





Department and Clinic of Haematology, Blood Neoplasms, and Bone Marrow Transplantation	3				4												
Summer Semester																	
Department of Nephrology and Transplantation Medicine					6												
Department of Vascular, General and Transplantation Surgery					4												
Department and Clinic of Haematology, Blood Neoplasms, and Bone Marrow Transplantation																	
TOTAL per year:																	
	5				20												
Educational objectives (max. 6 items) C1. Presentation of the rapidly growing forms of renal replacement therapy , patient eligibility rules and procurement , C2. Presentation of antirejection medication and possible complications following transplantation C3. Presentation of the legislation and the organization of organ transplantation in Poland.																	
Education result matrix for module/course in relation to verification methods of the intended education result and the type of class																	
Number of course education result	Number of major education result	Student who completes the module/course knows/is able to				Methods of verification of intended education results (forming and summarising)				Form of didactic class <i>**enter the abbreviation</i>							
<b>W 01</b>	<b>E W7</b>	He knows and understand the causes, symptoms , principles of diagnosis and therapeutic intervention with respect to the most common internal diseases occurring in adults ,				Oral answer				L, CC							



<b>W02</b>	E.W37	and their complications : kidney and urinary tract , including acute and chronic renal failure , diseases glomerulonephritis and interstitial kidney , renal cysts , kidney stones , urinary tract infections He knows the types of biological materials used in laboratory diagnostics and rules for the collection of research material ;		
<b>W03</b>	E.W38.	He knows theoretical basis and practical laboratory diagnostics ;		
<b>W04</b>	E.W39.	He knows and understands the possibilities and Limitations of laboratory tests in emergency situations ;		
<b>W05</b>	E.W8.	He knows and understands the course and symptoms of the aging process as well as that the principle of overall assessment and geriatric care interdisciplinary to a patient in the elderly ;		
<b>U 01</b>	E.U1.	performs medical history of the patient adults ;	Oral answer – adequacy of taking history and physical examination as well as assessment of medical records	L, CC
<b>U 02</b>	E.U3.	performs complete and targeted physical examination of the adult patient ;		
<b>U 03</b>	E.U7.	evaluates the condition , the state of consciousness of the patient;		
<b>U 04</b>	E.U20.	qualifies the patient for home and hospital treatment		
<b>U 05</b>	E.U38.	can keep patient's records medical		
<b>K 01</b>		willingly participates in care of patient after transplantation, cooperates in a transplant team,		
<b>K 02</b>		actively participates in education society regarding transplantation		
<b>K03</b>				
** L - lecture; SE - seminar; AC – auditorium classes; MC – major classes (non-clinical); CC – clinical classes; LC – laboratory				



classes; SCM – specialist classes (magister studies); CSC – classes in simulated conditions; FLC – foreign language course; PCP – practical classes with patient; PE – physical education (obligatory); VP – vocational practice; SS – self-study, EL – E-learning .

Please mark on scale 1-5 how the above effects place your classes in the following categories:  
communication of knowledge, skills or forming attitudes:

Knowledge: .5

Skills: 5

Social competences: 5

Student's amount of work (balance of ECTS points)

Student's workload (class participation, activity, preparation, etc.)	Student Workload (h)
1. Contact hours:	25
2. Student's own work (self-study):	10
Total student's workload	35
ECTS points for module/course	1,5
Comments	

**Content of classes** (please enter topic words of specific classes divided into their didactic form and remember how it is translated to intended educational effects)

Lectures

- 1a. Legal basis and organization of transplantation in Poland. The national list of refusals. Central List of Recipients .
- 1b. Immunological basis for organ transplantation.
- 1c. Immunosuppressive drugs , principles of immunosuppressive therapy .
- 2a. Infectious complications in transplant recipients .
- 2b. Mechanisms of organ rejection and chronic causes organ damage .

Seminars --

**Practical classes**

**Department of Nephrology and Transplantation Medicine**

Indications for organ transplantation.

Renal transplantation. Liver transplantation. Pancreas transplantation and pancreatic islet. Heart Transplant. Postoperative care after organ transplantation.

Eligibility transplant recipient, the immunological selection of recipient and donor tissue typing, crossmatch. The problem of donor family .

