| University: P. J. Šaf | árik University in Košice | |
|---|---|---------------------------------|
| Faculty: Faculty of | Science | |
| Course ID: ÚINF/ OPSP/14 | Course name: ABAP and | Object and Dialogue Programming |
| Course type, scope Course type: Lectu Recommended cou Per week: 3 / 1 Per Course method: pr | rre / Practice Trse-load (hours): study period: 42 / 14 | |
| Number of credits: | 5 | |
| Recommended sem | ester/trimester of the cours | e: 2., 4. |
| Course level: I., II., | N | |
| Prerequisities: ÚIN | F/RASP/14 or ÚINF/RASP/1 | 6 |
| Conditions for cour | se completion: | |
| Learning outcomes | : | |
| Brief outline of the Screen, function coc | course: les, local and global classes, | inheritance, polymorphism. |
| Recommended liter | ature: | |
| Course language: | | |
| Notes: | | |
| Course assessment Total number of asse | essed students: 26 | |
| | abs | n |
| | 61.54 | 38.46 |
| Provides: | | |
| Date of last modific | ation: 03.05.2015 | |
| Approved: prof. RN | Dr. Viliam Geffert, DrSc. | |

| University: P I Šafá | rik University in Košice |
|---|--|
| Faculty: Faculty of S | |
| Course ID: ÚINF/ AOS1/15 | Course name: Administration of OS |
| Course type, scope a Course type: Practic Recommended cour Per week: 2 Per stu Course method: pre | ce rse-load (hours): dy period: 28 |
| Number of credits: 2 | |
| Recommended seme | ster/trimester of the course: 1., 3. |
| Course level: I., II. | |
| Prerequisities: | |
| Conditions for cours | e completion: |
| Learning outcomes: To be able to install L several network dean | inux based system, divide disks, to know how to install, configure and manage nons. |
| | work services ewall settings e, php, mysql) (SNMP, MRTG) o, imap, postfix) II. irtualization (Hyper-V OpenVZ) |
| Stanek, W.: Windo Shah, S. Soyinka, Y | ature: ion Project, 4 updated edition. Brno: Computer Press (2008). ws Server 2012 Inside Out. Microsoft Press (2013) W. Administration Linux. Grade (2007) Linux. Brno: Computer Press (2008) |
| Course language: | |
| | |

| Course assessment Total number of assessed students: 70 | | | | | | | |
|---|-------------------|----------------|--|--|--|--|--|
| A B C D E FX | | | | | | | |
| 52.86 22.86 2.86 5.71 8.57 7.14 | | | | | | | |
| Provides: RNDr. Peter Gurský, PhD., RNDr. JUDr. Pavol Sokol, PhD. | | | | | | | |
| Date of last modification: 17.09.2015 | | | | | | | |
| Approved: prof | f. RNDr. Viliam (| Geffert, DrSc. | | | | | |

| University: P. J. Š | afárik Univers | ity in Košice | | | |
|--|--|--|--|---|--|
| Faculty: Faculty o | f Science | | | | |
| Course ID: ÚMV/ ALG3b/10 | Course na | me: Algebra II f | or informatician | and physicists | |
| Course type, scop Course type: Lec Recommended c Per week: 4 / 2 P Course method: | cture / Practice ourse-load (h er study perio | ours): | | | |
| Number of credits | s: 7 | | | | |
| Recommended se | mester/trimes | ster of the cours | e: 2. | | |
| Course level: I., II | • | | | | |
| Prerequisities: ÚM | MV/ALGa/10 | | | | |
| Conditions for co Exam | urse completi | on: | | | |
| Learning outcome To provide deeper Brief outline of th Vector spaces, sul spaces. The rank tranformations, m transformations, m transformations, re of linear transform Affine spaces, sub and quadrics. Recommended litt A. F. Beardon: Ala G. Birkhoff, S. Ma Course language: Slovak | knowledge or e course: ospaces. A ba of a matrix. L eatrices of su- egular matrices nations. ospaces and the erature: gebra and Geo | sis, a dimension inear transforma ms and compos s. Similar matrice eir positions. Euc metry, Cambridg | and a character ations and their itions of linear es. Characteristic clidean spaces, t | rization of n-din matrices. Operat tranformations. vectors and chan he distance of su | nensional vector ions with linear Regular linear racteristic values |
| Notes: | | | | | |
| Course assessmen Total number of as | - | ts: 284 | | | |
| A | В | С | D | Е | FX |
| 9.86 | 7.75 | 9.86 | 14.44 | 42.61 | 15.49 |
| Provides: doc. RN | Dr. Roman Sc | oták, PhD., Mgr. | Mária Janicová, | Mgr. Jana Chuda | á |
| Date of last modif | ication: 03.05 | 5.2015 | | | |
| A d | NDr Viliom (| Geffert, DrSc. | | - | |

| University: P. J. | Šafárik Univers | ity in Košice | | | |
|--|---|-------------------|-----------------|-------------|-----|
| Faculty: Faculty | of Science | | | | |
| Course ID: KFaI AFS/05 | DF/ Course na | me: Ancient Phi | losophy and Pre | esent Times | |
| Course type, sco Course type: Pr Recommended Per week: 2 Per Course method | actice course-load (h study period: | ours): | | | |
| Number of credi | ts: 2 | | | | |
| Recommended s | emester/trimes | ster of the cours | e: 2. | | |
| Course level: II. | | | | | |
| Prerequisities: | | | | | |
| Conditions for co | ourse completi | on: | | | |
| Learning outcon | nes: | | | | |
| Brief outline of t | he course: | | | | |
| Recommended li | iterature: | | | | |
| Course language | | | | | |
| Notes: | | | | | |
| Course assessme Total number of a | | ts: 30 | | | |
| A | В | С | D | Е | FX |
| 83.33 | 6.67 | 6.67 | 0.0 | 3.33 | 0.0 |
| Provides: Doc. P | hDr. Peter Nezi | ník, CSc. | | | |
| Date of last mod | ification: 03.05 | 5.2015 | | | |
| Approved: prof. | RNDr. Viliam (| Geffert, DrSc. | | | |

| University: P. J. | . Šafárik Univers | ity in Košice | | | |
|---|---|---|---|--|---|
| Faculty: Faculty | y of Science | | | | |
| Course ID: ÚIN APA1/15 | VF/ Course na | ame: Approxima | tion algorithms | | |
| Recommended | Lecture / Practice I course-load (h I Per study peri | e ours): | | | |
| Number of crea | lits: 5 | | | | |
| Recommended | semester/trime | ster of the cours | e: 5. | | |
| Course level: II | • | | | | |
| Prerequisities: | | | | | |
| Conditions for | course completi | on: | | _ | |
| Learning outco To learn basic of error probability | conceptions of ra | andomized algor | ithms and to clas | ssify the algorith | ms due to their |
| Las Vegas algor Carlo algorithm algorithms with problem, appropriate problems and a | f Probability The rithms. One side ns. Two sided un h polynomial ti pximation algori pproximation so . FPTAS. PTAS. | ory. Basic random d error Monte Ca nbounded error I me complexity thm, relative er lutions. Classific TSP problem and | arlo algorithms. Monte Carlo algo and relationship ror, approximati ation of optimisa | Two sided bound orithms. Classes s between them ion ratio. Speci- ation problems b | led error Monte of randomized n. Optimisation al optimisation ased upon their |
| Course languag | | | | | |
| Notes: | ;c | | | | |
| Course assessm | ent f assessed studen | | | | |
| А | В | С | D | Е | FX |
| 25.0 | 14.13 | 19.57 | 15.22 | 25.0 | 1.09 |
| Provides: prof. | RNDr. Viliam G | effert, DrSc., RN | Dr. Ondrej Krídl | o, PhD. | |
| Date of last mo | dification: 03.05 | 5.2015 | | | |
| Approved: prof | . RNDr. Viliam | Geffert, DrSc. | | _ | |
| | | r | | | |

| University: P. J. Šafărik University in Košice Faculty: Faculty of Science Course ID: ÚINF/ AFJ1b/15 Course name: Automata and formal languages Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 2 / 1 Per study period: 28 / 14 Course method: present Number of credits: 5 Recommended semester/trimester of the course: 1. Course level: I., II. Prerequisities: ÚINF/AFJ1a/15 Conditions for course completion: Test and oral examination. Learning outcomes: To provide theoretical background for studying computer science in general, by gi knowledge in theory of automata. Brief outline of the course: Chomsky and Greibach normal forms of context free gramars. Pushdown an lemma. Closure properties of context free and deterministic context free la | |
|--|------------------------------------|
| AFJ1b/15 Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 2 / 1 Per study period: 28 / 14 Course method: present Number of credits: 5 Recommended semester/trimester of the course: 1. Course level: I., II. Prerequisities: ÚINF/AFJ1a/15 Conditions for course completion: Test and oral examination. Learning outcomes: To provide theoretical background for studying computer science in general, by gi knowledge in theory of automata. Brief outline of the course: Chomsky and Greibach normal forms of context free gramars. Pushdown an lemma. Closure properties of context free and deterministic context free la | _ |
| Course type: Lecture / Practice Recommended course-load (hours): Per week: 2 / 1 Per study period: 28 / 14 Course method: present Number of credits: 5 Recommended semester/trimester of the course: 1. Course level: I., II. Prerequisities: ÚINF/AFJ1a/15 Conditions for course completion: Test and oral examination. Learning outcomes: To provide theoretical background for studying computer science in general, by gi knowledge in theory of automata. Brief outline of the course: Chomsky and Greibach normal forms of context free gramars. Pushdown au lemma. Closure properties of context free and deterministic context free la | |
| Recommended semester/trimester of the course: 1. Course level: I., II. Prerequisities: ÚINF/AFJ1a/15 Conditions for course completion: Test and oral examination. Learning outcomes: To provide theoretical background for studying computer science in general, by gi knowledge in theory of automata. Brief outline of the course: Chomsky and Greibach normal forms of context free gramars. Pushdown au lemma. Closure properties of context free and deterministic context free la | |
| Course level: I., II. Prerequisities: ÚINF/AFJ1a/15 Conditions for course completion: Test and oral examination. Learning outcomes: To provide theoretical background for studying computer science in general, by gi knowledge in theory of automata. Brief outline of the course: Chomsky and Greibach normal forms of context free gramars. Pushdown au lemma. Closure properties of context free and deterministic context free la | |
| Prerequisities: ÚINF/AFJ1a/15 Conditions for course completion: Test and oral examination. Learning outcomes: To provide theoretical background for studying computer science in general, by gi knowledge in theory of automata. Brief outline of the course: Chomsky and Greibach normal forms of context free gramars. Pushdown au lemma. Closure properties of context free and deterministic context free la | |
| Conditions for course completion: Test and oral examination. Learning outcomes: To provide theoretical background for studying computer science in general, by gi knowledge in theory of automata. Brief outline of the course: Chomsky and Greibach normal forms of context free gramars. Pushdown au lemma. Closure properties of context free and deterministic context free la | |
| Test and oral examination. Learning outcomes: To provide theoretical background for studying computer science in general, by gi knowledge in theory of automata. Brief outline of the course: Chomsky and Greibach normal forms of context free gramars. Pushdown au lemma. Closure properties of context free and deterministic context free la | |
| To provide theoretical background for studying computer science in general, by gi knowledge in theory of automata. Brief outline of the course: Chomsky and Greibach normal forms of context free gramars. Pushdown au lemma. Closure properties of context free and deterministic context free la | |
| Chomsky and Greibach normal forms of context free gramars. Pushdown at lemma. Closure properties of context free and deterministic context free la | ving the necessary |
| sensitive grammars and linearly-bounded Turing machines. Phrase-structure gram machines. Post correspondence problem. Undecidable problems in the theory of | inguages. Context mmars and Turing |
| Recommended literature: J.E. Hopcroft, R.Motwani, J.D. Ullman: Introduction to automata theory, langua computation, Addison-Wesley, 2001. J. Shallit: A second course in formal languages and automata theory, Cambridge 2009. M. Sipser: Introduction to the theory of computation, Thomson Course Technolo | e University press, |
| Course language: | |
| Notes: | |
| Course assessment Total number of assessed students: 498 | |
| A B C D E | FX |
| 37.55 14.26 20.08 18.67 6.63 | 2.81 |
| Provides: prof. RNDr. Viliam Geffert, DrSc., Mgr. Alexander Szabari, PhD. | |
| Date of last modification: 01.06.2015 | |
| Approved: prof. RNDr. Viliam Geffert, DrSc. | |

