

## UČNI NAČRT PREDMETA / COURSE SYLLABUS

|                      |                         |
|----------------------|-------------------------|
| <b>Predmet:</b>      | Varnost organizacij     |
| <b>Course title:</b> | Organizations' Security |

| Študijski program in stopnja<br>Study programme and level       | Študijska smer<br>Study field | Letnik<br>Academic year | Semester<br>Semester |
|---|-------------------------------|-------------------------|----------------------|
| Kibernetska varnost, magistrski študijski program druge stopnje | -                             | Prvi                    | Drugi                |
| The second cycle masters study programme Cyber Security         | -                             | First                   | Second               |

**Vrsta predmeta / Course type** Obvezni / Obligatory

**Univerzitetna koda predmeta / University course code:** 5-KV-MAG-VORG-2021-12-14

| Predavanja<br>Lectures | Seminar<br>Seminar | Vaje<br>Tutorial | Klinične vaje<br>work | Druge oblike študija | Samost. delo<br>Individ. work | ECTS |
|------------------------|--------------------|------------------|-----------------------|----------------------|-------------------------------|------|
| 25                     | -                  | 15               | -                     | -                    | 80                            | 4    |

**Nosilec predmeta / Lecturer:** doc. dr. Boštjan Delak

|                            |                               |  |
|----------------------------|-------------------------------|--|
| <b>Jeziki / Languages:</b> | <b>Predavanja / Lectures:</b> | Slovenski, angleški / Slovene, English |
|                            | <b>Vaje / Tutorial:</b>       | Slovenski, angleški / Slovene, English |

**Pogoji za vključitev v delo oz. za opravljanje študijskih obveznosti:**

Za vključitev v delo je potrebo usvojiti zanje predmetov Pravo informacijske varnosti, Varnost omrežij, Varnost posameznikov v kibernetskem prostoru, Varnosti in zavarovanje podatkov in Varnost sistemov.

Študent/študentka mora pred pristopom k izpitu pripraviti in zagovarjati seminarsko nalogo.

**Prerequisites:**

In order to be included in the work, it is necessary to master the content of the following courses: Information Security Law, Network Security, Personal Cybersecurity, Data security and protection, and System security.

Prior to the exam, the student has to prepare and present seminar work.

**Vsebina:**

- Tveganja: analiza in upravljanje s tveganji; informacijska tveganja, okoljski vplivi.
- Upravljanje informacijske varnosti: strateški, taktični in operativni management, dimenzije upravljanja.

**Content (Syllabus outline):**

- Risks: Risk analysis and management; information risks, environmental impacts.
- Information security management: Strategic, tactical and operational management, management dimensions.

- Uspešnost in učinkovitost informacijske varnosti:  
Elementi kakovosti varnosti, razmerje med funkcionalnostjo in varnostjo informacijskih sistemov.
- Ukrepi informacijske varnosti:  
Kontrole, standardi, okvirji in metodologije za upravljanje informacijske varnosti.
- Organizacijski informacijsko varnostni ukrepi: varnostni management, varnostna strategija in politika informacijske varnosti, skladnost z zakonodajo, upravljanje kadrovskih virov, varnostna kultura in ozaveščenost uporabnikov, upravljanje odnosov z zunanjimi subjekti.
- Tehnični ukrepi:  
Ukrepi fizične varnosti, ukrepi tehničnega varovanja informacijske varnosti.
- Neprekinjeno poslovanje:  
strategija, politika, načrti neprekinjenega poslovanja, krizno obveščanje, načrti okrevanja, testiranje, analiza, izboljševanje.

- Effectiveness and efficiency of information security:  
Elements of security quality, the relationship between functionality and security of information systems.
- Information security measures:  
Controls, standards, frameworks and methodologies for information security management.
- Organizational information security measures:  
Security management, security strategy and information security policy, compliance with legislation, human resources management, security culture and user awareness, management of relations with external entities.
- Technical measures:  
Physical security measures, technical security measures of information security.
- Business continuity:  
Strategy, policy, business continuity plans, crisis information, recovery plans, testing, analysis, improvements.

