NAME OF THE COURSE	Physics in sports					
Code		Year of study	1st graduate			
Course teacher	Assistant professor, Miodrag Spasić, PhD	Credits (ECTS)	3			
Associate teachers		Type of instruction (number of hours)	L	S	E	F
			45			
Status of the course	Elective	Percentage of application of e-learning				

COURSE DESCRIPTION

Course objectives	Students will acquire the necessary knowledge of the application of physical laws in sport.
Course enrolment requirements and entry competences required for the course	Basic knowledge of English language.
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	At the completion of this course, students will be able to do the following: - to identify that the problem is of physical nature - to learn to choose the right method and model that would be best suited to solve that problem - to learn what technical solutions exist today to solve the underlying problem(s) - to analyze data obtained by measurements

Course content broken down in detail by weekly class schedule (syllabus)

Lectures	Teacher
Basics of kinematics (3 hours)	Assistant professor, Miodrag Spasić, PhD
Kinematic measurements (3 hours)	Assistant professor, Miodrag Spasić, PhD
Basics of kinetics (3 hours)	Assistant professor, Miodrag Spasić, PhD
Kinetic measurements (3 hours)	Assistant professor, Miodrag Spasić, PhD
Newton's laws of motion (3 hours)	Assistant professor, Miodrag Spasić, PhD
Basics of physical modeling (3 hours)	Assistant professor, Miodrag Spasić, PhD
Basics of simulations (3 hours)	Assistant professor, Miodrag Spasić, PhD
Biomechanical measurements (3 hours)	Assistant professor, Miodrag Spasić, PhD
Biomechanical measurements (3 hours)	Assistant professor, Miodrag Spasić, PhD
State of the art in the field of measurement technology (3 hours)	Assistant professor, Miodrag Spasić, PhD
Practical measurements (3 hours)	Assistant professor, Miodrag Spasić, PhD
Data collection and expected errors (3 hours)	Assistant professor, Miodrag Spasić, PhD
Personal computer as valuable tool (3 hours)	Assistant professor, Miodrag Spasić, PhD
Practical modeling (3 hours)	Assistant professor, Miodrag Spasić, PhD

Format of instruction	X lectures ☐ seminars and workshops ☐ exercises ☐ *on line* in entirety ☐ partial e-learning ☐ field work	X independent assignments X multimedia X laboratory ☐ work with mentor ☐ (other)
Student responsibilities	Attend classes regularly and actively participate in teaching assignments.	

Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*						
	Class attendance	1	Research		Practical training	
	Experimental work	1	Report		(Other)	
	Essay		Seminar essay		(Other)	
	Tests	1	Oral exam		(Other)	
	Written exam		Project			

Grading and evaluating student work in class and at the final exam
Grades from 1 to 5: 1 (below 62%); 2 (63% -74%); 3 (75% - 84%); 4 (85% - 93%); 5 (94% - 100%) Class attendance 25% Experimental work 25% Written exam 50% _____ Total 100%

Required literature (available in the library and via other media)	**Title**	**Number of copies in the library**	**Availability via other media**
	McGinnis, P. M. (2000). *Biomechanics of Sport and Exercises*. (Fifth Edition). USA: Human Kinetics.	1	

Optional literature (at the time of submission of study programme proposal)	Ackland, T.; Elliott, B. & Bloomfield, J. (2009). *Applied Anatomy and Biomechanics in Sport*. (Second edition). USA: Human kinetics.
Quality assurance methods that ensure the acquisition of exit competences	Cooworking with other students, individual work with professor. External evaluation of teaching quality through 'Questionnaire for student's evaluation of teaching'.
Other (as the proposer wishes to add)	http://moodle.kifst.hr/course/view.php?id=496