| University: P. J. | Šafárik Univers | sity in Košice | | | |
|--|--|---|--|---|---|
| Faculty: Faculty | of Science | | | | |
| Course ID: ÚFV BSIM1/14 | // Course na | ame: Biomolecul | ar Simulations | | |
| Recommended | ecture / Practice l course-load (h 2 Per study perio | e ours): | | | |
| Number of cred | lits: 5 | | | | |
| Recommended | semester/trimes | ster of the course | e: 6. | | |
| Course level: II. | | | | | |
| Prerequisities: | | | | | |
| | presentation of | | | t. Development o | f own computer |
| Learning outco Introduction to a | | ics of biomolecul | ar simulations. | | |
| as flow of biolog mechanisms. Ex force fields and Carlo methods - approaches. Co | cteristics of biol gical information operimental met d methods of c - algorithms and mputational cha energy evaluati | n. 3D-structure an hods of structure classical molecul l paralelization. < allenges in biome ion, protein fold | d function of fo e determination ar dynamics. M i>Ab initio | atral dogma of mo ldamers. Recent w and their limitat Molecular dynam molecular dynar tions - simulatio onal complexity | view on enzyme ions. Empirical ics and Monte nics and hybrid ns of chemical |
| Recommended Actual literature | | by lecturer. | | | |
| Course languag | je: | | | | |
| Notes: | | | | | |
| Course assessm Total number of | ent assessed studen | its: 34 | | | |
| i i | В | С | D | Е | |
| А | D | | 2 | | FX |
| A 76.47 | 8.82 | 11.76 | 0.0 | 2.94 | FX 0.0 |
| | 8.82 | | | | |
| 76.47 | 8.82 RNDr. Jozef Ulič | éný, CSc. | | | |

| University: P. J. Šafán | rik University in Košice |
|--|---|
| Faculty: Faculty of S | cience |
| Course ID: ÚINF/ KKV1/15 | Course name: Classical and quantum computations |
| Course type, scope a Course type: Lectur Recommended cour Per week: 3 / 1 Per Course method: pre | re / Practice rse-load (hours): study period: 42 / 14 |
| Number of credits: 6 | |
| Recommended seme | ster/trimester of the course: 3., 5. |
| Course level: II. | |
| Prerequisities: | |
| Conditions for cours Written work Written and oral exam | - |
| Learning outcomes: To provide information and quantum models | on on quantum computer and quantum computations. To compare classical and methods. |
| algorithms, probabili an algorithm. Introd superoperators), univ factoring algorithm, a | ourse: ical theory of computation: Turing machines, Boolean circuits, parallel istic computation, NP-complete problems, and the idea of complexity of uction of general quantum formalism (pure states, density matrices, and versal gate sets and approximation theorems. Grover's algorithm, Shor's and the Abelian hidden subgroup problem. Parallel quantum computation, a 'NP-completeness, and quantum error-correcting codes. |
| Quantum Computers. 2. GRUSKA, J. Quan 3. JOHNSON, G. A S 4. KITAEV, A.Y., SH Mathematical Society 5. NIELSEN, M.A., O Cambridge University | OOLEN,G.D., MAINIERI, R., TSIFRINOVIC, V.I. Introduction to World Scientific, 2003. htum Computing. McGraw-Hill, 1999. Shortcut Through Time: The Path to the Quantum Computer, Knopf 2003. IEN, A.H., VYALYI, M.N. Classical and Quantum Computation. American <i>y</i> , 2002. CHUANG, I.L. Quantum Computation and Quantum Information. |
| Course language: | |
| Notes: | · · · · · · · · · · · · · · · · · · · |

| Course assessment Total number of assessed students: 80 | | | | | | | |
|--|--|--|--|--|--|--|--|
| A B C D E FX | | | | | | | |
| 23.75 | 3.75 | | | | | | |
| Provides: doc.] | Provides: doc. RNDr. Gabriel Semanišin, PhD., RNDr. Zuzana Bednárová, PhD. | | | | | | |
| Date of last modification: 03.05.2015 | | | | | | | |
| Approved: prof | Approved: prof. RNDr. Viliam Geffert, DrSc. | | | | | | |

| University: P. J. | Šafárik Univer | sity in Košice | | | |
|---|---|--|---------------------------------------|-----------------------------------|--------------------------------|
| Faculty: Faculty | of Science | | | | |
| Course ID: ÚIN KPI1/15 | F/ Course n | ame: Coding and | information tran | nsfer | |
| Course type, sco Course type: L Recommended Per week: 2 / 1 Course method | ecture / Practic course-load (Per study per | e hours): | | | |
| Number of cred | its: 4 | | | | |
| Recommended s | semester/trime | ester of the cours | e: 3., 5. | | |
| Course level: II. | | | | | |
| Prerequisities: | | | | | |
| Conditions for c | ourse complet | tion: | | | |
| Learning outcom To provide the s compression. | | wledge of basic p | rinciples of info | rmation theory, c | coding and data |
| coding, applicat compression. Sc | information the tions. Arithme calar and vecto s. Transform co | ory, entropy, Mar tic coding, diction r quantizations. In ding, DFT, DCT, a ppression. | onary techniques Differential enco | s, applications. ding, delta modu | Lossless image lation, subband |
| CRC Pr.,1998 K. Sayood: Intro | G. Harris, P. Jo | hnson: Introductio a Compression, N ttion Theory, ČVU | lorgan Kaufman | n, 1996 | a Compression, |
| Course languag | e: | | | | |
| Notes: | | | | | |
| Course assessme Total number of | | nts: 90 | | | |
| А | В | C | D | Е | EV |
| I | | | | | FX |
| 20.0 | 14.44 | 18.89 | 14.44 | 31.11 | FX 1.11 |
| 20.0 | | 18.89 Krajči, PhD., doo | | | |
| 20.0 | NDr. Stanislav | Krajči, PhD., doo | | | |

| University: P. J. Ša | fárik Univers | ity in Košice | | | |
|--|--|-------------------|-------------------|--------------|-----|
| Faculty: Faculty of | Science | | | | |
| Course ID: ÚINF/ KMU1/15 | Course na | me: Coding and | multimedial data | a transition | |
| Course type, scope Course type: Lec Recommended co Per week: 2 / 1 Po Course method: 1 | ture / Practice ourse-load (h er study perio | ours): | | | |
| Number of credits | : 4 | | | | |
| Recommended ser | nester/trimes | ster of the cours | e: 5. | | |
| Course level: I., II. | | | | | |
| Prerequisities: | | | | | |
| Conditions for cou | rse completi | on: | | | |
| Learning outcome | s: | | | | |
| Brief outline of the | e course: | | | | |
| Recommended lite | erature: | | | | |
| Course language: | | | | | |
| Notes: | | | | | |
| Course assessmen Total number of as | - | ts: 7 | | | |
| A | В | С | D | Е | FX |
| 14.29 | 0.0 | 28.57 | 57.14 | 0.0 | 0.0 |
| Provides: doc. RN | Dr. Stanislav | Krajči, PhD., doc | . RNDr. Jozef Jir | ásek, PhD. | 3 |
| Date of last modifi | cation: 03.05 | 5.2015 | | | |
| Approved: prof. R | NDr. Viliam (| Geffert, DrSc. | | | |

| University: P. J. Šat | ărik Univers | ity in Košice | |
|--|--------------------------------------|----------------------------|---------------------------------------|
| Faculty: Faculty of | Science | | |
| Course ID: KPPaPZ/KK/07 | Course na | me: Communication and Coop | peration |
| Course type, scope Course type: Pract Recommended co Per week: 2 Per st Course method: p | tice urse-load (h tudy period: | ours): | |
| Number of credits: | 2 | | |
| Recommended sem | ester/trimes | ter of the course: 3. | |
| Course level: II. | | | |
| Prerequisities: | | | |
| Conditions for cour | rse completi | on: | |
| Learning outcomes | : | | |
| Brief outline of the | course: | | |
| Recommended liter | rature: | | |
| Course language: | | | |
| Notes: | | | |
| Course assessment Total number of ass | essed studen | ts: 281 | |
| abs | | n | Z |
| 98.22 | | 1.78 | 0.0 |
| Provides: Mgr. Ond | rej Kalina, P | hD. | · · · · · · · · · · · · · · · · · · · |
| Date of last modifie | cation: 03.05 | 5.2015 | |
| Approved: prof. RN | Dr. Viliam (| Geffert, DrSc. | |

| | | sity in Košice | | | |
|--|---|---|--|--|---|
| Faculty: Facult | ty of Science | | | | |
| Course ID: ÚI VKN/15 | NF/ Course n | ame: Computation | onal and cognitiv | e neuroscience | |
| Course type: Recommende | cope and the me Lecture / Practic cd course-load (I 2 Per study per od: present | e hours): | | | |
| Number of cre | dits: 5 | | | | |
| Recommended | l semester/trime | ester of the cours | se: 5. | | |
| Course level: I | I | | | | |
| Prerequisities: | | | | | |
| Conditions for project, exam | course complet | tion: | | | |
| with focus on | ics in study of | concepts importat | - | cognitive proce of cognitive and n | |
| Dwief and the | f the gamme - | | | | |
| methods of the and system-the | s in cognitive sc coretical study in cory principles i | cience (following cognitive and ne n modeling of c | eural science, inc cognitive process | Neuroscience). C luding connection ses and neural ci king, attention, de | nistic, statistical ircuits. Selected |
| Selected topics methods of the and system-the models of the l plasticity. Recommended HERTZ, J., KR Addison-Wesle KANDEL, E. H McGraw-Hill, DAYAN, P. and | s in cognitive sc coretical study in eory principles i human visual and I literature: ROGH, A. and PA ey 1991 R., SCHWARTZ, 2000 | eience (following cognitive and ne in modeling of c d auditory systen ALMER R. G.: Ir , J. H. and JESSE | eural science, inc cognitive process ns, learning, thin atroduction to the CLL, T.M.: Princi | luding connection ses and neural ci | nistic, statistical ircuits. Selected evelopment and computation. cience. |
| Selected topics methods of the and system-the models of the l plasticity. Recommended HERTZ, J., KR Addison-Wesle KANDEL, E. H McGraw-Hill, DAYAN, P. and | s in cognitive sc coretical study in eory principles i human visual and I literature: ROGH, A. and PA ey 1991 R., SCHWARTZ, 2000 d ABBOTT, L. F eural Systems. M ge: | eience (following cognitive and ne in modeling of c d auditory systen ALMER R. G.: Ir , J. H. and JESSE | eural science, inc cognitive process ns, learning, thin atroduction to the CLL, T.M.: Princi | luding connection ses and neural ci king, attention, de theory of neural ples of Neural Sc | nistic, statistical ircuits. Selected evelopment and computation. cience. |
| Selected topics methods of the and system-the models of the l plasticity. Recommended HERTZ, J., KR Addison-Wesle KANDEL, E. H McGraw-Hill, DAYAN, P. and Modeling of N Course langua | s in cognitive sc coretical study in eory principles i human visual and I literature: ROGH, A. and PA ey 1991 R., SCHWARTZ, 2000 d ABBOTT, L. F eural Systems. M ge: | eience (following cognitive and ne in modeling of c d auditory systen ALMER R. G.: Ir , J. H. and JESSE | eural science, inc cognitive process ns, learning, thin atroduction to the CLL, T.M.: Princi | luding connection ses and neural ci king, attention, de theory of neural ples of Neural Sc | nistic, statistical ircuits. Selected evelopment and computation. cience. |
| Selected topics methods of the and system-the models of the l plasticity. Recommended HERTZ, J., KR Addison-Wesle KANDEL, E. H McGraw-Hill, DAYAN, P. and Modeling of N Course langua Slovak or Engl Notes: | s in cognitive sc coretical study in eory principles i human visual and I literature: ROGH, A. and PA ey 1991 R., SCHWARTZ, 2000 d ABBOTT, L. F eural Systems. M ge: ish | eience (following cognitive and ne in modeling of c d auditory system ALMER R. G.: Ir , J. H. and JESSE :: Theoretical Ne //IT Press, 2001 | eural science, inc cognitive process ns, learning, thin atroduction to the CLL, T.M.: Princi | luding connection ses and neural ci king, attention, de theory of neural ples of Neural Sc | nistic, statistical ircuits. Selected evelopment and computation. cience. |
| Selected topics methods of the and system-the models of the l plasticity. Recommended HERTZ, J., KR Addison-Wesle KANDEL, E. H McGraw-Hill, DAYAN, P. and Modeling of N Course langua Slovak or Engl Notes: | s in cognitive sc coretical study in eory principles i human visual and l literature: ROGH, A. and PA ey 1991 R., SCHWARTZ, 2000 d ABBOTT, L. F eural Systems. M ge: ish | eience (following cognitive and ne in modeling of c d auditory system ALMER R. G.: Ir , J. H. and JESSE :: Theoretical Ne //IT Press, 2001 | eural science, inc cognitive process ns, learning, thin atroduction to the CLL, T.M.: Princi | luding connection ses and neural ci king, attention, de theory of neural ples of Neural Sc | nistic, statistical ircuits. Selected evelopment and computation. cience. |

