Course objectives                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 01 | The aim of the course is to revise information learned during Pulmonology classes in 4th year and to elaborate on some specific issues. Classes are about: (i.) etiology and symptoms in pulmonology that are meet during work as general practitioner; (ii.) diagnostic procedures and tests used in pulmonology and interpretation of the results; (iii.) management of the most common pulmonary diseases; (iiii.) urgent cases in pulmonology and thoracic surgery. |

| to the Regulation of Minister of Science and Higher |
|-----------------------------------------------------|
| 0                                                   |
|                                                     |

Knowledge – Graduate\* knows and understands:

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| G.K1/ E.W1                                                                                                                                                                                                        | Graduate has the knowledge about causes and symptoms of lung diseases.                                                                                                                                                                                                    |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| G.K2/ E.W7, 2                                                                                                                                                                                                     | 2 Graduate knows the theoretical basis for diagnostic test used in pulmonology.                                                                                                                                                                                           |  |
| G.K3                                                                                                                                                                                                              | Graduate knows the basis of pharmacology in pulmonology.                                                                                                                                                                                                                  |  |
| G.K4                                                                                                                                                                                                              | Graduate understands the role of thoracic surgery in diagnostic protocols.                                                                                                                                                                                                |  |
| Skills– Graduate* i                                                                                                                                                                                               | s able to:                                                                                                                                                                                                                                                                |  |
| G.S1/E.U1 Mastering the theoretical knowledge of pulmonology. Practical exercises with patients: anamnesis, physical examination and discussion that additional studies are necessary to establish the diagnosis. |                                                                                                                                                                                                                                                                           |  |
| G.S2/ E.U3                                                                                                                                                                                                        | Student extends the knowledge and masters their skills in the scope of pulmonology, student plans diagnostic procedures and therapeutic interventions.                                                                                                                    |  |
| G.S3                                                                                                                                                                                                              | Student is able to conduct intervention in life threatening situations in pulmonology                                                                                                                                                                                     |  |
| E.U12                                                                                                                                                                                                             | perform the differential diagnosis of the most common diseases in adults and children;                                                                                                                                                                                    |  |
| E.U17 analyse the side effects of particular medicines and interactions between them                                                                                                                              |                                                                                                                                                                                                                                                                           |  |
| E.U24                                                                                                                                                                                                             | interpret laboratory test results with the identification of reasons for deviation;                                                                                                                                                                                       |  |
| E.U29 p. 2 perform the basic medical procedures, including:<br>2) vital signs monitoring with the aid of a pulse oximeter and cardiac monitor,                                                                    |                                                                                                                                                                                                                                                                           |  |
| E.U30 p. 2,6,7,8.                                                                                                                                                                                                 | <ul> <li>assist in the following procedures and medical treatments:</li> <li>2) pleural cavity drainage,</li> <li>6) fine-needle aspiration,</li> <li>7) epidermal tests,</li> <li>8) intradermal and scarification tests, as well as interpret their results;</li> </ul> |  |

\* In appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019 "graduate", not student is mentioned.

| Number of<br>effect of | Effects of learning in time  |
|------------------------|------------------------------|
| learning               |                              |
| nowledge – Grad        | luate knows and understands: |
| K1 As above            |                              |
| kills– Graduate is     | able to:                     |
| S1                     | As above                     |
| ocial Competenc        | ies – Graduate is ready for: |
| SC1                    | As above                     |

| 6. CLASSES    |                |                     |
|---------------|----------------|---------------------|
| Form of class | Class contents | Effects of Learning |

| Seminars /bedside classes | All topics covered during classes at 4th year |
|---------------------------|-----------------------------------------------|
| Seminars /bedside classes | Tuberculosis diagnosis and treatment          |
| Seminars /bedside classes | Extrapulmonary tuberculosis                   |
| Seminars /bedside classes | Lung cancer, treatment                        |
| Seminars /bedside classes | Urgent cases in thoracic surgery              |
| Seminars /bedside classes | Lung function in restrictive lung diseases    |
| Seminars /bedside classes | Sarcoidosis and interstitial lung diseases    |
| Seminars /bedside classes | Introduction to thoracic surgery              |
| Seminars /bedside classes | Diseases of the pleura                        |

### 7. LITERATURE

### Obligatory

Harrison's Principles of Internal Medicine. Ed. Kurt J. I et al. McGraw-Hill, Inc.

### Supplementary

Clinical Pulmonary Medicine. Ed. Little, Brown and Company, Boston

| <b>8.</b> Verifying the e                | 8. Verifying the effect of learning      |                      |  |  |
|------------------------------------------|------------------------------------------|----------------------|--|--|
| Code of the course<br>effect of learning | Ways of verifying the effect of learning | Completion criterion |  |  |
| EW7                                      | Oral credit                              | 50%                  |  |  |

**9.** Additional INFORMATION (information essential for the course instructor that are not included in the other part of the course syllabus e.g. if the course is related to scientific research, detailed description of, information about the Science Club)

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### ATTENTION

The final 10 minutes of the last class in the block/semester/year should be allocated to students' Survey of Evaluation of Classes and Academic Teachers.



# Internal Medicine - Endocrinology

| 1. Imprint                                |                                                                                                                                                            |
|-------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Academic Year                             | 2023/2024                                                                                                                                                  |
| Department                                | Faculty of Medicine                                                                                                                                        |
| Field of study                            | Medicine                                                                                                                                                   |
| Main scientific discipline                | Medical sciences                                                                                                                                           |
| Study Profile                             | General academic                                                                                                                                           |
| Level of studies                          | Uniform MSc                                                                                                                                                |
| Form of studies                           | Full time studies                                                                                                                                          |
| Type of module / course                   | Obligatory                                                                                                                                                 |
| Form of verification of learning outcomes | completion                                                                                                                                                 |
| Educational Unit / Educational Units      | Department of Internal Medicine, Endocrinology and Diabetes, Medical University of<br>Warsaw; Mazovian Brodnowski Hospital, Kondratowicza 8, 03-242 Warsaw |

| Head of Educational Unit / Heads of<br>Educational Units | Prof. Przemysław Witek, MD, PhD                                                                                                                                                                                                        |
|----------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Course coordinator                                       | MD, Łukasz Działach, e-mail: <u>lukasz.dzialach@wum.edu.pl</u>                                                                                                                                                                         |
| Person responsible for syllabus                          | MD, Lukasz Działach, e-mail: <u>lukasz.dzialach@wum.edu.pl</u>                                                                                                                                                                         |
| Teachers                                                 | Przemysław Witek, MD, PhD<br>Roman Kuczerowski, MD, PhD<br>Aleksandra Dubiel, MD<br>Łukasz Działach, MD<br>Joanna Kuczerowska, MD<br>Agnieszka Maksymiuk-Kłos, MD<br>Magdalena Poteraj, MD<br>Joanna Sobolewska, MD<br>Zuzanna Żak, MD |

| 2. BASIC INFORMATION                    |                                        |                    |                           |                          |  |
|-----------------------------------------|----------------------------------------|--------------------|---------------------------|--------------------------|--|
| Year and semester<br>of studies         | VI winter/summer semester              |                    | Number of ECTS<br>credits | 2.00                     |  |
| FORMS OF CLASSES                        |                                        | Number<br>of hours | ECTS credits calculat     | ECTS credite calculation |  |
| Contacting hours with a                 | Contacting hours with academic teacher |                    |                           |                          |  |
| Lecture (L)                             |                                        |                    |                           |                          |  |
| Seminar (S)                             |                                        | 5                  | 0.5                       |                          |  |
| Discussions (D)                         |                                        | 25                 | 1.0                       |                          |  |
| e-learning (e-L)                        |                                        |                    |                           |                          |  |
| Practical classes (PC)                  |                                        |                    |                           |                          |  |
| Work placement (WP)                     |                                        |                    |                           |                          |  |
| Unassisted student's work               |                                        |                    |                           |                          |  |
| Preparation for classes and completions |                                        | 10                 | 0.5                       |                          |  |

| 01 | Improve the skills of proper physical examination.                                                                                                 |  |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 02 | Ability to conduct differential diagnosis and to use proper diagnostic path in endocrinology.                                                      |  |
| 03 | Ability to recognize and treat life-threatening conditions in endocrinology.<br>Ability to treat and monitor treatment of common endocrinopathies. |  |

# **4. STANDARDS OF LEARNING – DETAILED DESCRIPTION OF EFFECTS OF LEARNING** (concerns fields of study regulated by the Regulation of Minister of Science and Higher Education from 26 of July 2019; does not apply to other fields of study)

| Code and number of effect of | Effects in time (in accordance with appendix to the Regulation of Minister of Science and Higher |
|------------------------------|--------------------------------------------------------------------------------------------------|
| learning in accordance with  | education from 26th of July 2019)                                                                |
| standards of learning        | E.W1, E.W7, E.W40, E.W41, E.U1, E.U3, E.U7, E.U12, E.U13, E.U14, E.U16, E.U18, E.U24, E.U38      |

### Knowledge – Graduate\* knows and understands:

| G.K1 | knows and understands principles of history taking and physical examination (E.W7)                                                     |
|------|----------------------------------------------------------------------------------------------------------------------------------------|
| G.K2 | knows and understands the causes, symptoms, principles of diagnosis and therapeutic management in common endocrinopathies (E.W1, E.W7) |
| G.K3 | knows and understands interpretation of laboratory values and others basic tests (E.W7, E.W40, E.W41)                                  |

#### Skills- Graduate\* is able to:

| G.S1 | take history and perform physical examination of patients with endocrine disorder (E.U1, E.U3, E.U7, E.U13)                         |  |
|------|-------------------------------------------------------------------------------------------------------------------------------------|--|
| G.S2 | interpret laboratory tests and imaging tests in endocrinological diagnostic (E.U24)                                                 |  |
| G.S3 | provide differential diagnosis of particular symptoms including endocrine disorders (E.U12)                                         |  |
| G.S4 | plan diagnostic procedures and treatment in common endocrine disorders (E.U16)                                                      |  |
| G.S5 | prepare and analyse clinical cases (E.U13, E.U38)                                                                                   |  |
| G.S6 | recognize, diagnose and treat life-threatening conditions in endocrinology (E.U14)                                                  |  |
| G.S7 | present a patient case to other doctor, consult relevant abnormalities in laboratory and imaging tests (E.U13, E.U14, E.U16, E.U18) |  |

\* In appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019 "graduate", not student is mentioned.

| 5. Addition                                 | 5. Additional effects of learning (non-compulsory) |  |  |
|---------------------------------------------|----------------------------------------------------|--|--|
| Number of<br>effect of<br>learning          | Effects of learning in time                        |  |  |
| Knowledge – Graduate knows and understands: |                                                    |  |  |

К1

| К2                                           |  |  |
|----------------------------------------------|--|--|
| Skills- Graduate is able to:                 |  |  |
| S1                                           |  |  |
| S2                                           |  |  |
| Social Competencies – Graduate is ready for: |  |  |
| SC1                                          |  |  |
| SC2                                          |  |  |

| orm of class          | Class contents                                                                                                                                                                               | Effects of Learning |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| bedside classes       | Training of practical issues connected with making history, signs and symptoms assessment as well as diagnosis and treatment.                                                                |                     |
|                       | Effects of Learning: E.U1, E.U3, E.U7, E.U12, E.U13, E.U14, E.U16, E.U24, E.U38                                                                                                              |                     |
| case studies workshop | Students present cases relevant to the subject of the seminar. After every presentation there is discussion.                                                                                 |                     |
| sessions              | Effects of Learning: E.W1, E.W7, E.W40, E.W41, E.U13, E.U14, E.U16, E.U18                                                                                                                    |                     |
| seminars              | <ol> <li>Case studies – thyroid diseases. Traps in endocrine diagnostics on<br/>examples.</li> </ol>                                                                                         |                     |
|                       | 2. Diseases of adrenal glands.                                                                                                                                                               |                     |
|                       | <ol> <li>Disorders of calcium and phosphate metabolism. Osteoporosis.</li> <li>Identifying, analysing, and visualizing diagnostic paths for patients<br/>with pituitary diseases.</li> </ol> |                     |
|                       | 5. Water-electrolyte homeostasis and disorders.                                                                                                                                              |                     |

| 7. LITERATURE                                                                                       |  |
|-----------------------------------------------------------------------------------------------------|--|
| Obligatory                                                                                          |  |
| 1. Basic & Clinical Endocrinology ed FS Greenspan, DG Gardner 10th ed Mc Graw Hill 2018             |  |
| Supplementary                                                                                       |  |
|                                                                                                     |  |
| 1. Oxford Desk Reference: Endocrinology, Helen E. Turner, Richard Eastell, and Ashley Grossman 2018 |  |
| 2. Harrison's Principles of Internal Medicine 19th ed Mc Graw Hill 2015                             |  |

### **8.** VERIFYING THE EFFECT OF LEARNING

| Code of the course<br>effect of learning | Ways of verifying the effect of learning                                                         | Completion criterion                                                        |
|------------------------------------------|--------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| G.S1, G.S2, G.S3,<br>G.S4, G.S6          | Active participation in all seminars and classes.                                                | Obligatory attendance and active participation in all seminars and classes. |
| G.S5, G.S7                               | Preparing a power-point presentations.                                                           | Presentation of case report.                                                |
| G.K1, G.K2, G.K3                         | Execution of assigned tasks on the e-learning platform.                                          | Execution of assigned tasks on the e-learning platform.                     |
| G.K1, G.K2, G.K3                         | Oral colloquium at the end of the course with the appointed doctor separately for each subgroup. | 3.0 (satisfactory).                                                         |

#### **9.** Additional information

On the first day of the course, we meet at the clinic entrance (Internal Medicine, Endocrinology and Diabetes – Kondratowicza Street 8, building C, 7th floor) at 9:00 a.m. The detailed schedule of classes will be presented approximately one week before. Depending on the epidemiological situation, some seminars and classes may be conducted as e-learning. On the last day, students present case reports indicated by the teacher.

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ATTENTION The final 10 minutes of the last class in the block/semester/year should be allocated to students' Survey of Evaluation of Classes and Academic Teachers.



## Internal Medicine- Diabetology

| 1. Imprint                                |                                                                                                                                  |  |
|-------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|--|
| Academic Year                             | 2023/2024                                                                                                                        |  |
| Department                                | Faculty of Medicine                                                                                                              |  |
| Field of study                            | Medicine                                                                                                                         |  |
| Main scientific discipline                | Medical sciences                                                                                                                 |  |
| Study Profile                             | General academic                                                                                                                 |  |
| Level of studies                          | Uniform MSc                                                                                                                      |  |
| Form of studies                           | Full-time studies                                                                                                                |  |
| Type of module/ course                    | Obligatory                                                                                                                       |  |
| Form of verification of learning outcomes | Exam                                                                                                                             |  |
| Educational Unit / Educational Units      | Department of Internal Medicine, Endocrinology and Diabetology ; Mazovian Brodnowski<br>Hospital, Kondratowicza 8, 03-242 Warsaw |  |

| Head of Educational Unit / Heads of<br>Educational Units | Prof. Przemysław Witek, MD, PhD                                                                                                                                                                                                         |
|----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Course coordinator                                       | Paweł Kuca, MD, PhD, e-mail: <u>pawel.kuca@wum.edu.pl</u>                                                                                                                                                                               |
| Person responsible for syllabus                          | Paweł Kuca, MD, PhD, e-mail: <u>pawel.kuca@wum.edu.pl</u>                                                                                                                                                                               |
| Teachers                                                 | Prof. Przemysław Witek, MD, PhD<br>Marek Kowrach, MD, PhD<br>Paweł Kuca, MD, PhD<br>Roman Kuczerowski, MD, PhD<br>Dominika Cichońska-Musioł, MD<br>Olga Gajek-Daszczyńska, MD<br>Joanna Kuczerowska, MD<br>Agnieszka Maksymiuk-Kłos, MD |
|                                                          | Justyna Nowak, MD<br>Joanna Sobolewska, MD<br>Katarzyna Wolder, MD<br>Zuzanna Żak, MD                                                                                                                                                   |

| 2. BASIC INFORMATION                            |        |                           |      |  |
|-------------------------------------------------|--------|---------------------------|------|--|
| ear and semester<br>f studies                   |        | Number of ECTS<br>credits | 2.00 |  |
| FORMS OF CLASSES                                | Number | ECTS credits calculation  |      |  |
| Contacting hours with academic teacher of hours |        |                           |      |  |
| Lecture (L)                                     |        |                           |      |  |
| Seminar (S)                                     | 5      | 0.5                       |      |  |
| Classes (C)                                     | 25     | 0.5                       |      |  |
| e-learning (e-L)                                |        |                           |      |  |
| Practical classes (PC)                          |        |                           |      |  |
| Work placement (WP)                             |        |                           |      |  |
| Unassisted student's work                       |        |                           |      |  |
| Preparation for classes and completions         | 20     | 0.7                       |      |  |

| 3. | 3. Course objectives                                                                       |  |
|----|--------------------------------------------------------------------------------------------|--|
| 01 | O1 Improve the skills of history taking and proper physical examination.                   |  |
| 02 | Ability to conduct differential diagnosis and to use proper diagnostic path in diabetology |  |
| 03 | Ability to recognize and treat life-threatening conditions in diabetology                  |  |
|    | Ability to treat and monitor treatment of common types of diabetes                         |  |

