

**CIRCULATORY SUPPORT & HEART- AC TRANSPLANTATION**

**Syllabus**

Course Description					
Name	Code	Semester	T+A Hour	Credit	ECTS
CIRCULATORY SUPPORT & HEART- AC TRANSPLANTATION	PRFY1231180	Spring Semester	2+2	3	8
<b>Prerequisites Courses</b>					
<b>Recommended Elective Courses</b>					
<b>Language of Instruction</b>	Turkish				
<b>Course Level</b>	Second Cycle (Master's Degree)				
<b>Course Type</b>	Elective				
<b>Course Coordinator</b>	Prof.Dr. Halil TÜRKOĞLU				
<b>Name of Lecturer(s)</b>	Prof.Dr. Korhan ERKANLI, Assist.Prof. Bilge YILMAZ				
<b>Assistant(s)</b>					
<b>Aim</b>	This course aims to inform students about ventricular support systems.The definition of circulatory support systems, their importance in cardiac surgery, and the techniques applied for heart transplantation are taught.				
<b>Course Content</b>	This course contains; learns right and left heart bypass,learns and uses ventricular assist systems,Gain information about the total artificial heart,Learns to use extracorporeal membrane oxygenator (ECMO),History of Heart Surgery,Introduction to organ transplants,Pathophysiology of organ transplantation,Immunological effects of organ transplantation,Criteria for donor selection in organ transplantations,Organ preservation solutions and organ transport,Heart transplant cannulation methods and perfusion management,Rejection after heart surgery,Cannulation methods and perfusion management in lung transplantation,Cannulation methods and perfusion management in liver and kidney transplants,Short-term circulatory support systems used in organ transplants.				
<b>Course Learning Outcomes</b>			<b>Teaching Methods</b>	<b>Assessment Methods</b>	
			14, 16, 5, 9	E	
			10, 12, 16, 4, 5, 9	E	
			10, 12, 16, 4, 6, 9	E	
			10, 14, 16, 5, 9	E	
			10, 14, 16, 5, 6	E	
			14, 16, 3, 5, 6	E	
			10, 12, 14, 16, 5	E	
			10, 12, 14, 16, 4, 5, 9	E	
<b>Teaching Methods</b>	10: Discussion Method, 12: Problem Solving Method, 14: Self Study Method, 16: Question - Answer Technique, 3: Problem Baded Learning Model, 4: Inquiry-Based Learning, 5: Cooperative Learning, 6: Experiential Learning, 9: Lecture Method				
<b>Assessment Methods</b>	E: Homework				
<b>Lecture Schedule</b>					
<b>Sequence</b>	<b>Topics</b>	<b>Preliminary Preparation</b>			
1	learns right and left heart bypass				
2	learns and uses ventricular assist systems				
3	Gain information about the total artificial heart				
4	Learns to use extracorporeal membrane oxygenator (ECMO)				
5	History of Heart Surgery				
6	Introduction to organ transplants				
7	Pathophysiology of organ transplantation				
8	Immunological effects of organ transplantation				
9	Criteria for donor selection in organ transplantations				
10	Organ preservation solutions and organ transport				
11	Heart transplant cannulation methods and perfusion management				
12	Rejection after heart surgery				
13	Cannulation methods and perfusion management in lung transplantation				
14	Cannulation methods and perfusion management in liver and kidney transplants				
15	Short-term circulatory support systems used in organ transplants				
<b>Evaluation Methods</b>		<b>Weight(%)</b>			
Midterm Exam		50			
General Exam		50			

Resources	
Mastery of Cardiothoracic Surgery	