Date of last modification: 03.05.2015

Approved: prof. RNDr. Viliam Geffert, DrSc.

| Faculty: Faculty of S | |
|--|--|
| Faculty: Faculty of 5 | cience |
| Course ID: ÚINF/ VYZ1/15 | Course name: Computational complexity |
| Course type, scope a Course type: Lectur Recommended cou Per week: 2 Per stu Course method: pre | re rse-load (hours): Idy period: 28 |
| Number of credits: 4 | ŀ |
| Recommended seme | ster/trimester of the course: 3. |
| Course level: II. | |
| Prerequisities: | |
| Conditions for cours Oral examination. | se completion: |
| Learning outcomes: To give the students completeness. | the theoretical background in computational complexity and theory of NP- |
| Deterministic simula Another NP-complet satisfiability, 3-color balancing, Space Savitch theorem. Clo | nondeterministic algorithms with polynomial time, NP-completeness. tion of a nondeterministic Turing machine. Satisfiability of Boolean formulae. te problems: satisfiability of a formula in a conjunctive normal form, 3- rability of a graph, 3-colorability of a planar graph, knapsack problem, |
| Complete problems f | bounded computations, classes L, NL, PSPACE. Deterministic simulation - sure under complement. For classes NL, P, and PSPACE. |
| Recommended litera J.E. Hopcroft, R.Mot computation, Addiso M. Sipser: Introducti L.A.Hemaspaandra, I science, Springer-Ver S. Arora, B. Barak: C 2009. G.Brassard, P.Bradle D.P.Bovet, P.Crescen C. Calude and J. Hro | For classes NL, P, and PSPACE. mure: wani, J.D. Ullman: Introduction to automata theory, languages, and n-Wesley, 2007. on to the Theory of Computation, Thomson, 2nd edition, 2006. M.Ogihara: Complexity theory companion, EATCS series, texts in computer rlag, 2002. Computational Complexity: A Modern Approach, Cambridge Univ. Pess, y: Fundamentals of algorithmics, Prentice Hall, 1996. zi: Introduction to the theory of complexity, Prentice Hall, 1994. mkovič: Complexity: A Language-Theoretic Point of View, in G. Rozenberg |
| Recommended litera J.E. Hopcroft, R.Mot computation, Addiso M. Sipser: Introducti L.A.Hemaspaandra, I science, Springer-Ver S. Arora, B. Barak: C 2009. G.Brassard, P.Bradle D.P.Bovet, P.Crescen C. Calude and J. Hro | sure under complement. For classes NL, P, and PSPACE. Inture: wani, J.D. Ullman: Introduction to automata theory, languages, and n-Wesley, 2007. on to the Theory of Computation, Thomson, 2nd edition, 2006. M.Ogihara: Complexity theory companion, EATCS series, texts in computer rlag, 2002. Computational Complexity: A Modern Approach, Cambridge Univ. Pess, y: Fundamentals of algorithmics, Prentice Hall, 1996. zi: Introduction to the theory of complexity, Prentice Hall, 1994. |

| Course assessm Total number of | nent f assessed studen | ts: 261 | | | |
|-----------------------------------|---------------------------|----------------|------|------|-----|
| А | В | С | D | Е | FX |
| 57.09 | 14.94 | 10.73 | 8.43 | 8.81 | 0.0 |
| Provides: prof. | RNDr. Viliam G | effert, DrSc. | | | |
| Date of last mo | dification: 03.05 | 5.2015 | | | |
| Approved: prof | f. RNDr. Viliam (| Geffert, DrSc. | | | |

| University: P. J | | | | | |
|---|--|---|--|--|--|
| Faculty: Facult | y of Science | | | | |
| Course ID: ÚIN VYU1/15 | NF/ Course n | ame: Computatio | onal learning | | |
| Recommende | Lecture / Practic d course-load (l l Per study per | e nours): | | | |
| Number of crea | lits: 5 | | | | |
| Recommended | semester/trime | ester of the cours | e: 4. | | |
| Course level: II | • | | | | |
| Prerequisities: | | | | | |
| Conditions for Recognition, or | - | ion: | | | |
| | | | | | |
| | students basic ki | nowledge about c | omputational lea | rning algorithms. | |
| To provide the s Brief outline of Concepts, hype algorithms for concerning, probability | students basic ki the course: otheses, learnin disjunctions. Pro | ng algorithms. E babilistic learnin ly correct (PAC) | Boolean formula g, consistent algo | e and represent prithms and learn | ation, learning ability, efficien |
| To provide the s Brief outline of Concepts, hype algorithms for concepts, learning, probability (VC) dimension Recommended M. Anthony, N. | the course: otheses, learnin disjunctions. Pro- bly approximate and learning al literature: Biggs: Comput | ng algorithms. E babilistic learnin ly correct (PAC) | Boolean formula g, consistent algo learning, Occam Theory, Cambrid | e and represent orithms and learn algorithms, Vapn | ation, learning ability, efficien ik-Cervonenki ess, 1991. |
| To provide the s Brief outline of Concepts, hype algorithms for c learning, probal (VC) dimension Recommended M. Anthony, N. M. J. Kearns, U | students basic ki the course: otheses, learnin disjunctions. Pro- bly approximate and learning al literature: Biggs: Comput V. Vazirani: A | ng algorithms. E babilistic learnin ly correct (PAC) gorithms. | Boolean formula g, consistent algo learning, Occam Theory, Cambrid | e and represent orithms and learn algorithms, Vapn | ation, learning ability, efficien ik-Cervonenki ess, 1991. |
| To provide the s Brief outline of Concepts, hype algorithms for c learning, probal (VC) dimension Recommended M. Anthony, N. M. J. Kearns, U London, 1994. | students basic ki the course: otheses, learnin disjunctions. Pro- bly approximate and learning al literature: Biggs: Comput V. Vazirani: A | ng algorithms. E babilistic learnin ly correct (PAC) gorithms. | Boolean formula g, consistent algo learning, Occam Theory, Cambrid | e and represent orithms and learn algorithms, Vapn | ation, learning ability, efficien ik-Cervonenki ess, 1991. |
| To provide the s Brief outline of Concepts, hype algorithms for concepts, hype algorithms for concepts, (VC) dimension Recommended M. Anthony, N. M. J. Kearns, U London, 1994. Course languag Notes: Course assessme | students basic ki the course: otheses, learnin disjunctions. Pro- bly approximate and learning al literature: Biggs: Comput V. Vazirani: A ge: | ng algorithms. E babilistic learnin ly correct (PAC) gorithms. ational Learning n Introduction to | Boolean formula g, consistent algo learning, Occam Theory, Cambrid | e and represent orithms and learn algorithms, Vapn | ation, learning ability, efficien ik-Cervonenki ess, 1991. |
| To provide the s Brief outline of Concepts, hype algorithms for concepts, hype algorithms for concepts, (VC) dimension Recommended M. Anthony, N. M. J. Kearns, U London, 1994. Course languag Notes: Course assessm | students basic ki the course: otheses, learnin disjunctions. Pro- bly approximate and learning al literature: Biggs: Comput V. Vazirani: A ge: ment | ng algorithms. E babilistic learnin ly correct (PAC) gorithms. ational Learning n Introduction to | Boolean formula g, consistent algo learning, Occam Theory, Cambrid | e and represent orithms and learn algorithms, Vapn | ation, learning ability, efficien ik-Cervonenki ess, 1991. |
| To provide the s Brief outline of Concepts, hyp- algorithms for c learning, probal (VC) dimension Recommended M. Anthony, N. M. J. Kearns, U London, 1994. Course languag Notes: Course assessm Total number of | students basic ki the course: otheses, learnin disjunctions. Pro- obly approximate and learning al literature: Biggs: Comput V. Vazirani: A ge: nent f assessed studen | ng algorithms. E babilistic learnin ly correct (PAC) gorithms. ational Learning n Introduction to nts: 129 | Boolean formula g, consistent algo learning, Occam Theory, Cambrid Computational L | e and represent orithms and learn algorithms, Vapn lge University Pro earning Theory, 1 | ation, learning ability, efficien ik-Cervonenki ess, 1991. MIT Press |
| To provide the s Brief outline of Concepts, hyp- algorithms for c learning, probal (VC) dimension Recommended M. Anthony, N. M. J. Kearns, U London, 1994. Course languag Notes: Course assessm Total number of A 12.4 | students basic ki the course: otheses, learnin disjunctions. Pro- obly approximate and learning al literature: Biggs: Comput V. Vazirani: A ge: Dent f assessed studen B 14.73 | ng algorithms. E babilistic learnin ly correct (PAC) gorithms. ational Learning n Introduction to nts: 129 C | Boolean formula g, consistent algo learning, Occam Theory, Cambrid Computational I D 13.18 | e and represent orithms and learn algorithms, Vapn lge University Pro earning Theory, 1 E | ation, learning ability, efficien ik-Cervonenki ess, 1991. MIT Press FX |
| To provide the s Brief outline of Concepts, hype algorithms for concepts, hype algorithms for concepts, hype algorithms for concepts (VC) dimension Recommended M. Anthony, N. M. J. Kearns, U London, 1994. Course languag Notes: Course assessme Total number of A 12.4 | students basic ki the course: otheses, learnin disjunctions. Pro- bly approximate and learning al literature: Biggs: Comput V. Vazirani: A ge: Dent f assessed studen B 14.73 RNDr. Gabriela | ng algorithms. E babilistic learnin ly correct (PAC) gorithms. ational Learning n Introduction to nts: 129 C 23.26 Andrejková, CSc | Boolean formula g, consistent algo learning, Occam Theory, Cambrid Computational I D 13.18 | e and represent orithms and learn algorithms, Vapn lge University Pro earning Theory, 1 E | ation, learning ability, efficien ik-Cervonenki ess, 1991. MIT Press FX |