#### **Temeljni literatura in viri / Readings:**

- Kaja Prislán, Igor Bernik, *Informacijska varnost in organizacije*, Univerza v Mariboru, Fakulteta za varnostne vede, 2019.
- Isabella Corradini, *Building a Cybersecurity Culture in Organization*, Springer, 2020.
- Ariel Evens, *Enterprise Cybersecurity in Digital Business – Building a Cyber Resilient Organization*, Routledge, 2021.

#### **Cilji in kompetence:**

*Učna enota prispeva k razvoju naslednjih splošnih in predmetno specifičnih kompetenc:*

##### **Splošne kompetence:**

- razumevanje pomena kibernetске varnosti.
- sposobnost identifikacije kibernetских varnostnih tveganj ter izdelave predlogov za ukrepanje in zaščito na osnovi identificiranih tveganj.
- sposobnost iskanja podatkov in virov za potrebe upravljanja kibernetске varnosti.

#### **Objectives and competences:**

*The instructional unit contributes to the development of the following general and subject-specific competences:*

##### **General competences:**

- Understanding the importance of cyber security.
- The ability to identify cyber security risks and make proposals for action and protection based on identified risks.
- The ability to find data and sources for the needs of cyber security management.
- The ability to do business communication, teamwork and use

- sposobnost poslovnega komuniciranja, skupinskega dela in uporabe informacijskih tehnologij za namen zagotavljanja kibernetске varnosti.
- sposobnost razvoja informacijskih varnostnih politik in sistemov upravljanja organizacije.

**Predmetno-specifične kompetence:**

- sposobnost identificirati kibernetска tveganja organizacije,
- sposobnost izvajati upravljanje informacijske varnosti,
- sposobnost preverjanja ustreznosti implementiranih kontrol kibernetске varnosti,
- sposobnost priprave in nadgradnje strategij, politik in drugih internih aktov na področju kibernetске varnosti
- sposobnost upravljanja sistema neprekinjenega poslovanja organizacije.

of information technology to ensure cyber security.

- The ability to develop information security policies and management systems of the organization.

**Subject-specific competences:**

- The ability to identify the organization's cyber risks,
- The ability to perform information security management,
- The ability to check the adequacy of implemented cyber security controls,
- The ability to prepare and upgrade strategies, policies and other internal acts in the field of cyber security
- The ability to manage the business continuity system within organization.

**Predvideni študijski rezultati:**

Znanje in razumevanje:

*Sposobnost študenta/študentke bo:*

- znal identificirati in analizirati tveganja ter predlagati vpeljavo ukrepov / kontrol za zmanjšanje tveganj na področju kibernetске varnosti
- ustrezno razmejiti upravljanje varnosti na različnih področjih in upravljati različne dimenzije varnosti organizacije
- prepoznaval elemente kakovosti varnosti in jih znal odločati med funkcionalnostjo in varnostjo
- znal izbrati ustrezne ukrepe in kontrole za zmanjševanje ranljivosti organizacije
- ustrezno pripraviti strategijo, politike in pripadajoče dokumente na področju informacijske varnosti
- uspešno upravljati neprekinjeno poslovanje organizacije s

**Intended learning outcomes:**

Knowledge and understanding:

The ability of the students will be:

- be able to identify and analyze risks and propose the introduction of measures / controls to reduce risks in the field of cyber security
- appropriately delineate security management in different areas and apply different dimensions of organisational security
- recognize the elements of safety quality and know how to decide between functionality and safety
- be able to choose appropriate measures and controls to reduce the vulnerability of the organization
- appropriate preparation of strategy, policies and related documents in the field of information security
- successfully manage the business continuity of the organization with the corresponding intensive plans, documents and measures.

pripadajočimi internimi načrti, dokumenti in ukrepi.