# **4. STANDARDS OF LEARNING – DETAILED DESCRIPTION OF EFFECTS OF LEARNING** (concerns fields of study regulated by the Regulation of Minister of Science and Higher Education from 26 of July 2019; does not apply to other fields of study)

| Code and number of effect of | Effects in time (in accordance with appendix to the Regulation of Minister of Science and Higher |
|------------------------------|--------------------------------------------------------------------------------------------------|
| learning in accordance with  | education from 26th of July 2019                                                                 |
| standards of learning        | E.W1, E.W7, E.W40, E.W41, E.U1, E.U3, E.U7, E.U12, E.U13, E.U14, E.U16, E.U18, E.U24, E.U38      |
|                              |                                                                                                  |
|                              |                                                                                                  |

#### Knowledge – Graduate\* knows and understands:

| G.K1 | knows and understands principles of history taking and physical examination (E.W7)                                                                                                                                        |  |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| G.K2 | knows and understands the causes, symptoms, principles of diagnosis and therapeutic management in diabetes in adults including complications: neuropathy, nephropathy, retinopathy, cardiovascular diseases. (E.W1, E.W7) |  |
| G.K3 | knows and understands interpretation of laboratory values and others basic tests (E.W7, E.W40, E.W41)                                                                                                                     |  |

### Skills- Graduate\* is able to:

| G.S1take history and perform physical examination of patients with diabetes (E.U1, E.U3, E.U7, E.U13)G.S2interpret laboratory tests and imaging tests in diabetes (E.U24)G.S3provide differential diagnosis of particular symptoms including metabolic disorders (E.U12)G.S4plan diagnostic procedures and treatment in common types of diabetes (E.U16) |  |      |                                                                                                                                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|------|-------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                                                          |  | G.S5 | prepare and analyse clinical cases (E.U13, E.U38)                                                                                   |
|                                                                                                                                                                                                                                                                                                                                                          |  | G.S6 | recognize, diagnose and treat life-threatening conditions in diabetology (E.U14)                                                    |
|                                                                                                                                                                                                                                                                                                                                                          |  | G.S7 | present a patient case to other doctor, consult relevant abnormalities in laboratory and imaging tests (E.U13, E.U14, E.U16, E.U18) |

\* In appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019 "graduate", not student is mentioned.

| 5. Additiona                       | 5. Additional effects of learning (non-compulsory) |  |  |
|------------------------------------|----------------------------------------------------|--|--|
| Number of<br>effect of<br>learning | Effects of learning in time                        |  |  |

| Knowledge – Graduate knows and understands:  |                              |  |  |
|----------------------------------------------|------------------------------|--|--|
| К1                                           |                              |  |  |
| К2                                           |                              |  |  |
| Skills– Graduate is a                        | Skills- Graduate is able to: |  |  |
| S1                                           |                              |  |  |
| S2                                           |                              |  |  |
| Social Competencies – Graduate is ready for: |                              |  |  |
| SC1                                          |                              |  |  |
| SC2                                          |                              |  |  |

| m of class                       | Class contents                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Effects of Learning                                              |
|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|
| bedside classes                  | Training of practical issues connected with taking history, signs and symptoms assessment as well as diagnosis and treatment.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | E.U1, E.U3, E.U7,<br>E.U12, E.U13, E.U14,<br>E.U16, E.U24, E.U38 |
|                                  | <b>Effects of Learning:</b> E.U1, E.U3, E.U7, E.U12, E.U13, E.U14, E.U16, E.U24, E.U38                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                  |
| ase studies workshop<br>sessions | <ul> <li>Workshop sessions:</li> <li>1. Diabetes in pregnancy.</li> <li>2. Patient with newly diagnosed type 1 diabetes, principles of a diabetic diet, insulin therapy.</li> <li>3. Diagnostic and therapeutic management in the diabetic foot syndrome.</li> <li>4. Insulin, insulin pumps.</li> <li>5. Cardiological and nephrological aspects in diabetes</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | E.W1, E.W7,<br>E.W40, E.W41,<br>E.U13, E.U14,<br>E.U16, E.U18    |
|                                  | Effects of Learning: E.W1, E.W7, E.W40, E.W41, E.U13, E.U14, E.U16, E.U18                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                  |
| seminars                         | <ul> <li>S1. Differential diagnosis of types of diabetes and the main complications of diabetes</li> <li>S2. Principles of insulin therapy - initiation of insulin therapy, dose setting, insulin therapy regimens. Principles of insulin treatment in specific clinical situations: treatment of diabetes in pregnancy. Principles of treatment with an insulin pump. Modern technologies blood glucose measurement.</li> <li>S3. Acute complications of metabolic disorders in diabetes mellitus: perioperative period, sepsis and septic shock - patient in intensive care unit, acute coronary syndromes, stroke, acute pancreatitis, ketoacidosis, lactic acidosis, <i>Hyperosmolar hyperglycemic state</i> (HHS) and hypoglycemia.</li> <li>S4. Principles of diabetes treatment with oral medications. Prevention of cardiovascular complications in diabetes according to clinical trials and their importance for practice.</li> <li>S5. Common endocrinopathies in diabetology.</li> </ul> | E.W1, E.W7,<br>E.W40, E.W41                                      |

| 7.            | Literature                                                                                              |  |  |  |
|---------------|---------------------------------------------------------------------------------------------------------|--|--|--|
| Obligato      | ry                                                                                                      |  |  |  |
| 1.            | Kumar and Clark's Clinical Medicine, 8e/9e (Kumar, Kumar and Clark's Clinical Medicine) by Parven Kumar |  |  |  |
| 2.            | Textbook of Diabetes. Ed. by Richard I.G.Holt, Clive Cockram, 5 <sup>th</sup> Edition                   |  |  |  |
| Supplementary |                                                                                                         |  |  |  |
| 1.            | Harrison's Principles of Internal Medicine 20 th edition                                                |  |  |  |

| 8. Verifying the effect of learning      |                                                   |                                                                             |
|------------------------------------------|---------------------------------------------------|-----------------------------------------------------------------------------|
| Code of the course<br>effect of learning | Ways of verifying the effect of learning          | Completion criterion                                                        |
| G.S1, G.S2, G.S3,<br>G.S4, G.S6          | Active participation in all seminars and classes. | Obligatory attendance and active participation in all seminars and classes. |
| G.S5, G.S7                               | Preparing a power-point presentation.             | Presentation of case report.                                                |
| G.K1, G.K2, G.K3                         | Oral colloquium at the end of the course.         | 3.0 (satisfactory).                                                         |

# **9.** Additional INFORMATION (information essential for the course instructor that are not included in the other part of the course syllabus e.g. if the course is related to scientific research, detailed description of, information about the Science Club)

The course take place in the Department of Endocrinology, Diabetology and Internal Medicine – Mazovian Brodnowski Hospital, Kondratowicza Street 8, building C, 7th floor, elevators A and B). Obligatory changing room/cloakroom on -1 floor. In advance the representative of the group will receive the e-mail with detailed schedule of classes.

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ATTENTION The final 10 minutes of the last class in the block/semester/year should be allocated to students' Survey of Evaluation of Classes and Academic Teachers.



## Internal Medicine – Nephrology

| 1. IMPRINT                                               |                                                                                                                                                                                                                        |
|----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Academic Year                                            | 2023/2024                                                                                                                                                                                                              |
| Department                                               | Faculty of Medicine                                                                                                                                                                                                    |
| Field of study                                           | Medicine                                                                                                                                                                                                               |
| Main scientific discipline                               | Medical Science                                                                                                                                                                                                        |
| Study Profile                                            | General academic                                                                                                                                                                                                       |
| Level of studies                                         | uniform MSc                                                                                                                                                                                                            |
| Form of studies                                          | Full time studies                                                                                                                                                                                                      |
| Type of module/ course                                   | Obligatory                                                                                                                                                                                                             |
| Form of verification of learning outcomes                | Exam                                                                                                                                                                                                                   |
| Educational Unit / Educational Units                     | Department of Transplantation Medicine, Nephrology and Internal Diseases<br>Address: 59 Nowogrodzka St, 02-006 Warsaw<br>Phone: 48 22 502 12 32, fax: 48 22 502 21 26;<br>e-mail: medycyna.transplantacyjna@wum.edu.pl |
| Head of Educational Unit / Heads of<br>Educational Units | Professor Magdalena Durlik                                                                                                                                                                                             |
| Course coordinator                                       | Assoc. Professor MD PhD Joanna Pazik                                                                                                                                                                                   |

| Person responsible for syllabus | Assoc. Professor Joanna Pazik MD PhD                                                                                                                                                                                                                                                                                                                        |
|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Teachers                        | Magdalena Durlik, Professor, MD, PhD<br>Teresa Bączkowska, Assoc. Professor MD, PhD<br>Joanna Pazik, Assoc. Professor MD, PhD<br>Dominika Dęborska-Materkowska Assoc. Professor MD, PhD<br>Ewa Nowacka-Cieciura MD, PhD<br>Jolanta Gozdowska Assoc. Professor MD, PhD<br>Olga Tronina, MD, PhD<br>Agnieszka Furmańczyk-Zawiska, MD, PhD<br>Robert Świder MD |

| <b>2.</b> BASIC INFORMATION             |              |                           |                          |  |  |
|-----------------------------------------|--------------|---------------------------|--------------------------|--|--|
| Year and semester<br>of studies         | 2            | Number of ECTS<br>credits | 2.00                     |  |  |
| FORMS OF CLASS                          | SES          | Number                    | ECTS credits calculation |  |  |
| Contacting hours with academic teacher  | of hours     | ECTS credits calculation  |                          |  |  |
| Lecture (L)                             |              |                           |                          |  |  |
| Seminar (S)                             | 5            | 0.4                       |                          |  |  |
| Classes (C)                             |              | 25                        | 1.6                      |  |  |
| e-learning (e-L)                        | arning (e-L) |                           |                          |  |  |
| Practical classes (PC)                  |              |                           |                          |  |  |
| Work placement (WP)                     |              |                           |                          |  |  |
| Unassisted student's work               |              |                           |                          |  |  |
| Preparation for classes and completions |              |                           |                          |  |  |

| 3. |                                                                                                                                                                         |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 01 | After completing the course students should know causes, clinical presentation, differential diagnostics and treatment of common diseases of kidneys and urinary tract. |
| 02 | Students should know about risk factors, presentation and clinical course of kidneys' involvement in systemic diseases.                                                 |
| 03 | Students should know indications, contraindications and technique of kidney biopsy.                                                                                     |
| 04 | Students should know indications for renal replacement treatment (RRT). Basic methods of RRT, advantages and limitations.                                               |

| 4. | Standards of Learning – Detailed description of effects of Learning (concerns fields of study regulated by the Regulation of |
|----|------------------------------------------------------------------------------------------------------------------------------|
|    | Minister of Science and Higher Education from 26 of July 2019; does not apply to other fields of study)                      |

| Code and number of effect  | Effects in time (in accordance with appendix to the Regulation of Minister of Science and Higher |
|----------------------------|--------------------------------------------------------------------------------------------------|
| of learning in accordance  | education from 26th of July 2019)                                                                |
| with standards of learning |                                                                                                  |
|                            |                                                                                                  |

### Knowledge – Graduate\* knows and understands:

| G.K1             | <ul><li>B.W24 main quantitative parameters describing the capacity of particular systems and organs, including the scope of the standard and demographic factors affecting the value of such parameters;</li><li>Parameters determining kidney function</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| G.K2             | <ul> <li>E.W7. Causes, symptoms, principles of diagnosis and therapeutic management of common internal diseases in adults and their complications with special regards to:</li> <li>5) diseases of kidneys and urinary tract, acute and chronic kidney failure (in contemporary medical terminology Acute Kidney Injury and Chronic Kidney Disease) glomerulonephritides, diseases of kidney interstitium and of urine collecting system, renal cysts, kidney stone disease, urinary tract infections, kidney and urine collecting system tumors.</li> <li>9) water-electrolyte and acid-base disorders, states of dehydration and overhydration, electolyte imbalance, acidosis and alkalosis.</li> </ul> |
| G.K3             | C.W38 Basic principles of pharmacotherapy (with particular emphasis on kidney diseases)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Skills– Graduate | * is able to:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| G.S1             | <ul> <li>E.U1. Conduct medical interview with an adult patient;</li> <li>E.U3. Conduct a complete and targeted physical examination of an adult patient;</li> <li>E.U7. Assess the general condition, state of consciousness and awareness of the patient;</li> <li>E.U14 Recognize life-threatening health conditions</li> </ul>                                                                                                                                                                                                                                                                                                                                                                          |
| G.S2             | E.U16 Plan diagnostic, therapeutic and prophylactic procedures (with special focus on nephrological diseases);<br>E.U32 Plan specialist consultations<br>E.U20 Qualify the patient for home and hospital treatment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

|       | E.U20 Qualify the patient for home and hospital treatment                                  |
|-------|--------------------------------------------------------------------------------------------|
| G.S3  | E.U17 Analyze the possible adverse side effects of individual drugs and drugs interactions |
| C.U17 | C.U17 Use of Pharmaceutical information systems and medicinal products databases           |
| G.S4  | D.U15 Respect patients' rights;                                                            |
| G.S2  | E.U38 Keep the patient's medical records                                                   |

\* In appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019 "graduate", not student is mentioned.

| 5. Addition                        | AL EFFECTS OF LEARNING (non-compulsory)                                                                                                                                  |
|------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Number of<br>effect of<br>learning | Effects of learning                                                                                                                                                      |
| Knowledge – Grad                   | luate knows and understands:                                                                                                                                             |
| К1                                 | D.W6 The importance of verbal and non-verbal communication in the process of communicating with the patient and the concept of trust in the interaction with the patient |

| К2                    |                                                                                                                                                                |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Skills– Graduate is a | able to:                                                                                                                                                       |
| S1                    | E.U29 Perform basic medical procedures including:<br>Body temperature measurement (superficial and deep), pulse measurement, non-invasive pressure measurement |
| S2                    |                                                                                                                                                                |
| Social Competencie    | es – Graduate is ready for:                                                                                                                                    |
| SC1                   |                                                                                                                                                                |
| SC2                   |                                                                                                                                                                |

| Form of class    | Class contents                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Effects of Learning                                                                                   |
|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| Seminars         | <ul> <li>S1. Primary glomerulonephritis – diagnostics, clinical course and treatment</li> <li>S2. Secondary glomerulonephaties – diagnostics, clinical course and treatment<br/>(ANCA positive vasculitides, anti-GBM nephritis, lupus nephritis, cryoglobulinemic<br/>glomerulonephritis)</li> <li>S3. Renal replacement therapy.</li> <li>S4. Tubulointerstitial kidney diseases</li> <li>S5. Chronic Kidney Disease</li> </ul>                                                                                                                                                                                                                                                                                                                                                                             | B.W24, EW1, E.W7<br>E.W7<br>B.W21, E.W7<br>E.W7, D.U15<br>D.U15<br>E.W7, E.U17                        |
| Clinical classes | <ul> <li>C1 Patient with proteinuria and hypertension</li> <li>C2 Patient with serum creatinine 10 mg/dl, eGFR 8 ml/min, without the history of renal diseases</li> <li>C3 Patient with acute kidney injury and haemoptysis</li> <li>C4 Patient with anemia and back pain, eGFR 50 ml/min.</li> <li>C5. Diagnostic biopsy of a kidney</li> <li>C6 – Patient who finished treatment with cyclophosphamide 3 weeks ago due to rapidly progressive glomerulonephritis, presenting with fever</li> <li>C7 Patient with fever, haematuria, positive Goldflam's/ Murphy's sign, CRP 100 mg/l</li> <li>C8 Passive participation in kidney biopsy</li> <li>C9. Qualification and preparation for RRT.</li> <li>C10. Chronic kidney disease and end-of-life care.</li> <li>C11-C25. Individual case studies</li> </ul> | E.U1, E.U3, E.U7, E.U12, E.U20<br>E.U16<br>C.U17<br>E.U16<br>E.U1, E.U3, E.U7, E.U14, E.U17,<br>E.U20 |

| <b>7.</b> נ | LITERATURE |  |  | <br> | <br> | <br> |  |  |
|-------------|------------|--|--|------|------|------|--|--|
| Obligatory  | y          |  |  |      |      |      |  |  |

1. Harrison's Principles of Internal Medicine, 20e, part 9 Disorders of the Kidney and Urinary Tract

#### Supplementary

- 1. Primer on Nephrology, Haber M, Springer International Publishing, 2022
- 2. Oxford Handbook of Nephrology and Hypertension Oxford Handbooks Simon Steddon, second edition 2014

| Code of the course<br>effect of learning               | Ways of verifying the effect of learning                                                                                                                                                                                                | Completion criterion                                                                                                                                                                          |  |  |  |  |
|--------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|
| E.U1, E.U3, E.U7<br>E.U12, E.U14 E.U16,<br>E.U17 E.U20 | Continuous assessment during the course of the classes, presence and<br>active participation in the clinical rounds. Based on sick leave one day<br>absenteeism is allowed, the remaining ones must be worked off with<br>another group | e.g. threshold number of points                                                                                                                                                               |  |  |  |  |
| B.W21, B.W24, EW1,<br>E.W7<br>D.U15<br>C.U17, E.U17    | Fifteen questions MCQ test                                                                                                                                                                                                              | 9 points - 2.0 (failed)<br>10 points - 3.0 (satisfactory)<br>11 points - 3.5 (rather good)<br>12 points - 4.0 (good)<br>13 points - 4.5 (more than<br>good)<br>14-15 points - 5.0 (very good) |  |  |  |  |

- **9.** Additional INFORMATION (information essential for the course instructor that are not included in the other part of the course syllabus e.g. if the course is related to scientific research, detailed description of, information about the Science Club)
- 1. Realization of the program will be based on seminars presenting the current state of knowledge in specific subject and practical classes in clinical wards and out-patients clinics
- 2. Classes start at 8.00.
- 3. Students are expected to have their own lab coat, stethoscope, student's ID, shoes.
- 4. The student participate in classes (seminars and practice) only with the group. Possible group change is exceptional, justified by student's personal situation and requires individual approval..
- 5. All student information is provided on an ongoing basis on the Clinic's website www.klinikamedycynytransplantacyjnej.wum.edu.pl
- 6. The student is obliged to follow the Medical University of Warsaw Regulations (available on the University's website).
- 7. Address: Department of Transplantation Medicine, Nephrology and Internal Diseases, 59 Nowogrodzka St, 02-006 Warsaw, Pavilion 1A.
- 8. Contact email address: joanna.pazik@wum.edu.pl

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### ATTENTION

The final 10 minutes of the last class in the block/semester/year should be allocated to students' Survey of Evaluation of Classes and Academic Teachers.