| Course type, scope and the method: Course type; Lecture / Practice Recommended course-load (hours): Per week: 2 / 1 Per study period: 28 / 14 Course method: present Number of credits: 4 Recommended semester/trimester of the course: 4. Course level: I., II. Prerequisities: Conditions for course completion: Oral examination, written tests. Learning outcomes: To provide the students with a knowledge of basic principles of computer architecture. Brief outline of the course: Milestones in computer organization, fundamental limitations. The representation of numbers an the implementation of floating point arithmetic. Combinatorial and sequential circuits, memor organization, RAMs and ROMs. Digital logic level architecture, data path timing, machine cycle The microarchitecture level, microinstructions and microinstruction execution, pipelining cache memory. I/O controllers, ports, interrupts, direct memory access. Device drivers, operatin system kernel, device-independent software. Recommended literature: 1. A. S. Tanenbaum: Structured Computer Organization, Prentice Hall, 2005 2. D.A. Patterson, J.L. Hennessy: Computer Organization and Design - The Hardware/Software Interface, Morgan Kaufmann, 2011 3. W. Stallings: Computer Organization and Architecture, Prentice Hall, 2012 4. J. Horák: Hardware, učebnice pro pokročilé, Computer Press, 2007 Course language: | • 5 | of Science | | | | |
|--|---|---|---|--|--|--|
| Course type: Lecture / Practice Recommended course-load (hours): Per week: 2 / 1 Per study period: 28 / 14 Course method: present Number of credits: 4 Recommended semester/trimester of the course: 4. Course level: 1., 11. Prerequisities: Conditions for course completion: Oral examination, written tests. Learning outcomes: To provide the students with a knowledge of basic principles of computer architecture. Brief outline of the course: Milestones in computer organization, fundamental limitations. The representation of numbers an the implementation of floating point arithmetic. Combinatorial and sequential circuits, memor organization, RAMs and ROMs. Digital logic level architecture, data path timing, machine cycl. The microarchitecture level, data types, addressing modes, instruction types. Instruction execution, pipelining cache memory. I/O controllers, ports, interrupts, direct memory access. Device drivers, operatin system kernel, device-independent software. Recommended literature: 1. A. S. Tanenbaum: Structured Computer Organization, Prentice Hall, 2005 2. D.A. Patterson, J.L. Hennessy: Computer Organization and Design - The Hardware/Software Interface, Morgan Kaufmann, 2011 3. W. Stallings: Computer Organizati | Course ID: ÚIN ARP1/15 | IF/ Course n | ame: Computer a | architecture | | |
| Recommended semester/trimester of the course: 4. Course level: I., II. Prerequisities: Conditions for course completion: Oral examination, written tests. Learning outcomes: To provide the students with a knowledge of basic principles of computer architecture. Brief outline of the course: Milestones in computer organization, fundamental limitations. The representation of numbers an the implementation of floating point arithmetic. Combinatorial and sequential circuits, memor organization, RAMs and ROMs. Digital logic level architecture, data path timing, machine cycle The microarchitecture level, microinstructions and microinstruction control. The instruction searchitecture level, data types, addressing modes, instruction types. Instruction execution, pipelining cache memory. I/O controllers, ports, interrupts, direct memory access. Device drivers, operatin system kernel, device-independent software. Recommended literature: I. A. S. Tanenbaum: Structured Computer Organization, Prentice Hall, 2005 2. D.A. Patterson, J.L. Hennessy: Computer Organization and Design - The Hardware/Software Interface, Morgan Kaufmann, 2011 3. W. Stallings: Computer organization and Architecture, Prentice Hall, 2012 4. J. Horák: Hardware, učebnice pro pokročilć, Computer Press, 2007 Course assessment Total number of assessed students: 57 A B C | Course type: L Recommended Per week: 2 / 1 | ecture / Practic l course-load (l Per study per | e nours): | | | |
| Course level: 1., II. Prerequisities: Conditions for course completion: Oral examination, written tests. Learning outcomes: To provide the students with a knowledge of basic principles of computer architecture. Brief outline of the course: Milestones in computer organization, fundamental limitations. The representation of numbers an the implementation of floating point arithmetic. Combinatorial and sequential circuits, memor organization, RAMs and ROMs. Digital logic level architecture, data path timing, machine cycle The microarchitecture level, data types, addressing modes, instruction types. Instruction execution, pipelining cache memory. I/O controllers, ports, interrupts, direct memory access. Device drivers, operatin system kernel, device-independent software. Recommended literature: 1. A. S. Tanenbaum: Structured Computer Organization, Prentice Hall, 2005 2. D.A. Patterson, J.L. Hennessy: Computer Organization and Design - The Hardware/Software Interface, Morgan Kaufmann, 2011 3. W. Stallings: Computer Organization and Architecture, Prentice Hall, 2012 4. J. Horák: Hardware, učebnice pro pokročilé, Computer Press, 2007 Course assessment Total number of assessed students: 57 A B C D E FX 15.79 19.3 17.54 21.05 19.3 7.02 | Number of cred | lits: 4 | | | | |
| Prerequisities: Conditions for course completion: Oral examination, written tests. Learning outcomes: To provide the students with a knowledge of basic principles of computer architecture. Brief outline of the course: Milestones in computer organization, fundamental limitations. The representation of numbers an the implementation of floating point arithmetic. Combinatorial and sequential circuits, memor organization, RAMs and ROMs. Digital logic level architecture, data path timing, machine cycle The microarchitecture level, microinstructions and microinstruction control. The instruction searchitecture level, data types, addressing modes, instruction types. Instruction execution, pipelining cache memory. I/O controllers, ports, interrupts, direct memory access. Device drivers, operatin system kernel, device-independent software. Recommended literature: 1. A. S. Tanenbaum: Structured Computer Organization, Prentice Hall, 2005 2. D.A. Patterson, J.L. Hennessy: Computer Organization and Design - The Hardware/Software Interface, Morgan Kaufmann, 2011 3. W. Stallings: Computer Organization and Architecture, Prentice Hall, 2012 4. J. Horák: Hardware, učebnice pro pokročilé, Computer Press, 2007 Course assessment Total number of assessed students: 57 A B C D E FX 15.79 19.3 | Recommended | semester/trime | ester of the cours | se: 4. | | |
| Conditions for course completion: Oral examination, written tests. Learning outcomes: To provide the students with a knowledge of basic principles of computer architecture. Brief outline of the course: Milestones in computer organization, fundamental limitations. The representation of numbers an the implementation of floating point arithmetic. Combinatorial and sequential circuits, memor organization, RAMs and ROMs. Digital logic level architecture, data path timing, machine cycle The microarchitecture level, microinstructions and microinstruction control. The instruction sy architecture level, data types, addressing modes, instruction types. Instruction execution, pipelining cache memory. I/O controllers, ports, interrupts, direct memory access. Device drivers, operatin system kernel, device-independent software. Recommended literature: 1. A. S. Tanenbaum: Structured Computer Organization, Prentice Hall, 2005 2. D.A. Patterson, J.L. Hennessy: Computer Organization and Design - The Hardware/Software Interface, Morgan Kaufmann, 2011 3. W. Stallings: Computer Organization and Architecture, Prentice Hall, 2012 4. J. Horák: Hardware, učebnice pro pokročilć, Computer Press, 2007 Course language: Notes: Course assessment Total number of assessed students: 57 A B C D E FX 15.79 19.3 17.54 21.05 19.3 7.02 | Course level: I., | II. | | | | |
| Oral examination, written tests. Learning outcomes: To provide the students with a knowledge of basic principles of computer architecture. Brief outline of the course: Milestones in computer organization, fundamental limitations. The representation of numbers an the implementation of floating point arithmetic. Combinatorial and sequential circuits, memor organization, RAMs and ROMs. Digital logic level architecture, data path timing, machine cycle The microarchitecture level, microinstructions and microinstruction control. The instruction searchitecture level, data types, addressing modes, instruction types. Instruction execution, pipelining cache memory. I/O controllers, ports, interrupts, direct memory access. Device drivers, operatin system kernel, device-independent software. Recommended literature: 1. A. S. Tanenbaum: Structured Computer Organization, Prentice Hall, 2005 2. D.A. Patterson, J.L. Hennessy: Computer Organization and Design - The Hardware/Software Interface, Morgan Kaufmann, 2011 3. W. Stallings: Computer Organization and Architecture, Prentice Hall, 2012 4. J. Horák: Hardware, učebnice pro pokročilé, Computer Press, 2007 Course language: Notes: Course assessment Total number of assessed students: 57 A B C D E FX 15.79 19.3 17.54 21.05 19.3 7.02 | Prerequisities: | | | | | |
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| Recommended literature: 1. A. S. Tanenbaum: Structured Computer Organization, Prentice Hall, 2005 2. D.A. Patterson, J.L. Hennessy: Computer Organization and Design - The Hardware/Software Interface, Morgan Kaufmann, 2011 3. W. Stallings: Computer Organization and Architecture, Prentice Hall, 2012 4. J. Horák: Hardware, učebnice pro pokročilé, Computer Press, 2007 Course language: Notes: Course assessment Total number of assessed students: 57 A B C D E FX 15.79 19.3 17.54 21.05 19.3 7.02 | | | point untillitette | | and sequential e | ircuits, memory |
| Notes: Course assessment Total number of assessed students: 57 D E FX A B C D E FX 15.79 19.3 17.54 21.05 19.3 7.02 | The microarchit architecture leve cache memory. | tecture level, m el, data types, ad I/O controllers, | s. Digital logic le nicroinstructions dressing modes, i ports, interrupts, | vel architecture, or and microinstruction types. | data path timing, ion control. The Instruction execu | , machine cycle e instruction se ition, pipelining |
| Course assessmentTotal number of assessed students: 57ABCDEFX15.7919.317.5421.0519.37.02 | The microarchit architecture leve cache memory. system kernel, d Recommended 1. A. S. Tanenba 2. D.A. Patterso Interface, Morga 3. W. Stallings: | tecture level, m el, data types, ad I/O controllers, levice-independ literature: aum: Structured n, J.L. Henness an Kaufmann, 2 Computer Orga | s. Digital logic le nicroinstructions dressing modes, i ports, interrupts, ent software. Computer Orgar y: Computer Org 011 nization and Arcl | vel architecture, of and microinstruct nstruction types. I direct memory a nization, Prentice anization and De | data path timing, tion control. The Instruction execu- ticcess. Device dr Hall, 2005 sign - The Hardv e Hall, 2012 | , machine cycle e instruction se ation, pipelining rivers, operating |
| Total number of assessed students: 57 A B C D E FX 15.79 19.3 17.54 21.05 19.3 7.02 | The microarchit architecture leve cache memory. system kernel, d Recommended 1. A. S. Tanenba 2. D.A. Patterso Interface, Morga 3. W. Stallings: 4. J. Horák: Har | tecture level, m el, data types, ad I/O controllers, levice-independ literature: aum: Structured n, J.L. Henness an Kaufmann, 2 Computer Orga dware, učebnico | s. Digital logic le nicroinstructions dressing modes, i ports, interrupts, ent software. Computer Orgar y: Computer Org 011 nization and Arcl | vel architecture, of and microinstruct nstruction types. I direct memory a nization, Prentice anization and De | data path timing, tion control. The Instruction execu- ticcess. Device dr Hall, 2005 sign - The Hardv e Hall, 2012 | , machine cycle e instruction se ation, pipelining rivers, operating |
| 15.79 19.3 17.54 21.05 19.3 7.02 | The microarchit architecture level cache memory. system kernel, d Recommended 1. A. S. Tanenba 2. D.A. Patterso Interface, Morga 3. W. Stallings: 4. J. Horák: Har Course languag | tecture level, m el, data types, ad I/O controllers, levice-independ literature: aum: Structured n, J.L. Henness an Kaufmann, 2 Computer Orga dware, učebnico | s. Digital logic le nicroinstructions dressing modes, i ports, interrupts, ent software. Computer Orgar y: Computer Org 011 nization and Arcl | vel architecture, o and microinstruc nstruction types. I direct memory a nization, Prentice anization and De | data path timing, tion control. The Instruction execu- ticcess. Device dr Hall, 2005 sign - The Hardv e Hall, 2012 | , machine cycle e instruction se ation, pipelining rivers, operating |
| | The microarchin architecture level cache memory. system kernel, d Recommended 1. A. S. Tanenba 2. D.A. Patterso Interface, Morga 3. W. Stallings: 4. J. Horák: Har Course languag Notes: Course assessm | tecture level, m el, data types, adu I/O controllers, levice-independ literature: aum: Structured n, J.L. Henness an Kaufmann, 2 Computer Orga dware, učebnice ge: ent | s. Digital logic le nicroinstructions dressing modes, i ports, interrupts, ent software. Computer Organ y: Computer Org 011 nization and Arcl e pro pokročilé, C | vel architecture, o and microinstruc nstruction types. I direct memory a nization, Prentice anization and De | data path timing, tion control. The Instruction execu- ticcess. Device dr Hall, 2005 sign - The Hardv e Hall, 2012 | , machine cycle e instruction se ation, pipelining rivers, operating |
| Provides: doc. RNDr. Jozef Jirásek. PhD. | The microarchit architecture level cache memory. system kernel, d Recommended 1. A. S. Tanenba 2. D.A. Patterso Interface, Morga 3. W. Stallings: 4. J. Horák: Har Course languag Notes: Course assessm Total number of | tecture level, m el, data types, ad- I/O controllers, levice-independ literature: aum: Structured n, J.L. Henness an Kaufmann, 2 Computer Orga dware, učebnice ee: ent | s. Digital logic le nicroinstructions dressing modes, i ports, interrupts, ent software. Computer Orgar y: Computer Org 011 nization and Arcl e pro pokročilé, C | vel architecture, o and microinstruc nstruction types. I direct memory a nization, Prentice anization and De- hitecture, Prentico Computer Press, 2 | data path timing, ion control. The Instruction execu- access. Device dr Hall, 2005 sign - The Hardv e Hall, 2012 2007 | , machine cycle e instruction se ation, pipelining rivers, operating ware/Software |
| | The microarchit architecture level cache memory. system kernel, d Recommended 1. A. S. Tanenba 2. D.A. Patterso Interface, Morga 3. W. Stallings: 4. J. Horák: Har Course languag Notes: Course assessm Total number of A | tecture level, m el, data types, adu I/O controllers, levice-independ literature: aum: Structured n, J.L. Henness an Kaufmann, 2 Computer Orga dware, učebnice ent Sassessed studen B | s. Digital logic le nicroinstructions dressing modes, i ports, interrupts, ent software. Computer Orgar y: Computer Org 011 nization and Arcl e pro pokročilé, C | vel architecture, o and microinstruc nstruction types. I direct memory a nization, Prentice anization and De- hitecture, Prentico Computer Press, 2 | data path timing, ion control. The Instruction execu- excess. Device dr Hall, 2005 sign - The Hardv e Hall, 2012 2007 | , machine cycle e instruction se ation, pipelining rivers, operating ware/Software |

Approved: prof. RNDr. Viliam Geffert, DrSc.

