

**DESCRIPTION OF COURSE UNIT FOR DOCTORAL STUDIES  
AT VILNIUS UNIVERSITY**

<b>Scientific Area/eas, Field/ds of Science</b>	Medical and Health Sciences (M 000): Medicine (M 001)			
<b>Faculty, Institute, Department/Clinic</b>	Faculty of Medicine, Institute of Clinical Medicine, Clinic of Gastroenterology, Nephrourology and Surgery			
<b>Course unit title</b> (ECTS credits, hours)	<b>Renal Replacement Therapy</b> 9 credits (239 hours)			
<b>Study method</b>	<b>Lectures</b>	<b>Seminars</b>	<b>Consultations</b>	<b>Self-study</b>
Number of ECTS credits	-	-	2	7
<b>Method of the assessment</b> (in 10 point system)	Final examination: 20 questions. Consists of clinical situations and multiple choice.			
<b>PURPOSE OF THE COURSE UNIT</b>				
Studying different renal replacement therapy modalities. Acquiring advanced and updated knowledge in the field of haemodialysis, peritoneal dialysis, and kidney transplant.				
<b>THE MAIN TOPICS OF COURSE UNIT</b>				
<p>Renal replacement therapy indications in patients with acute kidney injury and chronic kidney disease. Modality choice: transplant, peritoneal dialysis, hemodialysis.</p> <p>Haemodialysis prescription: timing, duration, dialysate composition, anticoagulation, medication. Creation, monitoring and complications of different hemodialysis access types: central venous catheter, arteriovenous fistula, arteriovenous graft.</p> <p>Other extracorporeal detoxification methods: isolated ultrafiltration, hemofiltration, heamodiafiltration.</p> <p>Peritoneal dialysis prescription: parameters and regimens of continuous ambulatory peritoneal dialysis and automated peritoneal dialysis. Detection and treatment of main peritoneal dialysis complications: mechanical, infectious, metabolic.</p> <p>Kidney transplantation: indications, examination, preparation, follow-up of kidney recipient. Transplant possibilities: deceased and living related donation, ABOi blood group and organ complex transplantation.</p> <p>Immunosuppressive medication: drug types, administration, side effects.</p> <p>Transplant complications in early and late period. Infections: pyelonephritis, viral. Cancers. Hyper acute, acute and chronic allograft rejection. Chronic allograft nephropathy.</p>				
<b>RECOMMENDED LITERATURE SOURCES</b>				
<p>1. Yong-Lim Kim, Hideki Kawanishi. The Essentials of Clinical Dialysis 1st ed. 2018. Springer.</p> <p>2. Feehally J. et al. Comprehensive Clinical Nephrology. Elsevier, 6th ed. 2018.</p> <p>3. Stuart J. Knechtle, Lorna P. Marson, Peter Morris. Kidney Transplantation - Principles and Practice: Expert Consult - Online and Print 8th Edition. 2019</p> <p>4. www.uptodate.com</p> <p>5. www.era-online.org</p> <p>6. www.theisn.org</p>				
<b>CONSULTING LECTURERS</b>				
1. <u>Coordinating lecturer</u> : Marius Miglinas (Prof. Dr.).				
2. Laurynas Rimševičius (Assoc. Prof. Dr.).				
3. Ernesta Mačionienė (Assist. Prof. Dr.).				
<b>APPROVED:</b>				
By Council of Doctoral School of Medicine and Health Sciences at Vilnius University: 29 <sup>th</sup> of September 2022				
Chairperson of the Board: Prof. Janina Tutkuvienė				