



# Transplantology

## 1. IMPRINT

Academic Year	2024/2025
Department	Faculty of Medicine
Field of study	Transplantology
Main scientific discipline	Medical sciences
Study ProfileGeneral academic	General academic
Level of studies	Uniform MSc
Form of studies	Full time studies
Type of module / courseObligatory	Obligatory
Form of verification of learning outcomes	Completion
Educational Unit / Educational	Department of Transplantation Medicine, Nephrology and Internal Diseases Address: 59 Nowogrodzka St, 02-006 Warsaw Phone: 22 502 12 32 Fax: 22 502 21 26
Head of Educational Unit / Heads of Educational Units	Professor Magdalena Durlik
Course coordinator	MD PhD Olga Tronina; <a href="mailto:olga.tronina@wum.edu.pl">olga.tronina@wum.edu.pl</a> ; phone: 604 975 468
Person responsible for syllabus	MD PhD Olga Tronina
Teachers	Magdalena Durlik, profesor, MD, PhD Teresa Bączkowska, MD, PhD Joanna Pazik, MD, PhD Dominika Dęborska-Materkowska, MD, PhD Ewa Nowacka-Cieciura, MD, PhD Jolanta Gozdowska, MD, PhD Olga Tronina, MD, PhD

	Agnieszka Furmańczyk-Zawiska, MD, PhD Maciej Kosieradzki, professor, MD, PhD Beata Łągiewska, MD, PhD Wojciech Lisik, professor, MD, PhD Marek Pacholczyk, MD, PhD Łukasz Górski, MSc
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<b>2. BASIC INFORMATION</b>			
<b>Year and semester of studies</b>	V year, IX I X 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)	6	0.2	
Seminar (S)	19	1.0	
Classes (C)			
e-learning (e-L)			
Practical classes (PC)	15	0.8	
Work placement (WP)			
<b>Unassisted student's work</b>			
Preparation for classes and completions			

<b>3. COURSE OBJECTIVES</b>	
O1	Legal issues in transplantology. Indications for solid organ transplantation
O2	Basics of transplantation immunology, tissue typing and recipient selection, rules of immunosuppressive treatment.
O3	Common post-transplant complications- pathogenesis, clinical presentation, differential and treatment

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

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

G.K1	E.W21. Issues in the field of transplantation immunology, principles of selecting the donor and recipient of organ and stem cells transplants F.W14. The basics of interventional transplantation, indications for the transplantation of irreversibly damaged organs and tissues and related procedures. F.W15. Principles of brain death determination
G.K2	E.W22. Types of transplants and immune mechanisms of allograft rejection C.W39. Major drug side effects, including drug interactions

##### Skills– Graduate\* is able to:

G.S1	E.U1. Conduct medical interview with and adult patient E.U3. Conduct a complete and targeted physical examination of an adult patient E.U14 Recognize life-threatening health conditions E.U16. Plan diagnostic, therapeutic and prophylactic procedures E.U32. Plan specialist consultations E.U20. Qualify the patient for home and hospital treatment
G.S2	E.U17. Analyze the possible side effects of individual drugs and their interactions 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. ADDITIONAL EFFECTS OF LEARNING *(non-compulsory)*

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

K1	D.W6 The importance of verbal and non-verbal communication in the proces of communicating with the patient and the concept of trust in the interaction with the patient
K2	

<b>Skills– Graduate is able to:</b>	
S1	E.U29 Perform basic medical procedures including: body temperature measurement (superficial and deep), pulse measurement, non-invasive pressure measurement
S2	
<b>Social Competencies – Graduate is ready for:</b>	
SC1	Acts for the patient's sake as his priority
SC2	Able to establish and maintain a deep and respectful contact with the patient.

<b>6. CLASSES</b>		
<b>Form of class</b>	<b>Class contents</b>	<b>Effects of Learning</b>
Lectures	L1. Organization of organ procurement and sharing in Poland. L2 Surgical complications in transplant recipients L3. Transplantation of heart, transplantation of lungs. L4. Regenerative medicine. L5. Transplant tolerance. L6. Current problems of transplantology.	F.W15, G.W9. F.W14 F.W14 E.W21, E.W22 F.W15, G.W9.m E.W21 E.W22
Seminars	S1. Organ procurement, evaluation and selection of donors. Organ preservation. S2. Qualification to kidney transplantation. S3. Qualification to liver transplantation. S4-5. Liver transplantation- surgical techniques and surgical complications. S6-7 Cardiological, metabolic and hematological complications after solid organ transplantation. S8. Malignancies in solid organ recipients. S9-10. Principles of immunosuppressive therapy in organ transplantation. S11-12. Transplant rejection and ther pathologies evolving in solid organ transplants. S13. Transplantation from living donor. S14-15 Infectious complications after solid organ transplantation. S16. Transplantation of pancreas and pancreatic islets. S17. Post-transplant management of liver transplant recipients. S18-19. Post-transplant management of kidney transplant recipients.	F.W15, G.W9. E.W7. E.W7. F.W14 E.W7 E.W7 C.W39 E.W21., E.W22  F.W14, G.W9 E.W7. E.W22 E.W7, E.W22 E.W7, E.W22

Clinical classes	C1-12 – clinical rounds, individual cases analysis in the department C13 – passive participation in transplanted organ biopsy C14-15 – passive/active participation in out-patients consultations	E.U1, E.U3, E.U7, E.U14, E.U16, E.U17, E.U32, E.U20, E.U38, D.U15
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## 7. LITERATURE

### Obligatory

Handbook of kidney Transplantation By Gabriel M. Danovitch, Lippincott Williams& Wilkins 2017

### Supplementary

Tectbook of Organ Transplantation Set, Wiley-Blackwell 2014 Allan D Kirk, Stuart J. Knechtle, Christian P. Larsen et al.

## 8. VERIFYING THE EFFECT OF LEARNING

Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
<i>e.g. G.K1, G.S1, K1</i>	<i>This field defines the methods used for grading students e.g. pop quiz, test, written report etc.</i>	<i>e.g. threshold number of points</i>
E.U1, E.U3, E.U7 E.U12, E.U14 E.U16, E.U17 E.U20	Continuous assessment during the course of the classes, presence and active participation in the clinical rounds. Based on sick leave one day absenteeism is allowed, the remaining ones must be worked off with another group.	
B.W21, B.W24, EW1, E.W7, D.U15, C.U17, E.U17	Fifteen questions MCQ test	9 points – 2.0 (failed) 10 points – 3.0 (satisfactory) 11 points – 3.5 (rather good) 12 points – 4.0 (good) 13 points – 4.5 (more than good) 14-15 points – 5.0 (very good)

## 9. ADDITIONAL INFORMATION

(Please write here Information essential for the course instructor that are not included in the other part of the course syllabus, **particularly the number of acceptable tries for passing a subject (§ 26, § 27 and § 28 of Study Regulations)**, including exam admission passes, and e.g. if the course is related to scientific research, detailed description of, information about the Science Club)

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1. Duration of the transplantology course: 1 week (from Monday to Friday).
2. 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
3. Classes start at 8.00.
4. During the course no absences will be excused.
5. Students are expected to have their own lab coat, stethoscope, student's ID, shoes.
6. The student participate in classes (seminars and practice) only with the group. Possible group change is allowed in exceptional, justified situations and requires individual approval.
7. If a student has two or more absences must make up for absences with another group. Only then can take the test with another group.
8. All student information is provided on an ongoing basis on the Clinic's website

**ATTENTION**

The final 10 minutes of the last class of the block/semester/year should be allotted for students to fill out the Survey of Evaluation of  
Classes and Academic Teachers