	Syllabus for academic year:	2020/2021					
	Training cycle: 2016-	2022					
	Description of the cou	ırse					
Module/Course	Clinical Transplantology	Gr	etailed education				
		Gr co	oup de	Group name			
		E		Non-invasive clinical science			
		F		Invasive clinical science			
Faculty	Medicine						
Major	Medicine						
Unit realizing the subject	Department of Nephrology and Department of Vascular, General Department and Clinic of Haema Marrow Transplantation	al and Transpla	antation	Surgery			
Specialties	Not applicable						
Level of studies	Uniform magister studies X*						
	1 st degree studies □						
	2 nd degree studies □						
	3 rd degree studies □						
	postgraduate studies □						
Form of studies	X full-time □ part-time						
Year of studies	V	Semester	X Win	nter nmer			
Type of course	X obligatory						
	□ limited choice						
	☐ free choice / elective						
Course	☐ major X basic						
Language of instruction	□ Polish X English □ other						
* mark □ with an X							
	Number of hours	3					
	Form of educatio	n					

Unit teaching the course	Lectures (L)	Seminars (SE)	Auditorium classes (AC)	Major Classes – not clinical (MC)	Clinical Classes (CC)	Laboratory Classes (LC)	Classes in Simulated Conditions (CSC)	Practical Classes with Patient (PCP)	Specialist Classes – magister studies (SCM)	Foreign language Course (FLC)	Physical Education obligatory (PE)	Vocational Practice (VP)	Self-Study (Student's own work)	E-learning (EL)
Winter Semester	16.				J.									
Direct (contact) education					10									
Online learning (synchronous)	5				10	4	T			¥				
Distance learning (asynchronous)														4
Summer Semester								V=						
Direct (contact) education					10									
Online learning (synchronous)					10									
Online learning (asynchronous)														
TOTAL per year:					,			**						
Direct (contact) education					20									
Online learning (synchronous)	5				20									
Online learning (asynchronous)														

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	Number of	Student who completes the	Methods of verification	Form of didactic
course	major	module/course knows/is able to	of intended education	class
education	education	Thoughey course knowsy is able to	results (forming and	**enter the
result	result		summarising)	abbreviation
W 01	E W7	He knows and understand the	Oral answer	L, CC
		causes, symptoms , principles		
		of diagnosis and therapeutic		
		intervention with respect to the		
		most common internal		

32000					
		diseases occurring in adults ,			
		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			
W02	E.W37	He knows the types of			
		biological materials used in			
		laboratory diagnostics and			
		rules for the collection of			2
		research material ;			
W03	E.W38.	He knows theoretical basis			
		and practical laboratory			
		diagnostics ;			
W 04	E.W39.	He knows and understands the			
		possibilities and Limitations of			
		laboratory tests in emergency			
+40-		situations ;			
W05	E.W8.	He knows and understands the	Y		
		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;			
U 01	E.U1.	performs medical history of the	Oral answer –	L, CC	
		patient adults ;	adequacy of		
U 02	E.U3.	performs complete and	taking history and		
		targeted physical examination	physical		
		of the adult patient ;	examination as		
U 03	E.U7.	evaluates the condition , the	well as		
		state of consciousness of the	assessment of		
		patient;	medical records		
U 04	E.U20.	qualifies the patient for home			
		and hospital treatment			
U 05	E.U38.	can keep patient's			
		records medical			
K 01		willingly participates in care of			
		patient after transplantation,			
K 02		cooperates in a transplant	2		
N UZ		team,			
1400		actively participates in			
K03		education society regarding			
		transplantation			

** 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

Forming attitudes:5

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

Student's workload	Student Workload (h)
(class participation, activity, preparation, etc.)	
1. Contact hours:	10
2. Online learning hours (e-learning):	15
3. 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

Department of Nephrology and Transplantation Medicine (2 hours)

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

Department and Clinic of Haematology, Blood Neoplasms, and Bone Marrow Transplantation (3 hours)

2. Types and general principles of hematopoietic cell transplantation. Indications and methods of preparation ("conditioning") of patients for transplantation of hematopoietic cells. General principles of managing patients after hematopoietic cell transplantation.

Seminars

Not applicable

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)

The princeples of qualifying the patient for hematopoietic cell transplantation.

Rules for the search and selection of allogeneic hematopoietic cell donor.

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.

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 preventive and pre-emptive cancer recurrence.

Other

1.

2.

3.

etc. ...