## Pediatrics – pediatric cardiology & neonatology

| 1. IMPRINT                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|----------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Academic Year                                            | 2023/2024                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Department                                               | Faculty of Medicine                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Field of study                                           | Medicine                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Main scientific discipline                               | Medical Science                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Study Profile                                            | General academic                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Level of studies                                         | Uniform MSc                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Form of studies                                          | Full time studies                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Type of module / course                                  | Obligatory                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Form of verification of learning outcomes                | exam                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Educational Unit / Educational Units                     | <ol> <li>Department of Paediatric Cardiology and General Paediatrics (2M6)</li> <li>ul. Żwirki i Wigury 63A, 02-091 Warszawa, tel (+48 22) 31 79 588,</li> <li>e-mail: kardiologia@spdsk.edu.pl</li> <li>Department of Neonatology and Rare Diseases (NZYN)</li> <li>Children's Hospital</li> <li>63A Żwirki i Wigury St.</li> <li>02-091 Warszawa</li> <li>phone: 48 22 317 93 43, 32, e-mail: neonatologia@wum.edu.pl</li> <li>www.noworodki.wum.edu.pl</li> </ol> |
| Head of Educational Unit / Heads of<br>Educational Units | 1 Professor Bożena Werner, MD, PhD e-mail: <u>bozena.werner@wum.edu.pl</u> (2M6)<br>2 Professor Bożena Kociszewska-Najman, MD, PhD e-mail: <u>bnajman@wum.edu.pl</u> (NZYN)                                                                                                                                                                                                                                                                                          |
| Course coordinator                                       | 1 Radosław Pietrzak, MD, PhD <u>radoslaw.pietrzak@wum.edu.pl</u> (2M6)<br>2 Natalia Czaplińska MD, PhD, e-mail: <u>nczaplinska@wum.edu.pl</u> or nczaplinska@gmail.com<br>(NZYN)                                                                                                                                                                                                                                                                                     |
| Person responsible for syllabus                          | Radosław Pietrzak, MD, PhD <u>radoslaw.pietrzak@wum.edu.pl</u> (2M6)                                                                                                                                                                                                                                                                                                                                                                                                 |
| Teachers                                                 | <b>2M6:</b><br>Professor Bożena Werner, MD, PhD e-mail: bozena.werner@wum.edu.pl<br>Beata Kucińska, MD PhD; beata.kucinska@wum.edu.pl<br>Radosław Pietrzak, MD PhD; radoslaw.pietrzak@wum.edu.pl                                                                                                                                                                                                                                                                     |

| Halszka Kamińska, MD PhD; halszka.kaminska@wum.edu.pl             |
|-------------------------------------------------------------------|
| Tomasz Książczyk, MD; tomasz.ksiazczyk@wum.edu.pl                 |
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| Katarzyna Łuczak-Woźniak, MD; katarzyna.luczak-wozniak@wum.edu.pl |
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| Małgorzata Ludzia, MD; <u>mludzia@wum.edu.pl</u>                  |
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| Piotr Halicki MD; piotr.halicki@uckwum.pl                         |
| Magdalena Pniewska MD ; magdalena.pniewska@uckwum.pl              |
|                                                                   |
| NZYN:                                                             |
| Prof. Andrzej Piotrowski MD. PhD, ,                               |
| Natalia Czaplińska Md PhD,                                        |
| Monika Gruszfeld MD,                                              |
| Magdalena Zarlenga MD,                                            |
| Olga Pawlik MD,                                                   |
| Anna Perdzyńska MD,                                               |
| Ewa Wilkos MD                                                     |
| Anita Adamiec MD                                                  |
| Oksana Nazaruk MD                                                 |
| Magdalena Mastalerek MD                                           |
|                                                                   |

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| 2. BASIC INFORMATION                    |                                                 |                    |                          |      |
|-----------------------------------------|-------------------------------------------------|--------------------|--------------------------|------|
| Year and semester of studies            | 6 <sup>th</sup> year winter and summer semester |                    | Number of ECTS credits   | 8.00 |
| FORMS OF CLASSES                        |                                                 | Number<br>of hours | ECTS credits calculation |      |
| Contacting hours with                   | Contacting hours with academic teacher          |                    |                          |      |
| Lecture (L)                             |                                                 |                    |                          |      |
| Seminar (S)                             |                                                 | 40                 | 2.5                      |      |
| Discussions (D)                         |                                                 | 80                 | 4.5                      |      |
| e-learning (e-L)                        |                                                 |                    |                          |      |
| Practical classes (PC)                  |                                                 |                    |                          |      |
| Work placement (WP)                     |                                                 |                    |                          |      |
| Unassisted student's work               |                                                 |                    |                          |      |
| Preparation for classes and completions |                                                 | 50                 | 1                        |      |

| 3. | Course objectives                                                                                                                 |
|----|-----------------------------------------------------------------------------------------------------------------------------------|
| C1 | Knowledge about the principles of the assessment, differential diagnosis and treatment of the diseases in paediatric cardiology   |
| C2 | Ability of circulatory system examination.                                                                                        |
| C3 | Principles of diagnostic and therapeutic management of circulatory system                                                         |
| C4 | Rules of conduct in emergency situations in paediatric cardiology, in particular loss of consciousness, palpitations, chest pain. |
| C5 | Principles of diagnostic and therapeutic procedures in congenital heart diseases                                                  |
| C6 | Knowledge about to effective and empatic communication with parents and the patient                                               |
| 07 | Ability of newborn resuscitation                                                                                                  |
| 08 | Knowledge about standards of perinatal care                                                                                       |
| O9 | Ability of physical examination of newborn                                                                                        |
| 10 | Knowledge about most common problems in neonatal period including prematurity                                                     |

| Code and number<br>of the effect of<br>learning in<br>accordance with<br>standards of<br>learning | Effects in time (in accordance with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019)                                                                                                                                                                                                                               |  |  |  |
|---------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| Knowledge – Gradı                                                                                 | ate* knows and understands:                                                                                                                                                                                                                                                                                                                                      |  |  |  |
| G.K1/EW1                                                                                          | Knowledge of environmental and epidemiological circumstances of the most often seen diseases in General Pediatrics and Pediatric Cardiology                                                                                                                                                                                                                      |  |  |  |
| G.K2/EW3.2                                                                                        | Knowledge of etiology, signs, symptoms, diagnosis, treatment, and prophylaxis of most common circulatory system diseases including: congenital heart diseases, myocarditis, endocarditis, pericarditis, heart rhythm disturbances, cardiomyopathies, heart failure, hypertension.                                                                                |  |  |  |
| G.K2                                                                                              | Most common problems in the neonatal period: adaptation problems, complications related to preterm labor, congenital defects, jaundice, hematological diseases, infections, respiratory distress syndrome, perinatal asphyxia Guidelines for neonatal resuscitation.<br>Principles of nutrition of newborn, including breastfeeding,                             |  |  |  |
| E.W2                                                                                              | rules of nutrition of healthy and sick children, protective vaccinations and routine children's health checks;                                                                                                                                                                                                                                                   |  |  |  |
| E.W3 p. 3                                                                                         | <ul> <li>causes, symptoms, principles of diagnosis and therapeutic treatment of the most common diseases in children:</li> <li>acute and chronic diseases of the upper and lower respiratory tract, congenital defects of the respiratory tract, tuberculosis, cystic fibrosis, asthma, allergic rhinitis, urticaria, anaphylactic shock, angioedema,</li> </ul> |  |  |  |
| E.W4                                                                                              | the following terms: battered child, sexual harassment, mental retardation, conduct disorders: psychoses, addictions, eating and excretion disorders in children;                                                                                                                                                                                                |  |  |  |
| E.W6                                                                                              | the most common life threatening conditions in children and the management of these conditions;                                                                                                                                                                                                                                                                  |  |  |  |
| E.W33                                                                                             | procedures in the case of detection of an infectious disease;                                                                                                                                                                                                                                                                                                    |  |  |  |
| E.W35                                                                                             | basic features, environmental and epidemiological conditions of the most frequent human skin diseases;                                                                                                                                                                                                                                                           |  |  |  |

| E.W39                                                                                                              | types of biological materials used in laboratory diagnostics and the principles of obtaining samples for microbiologi testing;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |
|--------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Skills– Graduate*                                                                                                  | is able to:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |
| G.S1/EU12                                                                                                          | Ability to differentiate abnormal findings in anamnesis and physical examination in paediatric cardiology                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| G.S2/EU14                                                                                                          | Ability to assess live threatening conditions in paediatric cardiology                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |
| G.S3/EU16 Ability to plan diagnostic pathway and therapeutic and prophylactic procedures in basic paediatric disea |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |
| G.S4/EU20                                                                                                          | Ability to qualification to in-patient treatment in paediatrics.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |
| G.S5/E.U29.2                                                                                                       | Ability to perform basic medical procedures: cardio monitoring, pulsoxymetry, cardioversion, defibrilation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |
| G.S5/E.U29.8                                                                                                       | Ability to perform basic medical procedures: ECG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |
| G.S1                                                                                                               | Assess the condition of the newborn in Apgar scale and its maturity,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |
| G.S2                                                                                                               | Perform the differential diagnosis of the most common neonatal diseases                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |
| E.U2                                                                                                               | collect medical history from a child and its family;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |
| E.U4                                                                                                               | conduct a physical examination of children of any age;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |
| E.U7                                                                                                               | evaluate the general condition, the state of consciousness and awareness of a patient;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |
| E.U8                                                                                                               | assess the condition of newborns in the APGAR scale and assess their maturity, examine the newborn reflexes;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |
| E.U9                                                                                                               | compare percentile charts with anthropometric and blood pressure measurements;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |
| E.U14                                                                                                              | recognise immediate threats to life;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |
| E.U15                                                                                                              | recognise states under the influence of alcohol, drugs and other stimulants;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |
| E.U27                                                                                                              | qualify a patient for vaccinations;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |
| E.U29 p. 1-8                                                                                                       | <ul> <li>perform the basic medical procedures, including: <ol> <li>body temperature measurement, pulse count and non-invasive blood pressure check,</li> <li>vital signs monitoring with the aid of a pulse oximeter and cardiac monitor,</li> <li>spirometry, oxygen therapy, manual ventilation and basics of mechanical ventilation,</li> <li>oro- and nasopharyngeal airway device placement,</li> <li>intravenous, intramuscular, subcutaneous injections, intravenous cannulation, venous blood sampling,</li> <li>nasal, pharyngeal and skin swab taking,</li> <li>male and female urinary bladder catheterisation, nasogastric tube placement, stomach lavage, enema,</li> <li>standard resting electrocardiogram with adequate interpretation, electrical cardioversion an defibrillation,</li> </ol> </li> </ul> |  |

**5.** Additional effects of learning (non-compulsory)

| Number of<br>effect of<br>learning | Effects of learning in time                                                                                        |  |  |  |
|------------------------------------|--------------------------------------------------------------------------------------------------------------------|--|--|--|
| Knowledge – Grad                   | Knowledge – Graduate knows and understands:                                                                        |  |  |  |
| K1/EW3.9                           | Knowledge of aetiology, signs, symptoms, diagnosis, treatment, and prophylaxis of chosen acute infectious diseases |  |  |  |
| K2/AW.1                            | Anatomical, histological and embryological terminology in English                                                  |  |  |  |
| Skills– Graduate is                | s able to:                                                                                                         |  |  |  |
| S1/EU2                             | . Ability to make medical history with a child and his family                                                      |  |  |  |
| S2/EU4                             | Ability to perform physical examination in a child of every age.                                                   |  |  |  |
| S3/EU13                            | Ability to evaluate the level of consciousness and general state in children in various age                        |  |  |  |
| Social Competenc                   | ies – Graduate is ready for:                                                                                       |  |  |  |
| SC1                                | The student is able to establish and maintain deep and respectful contact with the patient.                        |  |  |  |
| SC2                                | The student is guided by the good of the patient, putting them first.                                              |  |  |  |
| SC3                                | The student respects medical confidentiality and patient's rights.                                                 |  |  |  |
| SC4                                | The student is aware of their own limitations and the ability to constantly improve their education.               |  |  |  |

| Form of class | Class contents                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Effects of Learning                                                                                                   |
|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
|               | <ul> <li>2M6:</li> <li>1/ Most common congenital heart diseases in children. 4</li> <li>2/ Acutely ill child in pediatric cardiology 2</li> <li>3/ ECG assessment in children 2</li> <li>4/Most common arrhythmias in children 4</li> <li>5/ Cardiomyopathies in children 2</li> <li>6/ Heart failure in children 2</li> <li>7/ Inflammatory diseases of the circulatory system 4</li> <li>8/ Syncope in children 2</li> <li>9/ Chest pain in children 2</li> <li>NZYN:</li> </ul> | EW1<br>EW3.2<br>EW3.9<br>EW6<br>AW1<br>DW6                                                                            |
| Seminars      | Examination of the newborn<br>Adaptation to the extrauterine life.<br>Delivery room management. Resuscitation in the delivery room.<br>Surgical problems in the newborn<br>Hyperbilirubinemia in neonates<br>Neonatal effects of maternal diabetes<br>Neonatal sepsis<br>Respiratory problems of newborn                                                                                                                                                                           | E.W2, E.W3, E.W4, E.W6,<br>E.W33, E.W35, E.W39, E.U2,<br>E.U4, E.U7, E.U8, E.U9, E.U14,<br>E.U15, E.U27, E.U29, K1-K4 |

| Practical classes | 2M6: BED SIDE CALSSESS<br>Training of practical issues connected with making history, signs and<br>symptoms assessment as well as diagnosis in paediatric cardiology<br>NZYN:<br>Practical classes at Neonatal Intensive Care Unit, delivery room,<br>Resuscitation classes with phantoms | EU2<br>EU4<br>EU13<br>EU29<br>K1<br>K2<br>K3<br>K4 |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|

| 7.            | LITERATURE                                                                     |  |  |  |  |
|---------------|--------------------------------------------------------------------------------|--|--|--|--|
| Obligato      | Obligatory                                                                     |  |  |  |  |
| 1.            | Nelson Essentials of Pediatrics. Marcdante KJ, Kliegman RM, Elsevier Saunders, |  |  |  |  |
| 2.            | Park's Pediatric Cardiology for Practitioners, Myung K. Park, MD, FAAP, FACC   |  |  |  |  |
| 3.            | 3. Neonatology for medical students, 2021, B.Kociszewska-Najman                |  |  |  |  |
| Supplementary |                                                                                |  |  |  |  |
| 1.            | Nelson Textbook of Pediatrics. Kliegman RM, Stanton BMD, Elsevier Saunders.    |  |  |  |  |

2. Gomella's Neonatology, 8th edition 2020

| Code of the course effect<br>of learning                                                                                                       | Ways of verifying the effect of learning                                                          | Completion criterion            |
|------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|---------------------------------|
| E.W1., E.W3. pkt 2.<br>E.W6., G.W8., G.W17.,<br>E.U2., E.U4., E.U9.<br>E.U12., E.U24,<br>E.U29. pkt 2,<br>E.U29. pkt 8,<br>G.U2., G.U6., G.U8. | This field defines the methods used for grading students e.g. pop quiz, test, written report etc. | e.g. threshold number of points |
| U25                                                                                                                                            | The correct execution of examinations on bedside classes                                          |                                 |
| ALL                                                                                                                                            | Final test                                                                                        | 2.0 (failed )<9 points          |

#### **9.** Additional information

It is mandatory to change shoes and have a white coat. Basic knowledge of heart anatomy is required, as well as entry knowledge for a specific seminar. There may be tests or pre-seminar checkups.