| Faculty: Faculty of Science Course ID: ÚINF/ Course name: Cryptographic protocols |
|---|
| Course ID: ÚINF/ Course name: Cryptographic protocols |
| KRP1/15 |
| Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 2 / 2 Per study period: 28 / 28 Course method: present |
| Number of credits: 4 |
| Recommended semester/trimester of the course: 4. |
| Course level: I., II. |
| Prerequisities: |
| Conditions for course completion: written test |
| Learning outcomes: to acquire knowledge on design and verifying of cryptographic protocols |
| Brief outline of the course: Authentication and key establishment using shared and public key cryptography, key agreement protocols, conference key agreement, zero-knowledge protocols. |
| Recommended literature: 1. Colin Boyd, Anish Mathuria: Protocols for Authentication and Key Establishment, Springer, 2003 2. Douglas R. Stinson: Cryptography: Theory and Practice, Third Edition, Chapman & Hall/CRC, 2006 3. Bruce Schneier: Applied Cryptography, Second Edition, John Wiley & Sons Inc., 1996 4. Peter Ryan, Steve Schneider: Modeling and Analysis of Security Protocols, Addison-Wesley, 2001 |
| Course language: |
| Notes: |
| Course assessment Total number of assessed students: 2 |
| A B C D E FX |
| 0.0 0.0 50.0 0.0 50.0 0.0 |
| Provides: doc. RNDr. Stanislav Krajči, PhD., doc. RNDr. Jozef Jirásek, PhD., RNDr. Rastislav Krivoš-Belluš, PhD. |
| Date of last modification: 20.07.2016 |
| Approved: prof. RNDr. Viliam Geffert, DrSc. |

| University: P. J. Š | afárik Univers | ity in Košice | | | |
|---|---|-------------------|-------------------|--------------------|---------------|
| Faculty: Faculty of | of Science | | | | |
| Course ID: ÚINF KRS/15 | Course na | me: Cryptograp | hic systems and | their applications | |
| Course type, scop Course type: Lee Recommended o Per week: 3 / 2 H Course method: | cture / Practice course-load (h Per study perio | ours): | | | |
| Number of credit | s: 6 | | | | |
| Recommended se | emester/trimes | ter of the cours | e: 1. | | |
| Course level: I., I | I. | | | | |
| Prerequisities: | | | | | |
| Conditions for co | ourse completi | on: | | | |
| Learning outcom | es: | | | | |
| Brief outline of th | ne course: | | | | |
| Recommended lit | terature: | | | | |
| Course language: | : | | | | |
| Notes: | | | | | |
| Course assessmen Total number of a | | ts: 96 | | | |
| A | В | С | D | Е | FX |
| 12.5 | 9.38 | 9.38 | 12.5 | 35.42 | 20.83 |
| Provides: doc. RN Krivoš-Belluš, Phl | | Krajči, PhD., doo | z. RNDr. Jozef Ji | rásek, PhD., RNI | Dr. Rastislav |
| Date of last modi | fication: 03.05 | .2015 | | | |
| Approved: prof. H | RNDr. Viliam (| Geffert, DrSc. | | | |

| | Salarik Univer | sity in Košice | | | |
|--|---|--|--|-----------------------------------|--------------------|
| Faculty: Faculty | of Science | | | c | |
| Course ID: ÚIN TDB1/15 | F/ Course n | ame: Developme | nt of web-orient | ed database appli | ications |
| Course type, sco Course type: P Recommended Per week: 2 Pe Course methoo | Practice l course-load (l er study period | hours): | | | |
| Number of cred | its: 2 | | | | |
| Recommended | semester/trime | ester of the cours | e: 4. | | |
| Course level: II. | | | | | |
| Prerequisities: | | | | | |
| Conditions for c Work on a proje | ct. | tion: | | | |
| Presentation of a | a project. | | | | |
| Learning outcor To learn moder | mes: methods for | a development programming tech | | applications wi | th emphasis of |
| Learning outcom To learn moder database server Brief outline of Oracle SQL Data | mes: m methods for ORACLE and p the course: a Manipulation | | niques in JAVA. | nition Language. | |
| Learning outcom To learn moder database server Brief outline of Oracle SQL Data | mes: mes: ORACLE and p the course: a Manipulation Java Database literature: | programming tech Language. Oracle | niques in JAVA. | nition Language. | |
| Learning outcom To learn moder database server of Brief outline of Oracle SQL Data Java JDBC API Recommended 1 1. http://www.or | mes: mes: ORACLE and p the course: a Manipulation Java Database literature: racle.com | programming tech Language. Oracle | niques in JAVA. | nition Language. | |
| Learning outcom To learn moder database server (Brief outline of Oracle SQL Data Java JDBC API Recommended | mes: mes: ORACLE and p the course: a Manipulation Java Database literature: racle.com | programming tech Language. Oracle | niques in JAVA. | nition Language. | |
| Learning outcom To learn moder database server (Brief outline of Oracle SQL Data Java JDBC API Recommended 1 1. http://www.or Course languag Notes: | mes: mes: mes: ORACLE and p the course: a Manipulation Java Database literature: racle.com e: ent | programming tech Language. Oracle Connectivity. Jav | niques in JAVA. | nition Language. | |
| Learning outcom To learn moder database server of Brief outline of Oracle SQL Data Java JDBC API Recommended I 1. http://www.or Course languag Notes: Course assessm | mes: mes: mes: ORACLE and p the course: a Manipulation Java Database literature: racle.com e: ent | programming tech Language. Oracle Connectivity. Jav | niques in JAVA. | nition Language. | |
| Learning outcom To learn moder database server of Brief outline of Oracle SQL Data Java JDBC API Recommended 1 1. http://www.or Course languag Notes: Course assessm Total number of | mes: mes: mes: ORACLE and p the course: a Manipulation Java Database literature: racle.com ge: ent `assessed studen | nts: 0 | niques in JAVA. SQL Data Defir a JDBC API. Jav | nition Language. 7a JSP. JSTL. | Oracle PL/SQ |
| Learning outcom To learn moder database server of Brief outline of Oracle SQL Data Java JDBC API Recommended 1 1. http://www.or Course languag Notes: Course assessme Total number of A 0.0 | mes: mes: mes: ORACLE and p the course: a Manipulation Java Database literature: racle.com racle.com re: ent `assessed studen B 0.0 | nts: 0 C 0.0 | niques in JAVA. SQL Data Defir a JDBC API. Jav | ition Language. a JSP. JSTL. | Oracle PL/SQ FX |
| Learning outcom To learn moder database server of Brief outline of Oracle SQL Data Java JDBC API Recommended 1 1. http://www.or Course languag Notes: Course assessm Total number of A | mes: mes: mes: mes: mes: a Manipulation Java Database literature: racle.com racle.com ent assessed studen B 0.0 RNDr. Csaba Tö | nts: 0 C 0.0 D D D D D D D D D D D D D D D D D D | niques in JAVA. SQL Data Defir a JDBC API. Jav | ition Language. a JSP. JSTL. | Oracle PL/SQ FX |

| University: P. J. Š | afárik Univers | ity in Košice | | | |
|---|--------------------------------|-----------------------|-------------------|------|-----|
| Faculty: Faculty of | of Science | | | | |
| Course ID: ÚINF DPO/15 | / Course na | me: Diploma Th | esis and its Defe | ence | |
| Course type, scop Course type: Recommended c Per week: Per s Course method: | course-load (h tudy period: | | | | |
| Number of credit | s: 20 | | | | |
| Recommended se | emester/trimes | ster of the cours | e: | | |
| Course level: II. | | | | | |
| Prerequisities: | | | | | |
| Conditions for co | urse completi | on: | | | |
| Learning outcom | es: | | | | |
| Brief outline of th | ne course: | | | | |
| Recommended lit | terature: | | | | |
| Course language: | | | | | |
| Notes: | | | | | |
| Course assessmer Total number of a | | ts: 5 | | | |
| A | В | С | D | Е | FX |
| 60.0 | 0.0 | 40.0 | 0.0 | 0.0 | 0.0 |
| Provides: | | | | | |
| Date of last modi | fication: 03.05 | 5.2015 | | | |
| Approved: prof. F | RNDr. Viliam (| Geffert, DrSc. | | | |

| J | irik University in Košice | |
|---|--|--|
| Faculty: Faculty of S | Science | |
| Course ID: ÚINF/ ABSP/14 | Course name: Essentials of | of ABAP |
| Course type, scope a Course type: Lectu Recommended cou Per week: 2 / 1 Per Course method: pr | re / Practice rse-load (hours): study period: 28 / 14 | |
| Number of credits: | 4 | |
| Recommended seme | ester/trimester of the cours | e: 1., 3. |
| Course level: I., II., I | N | |
| Prerequisities: ÚINI | F/ZTSP/14 | |
| Conditions for cour | se completion: | |
| Learning outcomes: | | |
| ABAP Open SQL, A operations, cycles, te | mming in ABAP, declaratio BAP Workbench navigation st programs using a debugge | on of variables, the basic syntax of the language , ABAP editor, arithmetic, logic conditions, string r, an overview of the most important commands of objects, functional groups and function modules. |
| Recommended liter | ature: | |
| | | |
| Course language: | | |
| Course language: Notes: | | |
| | ssed students: 38 | |
| Notes: Course assessment | essed students: 38 abs | n |
| Notes: Course assessment | | n 5.26 |
| Notes: Course assessment | abs | |
| Notes: Course assessment Total number of asse | abs 94.74 | |

| University: P. J. Šafá | | |
|---|---|---|
| • | rik University in Košice | |
| Faculty: Faculty of S | Science | |
| Course ID: ÚINF/ ZTSP/14 | Course name: Essentials of | of the SAP Technology |
| Course type, scope a Course type: Lectu Recommended cou Per week: 2 / 1 Per Course method: pr | re / Practice rse-load (hours): study period: 28 / 14 | |
| Number of credits: | 4 | |
| Recommended seme | ester/trimester of the cours | e: 1., 3. |
| Course level: I., II., I | N | |
| Prerequisities: | | |
| Conditions for cour | se completion: | |
| Learning outcomes: | | |
| Brief outline of the | DOTIFEO. | |
| Defining mySAP Teo Design, Calling Fu | chnology (Products, Innovati nctions), System Kernel (C n SAP), Communication and | ons provided by SAP), Navigation (Logon, Screen lient/Server Architecture, Structure of an SAP Integration Technologies (Remote Function Calls, |
| Defining mySAP Tec Design, Calling Fun system, Processing in | chnology (Products, Innovati nctions), System Kernel (C n SAP), Communication and s). | lient/Server Architecture, Structure of an SAP |
| Defining mySAP Tec Design, Calling Fun system, Processing in Internet Technologie | chnology (Products, Innovati nctions), System Kernel (C n SAP), Communication and s). | lient/Server Architecture, Structure of an SAP |
| Defining mySAP Tec Design, Calling Fur system, Processing ir Internet Technologie Recommended liter | chnology (Products, Innovati nctions), System Kernel (C n SAP), Communication and s). | lient/Server Architecture, Structure of an SAP |
| Defining mySAP Teo Design, Calling Fur system, Processing in Internet Technologie Recommended liter Course language: | chnology (Products, Innovati actions), System Kernel (C a SAP), Communication and s). ature: | lient/Server Architecture, Structure of an SAP |
| Defining mySAP Tec Design, Calling Fur system, Processing in Internet Technologie Recommended liter: Course language: Notes: Course assessment | chnology (Products, Innovati actions), System Kernel (C a SAP), Communication and s). ature: | lient/Server Architecture, Structure of an SAF |
| Defining mySAP Tec Design, Calling Fur system, Processing in Internet Technologie Recommended liter: Course language: Notes: Course assessment | chnology (Products, Innovati nctions), System Kernel (C n SAP), Communication and s). ature: | lient/Server Architecture, Structure of an SAF Integration Technologies (Remote Function Calls |
| Defining mySAP Teo Design, Calling Fur system, Processing in Internet Technologie Recommended liter: Course language: Notes: Course assessment Total number of asse | chnology (Products, Innovati nctions), System Kernel (C n SAP), Communication and s). ature: essed students: 160 abs 100.0 | lient/Server Architecture, Structure of an SAF Integration Technologies (Remote Function Calls |
| Defining mySAP Teo Design, Calling Fun system, Processing in Internet Technologie Recommended liter: Course language: Notes: Course assessment Total number of asses Provides: Ing. Katar | chnology (Products, Innovati nctions), System Kernel (C n SAP), Communication and s). ature: essed students: 160 abs 100.0 ína Nináčová, RNDr. Štefan | n 0.0 |