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. Hanbook 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 med 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 assay or a presentation according to the lecturer instructions . Final test: oral answer /written test

Grade:	Criteria (only for courses/modules ending with an examination)
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 (4.5)	Knowledge of issues related to the basics of transplantation is estimated 90%. 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
	Criteria (only for courses/modules ending with e credit)
Credit	

Grade:	Criteria (examination evaluation criteria)
Very Good	
(5.0)	
Good Plus	
(4.5)	
Good	
(4.0)	
Satisfactory Plus	
(3.5)	
Satisfactory	
(3.0)	
Unit realizing the	Department of Nephrology and Transplantation Medicine
subject	
Unit address	50-556 Wrocław, ul. Borowska 213
Telephone	71 733 2500
E-Mail	nefrologia@umed.wroc.pl

Person responsible	Prof dr hab. Magdalena Krajewska
for module	
Coordinator	

Telephone	71 733 2500
E-Mail	magdalena.krajewska@umed.wroc.pl

Full name	Degree/scientific or professional title	Discipline	Performed profession	Form of classes
Dorota Kamińska	MD, PhD	Internal medicine, nephrology, clinical transplantation	Medical doctor	Classes, lectures, seminars
Mariusz Kusztal,	MD, PhD	Internal medicine, nephrology	Medical doctor	Classes, lectures, seminars
Mirosław Banasik,	MD, PhD	Internal medicine, nephrology, clinical transplantation	Medical doctor	Classes, lectures, seminars
Krzysztof Letachowicz,	MD, PhD	Internal medicine, nephrology	Medical doctor	Classes, lectures, seminars
Tomasz Gołębiowski,	MD, PhD	Internal medicine, nephrology, clinical transplantation	Medical doctor	Classes, lectures, seminars
Sławomir Zmonarski,	MD, PhD	Internal medicine, nephrology, clinical transplantation	Medical doctor	Classes, lectures, seminars
Maciej Szymczak,	MD, PhD	Internal medicine, nephrology, clinical transplantation	Medical doctor	Classes, lectures, seminars
Andrzej Konieczny	MD, PhD	Internal medicine, nephrology	Medical doctor	Classes, lectures, seminars
Katarzyna Jakuszko,	MD, PhD	Internal medicine, nephrology	Medical doctor	Classes, lectures, seminars
Hanna Augustyniak - Bartosik	MD, PhD	Internal medicine, nephrology, clinical transplantation	Medical doctor	Classes, lectures, seminars
Paweł	MD		Medical doctor	Classes, lectures,

Poznański		seminars

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

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

Lillali	magaa	nena.emmanowiczwi	mica.wroc.pi	
List of persons conducting specific classes:	degree/scientific or professional title	Discipline	Performe r professio n	Form of classes
Darusz Patrzałek	Prof. dr hab. n.med.	transplant surgery general surgery	Physician	classes
Tomasz Dawiskiba	dr n. med.	transplant surgery	physician	Classes,
Agnieszka Lepiesza	lekarz	transplant surgery	physician	Classes,
Marcin Rychter	lekarz	transplant surgery general surgery	physician	Classes,
Tadeusz Dorobisz	dr n. med.	general surgery	physician	classes
Maciej Antkiewicz	lekarz	general surgery	physician	Classes
Piotr Barć	dr n. med.	transplant surgery	physician	Classes,

	Department and Clinic of Haematology,	
Name of unit teaching course:	Blood Neoplasms, and Bone Marrow Transplantation	
Address	wyb. Ludwika Pasteura 4, 50-367 Wrocław	



Phone	tel.: 71 784 25 76, faks: 71 327 09 63
E-mail	e-mail: <u>WK-14@umed.wroc.pl</u>

Person responsible for course:	prof. dr hab. n. med. Tomasz Wróbel	
Phone	713689391	
E-mail	tomasz.wrobel@umed.wroc.pl	

List of persons conducting specific classes:	degree/scientific or professional title	Discipline	Performer profession	Form of cla
Anna Czyż	Dr hab. n. med.	Internal medicine, hematology, transplantology	lekarz; n.a.	CK
Donata Urbaniak-Kujda	Dr hab. n. med.	Internal medicine, hematology	lekarz; n.a.	СК
Maciej Majcherek	Dr n. med.	Hematology (in trainee)	lekarz n.a	СК
Monika Biernat	Dr n. med.	mikrobiology, internal medicine, hematology (in trainee)	lekarz; n.a.	СК
Agnieszka Szeremet	Lek.	Internal medicine, hematology	lekarz; n.a.	CK

Date of Syllabus development

29.09.2020

Syllabus developed by

dr hab. n.med. Dorota Kamińska, dr hab. n.med. Mirosław Banasik, dr n.med. Katarzyna Jakuszko

Signature of Head of teaching unit

Signature of Faculty Dean

con drhab, Magdalena Krajoveka