Medical confidentiality applies to students undergoing exercises at the Clinic (this applies to working at the patient's bed, as well as all medical records of the patient). Students are not allowed to provide information about the patient's condition, test results and the patient's treatment. All discussions about the patient (diagnosis, treatment, prognosis) may take place only without the patient's participation outside the patient's room, without the participation of other people.

It is strictly forbidden to take photos and record videos in any way showing patients, medical procedures or medical documentation.



## Surgery

| 1. IMPRINT                                               |                                                                                                                                                                                                                                                                                                                                                                           |  |
|----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Academic Year                                            | 2023/2024                                                                                                                                                                                                                                                                                                                                                                 |  |
| Department                                               | Faculty of Medicine                                                                                                                                                                                                                                                                                                                                                       |  |
| Field of study                                           | Medical Science                                                                                                                                                                                                                                                                                                                                                           |  |
| Main scientific discipline                               | Medical science                                                                                                                                                                                                                                                                                                                                                           |  |
| Study Profile                                            | General Academic                                                                                                                                                                                                                                                                                                                                                          |  |
| Level of studies                                         | Uniform MSc                                                                                                                                                                                                                                                                                                                                                               |  |
| Form of studies                                          | Full time studies                                                                                                                                                                                                                                                                                                                                                         |  |
| Type of module/ course                                   | obligatory                                                                                                                                                                                                                                                                                                                                                                |  |
| Form of verification of learning outcomes                | exam                                                                                                                                                                                                                                                                                                                                                                      |  |
| Educational Unit / Educational Units                     | 1 Department of General, Vascular and Transplant Surgery (1W14), Banacha 1a, Block B, 4-<br>th floor; tel.: (+48 22) 599 24 67, (+48 22) 599 24 68, e-mail: <u>chiront@wum.edu.pl</u><br>2 Department of General, Gastroenterological and Oncological Surgery (1W8)<br>1a Banacha St., 02-097 Warsaw<br>Phone: 48 22 599 22 57, e-mail: <u>gastrochirurgia@wum.edu.pl</u> |  |
| Head of Educational Unit / Heads of<br>Educational Units | 1 Prof. Zbigniew Gałązka MD, PhD <b>(1W14)</b><br>2 Prof. Maciej Słodkowski, MD, PhD <b>(1W8)</b>                                                                                                                                                                                                                                                                         |  |
| Course coordinator                                       | <b>(1W14)</b> Prof. Tomasz Jakimowicz MD, PhD<br>Michał Macech, MD, PhD email: <u>michal.macech@wum.edu.pl</u><br><b>(1W8)</b> Monika Wojtasik, MD email: <u>monika.wojtasik@wum.edu.pl</u>                                                                                                                                                                               |  |

| Person responsible for syllabus | Prof. Tomasz Jakimowicz MD, PhD, <u>tomj@wum.edu.pl</u>      |  |
|---------------------------------|--------------------------------------------------------------|--|
| Teachers                        | Department of General, Vascular and Transplant Surgery staff |  |

Γ

| 2. BASIC INFORMATION                                                                 |                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |
|--------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| r and semester<br>6 <sup>th</sup> year, 11 <sup>th</sup> & 12 <sup>th</sup> semester |                                                                                                           | Number of ECTS credits                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 8.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |  |
| FORMS OF CLASSES Number of hours of hours                                            |                                                                                                           | ECTS credits calculation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | ion                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |  |
|                                                                                      |                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |
| Lecture (L)                                                                          |                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |
| Seminar (S)<br>Classes (C)                                                           |                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |
|                                                                                      |                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |
| e-learning (e-L)                                                                     |                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |
| Practical classes (PC)                                                               |                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |
| Work placement (WP)                                                                  |                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |
| Unassisted student's work                                                            |                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |
| nd completions                                                                       |                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |
|                                                                                      | 6 <sup>th</sup> year, 11 <sup>th</sup> & 12 <sup>th</sup> semester<br>FORMS OF CLASSES<br>cademic teacher | 6 <sup>th</sup> year, 11 <sup>th</sup> & 12 <sup>th</sup> semester  FORMS OF CLASSES Cademic teacher  Ca | Number of ECTS credits         FORMS OF CLASSES       Number of hours       ECTS credits calculate         cademic teacher       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20       20 |  |  |

| 3. |                                                                                                                                                                                                                                                             |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 01 | Student takes medical history. Student assesses general condition of the patient, their consciousness and awareness.<br>Student describes patient's somatic complaints. Student performs full medical examination. Student makes differential<br>diagnosis. |
| 02 | Student knows and understands signs and symptoms, diagnosis and management of the most common diseases that require surgical treatment                                                                                                                      |
| 03 | Student knows indications, complications of the most common types of surgeries                                                                                                                                                                              |
| 04 | Student assists in typical surgery. Student is able to use basic surgical tools. Student obeys to rules of asepsis and antysepsis.<br>Student knows safety rules of preoperative and postoperative patient's management.                                    |
| 05 | Student participates in basic medical procedures.                                                                                                                                                                                                           |

**4. STANDARDS OF LEARNING – DETAILED DESCRIPTION OF EFFECTS OF LEARNING** (concerns fields of study regulated by the Regulation of Minister of Science and Higher Education from 26 of July 2019; does not apply to other fields of study)

| Code and number of effect of<br>learning in accordance with<br>standards of learning |                                                                                                                                                                                                                                                                        | <b>Effects in time</b> (in accordance with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019)         |  |  |
|--------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| Knowledge – Grad                                                                     | uate* knows a                                                                                                                                                                                                                                                          | and understands:                                                                                                                                  |  |  |
| F.W1 p. 1-4                                                                          | Student knows and understands signs and symptoms, diagnosis and management of the most common diseasesa)Acute and chronic abdominal diseasesb)Thoracic diseasesc)Head traumad)Politrauma                                                                               |                                                                                                                                                   |  |  |
| F.W3                                                                                 | Student knows indications, complications of the most common types of surgeries                                                                                                                                                                                         |                                                                                                                                                   |  |  |
| F.W4, F.W5                                                                           | Student knows safety rules of preoperative and postoperative patient's management.                                                                                                                                                                                     |                                                                                                                                                   |  |  |
| Skills– Graduate* i                                                                  | is able to:                                                                                                                                                                                                                                                            |                                                                                                                                                   |  |  |
| E.U1, F.W1,<br>F.W10, F.W13                                                          |                                                                                                                                                                                                                                                                        | es medical history. Student assesses general condition of the patient, their consciousness and<br>Student describes patient's somatic complaints. |  |  |
| E.U3, F.U6                                                                           | Student performs full medical examination.                                                                                                                                                                                                                             |                                                                                                                                                   |  |  |
| F.W10, F.W13,<br>E.U16                                                               | Student makes differential diagnosis.                                                                                                                                                                                                                                  |                                                                                                                                                   |  |  |
| F.U1                                                                                 | Student assists in typical surgery.                                                                                                                                                                                                                                    |                                                                                                                                                   |  |  |
| F.U2                                                                                 | Student is able to use basic surgical tools.                                                                                                                                                                                                                           |                                                                                                                                                   |  |  |
| F.U3                                                                                 | Student obeys to rules of asepsis and antysepsis.                                                                                                                                                                                                                      |                                                                                                                                                   |  |  |
| F.U5, F.U12,<br>F.U21, F.U22,<br>E.U7, E.U29                                         | <ul> <li>Student participates in basic medical procedures e.g.:</li> <li>a) Vital signs monitoring,</li> <li>b) Intramuscular and subcutaneous injections, collects blood samples from peripheral veins,</li> <li>Bladder catherer placing in men and women</li> </ul> |                                                                                                                                                   |  |  |
| D.U15                                                                                |                                                                                                                                                                                                                                                                        | Student cares about patient's rights i.e. protects his privacy, respects his right for intimacy, right for information about his health.          |  |  |
| D.W4, D.U5,                                                                          | Student respects physician- patient privilage.                                                                                                                                                                                                                         |                                                                                                                                                   |  |  |

D.U12

\* In appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019 "graduate", not student is mentioned.

| 5. Additional effects of learning (non-compulsory)             |                              |  |  |
|----------------------------------------------------------------|------------------------------|--|--|
| Number of<br>effect of Effects of learning in time<br>learning |                              |  |  |
| nowledge – Grad                                                | duate knows and understands: |  |  |

| K1                                           |             |  |
|----------------------------------------------|-------------|--|
| Skills– Graduate                             | is able to: |  |
| \$1                                          |             |  |
| Social Competencies – Graduate is ready for: |             |  |
| SC1                                          |             |  |

| Form of class | Class contents                                                      | Effects of Learning           |
|---------------|---------------------------------------------------------------------|-------------------------------|
|               | C1- Physical examination and medical history taking.                | F.W1, F.W3, F.W4, F.W5,       |
|               | C2- Medical case presentation.                                      | F.W14, F.U1, F.U2, F.U3, F.U4 |
|               | C3- Participation in the medical procedures undertaken on the ward, | F.U6, F.U12,                  |
| Classes (C)   | postoperative room.                                                 |                               |
|               | C4- Paritcipation in surgeries.                                     |                               |
|               | C5- Outpatient Department.                                          |                               |
|               | C6- Basic suturing techniques.                                      |                               |
|               | C7- Ultrasound imaging as a diagnostic and therapeutic tool.        |                               |
|               | S1- Aneurysm treatment                                              | F.W1, F.W3, F.W4, F.W5,       |
|               | S2- Hernia treatment.                                               | F.W14, F.U1, F.U2, F.U3, F.U4 |
|               | S3- Carotid arteries disease                                        | F.U6, F.U12,                  |
|               | S4- Preparation of the patient for surgery                          |                               |
|               | S5- Postoperative care                                              |                               |
|               | S6- Burns treatment.                                                |                               |
| Seminar (S)   | S7- Pancreatitis                                                    |                               |
| Seminar (S)   | S8- Limb ischemia                                                   |                               |
|               | S9- Breast cancer.                                                  |                               |
|               | S10- Colon cancer.                                                  |                               |
|               | S11- Trauma treatment                                               |                               |
|               | S12- Suture technique                                               |                               |
|               | S13- Suprarenal glands surgery                                      |                               |
|               | S14- Acute abdomen.                                                 |                               |

| 7. LITERATURE                                                                                          |
|--------------------------------------------------------------------------------------------------------|
| Obligatory                                                                                             |
| Priciples and Practice of Surgery. O. James Garden et al. Elsevier, 7th Edition                        |
| Handbook of Surgical Technique. A True Surgeon's Guide to Navigating the Operating Room. Ch.J.Hartman, |
| L.R.Kavoussi, Elsevier                                                                                 |
| Supplementary                                                                                          |
| Essential Surgery. Problems, Diagnosis and Management. C.R.G.Qiuck et al. Elsevier                     |
| Kirk's Basic surgical techniques. F. Myint, Elsevier                                                   |
| On Call Surgery. Adams et al. Elsevier, 4 <sup>th</sup> edition                                        |

## **8.** VERIFYING THE EFFECT OF LEARNING

| Code of the course effect of learning                                        | Ways of verifying the effect of learning                                                                                                   | Completion criterion                                                 |
|------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|
| e.g. G.K1, G.S1, K1                                                          | This field defines the methods used for grading students e.g. pop quiz, test, written report etc.                                          | e.g. threshold number of points                                      |
| F.W1, F.W3, F.W4,<br>F.W5, F.W14, F.U1,<br>F.U2, F.U3, F.U4,<br>F.U6, F.U12, | Activity during classes, presence during classes<br>Test: MCQ (20 questions based on seminars and bedside classes) and<br>practical (oral) | Activity during classes,<br>presence during all classes<br>Test: 60% |

# **9.** Additional INFORMATION (information essential for the course instructor that are not included in the other part of the course syllabus e.g. if the course is related to scientific research, detailed description of, information about the Science Club)

Two absences are allowed throughout the course. However they should be replaced by afternoon shifts (3-8 PM) that should be individually scheduled and completed before the colloquium.

Student Scientific Group "GRAFT", Tutor: Bohdan Solonynko MD PhD, e-mail: bohdan.solonynko@wum.edu.pl

Didactic consultations: time and availability of the teachers will be presented during classes.

Class regulations:

1. Attendance at classes is mandatory. All excused absences must be processed in the form agreed with the person

responsible for teaching in a given Department:

- Department and Clinic of General, Gastroenterological and Oncological Surgery (1W8):

Dr n med. Monika Wojtasik monika.wojtasik@wum.edu.pl

- Department of General, Vascular and Endocrine Transplantation Surgery (1W14)):

Maciej Jędrasik, MD, PhD maciej.jedrasik@wum.edu.pl, Wawrzyniec Jakuczun, MD, PhD wawrzyniec.jakuczun@wum.edu.pl

2. Students practicing at the bedside and in the procedure room are bound by medical confidentiality.

3. Students are not allowed to provide information about the patient's condition or methods of treatment.

4. Any discussions about the patient (diagnosis, treatment, prognosis) may only take place outside the patient's room.

5. Behave quietly, calmly and tactfully in the presence of sick people. The attitude towards the patient must be characterized by kindness and respect.

6. Collecting interviews and examining the patient should be carried out tactfully and discreetly, with full respect for his sensitivity and dignity. You should strive to establish full contact with the patient and gain his trust.

7. Students must remember that their presence in the Clinic may affect the spread of infections, so they must take care of cleanliness and hygiene, personal protective equipment and use protective measures according to recommendations applicable at the Medical University of Warsaw

8. If a student develops any local or general infection while doing the exercises, he or she should immediately notify the assistant who will make a decision regarding the student's further participation in classes.

9. Students participating in classes are obliged to be punctual and wear an ID badge.

10. A change of clothes is required before entering the operating room. In the operating room to ensure the patient's safety

Particularly stringent rules of behavior apply to everyone. Conversations are not allowed. Only movement is allowed in the area of the operating room designated by the assistant. It is mandatory to strictly comply with all instructions

issued by the assistant and following the comments of other employees of the operating theater.

11. When participating in classes, students are obliged to bring and wear clean aprons from the first day of classes and ID hadges. During classes, the student must

medical supplies, hospital footwear intended for participation in classes and ID badges. During classes, the student must have: stethoscope and pen.

12. It is strictly forbidden to take photos and record videos showing patients or medical procedures in any way or medical documentation during classes in the Clinic, the procedure room and the Emergency Room. Willingness to take photos or recordings showing only the image of the student in hospital attire or surroundings should be reported to the assistant and is not permitted without his permission.

13. Students should treat colleagues, doctors and nurses with whom they come into contact during classes with respect.

14. The student performs both the examination of patients and all procedures performed on the patient at the request and according to the instructions of the assistant with whom he works also explains and discusses all his doubts with assistant.

15. The student may make entries in the patient's medical records only at the request and under the supervision of an assistant. Any note in patient's records should be signed by the student with his name and surname and then checked and confirmed by the assistant.16. A student who is not prepared for class may not be admitted to them.

17. Final recommendations regarding the form of classes, students' participation in practical classes and seminars, and the use of protective items will be determined on the basis of the Regulations on Student Activities at the Medical University of Warsaw and the orders of the Rector of the Medical University of Warsaw.

18. Students attending classes must cover their nose and mouth with a surgical or FFP2 mask. Medical clothing should not reach below the elbow, aprons must be fastened, medical clothing such as a sweatshirt and trousers is recommended to avoid wearing clothing private on the hospital premises. You are not allowed to wear watches and/or jewelry or have your nails painted while staying in the Branch (nothing below the elbow rule). Please remind students of the "5 moments of hand hygiene".

19. The student has the opportunity to evaluate the classes by completing the university survey on the evaluation of classes and academic teachers. Additionally, students can submit comments to the Head of the Clinic and the person responsible for teaching in the Clinic.

We cordially invite students interested in Surgery to participate in the work of Student Scientific Clubs

1. Student Scientific Club at the Department and Clinic of General, Gastroenterological and Oncological Surgery (1W8):

Circle's supervisor – Dr. med. Katarzyna Mech.

2. Student Scientific Club at the Department and Department of General, Vascular, Endocrine and Transplant Surgery (1W14): Student Scientific Group "GRAFT", Tutor: Bohdan Solonynko MD PhD, e-mail: bohdan.solonynko@wum.edu.pl.