| University: P. J. Ša | ıfárik Univers | ity in Košice | | | |
|---|--|--------------------|--------------------|-----------------|-----|
| Faculty: Faculty of | f Science | | | | |
| Course ID: ÚINF/ VEP1/15 | Course na | me: Formal met | hods in a verifica | tion | |
| Course type, scope Course type: Lec Recommended co Per week: 2 / 1 P Course method: 1 | ture / Practice ourse-load (h er study perio | ours): | | | |
| Number of credits | :4 | | | | |
| Recommended ser | nester/trimes | ster of the course | e: 4. | | |
| Course level: II. | | | | | |
| Prerequisities: | | | | | |
| Conditions for cou | ırse completi | on: | | _ | |
| Learning outcome | es: | | | | |
| Brief outline of the | e course: | | | | |
| Recommended lite | erature: | | | | |
| Course language: | | | | | |
| Notes: | | | | | |
| Course assessmen Total number of as | - | ts: 23 | | | |
| A | В | С | D | Е | FX |
| 30.43 | 26.09 | 17.39 | 17.39 | 0.0 | 8.7 |
| Provides: doc. RN | Dr. Gabriela A | Andrejková, CSc. | , Mgr. Alexander | r Szabari, PhD. | |
| Date of last modif | ication: 03.05 | 5.2015 | | | |
| Approved: prof. R | NDr. Viliam (| Geffert, DrSc. | | | |

| Faculty: Facult | | | | | |
|---|---|---|---|---|---|
| | y of Science | | | | |
| Course ID: ÚI ZNA1/15 | NF/ Course na | me: Foundation | s of knowledge | systems | |
| Course type: Recommende | d course-load (h er study period: | ours): | | | |
| Number of cre | dits: 4 | | | | |
| Recommended | semester/trimes | ster of the cours | e: 4. | | |
| Course level: I | [. | | | | |
| Prerequisities: | | | | | |
| Conditions for | course completi | on: | | | |
| - | | | ications of logic | into computer sci | ence, especially |
| deductive data | bases. Logic and | - · · | - | databases, relations of Lattice Theorem | |
| | sis (FCA). Basic factorisation. Int | notions of Fuzzy | logic and Fuzzy | extension of FCA | - |
| decomposition, Recommended Shawn Hedmar computability a Shan-Hwei Nie Springer-Verlag Kristian Kerstin IOS Press, ISB Nilsson U., Ma Bělohlávek R.: Plenum Publish | factorisation. Int literature: n. A first course i and complexity. Conhuys-Cheng, Ro g, ISBN 3-540-62 ng. An Inductive N 1-58603-674-2 luszynski J.: Log Fuzzy Relational ners, New York, 2 | notions of Fuzzy ercontextual stru n logic: An intro Dxford university onald de Wolf. Fo 2927-0, 1997. Logic Programm , 2006. ic, Programming Systems: Found 2002. | logic and Fuzzy actures, bonds. duction to mode press, ISBN 0– oundations of In ning Approach to g and Prolog, Joh lations and Princ | | A. Optimal table eory, 06. ogramming. ional Learning, Ltd. 1995. cademic/ |
| decomposition, Recommended Shawn Hedmar computability a Shan-Hwei Nie Springer-Verlag Kristian Kerstin IOS Press, ISB Nilsson U., Ma Bělohlávek R.: Plenum Publish Ganter B., Will | factorisation. Int literature: n. A first course i and complexity. Conhuys-Cheng, Ro g, ISBN 3-540-62 ng. An Inductive N 1-58603-674-2 luszynski J.: Log Fuzzy Relational ners, New York, 2 e R.: Formal Cor | notions of Fuzzy ercontextual stru n logic: An intro Dxford university onald de Wolf. Fo 2927-0, 1997. Logic Programm , 2006. ic, Programming Systems: Found 2002. | logic and Fuzzy actures, bonds. duction to mode press, ISBN 0– oundations of In ning Approach to g and Prolog, Joh lations and Princ | extension of FCA l theory, proof the 19–852980–5, 20 ductive Logic Pro o Statistical Relation Wiley & Sons I ciples. Kluwer, Ac | A. Optimal table eory, 06. ogramming. ional Learning, Ltd. 1995. cademic/ |
| decomposition, Recommended Shawn Hedmar computability a Shan-Hwei Nie Springer-Verlag Kristian Kerstin IOS Press, ISB Nilsson U., Ma Bělohlávek R.: Plenum Publish Ganter B., Will Course languag | factorisation. Int literature: n. A first course i and complexity. Conhuys-Cheng, Ro g, ISBN 3-540-62 ng. An Inductive N 1-58603-674-2 luszynski J.: Log Fuzzy Relational ners, New York, 2 e R.: Formal Cor | notions of Fuzzy ercontextual stru n logic: An intro Dxford university onald de Wolf. Fo 2927-0, 1997. Logic Programm , 2006. ic, Programming Systems: Found 2002. | logic and Fuzzy actures, bonds. duction to mode press, ISBN 0– oundations of In ning Approach to g and Prolog, Joh lations and Princ | extension of FCA l theory, proof the 19–852980–5, 20 ductive Logic Pro o Statistical Relation Wiley & Sons I ciples. Kluwer, Ac | A. Optimal table eory, 06. ogramming. ional Learning, Ltd. 1995. cademic/ |
| decomposition, Recommended Shawn Hedman computability a Shan-Hwei Nie Springer-Verlag Kristian Kerstin IOS Press, ISB Nilsson U., Ma Bělohlávek R.: Plenum Publish Ganter B., Will Course languag Notes: Course assessm | factorisation. Int literature: n. A first course i and complexity. Conhuys-Cheng, Ro g, ISBN 3-540-62 ng. An Inductive N 1-58603-674-2 luszynski J.: Log Fuzzy Relational ners, New York, 2 e R.: Formal Cor ge: | notions of Fuzzy ercontextual stru n logic: An intro 0xford university onald de Wolf. F 2927-0, 1997. Logic Programming , 2006. ic, Programming 2002. icept Analysis: N | logic and Fuzzy actures, bonds. duction to mode press, ISBN 0– oundations of In ning Approach to g and Prolog, Joh lations and Princ | extension of FCA l theory, proof the 19–852980–5, 20 ductive Logic Pro o Statistical Relation Wiley & Sons I ciples. Kluwer, Ac | A. Optimal table eory, 06. ogramming. ional Learning, Ltd. 1995. cademic/ |
| decomposition, Recommended Shawn Hedman computability a Shan-Hwei Nie Springer-Verlag Kristian Kerstin IOS Press, ISB Nilsson U., Ma Bělohlávek R.: Plenum Publish Ganter B., Will Course languag Notes: Course assessm | factorisation. Int literature: n. A first course i and complexity. Comhuys-Cheng, Ro g, ISBN 3-540-62 ng. An Inductive N 1-58603-674-2 luszynski J.: Log Fuzzy Relational ners, New York, 2 e R.: Formal Cor ge: | notions of Fuzzy ercontextual stru n logic: An intro 0xford university onald de Wolf. F 2927-0, 1997. Logic Programming , 2006. ic, Programming 2002. icept Analysis: N | logic and Fuzzy actures, bonds. duction to mode press, ISBN 0– oundations of In ning Approach to g and Prolog, Joh lations and Princ | extension of FCA l theory, proof the 19–852980–5, 20 ductive Logic Pro o Statistical Relation Wiley & Sons I ciples. Kluwer, Ac | A. Optimal table eory, 06. ogramming. ional Learning, Ltd. 1995. cademic/ |

Provides: doc. RNDr. Stanislav Krajči, PhD., RNDr. Ondrej Krídlo, PhD.

Date of last modification: 03.05.2015

Approved: prof. RNDr. Viliam Geffert, DrSc.

| University: P. J. | Šafárik Univers | ity in Košice | | | |
|--|--|------------------|---------------------------------------|--------------------|-----------|
| Faculty: Faculty | of Science | | | | |
| Course ID: KFa DF2p/03 | DF/ Course na | me: History of I | Philosophy 2 (Ge | eneral Introductio | n) |
| Recommended | ecture / Practice course-load (h Per study perio | ours): | | | |
| Number of cred | its: 4 | | | | |
| Recommended | semester/trimes | ter of the cours | e: | | |
| Course level: I., | II. | | | | |
| Prerequisities: | | | | | |
| Conditions for a | course completi | on: | | | |
| Learning outco | mes: | | | | |
| Brief outline of | the course: | | | | |
| Recommended | literature: | | | | |
| Course languag | e: | | | | |
| Notes: | | | | | |
| Course assessm Total number of | | ts: 731 | | | |
| А | В | С | D | Е | FX |
| 60.6 | 13.82 | 12.72 | 8.76 | 3.42 | 0.68 |
| Provides: doc. P Katarína Mayero | | · · · 1 | · · · · · · · · · · · · · · · · · · · | eter Nezník, CSo | c., PhDr. |
| Date of last mod | lification: 03.05 | .2015 | | | |
| Approved: prof. | RNDr. Viliam (| Geffert, DrSc. | | | |

| University: P. J. Š | afárik Univers | ity in Košice | | | |
|---|--|--------------------------------------|-------|-------------------|----------|
| Faculty: Faculty o | of Science | | | | |
| Course ID: KFaD KDF/05 | | me: Chapters fro General Introduc | - | nilosophy of 19th | and 20th |
| Course type, scop Course type: Pra Recommended c Per week: 2 Per Course method: | ictice course-load (hi study period: | ours): | | | |
| Number of credit | s: 2 | | | | |
| Recommended se | mester/trimes | ter of the course | e: 2. | | |
| Course level: II. | | | | | |
| Prerequisities: | | | | | |
| Conditions for co | urse completi | on: | | | |
| Learning outcom | es: | | | | |
| Brief outline of th | e course: | | | | |
| Recommended lit | erature: | | | | |
| Course language: | | | | | |
| Notes: | | | | | |
| Course assessmen Total number of a | | ts: 10 | | | |
| A | В | С | D | Е | FX |
| 50.0 | 20.0 | 10.0 | 0.0 | 10.0 | 10.0 |
| Provides: doc. Ph | Dr. Pavol Thol | t, PhD., mim. pro | of. | | |
| Date of last modif | fication: 03.05 | .2015 | | _ | |
| Approved: prof. F | RNDr. Viliam (| Geffert, DrSc. | | | |

| University: P. J. Ša | fárik Univers | ity in Košice | | | |
|--|---------------------------------------|------------------|--------------------|---------------|-----|
| Faculty: Faculty of | Science | | | | |
| Course ID: KFaDF IH2/03 | Course na | me: Idea Huma | nitas 2 (General 1 | Introduction) | |
| Course type, scope Course type: Prac Recommended co Per week: 2 Per s Course method: p | tice ourse-load (h tudy period: | ours): | | | |
| Number of credits | : 2 | | | | |
| Recommended sen | nester/trimes | ter of the cours | e: 3. | | |
| Course level: II. | | | | | |
| Prerequisities: | | | | | |
| Conditions for cou | rse completi | on: | | | |
| Learning outcome | s: | | | | |
| Brief outline of the | e course: | | | | |
| Recommended lite | erature: | | | | |
| Course language: | | | | | |
| Notes: | | | | | |
| Course assessment Total number of as | | ts: 8 | | | |
| A | В | С | D | Е | FX |
| 87.5 | 12.5 | 0.0 | 0.0 | 0.0 | 0.0 |
| Provides: Doc. PhI | Dr. Peter Nezr | ník, CSc. | | | |
| Date of last modifi | cation: 03.05 | .2015 | | | |
| Approved: prof. R | NDr. Viliam (| Geffert, DrSc. | | | |

| University: P. J. Ša | fárik Universi | ity in Košice | | | |
|---|--|------------------|-------|------|-----|
| Faculty: Faculty of | Science | | | | |
| Course ID: ÚINF/ ANO/15 | Course na | me: Image analy | /sis | | |
| Course type, scope Course type: Lect Recommended co Per week: 2 / 2 Pe Course method: p | ure / Practice urse-load (he r study perio | ours): | | | |
| Number of credits: | 4 | | | | |
| Recommended sem | nester/trimes | ter of the cours | e: 3. | | |
| Course level: I., II. | | | | | |
| Prerequisities: | | | | | |
| Conditions for cou | rse completi | on: | | | |
| Learning outcomes | 5: | | | | |
| Brief outline of the | course: | | | | |
| Recommended lite | rature: | | | | |
| Course language: | | | | | |
| Notes: | | | | | |
| Course assessment Total number of ass | | ts: 10 | | | |
| A | В | С | D | Е | FX |
| 20.0 | 0.0 | 20.0 | 10.0 | 50.0 | 0.0 |
| Provides: doc. Ing. | Zoltán Tomo | ri, CSc. | | · | |
| Date of last modified | cation: 03.05 | .2015 | | | |
| Approved: prof. RN | NDr. Viliam C | Geffert, DrSc. | | | |

