

<b>GENERAL INFORMATION</b>		
Course name	<b>Transfusion Medicine</b>	
Course director	<b>Assoc. Prof. Marina Samardžija, MD, PhD</b>	
Assistants	Asst. Prof. Irena Jukić, MD, PhD Tomislav Vuk, MD, PhD	
Study program	<b>Integrated undergraduate and graduate university study program Medical Studies in German</b>	
Course status	Elective	
Year of study, semester	5 <sup>th</sup> year, 10 <sup>th</sup> semester	
Credits allocated and form of instruction	ECTS student workload	<b>1</b>
	Number of teaching hours (L+S+E)	<b>15 (5+5+5)</b>
<b>COURSE DESCRIPTION</b>		
<b>Course objectives</b>		
Obtaining knowledge about the implementation of optimal, rational and effective transfusion therapy, which includes knowledge of general principles of blood donation, laboratory selection of donors, blood changes during production, labeling and storage of blood products, characteristics of blood products and plasma derivatives, indications for their use, risks and side effects of transfusion therapy, quality control and measures of effectiveness. Students will also adopt the principles of good manufacturing and laboratory practice.		
<b>Course requirements</b>		
There are no specific requirements for this course except those defined in the study program curriculum.		
<b>Learning outcomes at the Programme level</b>		
<b>1.2., 2.1., 2.3., 3.4., 4.2.</b>		
<b>Expected learning outcomes (5-10 learning outcomes)</b>		
After passing the Transfusion medicine exam, the student will be able to interpret and draw conclusions related to the acquired knowledge in the field of: <ol style="list-style-type: none"> <li>1. Explain the basic features of transfusion therapy such as tissue transplantation with the possibility of developing unwanted side effects</li> <li>2. List the criteria for selecting a donor</li> <li>3. Master the method of taking, labeling, issuing and storing blood products</li> <li>4. List the risks, side effects, frequency, severity and factors as well as side effects of transfusion therapy</li> <li>5. Apply acquired knowledge on the use of screening and confirmatory tests such as sensitivity, specificity, reactivity and predictive value of tests</li> <li>6. Explain hemostasis disorder and treatment</li> <li>7. Apply measures and procedures in order to further improve the safety of transfusion therapy. Become familiar with Legislation and compliance of transfusion medicine with European laws.</li> </ol>		
<b>Course content</b>		
<i>Blood donor.</i> Criteria for selection of donors. Reception and categories of donors. Identification of donors and documentation management. <i>Blood products and plasma derivatives.</i> Basic principles of production, storage and issuing blood and blood products. Secondary production. Characteristics of blood products and quality control. <i>Fundamental transfusion therapy characteristics.</i> Indications, transfusion threshold and assessment of transfusion therapy success. <i>Bloodborne diseases.</i> Causes of diseases. Clinical picture of the disease. Measures for preventing disease transmission. <i>Blood products.</i> Taking, labeling, storing and issuing		

blood products. Operating cell separators. *Risks of transfusion therapy*. Side effects of transfusion therapy. Side effect frequency. Factors and severity of side effects. Reporting and monitoring of side effects. *Inherited and acquired bleeding disorders*. Hemophilia A and B. Von Willebrand disease. Clotting inhibitors. Treatment of inherited and acquired disorders of hemostasis. *Ethics in transfusion medicine*. Fundamental ethical principles and the complexity of ethical principles in transfusion medicine. *Legal and economic aspects of transfusion medicine*. Paid donors. Medical confidentiality. Legislation of the Republic of Croatia and compliance with European laws.

<b>Form of instruction</b>	<input checked="" type="checkbox"/> lectures	<input type="checkbox"/> individual assignments
	<input checked="" type="checkbox"/> seminars and workshops	<input type="checkbox"/> multimedia and Internet
	<input checked="" type="checkbox"/> exercises	<input type="checkbox"/> laboratory
	<input type="checkbox"/> distance learning	<input type="checkbox"/> mentoring activities
	<input type="checkbox"/> field course	<input type="checkbox"/> other

### Student obligations

Come to class prepared by studying the recommended literature for each unit and actively participate in all forms of instruction. The student must participate in at least 70% of classes to pass the course.

### Monitoring student learning

Attendance	x	Active participation	x	Seminar paper		Experimental work	
Written exam	x	Oral exam	x	Essay		Research	
Project		Continuous assessment		Paper		Practical work	
Portfolio							

### Assessment and evaluation of students during class and on the final exam

Students' performance will be evaluated during class and on the final exam. Students are evaluated numerically and descriptively (insufficient (1), sufficient (2), good (3), very good (4), excellent (5)). During classes, a student can earn a maximum of 100 points. Students can earn a maximum of 20 points during classes through different types of activities. On the final exam, students can earn a maximum of 80 points. The final grade represents the sum of the points earned during classes and on the final exam.

### Mandatory reading

1. Singbartl G, Singbartl K. *Transfusionsassoziierte Pharmakotherapie* Springer; 1. Aufl. 2016

### Additional reading

1. Mintz PD. *Transfusion therapy. Clinical Principles and Practice*. AABB Press; 2005

### The number of copies of mandatory reading in proportion to the number of students currently taking this course

Title	Number of copies	Number of students
Singbartl G, Singbartl K. <i>Transfusionsassoziierte Pharmakotherapie</i> Springer; 1. Aufl. 2016	A purchased license for online textbooks shall be used <a href="https://bfdproxy48.bfd-online.de/login.htm?back=http%3a%2f%2fpartner.bfd-online.info/bfdproxy48.bfd-online.de%2fameos%2fbfdAboGateway%3fabold%3d264117">https://bfdproxy48.bfd-online.de/login.htm?back=http%3a%2f%2fpartner.bfd-online.info/bfdproxy48.bfd-online.de%2fameos%2fbfdAboGateway%3fabold%3d264117</a> Access will be granted to all students enrolled in the study program	

### Quality monitoring methods ensuring the acquisition of knowledge upon completion, skills and competences

The quality of course performance is monitored through an anonymous student survey on the quality of the organization and conduction of classes, the course content and the work of

professors. The usefulness of the lectures from the students' perspective, the curriculum content, the professor preparedness, the clarity of the presentation, the amount of new content and the quality of the presentation are evaluated. The curriculum and its execution are administratively compared. The participation of students in lectures and exercises, as well as the excuses for missing classes, are controlled and analyzed.