PHYSIOLOGY OF SPORT	
GENERAL INFORMATION	
Course coordinator	Professor Ines Drenjančević, MD, PhD
Assistant/Associate	Assoc. Prof. Ana Stupin, MD, PhD Asst. Prof. Aleksandar Kibel, MD, PhD Asst. Prof. Marko Stupin, MD, PhD Asst. Prof. Ivana Jukić, MD, PhD Asst. Prof. Zrinka Mihaljević, PhD Petar Šušnjara, MMedLabDiag
Study Programme	Integrated undergraduate and graduate university study of Medicine
Status of the course	Elective
Year of study, semester	5th year, 10th semester
ECTS	**2**
Workload (hours)	Lectures (4); Seminars (4); Exercise(17)
Expected number of students	30
COURSE DESCRIPTION	
Course objectives	
The aim of the course is to acquaint students with the physiological adaptations of the organism exposed to physical exertion in sports activities and to present the methods used to assess this adaptation. The mechanisms of maintaining homeostasis in the organism at rest will be compared in comparison with the organism that exercises. The basic principles of sports training will be presented, and references will be made.	
Enrolment requirements and entry competencies	
Passed exams from last years, passed physiology exam	
Learning outcomes at the Programme level	
1.1., 2.1, 3.5, 4.2	
Learning outcomes (5-10)	
1.Present structural and functional physiological adaptations of the organism exposed to physical exertion within sports activities 2. Critically evaluate the methods used to assess that adaptation. 3. Compare the mechanisms of maintaining homeostasis in the organism at rest in comparison with the organism that exercises. 4. Present the basic principles of sports training, 5. Evaluate scientific literature in the field of sports physiology	
Course content	
Lectures Introduction to the physiology of sport. Adaptation of the cardiovascular and respiratory systems to physical activity. **Seminar** Indirect estimation of maximum oxygen uptake. Basic principles of sports training. **Exercises** Astrand test. Fundamentals of electrocardiography in sports physiology. Assessment of lung function using spirometry. Celemetry. Eurofit.	
Mode of teaching	

Lectures, Seminars; Laboratory exercises

Student obligations

Attendance at all forms of classes is mandatory, and the student must access all knowledge tests. A student may justifiably miss 30% of each form of instruction. Unfinished exercise must be colloquial.

Monitoring student work *(alignment of learning outcomes, teaching methods and grading)*

Teaching activity	ECTS	Learning outcome	Student activity	Assessment methods	Grade points	
					Min.	Max.
Class attendance	0,5	1-5	Class attendance	Attendance list	5	20
Laboratory exercises	0,5	1-5	Attendance and active participation in exercises	Laboratory notes	15	30
Final exam	1,0	1-5	Learning for the oral exam	Oral exam	30	50
Total	**2**				**50**	**100**

Evaluation of the final exam:

Student answer	Grade points
The answer meets the minimum criteria	30.0
The average answer with noticeable errors	37.0
The very good answer with minor errors	44.0
The exceptional answer	50.0

Calculation of final grade:
Students who obtained 30 or more points on the final exam, the points obtained on the final exam are added to the grade points obtained during the class, and this sum constitutes the final grade. Given that the study program provides for the descriptive evaluation of elective courses, the subject holder assigns a grade of "passed" at the end to a student who achieves 50 or more grade points in the course.

Required reading (available in the library and through other media)

Title	Number of copies in the library	Availability through other media
1. J.H., Costill D.L., Kenney W.L.: Physiology of Sport and Exercise, 8th Edition, Human Kinetics, 2021., odabrana poglavlja	0	
2. Guyton i Hall, Medicinska fiziologija, Medicinska naklada, 13.izdanje, 2017.	15	

Additional reading

1. Heimer S., Čajavec R.: Medicina sporta, 1. izdanje, KIF Sveučilišta u Zagrebu, Zagreb, 2006., odabrana poglavlja

Course evaluation procedures
Anonymous, quantitative, standardized student survey on the subject and work of teachers conducted by the Office for Quality of the Medical Faculty Osijek.
Note /Other
E-learning is not included in the norm of subject hours, but it is used in teaching and contains links to various pages, video and audio materials available on the website.