| Fooulty Fooult | | sity in Košice | | | |
|--|---|--|---|------------------|--------------------------------|
| raculty: racult | y of Science | | | | |
| Course ID: ÚIN MIN1/15 | NF/ Course n | ame: Informatics | for medicine | | |
| | Practice d course-load (l er study period | hours): | | | |
| Number of crea | dits: 2 | | | | |
| Recommended | semester/trime | ester of the cours | e: 5. | | |
| Course level: I. | , II. | | | | |
| Prerequisities: | | | | | |
| Conditions for Oral and writte | - | tion: | | | |
| - | pplication of co | mputer science ir relevant domain. | n medicine doma | in with emphasis | s on the specific |
| Software devel MS .NET, C#, used software to RationalRose, I company mang | lopment go me C++. Developn ools: RequisitePro, UI ement according | edicine domain (nent based on so- TA, Caliber, Clea g to CMMI metho | called "V" deve rCase. Quality a | lopment model. | An overview o |
| MS .NET, C#, used software to RationalRose, I | lopment go me C++. Developm ools: RequisitePro, UI ement according literature: go.com | nent based on so- TA, Caliber, Clea | called "V" deve rCase. Quality a | lopment model. | An overview of |
| Software devel MS .NET, C#, used software to RationalRose, I company mang Recommended http://www.syn | lopment go me C++. Developm ools: RequisitePro, UI ement according literature: go.com nens.com | nent based on so- TA, Caliber, Clea | called "V" deve rCase. Quality a | lopment model. | An overview of |
| Software devel MS .NET, C#, used software to RationalRose, I company mang Recommended http://www.syn http://www.sier | lopment go me C++. Developm ools: RequisitePro, UI ement according literature: go.com nens.com | nent based on so- TA, Caliber, Clea | called "V" deve rCase. Quality a | lopment model. | An overview o |
| Software devel MS .NET, C#, used software to RationalRose, H company mang Recommended http://www.syn http://www.sier Course languag Notes: Course assessm | lopment go me C++. Developm ools: RequisitePro, UI ement according literature: go.com nens.com ge: | nent based on so- ITA, Caliber, Clea g to CMMI metho | called "V" deve rCase. Quality a | lopment model. | An overview o |
| Software devel MS .NET, C#, used software to RationalRose, H company mang Recommended http://www.syn http://www.sier Course languag Notes: Course assessm | lopment go me C++. Developm ools: RequisitePro, UI ement according literature: go.com nens.com ge: | nent based on so- ITA, Caliber, Clea g to CMMI metho | called "V" deve rCase. Quality a | lopment model. | An overview of |
| Software devel MS .NET, C#, used software to RationalRose, H company mang Recommended http://www.syn http://www.sier Course languag Notes: Course assessm Total number o | lopment go me C++. Developm ools: RequisitePro, UI ement according literature: go.com nens.com ge: | nent based on so- TA, Caliber, Clea g to CMMI metho nts: 69 | called "V" deve rrCase. Quality a dology. | lopment model. | An overview o gement and SW |
| Software devel MS .NET, C#, used software to RationalRose, H company mang Recommended http://www.syn http://www.sier Course languag Notes: Course assessm Total number o A 75.36 | lopment go me C++. Developm ools: RequisitePro, UI ement according literature: go.com nens.com ge: hent f assessed studer B | nent based on so- ITA, Caliber, Clea g to CMMI metho nts: 69 C 0.0 | called "V" deve rrCase. Quality a dology. | E | An overview o gement and SW |
| Software devel MS .NET, C#, used software to RationalRose, H company mang Recommended http://www.syn http://www.sier Course languag Notes: Course assessm Total number o A 75.36 Provides: doc. 1 | lopment go me C++. Developm ools: RequisitePro, UI ement according literature: go.com nens.com ge: hent f assessed studer B 24.64 | nent based on so- ITA, Caliber, Clea g to CMMI metho nts: 69 C 0.0 pčo, PhD. | called "V" deve rrCase. Quality a dology. | E | An overview o gement and SW |

| University: P. J. | Šafárik Univers | ity in Košice | | | |
|---|---------------------------------|----------------------------------|-----------------|--------------|------------|
| Faculty: Faculty | of Science | | | | |
| Course ID: ÚIN MSSI/15 | F/ Course na | me: Informatika | II. | | |
| Course type, sco Course type: Recommended Per week: Per Course method | course-load (he study period: | | | | |
| Number of cred | its: 4 | | | | |
| Recommended s | semester/trimes | ter of the cours | e: | | |
| Course level: II. | | | | | |
| Prerequisities: (or ((ÚINF/LAD1 NEU1/15 or ÚIN | /15 or ÚINF/ZN F/VKN/15)) or | IA1/15) and ÚIN (ÚINF/KKV1/15 | F/AIS1/15) or (| ÚINF/VYU1/15 | and (ÚINF/ |
| Conditions for c | ourse completi | on: | | | |
| Learning outcom | nes: | | | | |
| Brief outline of | the course: | | | | |
| Recommended l | iterature: | | | | |
| Course languag | e: | | | | |
| Notes: | | | | | |
| Course assessme Total number of | | ts: 5 | | | |
| A | В | С | D | E | FX |
| 20.0 | 20.0 | 60.0 | 0.0 | 0.0 | 0.0 |
| Provides: | | | | | |
| Date of last mod | lification: 17.09 | .2015 | | | |
| Approved: prof. | RNDr. Viliam (| Geffert, DrSc. | | | |

| | 6 G · | | | | |
|--|---|--|--|--|--|
| Faculty: Faculty | | | | | |
| Course ID: ÚIN AIS1/15 | F/ Course n | ame: Information | systems archite | cture | |
| Course type, sco Course type: L Recommended Per week: 2 / 1 Course method | ecture / Practice course-load (h Per study per | e 1ours): | | | |
| Number of cred | lits: 4 | | | | |
| Recommended s | semester/trime | ster of the cours | e: 4. | | |
| Course level: II. | | | | | |
| Prerequisities: | | | | | |
| Conditions for c Work on project Written and oral | - - | ion: | | | |
| Learning outcom | | | 1 | motion anatom d | evelopment T |
| | ndamental princ | e modern method ciples of conceptu | • | • | 1 |
| introduce the fur Brief outline of System, informa model of the arc life cycle based marking models | the course: ation system, inf chitecture of an l on MDA. Mo s. Entity types. | | al modelling of i d. Conceptualisa em. Introduction modelling langu es. Cardinality c | tion of information to MDA, softwa age. Model tran constraints. Integ | on systems. ISC are development asformation and |
| introduce the fur Brief outline of System, informa model of the arc life cycle based marking models Taxonomies. Do | ndamental princ the course: ation system, inf chitecture of an l on MDA. Mo s. Entity types. omain events. U | formation pyramic information syste del, metamodel, Relationship typ | al modelling of i d. Conceptualisa em. Introduction modelling langu es. Cardinality c | tion of information to MDA, softwa age. Model tran constraints. Integ | on systems. ISC are development asformation and |
| introduce the fun Brief outline of System, information model of the arcolife cycle based marking models Taxonomies. Do Recommended I 1. http://www.or 2. Ian Sommervi 3. Anneke Klepp Addison-Wesley | ndamental princ the course: ation system, inf chitecture of an l on MDA. Mo s. Entity types. omain events. U literature: mg.org ille, Software E pe, Wim Bast, J v 2003 | formation pyramic information syste del, metamodel, Relationship typ | al modelling of i d. Conceptualisa em. Introduction modelling langu es. Cardinality c nsition diagrams son-Wesley 2005 DA Explained, th | nformation syste tion of informatio to MDA, softwa age. Model tran constraints. Integ | on systems. ISC are development asformation and rity constraints |
| introduce the fur Brief outline of System, informa model of the arc life cycle based marking models Taxonomies. Do Recommended I 1. http://www.or 2. Ian Sommervi 3. Anneke Klepp Addison-Wesley 4. Scott Berkun, | ndamental princ the course: ation system, inf chitecture of an l on MDA. Mo s. Entity types. omain events. U literature: mg.org ille, Software E pe, Wim Bast, J 7 2003 The Art Of Pro | formation pyramia information syste del, metamodel, Relationship typ se cases. State tra ngineering, Addia os B Warmer, MI | al modelling of i d. Conceptualisa em. Introduction modelling langu es. Cardinality c nsition diagrams son-Wesley 2005 DA Explained, th | nformation syste tion of informatio to MDA, softwa age. Model tran constraints. Integ | on systems. ISC are development asformation and rity constraints |
| introduce the fun Brief outline of F System, informat model of the arc life cycle based marking models Taxonomies. Do Recommended I 1. http://www.or 2. Ian Sommervi 3. Anneke Klepp Addison-Wesley 4. Scott Berkun, Course languag | ndamental princ the course: ation system, inf chitecture of an l on MDA. Mo s. Entity types. omain events. U literature: mg.org ille, Software E pe, Wim Bast, J 7 2003 The Art Of Pro | formation pyramia information syste del, metamodel, Relationship typ se cases. State tra ngineering, Addia os B Warmer, MI | al modelling of i d. Conceptualisa em. Introduction modelling langu es. Cardinality c nsition diagrams son-Wesley 2005 DA Explained, th | nformation syste tion of informatio to MDA, softwa age. Model tran constraints. Integ | on systems. ISC are development asformation and rity constraints |
| introduce the fun Brief outline of a System, informa model of the arc life cycle based marking models Taxonomies. Do Recommended I 1. http://www.or 2. Ian Sommervi 3. Anneke Klepp Addison-Wesley 4. Scott Berkun, Course languag Notes: | ndamental princ the course: ation system, inf chitecture of an l on MDA. Mo s. Entity types. omain events. U literature: mg.org ille, Software E pe, Wim Bast, J 2003 The Art Of Pro- ee: ent | formation pyramid information syste odel, metamodel, Relationship typ se cases. State trans ngineering, Addia os B Warmer, MI | al modelling of i d. Conceptualisa em. Introduction modelling langu es. Cardinality c nsition diagrams son-Wesley 2005 DA Explained, th | nformation syste tion of informatio to MDA, softwa age. Model tran constraints. Integ | on systems. ISC are development asformation and rity constraints |
| introduce the fur Brief outline of System, informa model of the arc life cycle based marking models Taxonomies. Do Recommended I 1. http://www.or 2. Ian Sommervi 3. Anneke Klepp Addison-Wesley 4. Scott Berkun, Course languag Notes: Course assessme | ndamental princ the course: ation system, inf chitecture of an l on MDA. Mo s. Entity types. omain events. U literature: mg.org ille, Software E pe, Wim Bast, J 2003 The Art Of Pro- ee: ent | formation pyramid information syste odel, metamodel, Relationship typ se cases. State trans ngineering, Addia os B Warmer, MI | al modelling of i d. Conceptualisa em. Introduction modelling langu es. Cardinality c nsition diagrams son-Wesley 2005 DA Explained, th | nformation syste tion of informatio to MDA, softwa age. Model tran constraints. Integ | on systems. ISC are development asformation and rity constraints |
| introduce the fun Brief outline of F System, informa model of the arc life cycle based marking models Taxonomies. Do Recommended I 1. http://www.or 2. Ian Sommervi 3. Anneke Klepp Addison-Wesley 4. Scott Berkun, Course languag Notes: Course assessme Total number of | ndamental princ the course: ation system, inf chitecture of an l on MDA. Mo s. Entity types. omain events. U literature: mg.org ille, Software E pe, Wim Bast, J 7 2003 The Art Of Pro- e: ent assessed studer | ciples of conceptu formation pyramid information syste odel, metamodel, Relationship typ se cases. State tra ngineering, Addir os B Warmer, MI oject Managemen | al modelling of i d. Conceptualisa em. Introduction modelling langu es. Cardinality c nsition diagrams son-Wesley 2005 DA Explained, th t, O Reilly 2005 | nformation syste tion of informatio to MDA, softwa age. Model tran constraints. Integr e Model Driven | on systems. ISC are development isformation and rity constraints Architecture, |
| introduce the fun Brief outline of a System, informa model of the arc life cycle based marking models Taxonomies. Do Recommended I 1. http://www.or 2. Ian Sommervi 3. Anneke Klepp Addison-Wesley 4. Scott Berkun, Course languag Notes: Course assessme Total number of A | ndamental princ the course: ation system, inf chitecture of an l on MDA. Mo s. Entity types. omain events. U literature: mg.org ille, Software E pe, Wim Bast, J 7 2003 The Art Of Pro e: ent Sassessed studer B 31.14 | formation pyramia information systen odel, metamodel, Relationship typ se cases. State transformer, MI oject Managemen nts: 167 C 25.15 | al modelling of i d. Conceptualisa em. Introduction modelling langu es. Cardinality c nsition diagrams son-Wesley 2005 DA Explained, th t, O Reilly 2005 | nformation syste tion of informatio to MDA, softwa age. Model tran constraints. Integr e Model Driven | rity constraints |