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## ATTENTION

The final 10 minutes of the last class in the block/semester/year should be allocated to students' Survey of Evaluation of Classes and Academic Teachers.



# Obstetrics and gynecology

| 1. Imprint                                               |                                                                                                                                                                                                                     |  |
|----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Academic Year                                            | 2023/2024                                                                                                                                                                                                           |  |
| Department                                               | Faculty of Medicine                                                                                                                                                                                                 |  |
| Field of study                                           | Medicine                                                                                                                                                                                                            |  |
| Main scientific discipline                               | Medical science                                                                                                                                                                                                     |  |
| Study Profile                                            | General academic                                                                                                                                                                                                    |  |
| Level of studies                                         | Uniform MSc                                                                                                                                                                                                         |  |
| Form of studies                                          | Full time studies                                                                                                                                                                                                   |  |
| Type of module / course                                  | Obligatory                                                                                                                                                                                                          |  |
| Form of verification of learning outcomes                | Credit                                                                                                                                                                                                              |  |
| Educational Unit / Educational Units                     | Department and Clinic of Obstetrics, Gynaecological Oncology and Gynaecology, MUW<br>8 Kondratowicza Street<br>Warsaw 03-242, phone: 48 22 32 65 818, e-mail: <u>klingin@wum.edu.pl</u><br>Building E, ground floor |  |
| Head of Educational Unit / Heads of<br>Educational Units | Prof. Włodzimierz Sawicki, MD, PhD                                                                                                                                                                                  |  |
| Course coordinator                                       | Prof. Krzysztof Cendrowski, MD, PhD, e-mail: krzysztof.cendrowski@wum.edu.pl                                                                                                                                        |  |

| Person responsible for syllabus | Anna Wnuk, PhD, <u>anna.wnuk@wum.edu.pl</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Teachers                        | Prof. Włodzimierz Sawicki, MD PhD;<br>Prof. Krzysztof Cendrowski, MD PhD;<br>Jolanta Mazurek-Kantor, MD PhD;<br>Michał Bachanek, MD PhD;<br>Anna Wnuk PhD;<br>Aleksandra Zielińska, MD PhD;<br>Seweryn Trojanowski, MD PhD;<br>Bohdan Dźwigała, MD PhD,<br>Bohdan Dźwigała, MD PhD,<br>Joanna Kociszewska, MD PhD,<br>Joanna Winiarek, MD;<br>Anna Słomka, MD;<br>Marta Chołuj, MD;<br>Witold Krzywdziński, MD;<br>Katarzyna Pietuch, MD;<br>Ewa Dobrzyńska, MD;<br>Wiktoria Malinowska, MD;<br>Mateusz Stypień, MD;<br>Szymon Bębenek, MD;<br>Monika Ostapów, MD;<br>Katarzyna Huzior, MD;<br>Natalia Świątek, MD;<br>Volka Ulan, MD;<br>Aleksandra Warska, MD;<br>Monika Pazura-Turowska, MD |

| 2. BASIC INFORMATION                   |                               |          |                          |      |
|----------------------------------------|-------------------------------|----------|--------------------------|------|
| Year and semester of studies           | VI year, 11 semester (winter) |          | Number of ECTS credits   | 4.00 |
|                                        | FORMS OF CLASSES              | Number   | ECTS credits calculation |      |
| Contacting hours with academic teacher |                               | of hours |                          |      |
| Lecture (L)                            |                               |          |                          |      |
| Seminar (S)                            |                               | 10       | 0,5                      |      |
| Classes (C)                            |                               | 50       | 2                        |      |
| e-learning (e-L)                       |                               |          |                          |      |
| Practical classes (PC)                 |                               |          |                          |      |
| Work placement (WP)                    |                               |          |                          |      |
| Unassisted student's work              |                               |          |                          |      |

| Preparation for classes and completions | 40 | 1,5 |
|-----------------------------------------|----|-----|
|                                         |    |     |

| 3. | Course objectives                                                                                                                           |
|----|---------------------------------------------------------------------------------------------------------------------------------------------|
| 01 | To obtain the theoretical knowledge on physiology and pathology of female genital tract including endocrinological and oncological aspects. |
| 02 | To obtain practical ability of history taking and gynaecological examination.                                                               |
| 03 | To obtain practical ability in management of gynaecological emergencies.                                                                    |
| 04 | To gain basic information about gynaecologic diseases and diagnosis and treatment of female genital organs malignancy.                      |
| 05 | To gain basic practical surgical experience in obstetrics and gynaecology.                                                                  |

| <b>4. STANDARDS OF LEARNING – DETAILED DESCRIPTION OF EFFECTS OF LEARNING</b> (concerns fields of study regulated by the Regulation of Minister of Science and Higher Education from 26 of July 2019; does not apply to other fields of study) |                                                                                                                                                                                                                                                               |                                                                                                                                           |  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| Code and number of effect of<br>learning in accordance with<br>standards of learning                                                                                                                                                           |                                                                                                                                                                                                                                                               | <b>Effects in time</b> (in accordance with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019) |  |  |
| Knowledge – Grad                                                                                                                                                                                                                               | uate* knows                                                                                                                                                                                                                                                   | and understands:                                                                                                                          |  |  |
| F.W9, p. 1-7<br>Skills– Graduate* i                                                                                                                                                                                                            | particular:1)menstrual cycle and its disorders,2)pregnancy,3)physiological and pathological childbirth and puerperium,4)inflammations and cancers of sexual organs,5)childbirth control,6)menopause,7)basic diagnostic methods and gynaecological treatments; |                                                                                                                                           |  |  |
| F.U11                                                                                                                                                                                                                                          | perform res                                                                                                                                                                                                                                                   | uscitation according to the latest advanced guidelines;                                                                                   |  |  |
| F.U12                                                                                                                                                                                                                                          | monitor perioperative care with the aid of basic vital signs;                                                                                                                                                                                                 |                                                                                                                                           |  |  |
| F.U13                                                                                                                                                                                                                                          | recognise the signs and symptoms proving an improper course of pregnancy (abnormal bleedings, contractile activity of the uterus);                                                                                                                            |                                                                                                                                           |  |  |
| F.U16                                                                                                                                                                                                                                          | recognise the beginning of delivery and improper delivery duration;                                                                                                                                                                                           |                                                                                                                                           |  |  |
| F.U18                                                                                                                                                                                                                                          | give recommendations, indications and contraindications to use contraceptives;                                                                                                                                                                                |                                                                                                                                           |  |  |
| G.S1                                                                                                                                                                                                                                           | can diagnose and establish priorities for medical procedures in typical gynaecological and obstetrics conditions.                                                                                                                                             |                                                                                                                                           |  |  |

| G.S2 | diagnose life threatening conditions                                                             |  |
|------|--------------------------------------------------------------------------------------------------|--|
| G.S3 | can plan therapeutic and diagnostic procedures in typical gynaecological and obstetrics diseases |  |

\* In appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019 "graduate", not student is mentioned.

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| Number of<br>effect of<br>learning           | Effects of learning in time                                                    |  |
|----------------------------------------------|--------------------------------------------------------------------------------|--|
| Knowledge – Graduate knows and understands:  |                                                                                |  |
| K1                                           | K1 Student respects medical confidentiality and patient's rights.              |  |
| Skills- Graduate is able to:                 |                                                                                |  |
| S1                                           | Student is guided by the good of the patients, putting them in the foreground. |  |
| Social Competencies – Graduate is ready for: |                                                                                |  |
| SC1                                          | Able to establish and maintain a deep and respectful contact with the patient. |  |

| Form of class    | Class contents                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Effects of Learning                       |
|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|
| Seminar (S)      | <ul> <li>S1. Infections and inflammations of the female genital tract.</li> <li>Acute diseases of the abdominal cavity in gynaaecology.</li> <li>S2. Menstrual cycle and its disorders. Puberty and climacterium.</li> <li>Selected endocrine syndromes: Gonadal dysgenesis, Turner's syndrome, Testicular feminization.</li> <li>S3. Congenital disorders of female genital organs. Vaginal and uterine prolapse. Urinary incontinence in women- diagnosis and treatment.</li> <li>S4. Couple infertility. Contraception. Gestational Trophoblastic Disease.</li> <li>S5. Fibroid uterus. Abnormal uterine bleeding. Endometrial hyperplasia. Endometrial cancer.</li> <li>S6. Pathology of the uterine cervix. Cervical cancer.</li> <li>S7. The role of gynaecologist in diagnosis and treatment of breast diseases. Pathology of vulva. Vulvar cancer. Physiotherapy in gynaecology.</li> <li>S8. Ovarian neoplasms. Ovarian cancer.</li> <li>S9. Basics of breast examination. Basics of history taking, examination and use of basic gynaecological procedures in gynecology.</li> <li>S10. Endometriosis</li> </ul> | F.W9 p. 1-7, K1, S1                       |
| Classes (C)      | Clinical practice in wards, practical classes with phantom demonstrations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | F.U11, F.U12, F.U13, F.U16,<br>F.U18, SC1 |
| e-learning (e-L) | Optional synchronous learning and asynchronous learning in online<br>education via e-learning.wum.edu.pl, Microsoft Teams, Zoom<br>(seminars only)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                           |

7. LITERATURE

## Obligatory

1. Llewelyn- Jones D.: "Fundamentals of Obstetrics and Gynaecology" Elsevier Limited, 2017.

#### Supplementary

- 1. Contemporary student's textbook of obstetrics and gynaecology edited in United States or the United Kingdom may be accepted.
- 2. Crash Course 4<sup>th</sup> Edition, Obstetrics and Gynaecology. Elsevier Limited, 2019.
- 3. Brian A. Magowan. Clinical Obstetrics and Gynaecology. 4th Edition. Elsevier Limited 2019.
- 4. Kate V. Meriwether. Obstetrics and Gynaecology Morning Report. Elsevier 2018.
- 5. Hao-Hua Wu. Gunner Googles. Augmented 1st Edition. Obstetrics and Gynaecology. Elsevier 2019.
- 6. John Guillebaud. 7<sup>th</sup> Edition Contraception. Elsevier 2017.

### **8.** VERIFYING THE EFFECT OF LEARNING

| Code of the course<br>effect of learning                          | Ways of verifying the effect of learning                                                                                                                                                                                                  | Completion criterion                           |
|-------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|
| e.g. G.K1, G.S1, K1                                               | This field defines the methods used for grading students e.g. pop quiz, test, written report etc.                                                                                                                                         | e.g. threshold number of points                |
| F.W9 p. 1-7; F.U11,<br>F.U12, F.U13, F.U16,<br>F.U18, K1, S1, SC1 | Complete the entire course and attendance at all classes with the exception of one permitted absence during the course. Student's presence confirmed in the student's card (S+PC) + examination of pregnant patient + MCQ test. MCQ exam. | Normal Distribution<br>(Gaussian Distribution) |

# **9.** Additional INFORMATION (information essential for the course instructor that are not included in the other part of the course syllabus e.g. if the course is related to scientific research, detailed description of, information about the Science Club)

1. The student is obliged to read the syllabus and time- table on the notice board in the department.

2. The student participate in classes (seminars and practice) only with the group. Possible group chance is allowed in exceptional, justified situations and requires individual approval (anna.wnuk@wum.edu.pl)

3. The student is obliged to follow the Medical University of Warsaw Regulations (available on the University's website).

4. During classes with patients, students keep seriousness and silence.

5. Meals and drinks should be consumed during breaks.

Classes at the Medical Simulation Centre at 8.30am - 2.00pm (Banacha St):

- gr 1 23 January;
- gr 2 24 November;
- gr 3 25 October;
- gr 4 2 October

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ATTENTION The final 10 minutes of the last class in the block/semester/year should be allocated to students' Survey of Evaluation of Classes and Academic Teachers.



# Psychiatry

| 1. Imprint                                |                                                                                                                                                                 |  |
|-------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Academic Year                             | 2023/2024                                                                                                                                                       |  |
| Department                                | Faculty of Medicine                                                                                                                                             |  |
| Field of study                            | Medicine                                                                                                                                                        |  |
| Main scientific discipline                | Medical science                                                                                                                                                 |  |
| Study Profile                             | General academic                                                                                                                                                |  |
| Level of studies                          | Uniform MSc                                                                                                                                                     |  |
| Form of studies                           | Full time stidues                                                                                                                                               |  |
| Type of module / course                   | Obligatory                                                                                                                                                      |  |
| Form of verification of learning outcomes | Exam                                                                                                                                                            |  |
| Educational Unit / Educational Units      | II Klinika Psychiatryczna / II Department of Psychiatry<br>ul. Kondratowicza 8, 03-242 Warszawa<br>phone: (+48 22) 326 58 92; e-mail: psychiatria@brodnowski.pl |  |

| Head of Educational Unit / Heads of<br>Educational Units | Prof. dr. hab. med. Andrzej Kokoszka<br>e-mail: <u>andrzej.kokoszka@wum.edu.pl</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|----------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Course coordinator                                       | Dr Marcin Obrębski<br>e-mail: mobrebski@wum.edu.pl                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Person responsible for syllabus                          | Prof. dr. hab. med. Andrzej Kokoszka<br>e-mail: andrzej.kokoszka@wum.edu.pl                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Teachers                                                 | Prof. dr hab. med. Andrzej Kokoszka<br>Dr n. med. Aleksandra Jodko-Modlińska<br>Dr n. o zdr. Marcin Obrębski<br>Lek. med. Magdalena Grusiecka-Stańczyk<br>Lek. med. Joanna Mikulska<br>Lek. med. Wiktor Buczek<br>Lek. Natalia Chłopecka<br>Lek. Natalia Chłopecka<br>Lek. Sebastian Koterwa<br>Lek. Matija Mitric<br>Lek. Radosław Napora<br>Lek. Natalia Olejnik<br>Lek. Sasza Rychlica<br>Lek. Nikołaj Rejewski<br>Lek. Przemysław Gałązka<br>Lek. Joanna Szczerba<br>Mgr Monika Gawłowicz<br>Mgr Joanna Mikuła<br>Mgr Renata Pionke<br>Mgr Karolina Ciesielka<br>Mgr Agnieszka Twarowska |

## **2.** BASIC INFORMATION

| Year and semester<br>of studies | VI vear I semester                                      |    | Number of ECTS<br>credits | 4.00 |
|---------------------------------|---------------------------------------------------------|----|---------------------------|------|
|                                 | FORMS OF CLASSES Contacting hours with academic teacher |    | ECTS credits calculation  |      |
| Contacting hours with a         |                                                         |    |                           |      |
| Lecture (L)                     |                                                         | 0  | (                         | )    |
| Seminar (S)                     |                                                         | 10 |                           | l    |
| Classes (C)                     |                                                         | 50 | 2                         | 2    |
| e-learning (e-L)                |                                                         | 0  | (                         | )    |
| Practical classes (PC)          |                                                         | 0  | (                         | )    |
| Work placement (WP)             |                                                         | 0  | (                         | )    |

| Unassisted student's work               |    |   |
|-----------------------------------------|----|---|
| Preparation for classes and completions | 60 | 1 |

| 3. | Course objectives                                                    |
|----|----------------------------------------------------------------------|
| 01 | History of psychiatry                                                |
| 02 | Bio-psycho-social aspects of mental disorders                        |
| 03 | General psychopathology                                              |
| 04 | Legal aspects of psychiatry                                          |
| 05 | Classifications of mental disorders                                  |
| O6 | Diagnostic methods in psychiatry                                     |
| 07 | Biological and psychosocial methods of treatment                     |
| 08 | To acquire skills of mental state assessment                         |
| 09 | Emergency and preliminary therapeutic management in mental disorders |

# **4. STANDARDS OF LEARNING – DETAILED DESCRIPTION OF EFFECTS OF LEARNING** (concerns fields of study regulated by the Regulation of Minister of Science and Higher Education from 26 of July 2019; does not apply to other fields of study)

Code and number of effect<br/>of learning in accordance<br/>with standards of learningEffects in time (in accordance with appendix to the Regulation of Minister of Science and Higher<br/>education from 26th of July 2019)

