DESCRIPTION OF THE COURSE OF STUDY

Course code	0314-3KRYS-B20-BSSK					
Name of the course in	n Polish Bezpieczeństwo systemów i sieci komputerow					
	English	Security of the systems and computer networks				

1. LOCATION OF THE COURSE OF STUDY WITHIN THE SYSTEM OF STUDIES

1.1. Field of study	Applied criminology
1.2. Mode of study	Full-time studies / part-time studies
1.3. Level of study	bachelor degree studies
1.4. Profile of study*	practical profile
1.5. Person/s preparing the course description	Jarosław Orczykowski, MA
1.6. Contact	+48 607770911 / jaroslaw.orczykowski@outlook.com

2. GENERAL CHARACTERISTICS OF THE COURSE OF STUDY

2.1. Language of instruction	Polish/English					
2.2. Prerequisites*	The student has a general background knowledge of					
	computer science					

3. DETAILED CHARACTERISTICS OF THE COURSE OF STUDY

3.1. Form of classes		Lecture					
3.2. Place of classes		Classes in UJK buildings					
3.3. Form of assessm	nent	Assessment with marks					
3.4. Teaching method	ods	Lecture, slide show, discussion					
3.5. Bibliography	Required reading	William Stallings, Lawrie Brown, Bezpieczeństwo systemów informatycznych. Zasady i praktyka. Wydanie IV. Tom 1, HELION 2019 William Stallings, Lawrie Brown, Bezpieczeństwo systemów informatycznych. Zasady i praktyka. Wydanie IV. Tom 2, HELION 2019 Chris Fry, Martin Nystrom, Monitoring i bezpieczeństwo sieci, HELION 2010					
Further reading		W. Stallings, Kryptografia i bezpieczeństwo sieci komputerowych. Koncepcje i metody bezpiecznej komunikacji, Gliwice 2012. Vijay Kumar Velu, Kali Linux. Testy penetracyjne i bezpieczeństwo sieci dla zaawansowanych. Wydanie II, HELION 2018 A.Barczak,T.sydoruk, Bezpieczeństwo systemów informatycznych, Siedlce 2002.					

4. OBJECTIVES, SYLLABUS CONTENT AND INTENDED LEARNING OUTCOMES

4.1. Course objectives (including form of classes)

- C1. Knowledge To acquaint students with the basic issues of security of computer systems and networks.
- C2. Skills To perfect the skills of selecting and applying secure computer systems and networks.
- C3. social skills To form responsibility, conscientiousness and reliability in undertaking professional tasks

4.2. Detailed syllabus (including form of classes)

- 1. architecture of computer systems
- 2. security of computer networks and systems
- 3. security standards in data protection
- 4. characteristics and classification of information
- 5. computer crime
- 6 Characteristics of threats in computer systems
- 7 Classical encryption techniques
- 8. digital signature
- 9 The concept of authentication
- 10. malware
- 11. computer network security
- 12. application security
- 13 Firewalls.
- 14. email security
- 15. ensuring data availability.

16. telecommunications security			

4.3 Intended learning outcomes

Code	A student, who passed the course	Relation to learning outcomes							
	within the scope of KNOWLEDGE :								
W01	Knows the construction and operation of devices used to secure computer systems and networks	KRYS1P_W09							
W02	Has detailed knowledge related to the security of computer networks and systems	KRYS1P_W02							
W03	Has advanced knowledge of the relationship of security of computer systems and networks with other sciences (psychology, sociology, pedagogy, psychiatry, penal sciences) and the possibility of practical application of this knowledge	KRYS1P_W03							
	within the scope of ABILITIES :								
U01	Has the ability to analyze specific threats to computer systems and networks	KRYS1P_U01							
U02	Is able to apply advanced information and communication techniques to describe phenomena and analyze data specific to security of computer networks and systems	KRYS1P_U02							
U03	Is able to use basic theoretical knowledge to describe in detail and practically analyze unit processes and social phenomena specific to security of computer networks and systems	KRYS1P_U03							
	within the scope of SOCIAL COMPETENCE :								
K01	Is able to independently complement the acquired knowledge and skills in the application of modern security of information systems and networks	KRYS1P_K01							
K02	Understands the social consequences associated with the practical application of the acquired knowledge and skills, is ready to fulfill social obligations and is able to take responsibility for his own actions	KRYS1P_K05							

		Method of assessment (+/-)																			
Teaching outcomes (code)		Exam oral/written*		Test*		Project*		Effort in class*		Self-study*		ly*	Group work*			Others* e.g. standard- ized test used in e- learning Form of classes					
(coue)		Form of classes		Form of classes		Form of classes		Form of classes		Form of classes		Form of classes									
	L	С		L	С		L	С		L	С		L	С		L	С		L	С	
W01-W03				x			x														Ī
U01-U03				x			x														Ī
K01-K02							x			x											Γ

^{*}delete as appropriate

4.5. Criteria of assessment of the intended learning outcomes											
Form of classes	Grade	Criterion of assessment									
.) e-	3	He passed the written exam with 51-60% of the maximum points possible.									
	3,5	He passed the written exam with 61-70% of the maximum points possible.									
ure udi) rni)	4	He passed the written exam with 71-80% of the maximum points possible.									
lecture (including learning	4,5	He passed the written exam with 81-90% of the maximum points possible.									
l (j)	5	He passed the written exam with more than 91% of the maximum possible points.									

5. BALANCE OF ECTS CREDITS – STUDENT'S WORK INPUT

	Student's workload					
Category	Full-time studies	Extramural studies				
NUMBER OF HOURS WITH THE DIRECT PARTICIPATION OF THE TEACHER /CONTACT HOURS/	26	11				
Participation in lectures*	25	10				

Participation in classes, seminars, laboratories*	1	1
Preparation in the exam/final test*	24	39
Others (please specify e.g. e-learning)*	4	4
INDEPENDENT WORK OF THE STUDENT/NON-CONTACT HOURS/	10	15
Preparation for the lecture*	10	20
Preparation for the classes, seminars, laboratories*	50	50
Preparation for the exam/test*	2	2
Gathering materials for the project/Internet query*	26	11
Preparation of multimedia presentation	25	10
Others *	1	1
TOTAL NUMBER OF HOURS	24	39
ECTS credits for the course of study	4	4

^{*}delete as appropriate

Accepted for execution	(date and legible signatures	of the teachers running the	course in the given academic year)
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