**Metode poučevanja in učenja:**

- predavanja z aktivno udeležbo študentov (razlaga, diskusija, vprašanja, primeri, reševanje problemov)
- vaje z izdelavo domačih nalog in izdelava seminarske naloge
- individualne in skupinske konzultacije (diskusija, dodatna razlaga, obravnava specifičnih vprašanj)

**Learning and teaching methods:**

- lectures with active participation of students (explanation, discussion, questions, examples, problem solving)
- exercises with homework and seminar work
- individual and group consultations (discussion, additional explanation deals with specific issues)

**Načini ocenjevanja:**

Delež (v %) /  
Weight (in %)

**Assessment:**

| Način (pisni izpit, ustno izpraševanje, naloge, projekt):                                  | Delež (v %) /<br>Weight (in %) | Type (examination, oral, coursework, project):   |
|--|--------------------------------|--|
| <ul style="list-style-type: none"> <li>• pisni izpit</li> </ul>                            | 60                             | <ul style="list-style-type: none"> <li>• written exam</li> </ul>                                 |
| <ul style="list-style-type: none"> <li>• priprava in zagovor seminarske naloge,</li> </ul> | 30                             | <ul style="list-style-type: none"> <li>• preparation and presentation of seminar work</li> </ul> |
| <ul style="list-style-type: none"> <li>• domače naloge</li> </ul>                          | 10                             | <ul style="list-style-type: none"> <li>• homework</li> </ul>                                     |

**Reference nosilca / Lecturer's references:**

- DREV, Matjaž, DELAK, Boštjan. Conceptual Model of Privacy by Design. Journal of computer information systems. 2021, vol. , iss. , str. 1-8, ilustr. ISSN 0887-4417. DOI: 10.1080/08874417.2021.1939197. [COBISS.SI-ID 74349827].
- KAVČIČ, Tina, DELAK, Boštjan. State of the cyber insurance products within Slovenian insurance companies. The Online journal of applied knowledge management. 2019, vol. 7, iss. 2, str. 56-68, tabele. ISSN 2325-4688. [COBISS.SI-ID 44763651].
- DELAK, Boštjan. Revizija neprekinjenega poslovanja = Business continuity audit. Sir\*ius : revija za teorijo in prakso revizije, računovodstva, davkov, financ, ocenjevanja vrednosti in drugih sorodnih področij. 2019, št. 5, str. 3-17. ISSN 2335-3252. <http://www.si-revizija.si/publikacijesirius/kazala-letnikov>. [COBISS.SI-ID 2048620563].
- DAVIS, Keiona, LEVY, Yair, DELAK, Boštjan. Towards a development of cybersecurity risk-responsibility taxonomy of small enterprises for data breach mitigation. V: Digital disruption. 24th Americas Conference on Information Systems (AMCIS), New Orleans, LA, August 16-18, 2018. [S. l.]: Association for Information Systems, 2018. Str. 1-6. ISBN 978-0-9966831-6-6-  
<https://aisel.aisnet.org/cgi/viewcontent.cgi?article=1338&context=amcis2018>,  
<https://aisel.aisnet.org/amcis2018/Security/Presentations/8/>. [COBISS.SI-ID 2048569363].
- DELAK, Boštjan. Izzivi revizorjev informacijskih sistemov pri dajanju zagotovil pri logičnih dostopih = The information systems auditors' issues at the logical access audit assurance activities. Sir\*ius : revija za teorijo in prakso revizije, računovodstva, davkov, financ, ocenjevanja vrednosti in drugih sorodnih področij. sep. 2016, let. 4, št. 5, str. 5-27, graf. prikazi, tabele. ISSN 2335-3252. [COBISS.SI-ID 23241958].

- DELAK, Boštjan. Approach for information system maturity assessment. V: KARAGIANNIS, Dimitris (ur.), SCHLAMBERGER, Niko (ur.). Proceedings of the CAiSE 2016 Industry Track co-located with 28th International Conference on Advanced Information Systems Engineering (CAiSE 2016), Ljubljana, Slovenia, June 13-17, 2016, (CEUR workshop proceedings, ISSN 1613-0073, Vol. 1600). [S. l.]: CEUR-WS. 2016, str. 1-15.