



## Vaccinology in practice

### 1. IMPRINT

<b>Academic Year</b>	2023/2024
<b>Department</b>	Faculty of Medicine
<b>Field of study</b>	Medicine
<b>Main scientific discipline</b>	Medical sciences
<b>Study Profile</b>	General academic
<b>Level of studies</b>	Uniform MSc
<b>Form of studies</b>	Full time studies
<b>Type of module / course</b>	Non-compulsory
<b>Form of verification of learning outcomes</b>	Completion
<b>Educational Unit / Educational Units</b>	Department of Social Medicine and Public Health Medical University of Warsaw 3 Oczki St, 02-007 Warsaw Phone: 22-621-52-56, 22-621-51-97 E-mail: <a href="mailto:zmsizp@wum.edu.pl">zmsizp@wum.edu.pl</a>

<b>Head of Educational Unit / Heads of Educational Units</b>	Prof. Aneta Nitsch-Osuch, MD, PhD
<b>Course coordinator</b>	Katarzyna Lewtak, MD, PhD e-mail: <a href="mailto:katarzyna.lewtak@wum.edu.pl">katarzyna.lewtak@wum.edu.pl</a>
<b>Person responsible for syllabus)</b>	Katarzyna Lewtak, MD, PhD e-mail: <a href="mailto:katarzyna.lewtak@wum.edu.pl">katarzyna.lewtak@wum.edu.pl</a>
<b>Teachers</b>	Prof. Aneta Nitsch-Osuch, MD, PhD Katarzyna Lewtak, MD, PhD

<b>2. BASIC INFORMATION</b>			
<b>Year and semester of studies</b>	I-VI year, summer and winter semester	<b>Number of ECTS credits</b>	2.00
<b>FORMS OF CLASSES</b>		<b>Number of hours</b>	<b>ECTS credits calculation</b>
<b>Contacting hours with academic teacher</b>			
Lecture (L)			
Seminar (S)		30 (e-learning)	1.00
Classes (C)			
e-learning (e-L)			
Practical classes (PC)			
Work placement (WP)			
<b>Unassisted student's work</b>			
Preparation for classes and completions		30	1.00

<b>3. COURSE OBJECTIVES</b>	
O1	Understanding the types and technology platforms of vaccines.
O2	Understanding the concept of life long approach to immunization.
O3	Comprehensive understanding of vaccine hesitancy problem.
O4	Having knowledge about the most common indications and contraindications for vaccines, including risk group patients.
O5	Having knowledge about recommended vaccines for pregnant women (maternal immunization rules and principles) .
O6	Ability to provide a medical advice for patients who require vaccinations.

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

<b>Code and number of effect of learning in accordance with standards of learning</b>	<b>Effects in time</b> <i>(in accordance with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019)</i>
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##### Knowledge – Graduate\* knows and understands:

C.K20	knows and understands the principles related to treatment of viral, bacterial, mycotic and parasitic infections;
E.K8	knows the symptoms of viral hepatitis, HIV infection and the acquired immune deficiency syndrome (AIDS) in infectious and parasitic diseases:
E.K9	principles of immunisation against infectious diseases in children and adults;
E.K18	knows life threatening conditions;
G.K6	health situation in the Republic of Poland and in the world;
G.K13	knows the principles of disease prevention and improvement of the health condition;
G.K14	knows the principles of epidemiological processing of the infectious disease focus, including vaccinations;

##### Skills– Graduate\* is able to:

E.S1	carries out differential diagnosis of the most common diseases of adults;
E.S3	plans the diagnostic and therapeutic procedures in case of the most common diseases of adults;
E.S7	qualifies the patient to vaccinations;
E.S8	recognises life threatening conditions;
G.S3	defines basic terms in the area of prophylaxis, health promotion and environmental hygiene;
G.S11	determines health related needs and plans activities in the area of prophylaxis and health promotion;
G.S18	evaluates the level of threats to the health, caused by the condition of the air, water, soil and food quality;

\* 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)*

<b>Number of effect of learning</b>	<b>Effects of learning in time</b>
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##### Knowledge – Graduate knows and understands:

K1	Types of vaccinations and technology platforms;
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K2	vaccine hesitancy problem.
K3	vaccine recommendations and requirements.

**Skills– Graduate is able to:**

S1	help patient to choose vaccine, including risk group patients and pregnant women;
S2	describe and recognise a patient with a hesitant attitude to vaccines;
S3	plan a vaccination schedule for a patient.

**Social Competencies – Graduate is ready for:**

SC1	being familiar with current vaccine recommendations;
SC2	identifying the indications and contraindications for vaccines;
SC3	accessing reliable evidence-based country specific information about vaccine / current epidemiological situation;
SC4	delivering correct advice using reliable information resources tailored to the individual needs of each patient (regarding vaccines and vaccination schedule).

**6. CLASSES**

Form of class	Class contents	Effects of Learning
(e-L) seminar 1 asynchronous online course	Introduction to vaccinology. Types of vaccines and technological platforms for vaccine production.	E.K9; E.K18; G.K6; G.K13; G.K14; E.S1; E.S3; E.S8; G.S3; G.S11; G.S18
(e-L) seminar 2 and seminar 3 asynchronous online course	Life long approach to vaccination	C.K20; E.K18; G.K13; G.K14; E.S1; E.S3; E.S8; G.S18
(e-L) seminar 4 and seminar 4 asynchronous online course	Maternal immunization – general rules and principles	E.K9; E.K18; G.K6; G.K13; G.K14; E.S1; E.S7; E.S8; G.S3; G.S11
(e-L) seminar 5 and seminar 6 asynchronous online course	Adult immunization	C.K20; G.K6; G.K13; G.K14; E.S1; E.S3; G.S3; G.S11
(e-L) seminar 7 asynchronous online course	Vaccine hesitancy	C.K20; E.K9; E.K18; G.K13; G.K14; E.S7; E.S8; G.S3; G.S11; G.S18
(e-L) seminar 8 and seminar 9 asynchronous online course	Adult immunization – practical aspects	E.K9; E.K18; G.K13; G.K14; E.S1; E.S3; E.S7; E.S8; G.S3; G.S11; G.S18
(e-L) seminar 10 asynchronous online course	History of vaccines and vaccinology	E.K9; E.K18; G.K13; G.K14; E.S1; E.S3; E.S7; E.S8; G.S3; G.S11; G.S18

**7. LITERATURE**

**Obligatory**

1. Plotkin S, Orenstein W, Offit P, Edwards K: Plotkin's vaccines. 8<sup>th</sup> edition. Elsevier 2022.

### Supplementary

- 1.

## 8. VERIFYING THE EFFECT OF LEARNING

Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
C.K20; E.K8; E.K9; E.K18; G.K6; G.K13; G.K14; E.S1; E.S3; E.S7; E.S8; G.S3; G.S11; G.S18	1. Quizzes, written assignments 2. Test (MCQ) – 30 questions	1. credit 2. Requirements for a pass: minimum 20 points at the final test

## 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 is available on the platform [www.e-learning.wum.edu.pl](http://www.e-learning.wum.edu.pl). Student must learn all materials uploaded to the modules on the platform. After each module there are questions related to its subject.

Student must prepare travel advices for patients (Task 1 and Task 2), send it to the teacher (using e-learning platform) and receive a positive evaluation. Student must sent them before proceeding to the final test.

Student must pass the final test (available on the e-learning platform) to obtain a credit.

Printing the certificate is possible only if the student has fulfilled both criteria: passed the final test and a received positive evaluation of the Task 1 and Task 2.

Students are obligatory to check MUW student email account as all information are sent only by formal MUW mails.

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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.