



Syllabus for academic year: 2022/2023 Cycle: 2018/2019-2023/2024													
Description of the course													
Course	Transplantologia kliniczna							Group of detailed education results					
	Clinical transplantation							Group of classes (group code) F	Group name INVASIVE CLINICAL SCIENCE				
Faculty	Medicine												
Major	Medicine												
Level of studies	X uniform magister studies <input type="checkbox"/> 1 st degree studies <input type="checkbox"/> 2 nd degree studies <input type="checkbox"/> 3 rd degree studies <input type="checkbox"/> postgraduate studies												
Form of studies	X full-time <input type="checkbox"/> part-time												
Year of studies	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 X 5 <input type="checkbox"/> 6						Semester:	X winter X summer					
Type of course	X obligatory <input type="checkbox"/> free choice / optional												
Language of study	<input type="checkbox"/> Polish X English												
Number of hours													
Form of education													
	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)	Foreign language Course (FLC)	Physical Education (PE)	Vocational Practice (VP)	Directed Self-Study (DSS)	E-learning (EL)
Winter semester: 13 hours													
Department of Nephrology and Transplantation Medicine													
Direct (contact) education ¹					4								
Distance learning ²	2												
Department of Haematology, Blood Neoplasms and Bone Marrow Transplantation													
Direct (contact) education					4								

¹ Education conducted with direct participation of university teachers or other academics

² Education with applied methods and techniques for distance learning



Distance learning	3												
Summer semester: 12 hours													
Department of Nephrology and Transplantation Medicine													
Direct (contact) education		4			8								
Distance learning													
TOTAL per year: 25 hours													
Department of Nephrology and Transplantation Medicine													
Direct (contact) education		4			12								
Distance learning		2											
Department of Haematology, Blood Neoplasms and Bone Marrow Transplantation													
Direct (contact) education					4								
Distance learning		3											
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. C4. Development social competences needed to practice the medical profession, in accordance with graduate's profile.													
Education result for course in relation to verification methods of the intended education result and the type of class:													
Number of detailed education result	Student who completes the course knows/is able to					Methods of verification of intended education results			Form of didactic class <i>*enter the abbreviation</i>				
F. W14.	In terms of knowledge the graduate knows and understands: the basic coverage of procedural transplantation, indications for transplantation of irreversibly damaged organs and tissues and related procedures;					Oral answer			L/CK/AC				
F.U1.	In terms of skills the graduate is able to: assist in a typical surgical procedure, prepare the surgical field and administer local anaesthetic to the surgical area;					assessment of practical skills			CK				
F.U12.	monitor the patient's condition in the postoperative period based on basic vital signs;					assessment of practical skills			CK				
* L- lecture; SE- seminar; AC- auditorium classes; MC- major classes (non-clinical); CC- clinical classes; LC- laboratory classes; CSC- classes in simulated conditions; PCP- practical classes with patient; FLC- foreign language course; PE- physical education; VP- vocational practice; DSS- directed self-study; EL- E-learning													
Student's amount of work (balance of ECTS points):													
Student's workload (class participation, activity, preparation, etc.)										Student Workload			
1. Number of hours of direct contact:										20			



2. Number of hours of distance learning:	5
3. Number of hours of student's own work:	9
4. Number of hours of directed self-study	n/d
Total student's workload	34
ECTS points for course	1,5

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

WINTER SEMESTER (5 hours)

1. Legal basis and organization of transplantation in Poland. Immunological basis for organ transplantation. Department of Nephrology and Transplantation Medicine (2 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. Department of Haematology, Blood Neoplasms, and Bone Marrow Transplantation (3 hours)

Seminars

SUMMER SEMESTER (4 hours)

1. Indications for organ transplantation. Eligibility transplant recipient, the immunological selection of recipient and donor tissue typing, crossmatch. The problem of donor family (2 hours).
2. Organ procurement and storage. 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 (2 hours).

Classes

WINTER SEMESTER (8 hours)

Department of Nephrology and Transplantation Medicine

1. 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 (2 hours).
2. Rejection of the transplant. Rules for selection of the immunosuppressive program. Monitoring of immune response. Control of drug concentrations (2 hours).

Department of Haematology, Blood Neoplasms, and Bone Marrow Transplantation:

1. The principles 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 (2 hours).
2. 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 (2 hours).

SUMMER SEMESTER (8 hours)

Department of Nephrology and Transplantation Medicine

1. Organ procurement and storage. Criteria for brain death. Choosing a deceased donor and taking care of the donor. Rules for organ allocation (2 hours).
2. Acute and chronic rejection of transplants. Histopathology changes in the kidney transplant. Monitoring transplant recipient (2 hours).
3. 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 (2 hours).



A patient with inefficient transplant. Retransplantation. The results of transplantation. The quality of life of transplant recipients. Pregnancy patients after transplantation (2 hours).
Other 1.
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; Hanbook of kidney transplantation , G Danovitch , Lippincott Williams and Wilkins, 2017
Preliminary conditions: (minimum requirements to be met by the student before starting the course) Knowledge of the basics of internal medicine and basic surgery.

Rules for granting partial grades in the subject during the semester:	
Conditions to receive credit for the course: ⁴ (the final grade is the average of the grades issued by both units)	
Grade:	Criteria for courses ending with a grade
	Department of Nephrology and Transplantation Medicine
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 Above (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
	Department of Haematology, Blood Neoplasms, and Bone Marrow Transplantation:
Very Good (5.0)	Knowledge of issues related to the hematopoietic cell transplantation is estimated 95%. Student interprets medical research, diagnose , carry out differential diagnosis , proposes treatment very well.
Good Above (4.5)	Knowledge of issues related to the hematopoietic cell 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 hematopoietic cell 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 hematopoietic cell 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 hematopoietic cell transplantation is estimated 60%. Student interprets medical research, diagnose , carry out differential diagnosis , proposes treatment sufficiently



⁴ Please only fill out the conditions to receive credit specific to the given course and delete the remainder. Conditions to receive credit for the course (ie. with a grade or without), and the conditions for obtaining a grade from the exam, must include verification of the result of the given education carried out during all forms of teaching within the given subject (the following must be specified: form, criteria, and conditions to receive credit for classes included in the course, the admission terms to the final theoretical or practical examination, the form and requirements that must be met by the student to pass, as well as the criteria for specific grades). ATTENTION! Attendance can not be a condition for passing the course

Department in charge of the course: ⁵	Department of Nephrology and Transplantation Medicine
Head of Department in charge of the course:	Prof. dr hab. Magdalena Krajewska
Telephone:	71 7332500
E-Mail:	nefrologia@umw.edu.pl
Department in charge of the course: ⁵	Department of Haematology, Blood Neoplasms, and Bone Marrow Transplantation
Head of Department in charge of the course:	Prof. dr hab. Tomasz Wróbel
Telephone:	713689391
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Person in charge for the course:	Prof. dr hab. Magdalena Krajewska
Telephone:	71 7332500
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Coordinator of the course:	Prof. dr hab. Magdalena Krajewska
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CONSULTATION: Detailed information pertaining to the dates and places for consultation of academic staff are provided on the university websites of the departments in which the given subjects are being conducted. Additionally the information is posted next to the department secretary.

Date of Syllabus development
24.06.2022



⁵ For coordinated subjects, subjects which are coordinated by more than one department, this part should be duplicated and completed separately for each of the departments which will be conducting didactic classes.