

## CARDIAC SURGERY &amp; EXTRACORPOREAL CIRCULATION

## Syllabus

Course Description					
Name	Code	Semester	T+A Hour	Credit	ECTS
CARDIAC SURGERY & EXTRACORPOREAL CIRCULATION	PRFY1231160	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>	Assoc.Prof. Yahya YILDIZ				
<b>Assistant(s)</b>					
<b>Aim</b>					
<b>Course Content</b>	This course contains; Detailed explanation of extracorporeal circulation techniques,Installation and operation of the cardiopulmonary bypass system,Isolated organ perfusion,Intra-abdominal perfusion applications,Perfusion applications in pregnant women,Perfusion applications in liver transplants,Pulsatile flow and nonpulsatile flow,Organ transport in heart transplants.				
<b>Course Learning Outcomes</b>			<b>Teaching Methods</b>	<b>Assessment Methods</b>	
At the end of this course, the student; Will have knowledge about the evaluation and applications of extracorporeal circulation techniques.					
The differences between extracorporeal circulation techniques, cannulation techniques, femoral, jugular, venous cannulation and femoral artery aortic cannulation will be explained.					
As a strategy for entering cardiopulmonary bypass, the arrangements to be made for fresh gas and blood flow in ECMO at the beginning and in the future are explained. ECMO adjustments are made according to hemodynamics and gas exchange monitoring.					
Adjustments are made according to the blood gas taken					
<b>Teaching Methods</b>					
<b>Assessment Methods</b>					
<b>Lecture Schedule</b>					
<b>Sequence</b>	<b>Topics</b>	<b>Preliminary Preparation</b>			
1	Detailed explanation of extracorporeal circulation techniques				
2	Installation and operation of the cardiopulmonary bypass system				
3	Isolated organ perfusion				
4	Intra-abdominal perfusion applications				
5	Perfusion applications in pregnant women				
6	Perfusion applications in liver transplants				
7	Pulsatile flow and nonpulsatile flow				
8	Organ transport in heart transplants				
<b>Evaluation Methods</b>		<b>Weight(%)</b>			
Midterm Exam		50			
General Exam		50			
<b>Resources</b>					