Care for the patient in the early period after kidney transplantation; the most common complications. Delayed taking action by the transplanted organ, the causes of deterioration, Rejection of the transplant. Rules for selection of the immunosuppressive program. Monitoring of immune response. Control of drug concentrations.

Acute and chronic rejection of transplants. Histopathology changes in the kidney transplant.

Monitoring transplant recipient. Infectious complications in the early and late and post-transplant period. Cardiovascular morbidity in transplant recipients. Hematologic, metabolic, endocrine complications and cancers after organ transplantation. A patient with inefficient transplant.

Retransplantation. The results of transplantation. The quality of life of transplant recipients.

Pregnancy patients after transplantation.



**Department of Vascular, General and Transplantation Surgery**

Organ procurement and storage. Criteria for brain death. Choosing a deceased donor and taking care of the donor. Rules for organ allocation.

Surgical aspects of transplantation and post-transplantation care over kidney recipient

Surgical aspects of transplantation and post-transplant care over recipients of abdominal organs: liver, pancreas, intestines.

Surgical aspects of transplantation and post-transplant care over chest and heart organ recipients.

**Department and Clinic of Haematology, Blood Neoplasms, and Bone Marrow Transplantation**

Day 1 (2h)

Rules for the qualification of a patient for hematopoietic cell transplantation.

Principles of searching for and selection of donors of allogeneic hematopoietic cells.

Sources of hematopoietic cells and methods of their collection. Engineering of hematopoietic cells preparation.

Day 2 (2h)

Infectious and non-infectious complications after hematopoietic cell transplantation.

An acute and chronic graft versus host disease. Diagnostics, symptoms and treatment.

Principles and methods for monitoring residual disease after HSCT. Evaluation of donor chimerism after transplantation after allogeneic HSCT. Methods for the treatment of prophylactic and anticipatory recurrence of cancer.

Other ---

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

1. Organ transplantation – a clinical guide Andre A.Kline, 2011, Cambridge University Press

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

1. Textbook of Organ Transplantation, A Kirk, 2014, Wiley-Blackwell

2. Handbook of kidney transplantation, G Danovitch, Wolters Cluver

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

Clinical classes, multimedia projector

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

Knowledge of the basics of internal medicine and basic surgery .

Conditions to receive credit for the course (specify the form and conditions of receiving credit for classes included in the module/course, admission terms to final theoretical or practical examination, its form and requirements to be met by the student to pass it and criteria for specific grades)

All the absences (including Rectors Day ect.) has to be made up in form of preparing an essay or a presentation according to the lecturer instructions . Final test: oral answer /written test

Grade:	Criteria
Very Good (5.0)	Knowledge of issues related to the basics of transplantation is estimated 95%. Student interprets medical research, diagnose, carry out differential diagnosis, proposes treatment very well.
Good Plus	Knowledge of issues related to the basics of transplantation is estimated 90%.



(4.5)	Student interprets medical research, diagnose , carry out differential diagnosis , proposes treatment above well.
Good (4.0)	Knowledge of issues related to the basics of transplantation is estimated 80%. Student interprets medical research, diagnose , carry out differential diagnosis , proposes treatment well.
Satisfactory Plus (3.5)	Knowledge of issues related to the basics of transplantation is estimated 70%. Student interprets medical research, diagnose , carry out differential diagnosis , proposes treatment fairly well
Satisfactory (3.0)	Knowledge of issues related to the basics of transplantation is estimated 60%. Student interprets medical research, diagnose , carry out differential diagnosis , proposes treatment sufficiently
<b>Grade:</b>	<b>Criteria for exam (if applicable)</b>
Very Good (5.0)	
Good Plus (4.5)	
Good (4.0)	
Satisfactory Plus (3.5)	
Satisfactory (3.0)	

<b>Name of unit teaching course:</b>	Department of Nephrology and Transplantation Medicine
Address	<b>Borowska 213 Wrocław</b>
Phone	<b>717332500</b>
E-mail	nefrologia@umed.wroc.pl

<b>Person responsible for course:</b>	<b>Prof. Magdalena Krajewska</b>
Phone	<b>717332500</b>
E-mail	nefrologia@umed.wroc.pl