### Knowledge – Graduate\* knows and understands:

| E.W1.  | knows the environmental and epidemiological determinants of the most common mental illnesses                                                 |
|--------|----------------------------------------------------------------------------------------------------------------------------------------------|
| E.W10. | knows and understands the basic principles of pharmacotherapy in the elderly                                                                 |
| E.W11. | knows and understands the risks associated with hospitalization of the elderly                                                               |
| E.W12. | knows and understands the basic principles of organizing elderly care as well as the burdens of being a caregiver for<br>an elderly person   |
| E.W15. | knows the basic concepts in the pathogenesis of mental disorders                                                                             |
| E.W16. | knows the general psychiatric symptomatology and the principles of classifying mental disorders according to the main classification systems |

| E.W17 p. 1-5        | <ul> <li>knows the symptoms as well as principles of diagnosis and therapeutic treatment of the most common mental illnesses, including:</li> <li>a) schizophrenia</li> <li>b) affective and adaptive disorders</li> <li>c) eating disorders</li> <li>d) disorders associated with the use of psychoactive substances</li> </ul> |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| E.W18.              | knows the principles of diagnosis of and procedure for dealing with psychiatric emergencies                                                                                                                                                                                                                                      |
| E.W19.              | knows the characteristics of mental disorders and of treating these disorders in old age                                                                                                                                                                                                                                         |
| E.W20.              | knows the symptoms of mental disorders in the course of somatic diseases and their impact on the course of the<br>underlying disease as well as the prognosis and principles of treating these disorders                                                                                                                         |
| E.W21.              | has knowledge of human sexuality and of the basic disorders associated with it                                                                                                                                                                                                                                                   |
| E.W22.              | is familiar with provisions relating to mental health care; with particular emphasis on the rules of admission to psychiatric hospitals                                                                                                                                                                                          |
| E.W38               | is familiar with the theoretical and practical fundamentals of laboratory diagnosis in psychiatry                                                                                                                                                                                                                                |
| E.W39.              | knows and understands the capabilities and limitations of laboratory testing in psychiatric emergencies                                                                                                                                                                                                                          |
| Skills– Graduate* i | is able to:                                                                                                                                                                                                                                                                                                                      |
| E.U5.               | carries out a psychiatric examination                                                                                                                                                                                                                                                                                            |
| E.U12.              | performs a differential diagnosis of the most common mental illnesses in adults                                                                                                                                                                                                                                                  |
| E.U13.              | assesses and describes the patient's somatic and psychological state                                                                                                                                                                                                                                                             |
| E.U14.              | recognizes conditions that pose a direct threat to life in the course of mental disorders                                                                                                                                                                                                                                        |
| E.U15.              | recognizes states under the influence of alcohol, drugs and other stimulants                                                                                                                                                                                                                                                     |
| E.U16.              | plans diagnostic, therapeutic and preventive procedures regarding mental disorders                                                                                                                                                                                                                                               |
| E.U17.              | analyzes the possible adverse effects of particular drugs and the interactions between them                                                                                                                                                                                                                                      |
| E.U18.              | proposes that existing therapeutic guidelines and other treatment methods be individualized if standard therapy is ineffective or contraindicated                                                                                                                                                                                |
| E.U19.              | recognizes the signs of drug dependency and proposes treatment                                                                                                                                                                                                                                                                   |
| E.U20.              | decides that a given patient is eligible for home or hospital treatment                                                                                                                                                                                                                                                          |
| E.U23.              | proposes a rehabilitation program for the most common diseases                                                                                                                                                                                                                                                                   |
| E.U24.              | interprets the results of laboratory tests and identifies the causes of deviations                                                                                                                                                                                                                                               |
| E.U32.              | plans specialist consultations                                                                                                                                                                                                                                                                                                   |
| E.U38.              | keeps a patient's medical records                                                                                                                                                                                                                                                                                                |
| In appendix to the  | Regulation of Minister of Science and Higher education from 26th of July 2019 ",graduate", not student is mentioned.                                                                                                                                                                                                             |

5. Additional effects of learning (non-compulsory)

| Number of<br>effect of<br>learning           | Effects of learning in time                                                                   |  |
|----------------------------------------------|-----------------------------------------------------------------------------------------------|--|
| Knowledge – Grad                             | duate knows and understands:                                                                  |  |
| К1                                           | Has a basic knowledge about different types of psychotherapy                                  |  |
| К2                                           | Understands the impact of psychological factors on patient adherence to recommended treatment |  |
| Skills– Graduate is                          | s able to:                                                                                    |  |
| S1                                           | Establishes ethical and professional relations with patients suffering from mental disorders  |  |
| 52                                           | Increases patient motivation and adherence to treatment                                       |  |
| Social Competencies – Graduate is ready for: |                                                                                               |  |
| SC1                                          | Presents diagnosis of a patient and discusses it with other students                          |  |
| SC2                                          |                                                                                               |  |

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| 6. CLASSES            |                                                                                                                       |                                                  |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|
| Form of class         | Class contents                                                                                                        | Effects of Learning                              |
| Seminar 1 (3 hours)   | Sexual disorders – Etiology, diagnosis, classification and treatment                                                  | E.W21                                            |
| Seminar 2 (1 hours)   | Eating disorder and insomnias: Etiology, diagnosis, classification and treatment                                      | E.W15, E.W16, E.W17, E.W22                       |
| Seminar 3 (2 hours )  | Psychopharmacology and diagnostic methods – the rules medication and the laboratory diagnostic methods                | E.W38, E.W39                                     |
| Seminar 4 (3hours)    | Suicide, aggression, forensic issues – Emergency and forensic psychiatry                                              | E.W18                                            |
| Seminar 5(1 hour)     | Environmental psychiatry and Organization and functions of Mental Health Centers                                      | E.W22                                            |
| Classes 1 (12 hours)  | Diagnosis and therapy within Mental Health Center                                                                     | E.U5, E.U12-E.U20, E.U23-<br>E.U24, E.U32, E.U38 |
| Classes 2 (6 hours )  | Introduction to psychotherapy; models of psychotherapy, criteria of qualification to different types of psychotherapy | E.U16, E.U18, E.U20                              |
| Classes 3 (12 hours)  | management with insomnia in clinical practice                                                                         | E.U16, E.U17, E.U18                              |
| Classes 4 (16 hours)  | management with older patients                                                                                        | E.U5, E.U12-E.U20, E.U23-<br>E.U24, E.U32, E.U38 |
| Classes 5 (2 hours)   | use of restrains and management with agressive patient                                                                | E.U5, E.U16, E.U38                               |
| Classes 6 ( 2 hours ) | psychiatric rehabilitation                                                                                            | E.U16, E.U32, E.U38                              |

7. LITERATURE

### Obligatory

Cowen P., Harrison P., Burns T., Shorter Oxford Textbook of Psychiatry Edition, Sixth 2012 or latter

#### Supplementary

- 1. Sadock B.J., Sadock V.A. Ruitz P. Kaplan and Sadock's Synopsis of Psychiatry: Behavioral Sciences/Clinical Psychiatry. Wolters Kluver, 2015
- 2. Meyer, R. G., Chapman, L. K., and Weaver, C. M. Case Studies in Abnormal Behavior. 9th ed. 2014

| 8. Verifying the effect of learning      |                                                                                                                |                                         |
|------------------------------------------|----------------------------------------------------------------------------------------------------------------|-----------------------------------------|
| Code of the course<br>effect of learning | Ways of verifying the effect of learning                                                                       | Completion criterion                    |
| E.W15-E.W39                              | Colloquium – test on the last day of course, <i>consisting of 20 single select multiple choice questions</i> . | At least 60% of correct answers on test |
| E.U5-E.U38                               | Written description of mental states of two patients with different disorders, presented during classes.       | Accepted by the assistant               |

# **9.** Additional INFORMATION (information essential for the course instructor that are not included in the other part of the course syllabus e.g. if the course is related to scientific research, detailed description of, information about the Science Club)

Classes and seminars takes place at:

DREWNICA= Drewnica Hospital, - ul. Rychlińskiego 1, Ząbki, meeting at main entrance to the new building. KONDRATOWICZA 8= Brodnowski Hospital, ul. Kondratowicza 8, Building G, 4th floor SUWALSKA 11= Brodnowski Hospital, Daily Psychiatric Ward, ul. Suwalska 11 In case of epidemiological restrictions = ONLINE

The first seminar takes place in lecture hall in Brodnowski Hospital, ul. Kondratowicza 8, pawilon "G". The detailed program of seminars and classes will be presented a during the first seminar

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ATTENTION The final 10 minutes of the last class in the block/semester/year should be allocated to students' Survey of Evaluation of Classes and Academic Teachers.



# **Emergency medicine**

## **1.** IMPRINT Academic Year 2023/2024 Department Faculty of Medicine Field of study Medicine Main scientific discipline Medical science **Study Profile** General academic Level of studies Uniform MSc Form of studies Full time studies Type of module/ Obligatory course Form of verification of Exam learning outcomes **Emergency Departemnt of** Educational Unit / The Infant Jesus Clinical Hospital (Szpital Kliniczny Dzieciątka Jezus) **Educational Units** Lindleya 4, 02-005 Warsaw, phone: 48 22 502 13 23 e-mail: medycynaratunkowa@wum.edu.pl Head of Educational prof. dr hab. n. med. Jarosław Czerwiński Unit / Heads of **Educational Units** Course coordinator prof. dr hab. n. med. Jarosław Czerwiński Person responsible for prof. dr hab. n. med. Jarosław Czerwiński syllabus jaroslaw.czerwinski@wum.edu.pl,medycynaratunkowa@wum.edu.pl

| 2. BASIC INFORMATION                    |                                       |                           |     |
|-----------------------------------------|---------------------------------------|---------------------------|-----|
| Year and semester<br>of studies         | Year VI. Semester XI and<br>XII       | Number of ECTS<br>credits | 4,0 |
| FORMS OF CLASSES                        | ASSES Number ECTS credits calculation |                           |     |
| Contacting hours with academic teacher  | of hours                              |                           |     |
| Lecture (L)                             |                                       |                           |     |
| Seminar (S)                             | 10                                    | 1,0                       |     |
| Discussions (D)                         | 50                                    | 1,0                       |     |
| e-learning (e-L)                        |                                       |                           |     |
| Practical classes (PC)                  |                                       |                           |     |
| Work placement (WP)                     |                                       |                           |     |
| Unassisted student's work               |                                       |                           |     |
| Preparation for classes and completions | 80                                    | 2,0                       |     |

|    | 3. Course objectives                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| 01 | The aim of education is to acquire by students appropriate educational effects in the field of emergency medicine, i.e. dealing with patients in conditions directly threatening health and life in accordance with current medical knowledge.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |  |  |
| 02 | In terms of knowledge, the goal is to acquire or consolidate the thematic information by the student in the following areas: - the structure and function of the human body in normal and pathological conditions; - symptoms and course of diseases directly threatening health and life; - diagnostic and therapeutic procedures appropriate for emergency medicine; - ethical, social and legal conditions of performing the profession of emergency medicine doctor and principles of health promotion. The student bases his knowledge on scientific evidence and accepted norms. In terms of skills, the aim of education is to acquire them in the thematic areas: - diagnosis of a medical problem and determination of priorities in the field of emergency medicine physician responsibilities; - diagnosis of life-threatening conditions requiring immediate intervention; - planning the diagnostic procedure and interpreting its results; - implementation of proper and safe therapeutic treatment and prediction of its consequences. |  |  |  |

| 03 | In the field of social competences is the construction of the attitude of a doctor who can establish and maintain a deep and |
|----|------------------------------------------------------------------------------------------------------------------------------|
|    | respectful contact with the patient.                                                                                         |

| ode and number of effect of learning<br>ccordance with standards of learning | <b>Effects in time</b> (in accordance with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019                                                                                                                                                                                                                                                                                                                                                                                                               |
|------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| nowledge – Graduate* knows and un                                            | derstands:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| F.W1 p. 1-4                                                                  | <ul> <li>causes, symptoms, principles of diagnosis and therapeutic treatment in relation to the most common diseases requiring surgical intervention taking into account the distinctions of childhood, in particular: <ol> <li>acute and chronic diseases of abdominal cavity,</li> <li>chest diseases,</li> <li>limb and head diseases,</li> <li>bone fractures and organ injuries;</li> </ol></li></ul>                                                                                                                                             |
| F.W2                                                                         | specific paediatric surgery, including traumatology, otolaryngology, acquired defects and diseases in children which require surgical treatment;                                                                                                                                                                                                                                                                                                                                                                                                       |
| F.W3                                                                         | rules of qualification and performance, as well as the most common complications of basic surgical procedures and invasive diagnostic and therapeutic procedures;                                                                                                                                                                                                                                                                                                                                                                                      |
| F.W6                                                                         | indications for and principles of use of intensive care;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| F.W7                                                                         | applicable recommendations concerning resuscitation of newborns, children and adults;                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| F.W8                                                                         | rules of operation of the integrated state system of medical emergency;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| F.W10                                                                        | <ul> <li>problems of contemporary imaging studies, in particular:</li> <li>1) radiological symptomatology of basic diseases,</li> <li>2) instrumental methods and imaging techniques used to perform therapeutic procedures,</li> <li>3) indications, contraindications and preparation of patients for particular types of imaging examinations and contraindications to the use of contrast agents;</li> </ul>                                                                                                                                       |
| F.W13                                                                        | <ul> <li>causes, symptoms, principles of diagnosis and therapeutic treatment in the case of the most common diseases of the central nervous system in terms of: <ol> <li>cerebral oedema and its consequences with a particular reference to emergencies,</li> <li>other forms of intracranial narrowness with their consequences,</li> <li>cranial-cerebral injuries,</li> <li>vascular defects of the central nervous system,</li> <li>tumours of the central nervous system,</li> <li>diseases of the spine and spinal cord;</li> </ol> </li> </ul> |
| F.W16                                                                        | treatment algorithm for particular stages of accidental hypothermia and post-traumatic hypothermia.                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

| F.U1 | assist in a typical surgery, prepare the surgical field and use local anaesthetics at the operated |  |
|------|----------------------------------------------------------------------------------------------------|--|
|      | area;                                                                                              |  |
| F.U2 | use the basic surgical tools;                                                                      |  |

| F.U3  | observe the rules of asepsis and antisepsis;                                                                                                                                                                    |
|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| F.U5  | place a venous access;                                                                                                                                                                                          |
| F.U7  | assess the result of radiographic studies in terms of the most frequent kinds of fractures, especially long bone fractures;                                                                                     |
| F.U8  | immobilise a limb temporarily, choose the kind of immobilisation necessary to be applied in typical clinical cases and control the appropriate blood flow in the limb after an immobilising dressing is put on; |
| F.U9  | apply a dressing in the case of external bleeding;                                                                                                                                                              |
| F.U10 | perform basic life resuscitation with automated external defibrillation devices and other resuscitation measures, as well as first aid;                                                                         |
| F.U11 | perform resuscitation according to the latest advanced guidelines;                                                                                                                                              |
| F.U12 | monitor perioperative care with the aid of basic vital signs;                                                                                                                                                   |
| F.U21 | assess an unconscious patient according to the international point scales;                                                                                                                                      |
| F.U22 | diagnose the symptoms of intracranial hypertension;                                                                                                                                                             |
| F.U23 | assess the indications for suprapubic puncture and participate in the procedure;                                                                                                                                |
| F.U24 | assist with common urological procedures (diagnostic and therapeutic endoscopic procedures of the urinary system, lithotripsy, prostate cancer biopsy);                                                         |

\* In appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019, graduate", not student is mentioned.

