

COURSE TITLE		APPLIED ARTIFICIAL INTELLIGENCE					
Course code	DPR006	Year of study		1.			
Lecturer(s)	Toma Rončević, PhD, senior lecturer	ECTS (Number of credits allocated)		6			
Associates	/	Total lesson hours per semester	Lecture	Seminar	Practical	Laboratory	
			30	15	15		
Course status	Compulsory	Percentage share of e-learning		50%			
COURSE DESCRIPTION							
Course Objectives	- introduction to methods from artificial intelligence - application of artificial intelligence methods on specific problems						
Course enrolment requirements and entry competencies required for the course	Advanced programming skills						
Learning outcomes	- define basic methods and algorithms from area of artificial intelligence, - demonstrate ideas behind different algorithms and their use, - select methods for specific problems, - recognize problems adequate for methods from artificial intelligence, - formulate problems as problems from area of artificial intelligence - evaluate applications and background algorithms used for their implementation.						
On successful completion of this course, student should be able to:							
Course content	Introduction and motivation for use of methods from area of artificial intelligence and their application. Programming, algorithms and data structures. Agents and environments. Informed and uninformed search. Reinforcement learning. Two player games: minimax and MTCS algorithms. Machine learning. Linear models for regression and classification. Neural nets. Using regression models for reinforcement learning. Other types of learning. Application of machine learning for other domains.						
Types of teaching:	☒ lecture ☒ seminars and workshop ☒ practical ☒ combined e-learning ☐ field research			☒ self-study ☐ multimedia ☒ laboratory ☐ mentoring work ☐ (others)			
Student obligations	Attending classes, laboratories, exams.						
Monitoring student work (enter the share in ECTS credits for each activity so that the total number of ECTS credits corresponds to the credit value of the course):	Class attendance	2.0	Research	0.5	Practical work		
	Experimental work		Report		(others)		
	Essay		Seminar	2.8	(others)		
	Self-study	0.5	Workshop		(others)		
	Project		Office hours, mid-term exams and final exam	0.2	(others)		

Assessment and evaluation of student work during classes and at the final exam	CONTINUOUS ASSESSMENT		
	Continuous testing indicators	Performance A_i (%)	Grade ratio k_i (%)
	Attendance and laboratory	50-100	20
	Seminar	50-100	80
	FINAL ASSESSMENT		
	Indicators checks	Performance A_i (%)	Grade ratio k_i (%)
	Final exam	50 - 100	50
	Previous activities	50 - 100	50
	Indicators checks	Performance A_i (%)	Grade ratio k_i (%)
	Final exam	50 - 100	50
	Previous activities	50 - 100	50
	The grade (in percentages) is formed on the basis of all indicators that describe the level of student activities according to the relation:		
	$Grade(\%) = \sum_{i=1}^N k_i A_i$		
	k_i - weighting factor for each activity, A_i - success in percentage achieved for a particular activity, N - total number of activities.		
	PERFORMANCE AND GRADE		
	Percentage	Criteria	Grade
	50% - 61%	basic criteria met	sufficient (2)
	62% - 74%	average performance with some errors	good (3)
	75% - 87%	above average performance with minor errors	very good (4)
	88% - 100%	outstanding performance	outstanding (5)
Required reading	1. Notes from lectures		
Optional reading	1. S. Russell, P. Norvig, Artificial Intelligence: A Modern Approach, Prentice Hall, 3. edition, 2009.		
Quality monitoring to ensure the acquisition of established learning	- Records of class attendance and success in performing student obligations - Updating detailed course curricula - Supervision of teaching activities - Continuous quality control of all parameters of the teaching process in		

outcomes	accordance with the Action Plans Semester-based student survey in accordance with the "Ordinance on the procedure of student evaluation of teaching work at the University of Split" (UNIST, Centre for Quality Improvement).
Other information	/