<i>List of persons conducting specific classes:</i>	<i>degree/scientific or professional title</i>	<i>Discipline</i>	<i>Performer profession</i>	<i>Form of classes</i>
Dorota Kamińska	Dr hab. n. med	Internal disease, nephrology, transplantology	physician	Classes, lectures
Mirosław Banasik	Dr hab. n. med	Internal disease, nephrology, transplantology	physician	Classes, lectures
Krzysztof Letachowicz	Dr hab. n. med	Internal disease, nephrology,	physician	classes



Tomasz Gołębiowski	Dr n. med	Internal disease, nephrology,	physician	classes
Hanna Augustyniak-Bartosik	Dr n. med	Internal disease, nephrology, transplantology	physician	classes
Sławomir Zmonarski,	Dr n. med	Internal disease, nephrology, transplantology	physician	classes
Mariusz Kuztal	Dr hab. n. med	Internal disease, nephrology,	physician	classes
Paweł Poznański	Lek.		physician	Classes, lectures
Oktawia Mazanowska,	Dr hab. n. med., prof. nadzw.	Internal disease, nephrology, transplantology	physician	classes

<b>Name of unit teaching course:</b>	Department of Vascular, General and Transplantation Surgery
Address	Ul. Borowska 213, Wrocław,
Phone	71 733 20 03
E-mail	magdalena.emilianowicz@umed.wroc.pl

<b>Person responsible for course:</b>	<b>Prof. Dariusz Janczak</b>
Phone	tel. 71 733 20 03
E-mail	magdalena.emilianowicz@umed.wroc.pl

<i>List of persons conducting specific classes:</i>	<i>degree/scientific or professional title</i>	<i>Discipline</i>	<i>Performer profession</i>	<i>Form of classes</i>
Piotr Barć	dr n. med.	transplant surgery general surgery	physician	Classes,
Tomasz Dawiskiba	dr n. med.	transplant surgery general surgery	physician	Classes,
Agnieszka Lepiesza	lekarz	transplant surgery general surgery	physician	Classes,
Marcin Rychter	lekarz	transplant surgery general surgery	physician	Classes,
Aleksandra Milnerowicz	lekarz	general surgery	physician	classes
Tadeusz Dorobisz	dr n. med.	general surgery	physician	classes
Maciej Antkiewicz	lekarz	general surgery	physician	classes



<b>Name of unit teaching course:</b>	Department and Clinic of Haematology, Blood Neoplasms, and Bone Marrow Transplantation
Address	wyb. Ludwika Pasteura 4, 50-367 Wrocław
Phone	71 784 25 76
E-mail	WK-14@umed.wroc.pl

<b>Person responsible for course:</b>	<b>Prof. Tomasz Wróbel</b>
Phone	71 784 25 76
E-mail	WK-14@umed.wroc.pl

<i>List of persons conducting specific classes:</i>	<i>degree/scientific or professional title</i>	<i>Discipline</i>	<i>Performer profession</i>	<i>Form of classes</i>
Anna Czyż	Dr hab.	Internal medicine, Hematology and transplantology	physician	Classes, lectures
Agnieszka Szeremet	Lek. Med.	Internal medicine, hematology	physician	classes
Monika Biernat	Dr n.med.	Internal medicine, microbiology, hematology trainee	physician	classes
Aleksandra Bogucka- Fedorczuk	Lek. Med.	Internal medicine	physician	classes
Maciej Majcherek	Dr n.med.	Hematology trainee	physician	classes

**Date of Syllabus development**

2.07.2019

**Syllabus developed by**

dr hab n.med. Dorota Kamińska  
dr hab.n. med. Mirosław Banasik .

**Signature of Head of teaching unit**

Signature of Faculty Dean

Wrocław Medical University  
FACULTY OF MEDICINE  
VICE-DEAN FOR STUDENTS IN ENGLISH  
*Andrzej Hendrich*  
Prof. Andrzej Hendrich, PhD

Uniwersytet Medyczny we Wrocławiu  
KATEDRA I KLINIKA NEFROLOGII  
I MEDYCZYNY TRANSPLANTACYJNEJ  
*Magdalena Krajewska*  
prof. dr hab. Magdalena Krajewska