| 5. Additional effects of learning (non-compulsory) |                                                                                                                                                           |  |  |
|----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| Number of effect of<br>learning                    | Effects of learning in time                                                                                                                               |  |  |
| Knowledge – Graduate k                             | nows and understands:                                                                                                                                     |  |  |
|                                                    |                                                                                                                                                           |  |  |
|                                                    |                                                                                                                                                           |  |  |
| Skills- Graduate is able to:                       |                                                                                                                                                           |  |  |
|                                                    |                                                                                                                                                           |  |  |
|                                                    |                                                                                                                                                           |  |  |
| Social Competencies – Graduate is ready for:       |                                                                                                                                                           |  |  |
| SC1                                                | Able to establish and maintain a deep and respectful contact with the patient, provides mental support with special consideration of elderly and infirms. |  |  |
| SC2                                                | Student is guided by the good of the patients, putting them in the foreground.                                                                            |  |  |

| SC3 | Student respects medical confidentiality and patient's rights.                                      |
|-----|-----------------------------------------------------------------------------------------------------|
| SC4 | Student is aware of his own limitations and the has ability to constantly improve his skills.       |
| SC5 | Student can cooperate with other members of the emergency medical team.                             |
| SC6 | Student can cooperate with other health care professionals.                                         |
| SC7 | Student shows respect for the patient through understanding for worldview and cultural differences. |

| 6. CLASSES           |                                                                                                                                                                        |                                 |  |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|--|
| Form of class        | Class contents                                                                                                                                                         | Effects of Learning             |  |
| Seminars/<br>classes | Life-saving treatments: BLS, ALS, AED. A universal algorithm for life-saving activities.                                                                               | F.W6, F.W7., F.W13.             |  |
| Seminars/<br>classes | Acute coronary syndromes. Severe heart rhythm disturbances. ECG in emergency medicine.                                                                                 | F.W6, F.W7.                     |  |
| Seminars/<br>classes | Physiological and pathophysiological distinctions of childhood. Cardiac arrest in children. PALS - advanced emergency procedures in pediatric patients.                | F.W1., F.W2., F.W6,<br>F.W7.    |  |
| Seminars/<br>classes | Disorders with dyspnoe and respiratory failure: asthmatic condition, COPD, pulmonary edema, pulmonary embolism, anaphylaxis.                                           | F.W6, F.W7., F.W10.             |  |
| Seminars/<br>classes | Acute surgical diseases (pneumothorax, gastrointestinal bleeding, burns).                                                                                              | F.W1., F.W3.,<br>F.W10., F.W13. |  |
| Seminars/<br>classes | Medications and infusion fluids in emergency medicine                                                                                                                  | F.W1., F.W3.,<br>F.W10., F.W13. |  |
| Seminars/<br>classes | Acute metabolic syndromes: hypo- and hyperglycemia, hyper- and hypokalemia, hypo- and hypernatremia, hyperammonaemia, poisoning.                                       | F.W6, F.W7.                     |  |
| Seminars/<br>classes | Resuscitation of the newborn immediately after birth.                                                                                                                  | F.W6, F.W7.                     |  |
| Seminars/<br>classes | Mass events. Pre-hospital and hospital segregation of patients (triage). Multi-organ injuries.<br>Application of FAST (focused assessment with sonography for trauma). | F.W2., F.W6, F.W7.              |  |
| Seminars/<br>classes | Diagnosis of sudden life-threatening conditions and rules of treatment in these states.                                                                                | F.U10., F.U11.,<br>F.U21.       |  |
| Seminars/<br>classes | Clinical evaluation of the unconscious patient.                                                                                                                        | F.U11., F.U21.                  |  |
| Seminars/<br>classes | Activities in the algorithm of basic and advanced rescue operations, specifying patients up to 18 years of age and adult patients, including using phantoms.           | F.U10., F.U11.,<br>F.U21.       |  |
| Seminars/<br>classes | ECG – technical skills and interpretation                                                                                                                              | F.U10.                          |  |
| Seminars/<br>classes | Monitoring vital signs using a cardiomonitor.                                                                                                                          | F.U10., F.U11.,<br>F.U21.       |  |

| Seminars/<br>classes | Performing electrical cardioversion and heart defibrillation.                                                                                           | F.U10., F.U11.        |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| Seminars/<br>classes | Arterial and venous blood collection including the ability to introduce a peripheral venous line.                                                       | F.U5.                 |
| Seminars/<br>classes | Introduction of the oropharyngeal tube.                                                                                                                 | F.U11.                |
| Seminars/<br>classes | Using pulse oximetry and kapnometry.                                                                                                                    | F.U10.                |
| Seminars/<br>classes | Ventilation through a face mask with a self-expanding sack.                                                                                             | F.U11.                |
| Seminars/<br>classes | Knowledge of the basic principles of conducting replacement ventilation.                                                                                | F.U10., F.U11.        |
| Seminars/<br>classes | Treatment with oxygen.                                                                                                                                  | F.U10., F.U11.        |
| Seminars/<br>classes | Urinary bladder catheterisation.                                                                                                                        | F.U2., F.U23., F.U24. |
| Seminars/<br>classes | Insertion of naso-gastrial tube and Sengstakena-Blakemore tube.                                                                                         | F.U2.                 |
| Seminars/<br>classes | Clinical assessment i cases of acute abdomen.                                                                                                           | F.U1.                 |
| Seminars/<br>classes | Assessment conditions and indication to cystostomy.                                                                                                     | F.U1.                 |
| Seminars/<br>classes | Evaluation of signs and symptoms of intracranial hyoertension.                                                                                          | F.U22.                |
| Seminars/<br>classes | Pleura puncture and pleural fluid collection.                                                                                                           | F.U2.                 |
| Seminars/<br>classes | Pleural drainage.                                                                                                                                       | F.U2.                 |
| Seminars/<br>classes | The ability to use initial deflation of the pleural cavity in the event of an emergency episode.                                                        | F.U2.                 |
| Seminars/<br>classes | Ability to use initial decompression of cardiac tamponade.                                                                                              | F.U3.                 |
| Seminars/<br>classes | Making decision in the issue of selection between X-ray, CT, MRI or USG imaging, and identifying life threatening signs in these diagnostic instruments | F.U7.                 |
| Seminars/<br>classes | Abdominal puncture and drainage.                                                                                                                        | F.U2.                 |
| Seminars/<br>classes | Calculation of drug doses, also drug doses to infusion in pumps.                                                                                        | F.U11., F.U12.        |
| Seminars/<br>classes | Monitoring of poisoned patient.                                                                                                                         | F.U10., F.U21.        |
| Seminars/<br>classes | Poisoning treatment.                                                                                                                                    | F.U21.                |

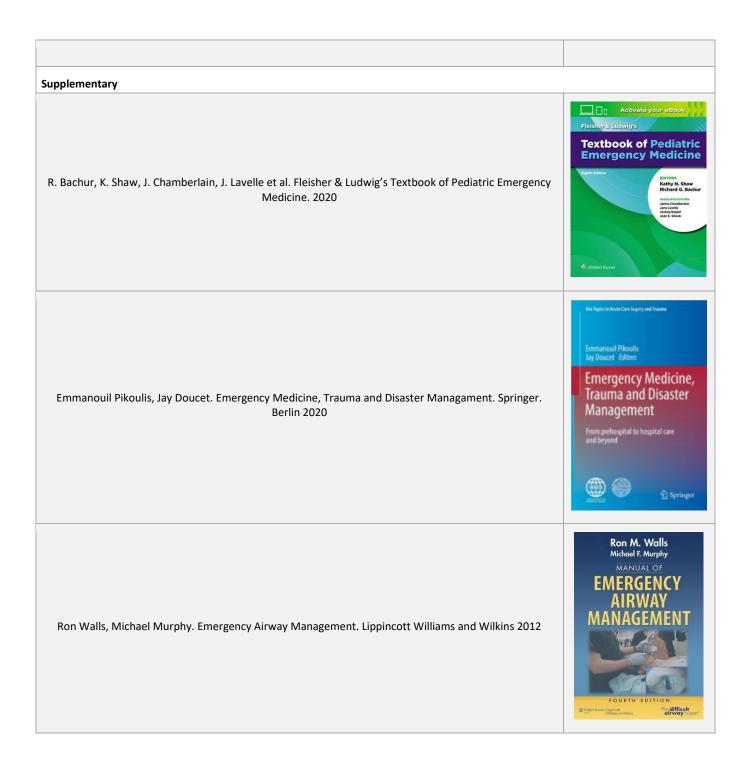
| Seminars/<br>classes | Management in hemorrhagic shock.                                                                                                                              | F.U9.        |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| Seminars/<br>classes | Blood and blood components treatment.                                                                                                                         | F.U9.        |
| Seminars/<br>classes | Management in acute metabolic disorders.                                                                                                                      | F.U21.       |
| Seminars/<br>classes | Mulit-trauma and traumatic shock management.                                                                                                                  | F.U8., F.U9. |
| Seminars/<br>classes | Treatment with external hemorrhage.                                                                                                                           | F.U9.        |
| Seminars/<br>classes | Use of basic first aid devices (triangular bandage, personal dressing, pressure dressing, thermal blanket, orthopedic board, Kramer's rail, cervical collar). | F.U7.        |
| Seminars/<br>classes | Preparing the patient for transportation.                                                                                                                     | F.U8.        |
| Seminars/<br>classes | Triage                                                                                                                                                        | F.U21.       |

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| Code  | Seminars:<br>8-9.30                                                                                                                                                 | Exercises: 9.30-12.30<br>Simulations                                                                                                                                                                                                                                                                                                                     | Activities performed. Skills transferred.<br>Skills acquired by the student.                                                                                                                                                                                |
|-------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ALS   | Life saving treatments: BLS, ALS,<br>AED. An universal algorithm for life-<br>saving activities.                                                                    | Exercises (scenarios) with BLS, ALS, AED using<br>a manikin.<br>Advanced ALS schemes                                                                                                                                                                                                                                                                     | Diagnosis of cardiac arrest. Conducting indirect<br>cardiac massage, ventilation, defibrillation and<br>evaluation of the effectiveness of these procedures.<br>Monitoring of vital signs.                                                                  |
| HEART | Acute coronary syndromes. Severe heart rhythm disturbances. ECG in emergencymedicine.                                                                               | Exercises (scenarios) for the treatment of acute<br>coronary syndromes and acute cardiac<br>arrhythmias in pre-hospital care and SOR.<br>Emergency ECG: heart attack, arrhythmias,<br>pulmonary embolism, electrolyte disturbances.                                                                                                                      | ECG, external cardiac stimulation, electrical cardioversion.                                                                                                                                                                                                |
| RESP  | Disorders with dyspnoea and<br>respiratory failure: asthmatic<br>condition, COPD, pulmonary edema,<br>pulmonary embolism, anaphylaxis.                              | The principles of oxygen therapy and ventilation.<br>Instrumental and non-instrumental methods of<br>airway management. Cricothyroidotomy.<br>Simulation 6. Pulmonary edema.                                                                                                                                                                             | Ventilation of the patient. Endotracheal intubation rules. Introduction of the oropharyngeal tube and laryngeal mask. Ventilation using a self-expanding bag and face mask and after inserting the device.                                                  |
| SURG  | Acute surgical diseases<br>(pneumothorax, gastrointestinal<br>bleeding, burns).                                                                                     | Treatment of pneumothorax, treatment of<br>gastrointestinal bleeding.<br>Principles of blood and plasma treatment.<br>Simulation 4. Multi-organ injury. Pelvic<br>fracture. Stomach pneumothorax.<br>Simulation 3. Burns.                                                                                                                                | Insertion of a <u>naso-gastric</u> tube, and <u>Sengstaken-</u><br>Blakemore tube. Putting on a pressure dressing and<br>a <u>ruffler</u> . Documentation related to blood treatment                                                                        |
| PED1  | Physiological and pathophysiological<br>distinctions of childhood. Cardiac<br>arrest in children. PALS - advanced<br>emergency procedures in pediatric<br>patients. | Exercises (scenarios) from BLS, PALS, AED with<br>the use of a child dummy.<br>Exercises of advanced PALS schemes.<br><b>Simulation 1: Cardiac arrest</b>                                                                                                                                                                                                | Diagnosis of cardiac arrest in children. Conducting<br>indirect cardiac massage, ventilation, defibrillation<br>and evaluation of the effectiveness of these<br>procedures.                                                                                 |
|       |                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                             |
| PED2  | Resuscitation of the newborn<br>immediately after birth.                                                                                                            | Advanced PALS diagrams in children and<br>newborns immediately after birth.<br>Pharmacotherapy in PALS.<br>Instrumental and non-instrumental methods of<br>clearing the airways. Procedure in case of<br>aspiration and choking in children. Principles of<br>oxygen therapy and ventilation of children.<br>Treatment of pain associated with trauma in | Inserting the oropharyngeal tube and laryngeal mas<br>in children. Oxygen therapy. Ventilation, <u>Conicotom</u><br>in children. Management of hemorrhagic shock. Flui<br>therapy and treatment with blood products.<br>Management of <u>Hiperkalemia</u> . |

|           |                                                                                                                                                                                    | children. Hemorrhagic shock. Hyperkalemia.                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| МЕТ       | Acute metabolic syndromes: hypo-<br>and hyperglycemia, hyper- and<br>hypokalemia, hypo- and<br>hypernatremia, hyperammonaemia,<br>poisoning.                                       | Discussion of principles for the diagnosis and treatment of acute metabolic disorders. Simulation 7. Metabolic disorders.                                                                                                                                                                                                                                 | Simple diagnosis and treatment of acute metabolic disorders.                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| DRUGS     | Medications and infusion fluids in<br>emergency medicine                                                                                                                           | Administration of basic drugs in cardiopulmonary<br>resuscitation and other life-threatening situations.<br>Modern fluid therapy. Methods of obtaining<br>central and peripheral venous access.<br>Intraosseous access.                                                                                                                                   | Calculation of drug doses, especially doses to infusion in pumps.                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| TRAUMA    | Mass events. Pre-hospital and<br>hospital segregation of patients<br>(triage). Multi-organ injuries.<br>Application of FAST (focused<br>assessment with sonography for<br>trauma). | Segregation of patients (triage scenarios).<br>Management of multi-trauma injuries.<br>Evaluation of patients after trauma (International<br>Trauma Life Support algorithms). <b>Simulation 5.</b><br><b>Multiple organ injury. Spinal fracture. Broken</b><br><b>limbs.</b><br><b>Simulation 9. Multiple organ injury, abdominal</b><br><b>bleeding.</b> | Simulation of segregation of patients. Documentati<br>of triage.<br>Techniques of life-saving diagnostic and therapeutic<br>procedures: puncture of the body cavities (puncture<br>and pleural drainage, puncture and abdominal<br>drainage, pericardial sac puncture), intersection.<br>Techniques of using the equipment (orthopedic<br>board, cervical collar, Kramer's rail). The use of<br>ultrasound and other imaging techniques in the<br>emergency department in patients with multiple site<br>injuries. |
| CREDIT 8. | 00 – 12.30                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                           | EXAM (on-line) 14.00 – 20.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

| bligatory                                                                                                                                                |                                                                                                                                                    |
|----------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| The ERC Guidelines 2021<br>https://cprguidelines.eu/                                                                                                     | EUROPEAN<br>RESUSCITATION<br>COUNCIL                                                                                                               |
| Campbell JE, Alson RL: International Trauma Life Support for Emergency Care Providers. 9th<br>Edition. Pearson 2020                                      |                                                                                                                                                    |
| Rita K. Cydulka, Michael T. Fitch, Scott A. Joing, Vincent J. Wang, David M. Cline, O. John Ma.<br>Emergency Medicine Manual. McGraw-Hill Education 2018 | <section-header><section-header><section-header><image/><text><text><text></text></text></text></section-header></section-header></section-header> |



| 8. Verifying the effect of learning            |                                                                     |                                 |
|------------------------------------------------|---------------------------------------------------------------------|---------------------------------|
| Code of the<br>course<br>effect of<br>learning | Verifying the effect of<br>learning                                 | Completion criterion            |
| e.g.G.K1,<br>G.S1, K1                          | This field defines the<br>methods used for<br>grading students e.g. | e.g. threshold number of points |

|        | pop quiz, test, written<br>report etc.     |                                                  |                                                                                                         |  |  |
|--------|--------------------------------------------|--------------------------------------------------|---------------------------------------------------------------------------------------------------------|--|--|
|        | Current assessment of knowledge and skills |                                                  | dge and skills by the teachers. Positive final pass. E<br>e points. The exam grade scale is as follows: |  |  |
|        | by the assistant, practical final, exam    | Kryteria zaliczenia przedmiotuł: egzamin testowy |                                                                                                         |  |  |
|        |                                            | ocena                                            | kryteria                                                                                                |  |  |
|        |                                            | 2,0 (ndst)                                       | Poniżej 41 pkt w egzaminie testowym                                                                     |  |  |
| F.W1.  |                                            | 3,0 (dost)                                       | 41-44 pkt w egzaminie testowym                                                                          |  |  |
|        |                                            | 3,5 ( <mark>ddb)</mark>                          | 45-48 pkt w egzaminie testowym                                                                          |  |  |
|        |                                            | 4,0 (db)                                         | 49-52 pkt w egzaminie testowym                                                                          |  |  |
|        |                                            | 4,5 (pdb)                                        | 53-56 pkt w egzaminie testowym                                                                          |  |  |
|        |                                            | 5,0 (bdb)                                        | 57-60 pkt w egzaminie testowym                                                                          |  |  |
| F.W2.  | As above                                   | As above                                         |                                                                                                         |  |  |
| F.W3.  | As above                                   | As above                                         |                                                                                                         |  |  |
| F.W6.  | As above                                   | As above                                         |                                                                                                         |  |  |
| F.W7.  | As above                                   | As above                                         |                                                                                                         |  |  |
| FW8.   | As above                                   | As above                                         |                                                                                                         |  |  |
| F.W10. | As above                                   | As above                                         |                                                                                                         |  |  |
| F.W13. | As above                                   | As above                                         |                                                                                                         |  |  |
| F.W16. | As above                                   | As above                                         |                                                                                                         |  |  |
| F.U1.  | As above                                   | As above                                         |                                                                                                         |  |  |
| F.U2.  | As above                                   | As above                                         |                                                                                                         |  |  |
| F.U5.  | As above                                   | As above                                         |                                                                                                         |  |  |
| F.U7.  | As above                                   | As above                                         |                                                                                                         |  |  |
| F.U8.  | As above                                   | As above                                         |                                                                                                         |  |  |
| F.U9.  | As above                                   | As above                                         |                                                                                                         |  |  |
| F.U10. | As above                                   | As above                                         |                                                                                                         |  |  |
| F.U11. | As above                                   | As above                                         |                                                                                                         |  |  |
| F.U12. | As above                                   | As above                                         |                                                                                                         |  |  |
| F.U21. | As above                                   | As above                                         |                                                                                                         |  |  |
| F.U22. | As above                                   | As above                                         |                                                                                                         |  |  |
| F.U23. | As above                                   | As above                                         |                                                                                                         |  |  |
|        |                                            | 1                                                |                                                                                                         |  |  |

| F.U24. | As above | As above |
|--------|----------|----------|
| К1     | As above | As above |
| К2     | As above | As above |
| кз     | As above | As above |
| К4     | As above | As above |
| К5     | As above | As above |
| K6     | As above | As above |
| К7     | As above | As above |

**9.** Additional information (information essential for the course instructor that are not included in the other part of the course syllabus e.g. if the course is related to scientific research, detailed description of, information about the Science Club)

### 2023.07.06..

#### Information for students of the 6th year of medicine on the course in emergency medicine in the academic year 2023-24

1. Classes (seminars and exercises) will be conducted in a stationary form in the premises of the Department of Emergency Medicine (Szpital Kliniczny Dzieciątka Jezus, ul. Lindley'a 4).

