

DESCRIPTION OF A STUDY COURSE – SYLLABUS

Title of a course	Human factors in safety				
Head of course	PhD Drago Pupavac, College Professor				
Study programme	Professional undergraduate study Occupational Safety				
Status of a course	Obligatory				
Year of study	1.	Semester	II	ECTS credits	3
Teaching plan (L + E + S+ Pr)	2L+1E				
Goals of a course					
The aim of the course is to contribute to a better knowledge of the human factor in the occurrence of accidents at work, why and how accidents occur, to whom accidents occur, how to monitor accidents, how to improve employee safety and to sensitize students to work safely. To emphasize the importance of behavioural approach in the analysis of accidents at work, to get acquainted with the psychophysiological bases of a person's work activity, the social framework of its occurrence and the main approaches to increasing the productivity, safety and satisfaction of people at work.					
Conditions for enrolling course					
No conditions					
Learning outcomes on a level of a study programme which includes course					
Outcome 3: Assess risk and recommend protective measures. Outcome 6: Distinguish between subjects in the field of occupational safety and health. Outcome 8: Organize a system of prescribed procedures and documents in the field of occupational safety. Outcome 9: Conduct training of subjects in the field of occupational safety. Outcome 10: Participate in teamwork and present professional content in both Croatian and foreign languages in written and spoken form.					
Expected learning outcomes on a level of a course					
1. Evaluate factors that are associated with a person and his/her physiological and psychological characteristics that can affect safety in human actions, in work situations. 2. Assess workplace hazards, recommend number of breaks and their schedule, as well as measures and activities for safe work. 3. Distinguish between subjects in the field of safety and their role in the implementation of occupational safety. 4. Organize, prepare and keep prescribed reports of occupational injuries and occupational diseases, and produce reports for the needs of the employer. 5. Design and implement training programs for safe work. 6. Participate in teamwork, lead meetings and analyse workplace accidents and injuries. 7. Compare the correlation between sick leave, absenteeism, personality traits, stress, age, day of the week, gender, professional qualifications and education of workers, and occupational safety.					
Content of a course					
Representatives and boards for health and safety. Psycho-physiological ability, personality trait and working ability. Analysis of work, methods, procedures, and fields in safety. Physical work, physiologic assumptions and workers' workload. Fatigue, physiologic background and prevention of fatigue. Consequences of stress at work. Safety and health. Rationalization of physical work. Motivation and safety. Communication of man and machine, attention. Inadequate condition of work. Forms, procedures and efficiency of professional selection with respect to safety. Professional education of workers for safe work. Psychological problems and prevention of accidents at work. Relation of sick-leave, staying away from work and occupational safety. Fluctuation of workers and safety.					
Teaching modes	<input checked="" type="checkbox"/> lectures <input type="checkbox"/> auditory exercises <input checked="" type="checkbox"/> seminars and workshops <input type="checkbox"/> distance learning		<input checked="" type="checkbox"/> individual assignments <input type="checkbox"/> multimedia and network <input type="checkbox"/> laboratory <input type="checkbox"/> supervisor's work		

	<input type="checkbox"/> field classes	<input type="checkbox"/> other _____
Comments		

Students' obligations

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Grading, evaluation and monitoring of students' work continuously during lectures and exams

Grading is based upon evaluation of course's learning outcomes' adoption. Grading is performed continuously during lectures and/or during exam, in compliance with the provisions of Regulation on the assessment of students.

Continuous check-up:

Outcomes	Pre-exam I	Pre-exam 2	Seminar work	Assignments	Threshold	Max
Outcome 1	7%		4%	3%	7%	14%
Outcome 2	8%		4%	3%	8%	15%
Outcome 3	7%		3%	3%	7%	13%
Outcome 4	8%			6%	7%	14%
Outcome 5		10%	2%	2%	7%	14%
Outcome 6		10%	3%	1%	7%	14%
Outcome 7		10%	4%	2%	8%	16%
Percentage of ECTS	1	1	0,5	0,5		
Total	30	30	20	20	50 %	100 %

A student has passed the exam if he has acquired a percentage of credits for each learning outcome higher or equal to defined threshold.

Exam term:

Outcomes	Written exam	Oral exam	Max
Outcome 1	10%	4%	14%
Outcome 2	10%	5%	15%
Outcome 3	10%	3%	13%
Outcome 4	10%	4%	14%
Outcome 5	10%	4%	14%
Outcome 6	10%	4%	14%
Outcome 7	10%	6%	16%
Percentage of ECTS	2	1	
Total	70%	30%	100 %

A student has passed the exam if he has acquired a percentage of credits for each learning outcome higher or equal to defined threshold.

Grading:

A student has passed the exam if he has acquired at least 50% of anticipated credits of a specific learning outcome.

If a student has passed learning outcomes of all courses, the accomplished credits (percentages) of all passed learning outcomes are being added, while the final grade is defined upon following table:

Range of credits (percentages)	Numerical grade	ECTS grade
90,00 – 100,00	Excellent (5)	A
75,00 – 89,99	Very good (4)	B
60,00 – 74,99	Good (3)	C
50,00 – 59,99	Sufficient (2)	D
0,00 – 49,99	Insufficient (1)	F

Obligatory literature	
1.	Stry, D.: Ljudski čimbenici u zaštiti, IPROZ, Zagreb, 2003.
2.	Arnold, J.; Silvester, J; Patterson, F.; Robertson, I.; Cooper, C. & Burnes, B. (2005). Work Psychology (4th ed.) Prentice-Hall.
Additional literature	
1.	Petz, B. (1987). Psihologija rada, Školska knjiga, Zagreb, 1987.,
2.	Pupavac, D., Zelenika, R. (2004). Upravljanje ljudskim potencijalima u prometu, Veleučilište u Rijeci, Rijeka.
3.	Pupavac, D., Bognolo, D. i Kršulja, M. (2018). Statistička analiza ozljeda i ocjena na radu u Republici Hrvatskoj. Sigurnost, 60 (3), 225-233. https://doi.org/10.31306/s.60.3.5
4.	Pupavac, D. (2016). Utjecaj razvoja mreže autocesta na trošak prometnih nesreća u Hrvatskoj. Sigurnost, 58 (4), 281-290. https://doi.org/10.31306/s.58.4.1
5.	Pupavac, D., Bognolo, D., Kršulja, M. (2017). Upravljanje sigurnošću u željezničkom prometu, Limen, Beograd, 2017.