If occasionally the form of classes will be changed into on-line form Students will be inform on this matter immediately (e-learning page, mail to group leader).

2. Clinical exercises, in bedside classes, will be conducted at the Emergency Department of the Szpital Kliniczny Dzieciątka Jezus, ul. Lindley'a 4.

3. During full-time classes in the premises of ZMR and SOR Students, the Regulations apply.

4. Additional materials (films, source texts, studies) will be posted on the e-learning platform.

5. Access to materials uploaded on the platform will be provided throughout the entire academic year.

6. Classes at the Medical Simulation Center (CSM) take place on dates and according to the rules in force at the Center

7. The conditions for completing the course are:

- holding seminars and practical exercises at the Department of Emergency Medicine;

- classes at CSM ;;

- use of all materials posted on the e-learning platform;

- passing the exam in the remote formula (e-learning platform, on-line access from 2 p.m. to 8 p.m.) on Friday, ending the two-week course.

8. A detailed schedule of classes divided into groups will be posted on the Department's website and on the e-learning platform. The schedule will include classes at the Medical Simulation Center and the exam.

9. The documents linked in content to this Information are: Regulations for Students in force during full-time classes in the premises of the Department of Emergency Medicine, Two-week program of teaching emergency medicine for the 6th year of medical faculties in the academic year 2023-24, detailed schedule of classes, Syllabus of the subject.

### 2023.07.06.

# Regulations for students applicable during full-time classes in the premises of the Department of Emergency Medicine and the Hospital Emergency Department

1. Before starting classes, the student is required to read these regulations and the documents (available on the Department's website and on the e-learning platform):

- thematically related to the classes (Information for students of the 6th year of the Faculty of Medicine on the course in emergency medicine in the 2023-24 academic year, subject syllabus, two-week curriculum for the 6th year of medical faculties in the 2023-24 academic year, detailed schedule of classes;

2. Before and during classes, the student should follow the current epidemic rules.

3. The student is obliged to prepare individually for each class based on the indicated literature, materials available on the e-learning platform and information published on the Department's website.

4. The student participates in full-time classes in the group indicated in the schedule of classes. Changing the group at the student's request requires the individual consent of the Subject Coordinator.

5. The organization of stationary classes may change. Information on changes for individual groups will be posted on the e-learning platform no later than the day preceding the block of Emergency Medicine classes.

6. In special situations and confirmed by an appropriate document, the Student's absence during full-time classes does not require making up. These situations include: the student's wedding, death of the closest family member of the student, summons to court, honorary blood donation on a given day, quarantine or epidemiological supervision.

7. Any other absence requires making up after obtaining the consent of the assistant conducting the classes on the jointly selected date. 8. The student is obliged to change shoes and, if there are classes at the bedside, also outerwear in the cloakroom on the premises of the Institute. Footwear must have a non-marking sole and medical protective clothing should be neat, functional and safe.

9. During practical classes, students perform exercises under the supervision of an assistant conducting the classes, observing the safety rules indicated by him.

10. After completing the practical classes, students organize and disinfect the used equipment according to the rules indicated by the teaching assistant.

11. The student is obliged to comply with the health and safety rules and the protection of fire safety in force on the premises of the Institute.

13. In particular, it is prohibited to:

- use of training equipment without the consent and supervision of the teaching assistant

- use of electrical devices, especially a cardiac defibrillator monitor, without the consent and supervision of the teaching assistant.

14. In connection with COVID-19, until further notice, a mixed teaching formula is in force, with a limitation of the number of stationary classes, conducting stationary classes in smaller groups, participation in remote classes, cancellation of classes at the bedside.

15. In matters not covered above, the Study Regulations of the Medical University of Warsaw apply.

Medical University of Warsaw has property rights, including copyright, to the syllabus. The syllabus may be used for educational purposes at the MUW only. Using of the syllabus for other purposes requires consent of the MUW.

## ATTENTION

The final 10 minutes of the last class in the block/semester/year should be allocated to students' Survey of Evaluation of Classes and Academic Teachers.



# Family medicine

| 1. Imprint                                               |                                                                                                                                                                                                                                                             |  |
|----------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Academic Year                                            | 2023/2024                                                                                                                                                                                                                                                   |  |
| Department                                               | Faculty of Medicine                                                                                                                                                                                                                                         |  |
| Field of study                                           | Medicine                                                                                                                                                                                                                                                    |  |
| Main scientific discipline                               | Medical Science                                                                                                                                                                                                                                             |  |
| Study Profile                                            | General academic                                                                                                                                                                                                                                            |  |
| Level of studies                                         | uniform MSc                                                                                                                                                                                                                                                 |  |
| Form of studies                                          | Full time studies                                                                                                                                                                                                                                           |  |
| Type of module / course                                  | Obligatory                                                                                                                                                                                                                                                  |  |
| Form of verification of learning outcomes                | Exam                                                                                                                                                                                                                                                        |  |
| Educational Unit / Educational Units                     | Department of Family Medicine (1MH), MUW<br>6 Binieckiego St, 02-097 Warsaw<br>4th floor, rooms: 5.52, 5.53, 5.54 (University Dentistry Centre)<br>Phone: +48 22 116 62 32                                                                                  |  |
| Head of Educational Unit / Heads of<br>Educational Units | Życińska Katarzyna MD, PhD, Prof. <u>katarzyna.zycinska@wum.edu.pl</u>                                                                                                                                                                                      |  |
| Course coordinator                                       | Życińska Katarzyna MD, PhD, Prof. <u>katarzyna.zycinska@wum.edu.pl</u><br>Puchala Mateusz MD, PhD <u>family.medicine@wum.edu.pl</u>                                                                                                                         |  |
| Person responsible for syllabus                          | Życińska Katarzyna MD, PhD, Prof. <u>katarzyna.zycinska@wum.edu.pl</u>                                                                                                                                                                                      |  |
| Teachers                                                 | Durajski Łukasz MD<br>Górecki-Gomoła Adam MD<br>Kalisz Marcin MD<br>Pasierb Anna MD<br>Puchala Mateusz MD, PhD<br>Whiteman Monika PhD<br>Zielonka Maria Tadeusz MD, PhD, associate Prof.<br>Życińska Katarzyna MD, Ph.D, Prof.<br><b>Practical classes:</b> |  |

| MUW group<br>Biovena Health Centre group      |
|-----------------------------------------------|
| Orlik Health Centre group                     |
| Jutro Medical Health Centre group             |
| Warszawa Wola-Śródmieście Health Centre group |

| 2. BASIC INFORMATION                    |                                                     |                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
|-----------------------------------------|-----------------------------------------------------|--------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Year and semester<br>of studies         |                                                     | Number of ECTS credits                                                                                       | 4.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |
| FORMS OF CLASSES                        |                                                     | ECTS credits calculation                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| cademic teacher                         | of hours                                            |                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| Lecture (L)                             |                                                     |                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| Seminar (S)                             |                                                     | 0,6                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| Discussions (D)                         |                                                     | 3,4                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| e-learning (e-L)                        |                                                     |                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| Practical classes (PC)                  |                                                     |                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| Work placement (WP)                     |                                                     |                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| Unassisted student's work               |                                                     |                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| Preparation for classes and completions |                                                     |                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
|                                         | VI year, 11 semester (winter)  cademic teacher  ork | VI year, 11 semester (winter)   Cademic teacher Number of hours   cademic teacher 10   10 50   50 10   10 50 | VI year, 11 semester (winter)          Number of hours       Number of hours       ECTS credits calculate         cademic teacher       10       0,6         Image: I |  |

| 3. | Course objectives                                                                                                                                                                                                               |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 01 | Present basic knowledge on the organization of primary care and practical aspects of simple procedures. Students discuss the principles of family doctor's cooperation with a specialist doctor and pre-and post-hospital care. |
| 02 | The most common conditions in primary care (treat a wide range of medical conditions and injuries for patients of all ages, genders, and states of health).                                                                     |
| 03 | Medical consultation and communication with the patients as family doctor/general practitioner.                                                                                                                                 |

## 4. STANDARDS OF LEARNING - DETAILED DESCRIPTION OF EFFECTS OF LEARNING

| Code and<br>number of<br>effect of<br>learning in<br>accordance<br>with standards<br>of learning | Imber of         fect of         arning in         cordance         ith standards                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |  |  |
|--------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|
| Knowledge – Gra                                                                                  | duate* knows and understands:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |  |  |  |
| G.K1                                                                                             | E.W2 rules of nutrition of healthy and sick children, protective vaccinations and routine children's health checks                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |  |  |
| G.K2                                                                                             | <ul> <li>E.W7 reasons, symptoms, diagnostic and treatment procedures of the most frequent internal diseases and their complications in adult patients:</li> <li>1) circulatory system diseases, including coronary heart disease, heart defects, endocardium disease, cardiomyopathy, pericardium diseases, cardiac failure (acute and chronic), artery and vein diseases, hypertension: essential and secondary, pulmonary hypertension,</li> <li>2) respiratory system diseases, including respiratory tract diseases, chronic obstructive pulmonary disease, bronchial asthma, bronchiectasis, cystic fibrosis, respiratory system infections, interstitial lung diseases, pleural diseases, mediastinal disorders, obstructive and central sleep apnoea, respiratory failure (acute and chronic), respiratory system cancers,</li> <li>3) rheumatic diseases, including systemic diseases of connective tissue, systemic vasculitis, arthritis with the involvement of the spine, bone metabolic diseases, in particular osteoporosis and osteoarthritis, gout,</li> <li>4) water-electrolytic disturbances and acid-base disturbances, dehydration, hyperhydration, electrolyte imbalance, acidosis and alkalosis;</li> </ul> |  |  |  |  |
| G.K3                                                                                             | E.W8. course and symptoms of the process of aging, as well as the rules of the general geriatric assessment and the interdisciplinary care of elderly patients;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |  |
| G.K4                                                                                             | E.W38. causes, symptoms, diagnosis and treatment of the most common diseases and the specific problems in the family practice.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |  |  |  |
| Skills- Graduate*                                                                                | is able to:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |  |  |  |
| G.S1 E.U1. collect medical history from adult patients;                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |  |
| G.S2                                                                                             | G.S2 E.U2. collect medical history from a child and its family;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |  |
| G.S3                                                                                             | E.U3. conduct a complete and targeted physical examination in adults;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |  |  |
| G.S4                                                                                             | E.U4. conduct a physical examination of children of any age;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |  |  |  |
| G.S5                                                                                             | E.U12. perform the differential diagnosis of the most common diseases in adults and children;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |  |  |  |
| G.S6                                                                                             | E.U16. plan diagnostic, therapeutic and preventive treatment;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |  |  |  |
| G.S7                                                                                             | E.U20. qualify patients for home and hospital treatment;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |  |  |  |

| G.S8  | E.U24. interpret laboratory test results with the identification of reasons for deviation;                                                                                                                                                                                                                                                              |  |  |
|-------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| G.S9  | E.U27. qualify a patient for vaccinations;                                                                                                                                                                                                                                                                                                              |  |  |
| G.S10 | <ul> <li>E.U29. perform the basic medical procedures, including:</li> <li>9) body temperature measurement, pulse count and non-invasive blood pressure check,</li> <li>10) standard resting electrocardiogram with adequate interpretation, electrical cardioversion and defibrillation,</li> <li>simple strip test and blood glucose check;</li> </ul> |  |  |
| G.S11 | E.U32. plan specialist consultations.                                                                                                                                                                                                                                                                                                                   |  |  |

\* In appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019 "graduate", not student is mentioned.

Γ

| 5. Additional effects of learning (non-compulsory) |                                                                                         |  |
|----------------------------------------------------|-----------------------------------------------------------------------------------------|--|
| Number of<br>effect of<br>learning                 | Effects of learning in time                                                             |  |
| Knowledge – Graduate knows and understands:        |                                                                                         |  |
| K1                                                 | K.S3 Student respects medical confidentiality and patient's rights.                     |  |
| Skills- Graduate is able to:                       |                                                                                         |  |
| S1                                                 | S1 K.S2 Student is guided by the good of the patients, putting them in the foreground.  |  |
| Social Competencies – Graduate is ready for:       |                                                                                         |  |
| SC1                                                | SC1 K.S1 Able to establish and maintain a deep and respectful contact with the patient. |  |

| Form of class          | Class contents                                                   | Effects of Learning |  |
|------------------------|------------------------------------------------------------------|---------------------|--|
|                        | S1. Rheumatic diseases in GP practice.                           | G.K1 – G.K.4;       |  |
|                        | S2. Psychology for GP.                                           | K1; S1; SC1         |  |
| Seminar (S)            | S3. Telemedicine and e-health services.                          |                     |  |
| Seminar (S)            | S4. The impact of air pollution and climate change on health.    |                     |  |
|                        | S5. Vaccination programme in Poland.                             |                     |  |
|                        | S6. Skin diseases in GP practice.                                |                     |  |
| Dresting classes (DC)  | C1-12. Practical classes in family doctor's clinic – 7 meetings. | G.S1 - G.S11;       |  |
| Practical classes (PC) |                                                                  | K1; S1; SC1         |  |

| 7. LITERATURE |  |
|---------------|--|
| Obligatory    |  |

Textbook of Family Medicine. Author: Robert and David P. Rakel. Ninth Edition. Elsevier 2015.

### Supplementary

| 8. Verifying the effect of learning                                                                                                             |                                          |                      |
|-------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|----------------------|
| Code of the course<br>effect of learning                                                                                                        | Ways of verifying the effect of learning | Completion criterion |
| G.K1 – G.K.4;1. Complete the entire course and attendance at all classes.60%G.S1 - G.S11;2. Exam - SCQ test (50 questions).60%K1; S1; SC160%60% |                                          | 60%                  |

### 9. Additional information

Regulations for students during classes at the Department of Family Medicine

1. The student is obliged to read the syllabus <u>https://ed.wum.edu.pl/students/curriculum/curriculum/</u> and time-table on the website <u>www.medycynarodzinna.wum.edu.pl</u> -> English Division.

2. Seminars start at 3.00 p.m. If any changes occur - remember point 1.

3. The students participate in classes (seminars and practice) only with their Dean's group. Possible group change is

allowed in exceptional, justified situations and requires individual approval of course coordinator (according to MUW Regulations) – family.medicine@wum.edu.pl.

4. The student must complete the entire course - all seminars and practical classes. Any absence requires working off - absence is acceptable.

5. The student is obliged to follow the Medical University of Warsaw Regulations (available on the University's website).

6. During classes with patients, students keep seriousness and silence.

7. Meals and drinks should be consumed during breaks.

8. Attendance card should be returned to secretariat no longer than a week after the end of classes.

9. Student should obtain credits for family medicine in the plan of study, but no longer than 2 weeks after the end of the course.

10. Students can get credit and proceed to the final exam (winter session) only after completing all Department's requirements.

11. Attention! The material from the seminars from both the 4th and 6th year and the current literature are obligatory for the exam.

12. Any comments or complaints regarding the final test are considered before leaving the examination room.

13. Examination grades are final, and we do not allow positive ratings to be improved.

14. The person responsible for students' affairs: Mateusz Puchala MD, PhD - family.medicine@wum.edu.pl

## ATTENTION!

Please ensure about the form and location of classes on the website <u>www.medycynarodzinna.wum.edu.pl</u>-> English Division.

Medical University of Warsaw has property rights, including copyright, to the syllabus. The syllabus may be used for educational purposes at the MUW only. Using of the syllabus for other purposes requires consent of the MUW.

### ATTENTION

The final 10 minutes of the last class in the block/semester/year should be allocated to students' Survey of Evaluation of Classes and Academic Teachers.

## SPECIALTY CLASSES:

The specialty classes are held in two clinical blocks (3-weeks each in the mornings) during last 6 weeks of the spring semester 2023/2024.

Student can be enrolled for the subjects given below according to preferences and to the capacity of the teaching clinics:

| I | First 3-week block (90h):           | II | Second 3-week block (90h):                |
|---|-------------------------------------|----|-------------------------------------------|
|   | Obstetrics and Gynecology, Surgery, |    | Anesthesiology, Pediatrics, Ophtalmology, |
|   | Urology, Psychiatry, Maternal Fetal |    | Neurology, Cardiology                     |
|   | Medicine (Perinatology and Fetal    |    |                                           |
|   | Therapy)                            |    |                                           |
|   | 22.04-17.05.2024                    |    | 20.05-7.06.2024                           |