Approved: prof. RNDr. Viliam Geffert, DrSc.

| University: P. J. Ša | fárik Univers | ity in Košice | | | |
|---|---|------------------|------------------|--------|-------|
| Faculty: Faculty of | Science | | | | |
| Course ID: ÚINF/ TIK1/15 | Course na | me: Information | theory, encoding | g S | |
| Course type, scope Course type: Lect Recommended co Per week: 2 / 1 Pe Course method: p | ure / Practice ourse-load (her or study perio | ours): | | | |
| Number of credits | : 4 | | | | |
| Recommended sen | nester/trimes | ter of the cours | e: 3. | | |
| Course level: II. | | | | | |
| Prerequisities: | | | | | |
| Conditions for cou | rse completi | on: | | | |
| Learning outcome | s: | | | | |
| Brief outline of the | course: | | | | |
| Recommended lite | rature: | | | | |
| Course language: | | | | | |
| Notes: | | | | | |
| Course assessment Total number of ass | | ts: 23 | | | |
| A | В | С | D | Е | FX |
| 60.87 | 8.7 | 13.04 | 4.35 | 0.0 | 13.04 |
| Provides: doc. RNI | Dr. Stanislav l | Krajči, PhD. | | | |
| Date of last modifi | cation: 03.05 | .2015 | | | |
| Approved: prof. Rl | NDr. Viliam (| Geffert, DrSc. | | | |

| | COURSE INFORMATION LETTER |
|--|--|
| University: P. J. Šafa | árik University in Košice |
| Faculty: Faculty of S | Science |
| Course ID: ÚINF/ UUI1/15 | Course name: Introduction to artificial intelligence |
| Course type, scope Course type: Lectu Recommended cou Per week: 2 Per stu Course method: pr | ure urse-load (hours): udy period: 28 resent |
| Number of credits: | |
| | ester/trimester of the course: 4., 6. |
| Course level: II. | |
| Prerequisities: | |
| • | : rse is to achieve basic information about artificial intelligence techniques. For le to study more deeply from literature, if needed. |
| representation in AI informed versus info iterative enhanceme constraint logic pro- described objects rec and describtion, ob knowledge systems information), genetic | elligence, natural intelligence, edges of agent machine intelligence, knowledge (semantic networks, frames), reasoning. Problem solving in status space - non- ormed deep and wide search, A*, solving of problems described as the game, nt algorithms, problem solving by decomposition. Planning and scheduling, ogramming, machine learning, computer vision - image recognition (flag cognition, structural scene analysis), image preprocessing, image representation oject recognition. Natural language processing, artificial neural networks, (structure, charakteristcs, direct and backward reasoning, working with vague c algorithms, distributed artificial intelligence and multi-agent systems. |
| 2002, ISBN: 013790 Negnevitsky Michae Addison Wesley, 200 Luger George: Artif | P: Artificial Intelligence: A Modern Approach (2nd Edition), Prentice Hall, |

(5th Edition), Addison Wesley, 2004, ISBN: 0321263189

Course language:

Notes:

| Course assessment Total number of assessed students: 83 | | | | | | | |
|--|---------------------------------------|----------------|------|------|-----|--|--|
| A B C D E FX | | | | | | | |
| 65.06 | 16.87 | 12.05 | 3.61 | 2.41 | 0.0 | | |
| Provides: doc.] | Ing. Štefánia Gal | lová, CSc. | | | · | | |
| Date of last mo | Date of last modification: 03.05.2015 | | | | | | |
| Approved: prof | f. RNDr. Viliam (| Geffert, DrSc. | | | | | |

| Faculty: Faculty | | | | | |
|--|---|---|--|---|---|
| - | y of Science | | | | |
| Course ID: ÚIN UGR1/15 | NF/ Course | name: Introduction | n to computer gra | aphics | |
| Course type, sc Course type: I Recommended Per week: 2 / 1 Course metho | Lecture / Praction d course-load (l Per study per | ce (hours): | | | |
| Number of crea | lits: 5 | | | | |
| Recommended | semester/trim | ester of the cours | e: 1. | | |
| Course level: I., | , II. | | | | |
| Prerequisities: | | | | | |
| Conditions for | course comple | tion: | | | |
| Learning outco To provide the graphics. | | mowledge of grap | hics algorithms a | and basic princip | les of computer |
| drawing 2D prin | | | ve modelino 101 | endorations and a | |
| perspective and | ézier curves, B- l parallel proje niques, photo ation, virtual re | -splines, surfaces. ections. Visible-su realism, textures, | Homogenous coo Irface determina | ordinates, affine t tion, illumination | ransformations n and shading |
| perspective and Rendering tech computer anima Recommended FOLEY, J. D., v Practice, Addiso | ézier curves, B- d parallel proje aniques, photor ation, virtual rea literature: /an DAM, A., H on-Wesley, 199 | -splines, surfaces. ections. Visible-su realism, textures, ality. FEINER, S., HUG | Homogenous coo arface determina ray tracing, ra HES, J.: Comput | ordinates, affine t tion, illumination diosity. Object | ransformations n and shading representations |
| perspective and Rendering tech computer anima Recommended FOLEY, J. D., v Practice, Addiso MORTENSON, | ézier curves, B- d parallel proje- niques, photo- ation, virtual re- literature: van DAM, A., H on-Wesley, 199 , M.E.: Geomet | -splines, surfaces. ections. Visible-su realism, textures, ality. FEINER, S., HUG | Homogenous coo arface determina ray tracing, ra HES, J.: Comput | ordinates, affine t tion, illumination diosity. Object | ransformations n and shading representations |
| perspective and Rendering tech computer anima Recommended FOLEY, J. D., v Practice, Addiso MORTENSON, Course languag | ézier curves, B- d parallel proje- niques, photo- ation, virtual re- literature: van DAM, A., H on-Wesley, 199 , M.E.: Geomet | -splines, surfaces. ections. Visible-su realism, textures, ality. FEINER, S., HUG | Homogenous coo arface determina ray tracing, ra HES, J.: Comput | ordinates, affine t tion, illumination diosity. Object | ransformations n and shading representations |
| perspective and Rendering tech computer anima Recommended FOLEY, J. D., v Practice, Addiso | ézier curves, B- d parallel proje- niques, photo- ation, virtual re- literature: van DAM, A., H on-Wesley, 199 , M.E.: Geomet ge: | -splines, surfaces. ections. Visible-su realism, textures, ality. FEINER, S., HUG 1 tric modeling, 2.ed | Homogenous coo arface determina ray tracing, ra HES, J.: Comput | ordinates, affine t tion, illumination diosity. Object | ransformations n and shading representations |
| perspective and Rendering tech computer anima Recommended FOLEY, J. D., w Practice, Addiso MORTENSON, Course languag Notes: Course assessm | ézier curves, B- d parallel proje- niques, photo- ation, virtual re- literature: van DAM, A., H on-Wesley, 199 , M.E.: Geomet ge: | -splines, surfaces. ections. Visible-su realism, textures, ality. FEINER, S., HUG 1 tric modeling, 2.ed | Homogenous coo arface determina ray tracing, ra HES, J.: Comput | ordinates, affine t tion, illumination diosity. Object | ransformations n and shading representations |
| perspective and Rendering tech computer anima Recommended FOLEY, J. D., v Practice, Addiso MORTENSON, Course languag Notes: Course assessm Total number of | ézier curves, B- d parallel proje- niques, photo- nition, virtual re- literature: van DAM, A., H on-Wesley, 199 , M.E.: Geomet ge: nent f assessed stude | -splines, surfaces. ections. Visible-su realism, textures, ality. FEINER, S., HUG 1 tric modeling, 2.ed | Homogenous coo Inface determina ray tracing, ra HES, J.: Comput , Willey, 1997 | ordinates, affine t tion, illumination diosity. Object er Graphics: Prin | ransformations n and shading representations neiples and |
| perspective and Rendering tech computer anima Recommended FOLEY, J. D., w Practice, Addiso MORTENSON, Course languag Notes: Course assessm Total number of A 13.03 | ézier curves, B- d parallel proje- niques, photo- ation, virtual re- literature: van DAM, A., H on-Wesley, 199 , M.E.: Geomet ge: nent f assessed stude B 8.4 | -splines, surfaces. ections. Visible-su realism, textures, ality. FEINER, S., HUG 1 tric modeling, 2.ed ents: 238 | Homogenous coo Inface determina ray tracing, ra HES, J.: Comput , Willey, 1997 D 23.95 | E 31.93 | FX 9.66 |
| perspective and Rendering tech computer anima Recommended FOLEY, J. D., w Practice, Addiso MORTENSON, Course languag Notes: Course assessm Total number of A 13.03 | ézier curves, B- d parallel proje- niques, photo- ation, virtual re- literature: van DAM, A., H on-Wesley, 199 , M.E.: Geomet ge: nent f assessed stude B 8.4 RNDr. Gabriel 3 | -splines, surfaces. ections. Visible-su realism, textures, ality. FEINER, S., HUG tric modeling, 2.ed ents: 238 C 13.03 Semanišin, PhD., I | Homogenous coo Inface determina ray tracing, ra HES, J.: Comput , Willey, 1997 D 23.95 | E 31.93 | FX 9.66 |

| | | sity in Košice | | | |
|--|--|--|---|---|---|
| Faculty: Faculty | y of Science | | | | |
| Course ID: ÚIN UNS1/15 | NF/ Course n | ame: Introductio | on to neural netwo | orks | |
| Recommended | Lecture / Practic d course-load (H l Per study per | e nours): | | | |
| Number of crea | lits: 5 | | | | |
| Recommended | semester/trime | ester of the cours | se: 1. | | |
| Course level: I. | , II. | | | | |
| Prerequisities: | | | | | |
| Conditions for | course complet | ion: | | | |
| | and to know app | lications of basic | paradigms of ne | eural networks T | o learn working |
| Brief outline of Basic models of gates, perceptro networks, back | of computationa ons), their compu propagation alg | k models. al units - neuror atational capabilit gorithm. Hopfiel | ns (linear thresho ty, algorithms of d neural network | old gates, polyna adaptations. Feed xs. ART neural r | omial threshold |
| Brief outline of Basic models of gates, perceptro networks, back neural networks Recommended J. Hertz, A.Krog Wesley, 1991 | the course: of computationations), their computations), their computation algorized to solving of propagation of propagation algorized to solving of propagation algorized to solving of propagation and solving and solving of propagation | k models. al units - neuror atational capabilit gorithm. Hopfiel roblems. Genetic : Introduction to | ns (linear thresho ty, algorithms of d neural network and evolution al the theory of neu | old gates, polyna adaptations. Feed xs. ART neural r | omial threshold f-forward neura networks. Using Addison |
| Brief outline of Basic models of gates, perceptro networks, back neural networks Recommended J. Hertz, A.Krog Wesley, 1991 | the course: of computationations), their computations), their computation algors to solving of propagation of propagation algors to solving of propagation algors to solving of propagation algors to solving of propagation and solving of propagation algors to solv | k models. al units - neuror atational capabilit gorithm. Hopfiel roblems. Genetic : Introduction to | ns (linear thresho ty, algorithms of d neural network and evolution al the theory of neu | old gates, polyna adaptations. Feed cs. ART neural r gorithms. | omial threshold f-forward neura networks. Using Addison |
| Brief outline of Basic models of gates, perceptro networks, back neural networks Recommended J. Hertz, A.Krog Wesley, 1991 HASSOUN, M. | the course: of computationations), their computations), their computation algors to solving of propagation of propagation algors to solving of propagation algors to solving of propagation algors to solving of propagation and solving of propagation algors to solv | k models. al units - neuror atational capabilit gorithm. Hopfiel roblems. Genetic : Introduction to | ns (linear thresho ty, algorithms of d neural network and evolution al the theory of neu | old gates, polyna adaptations. Feed cs. ART neural r gorithms. | omial threshold f-forward neura networks. Using Addison |
| Brief outline of Basic models of gates, perceptron networks, back neural networks Recommended J. Hertz, A.Krog Wesley, 1991 HASSOUN, M. Course languag Notes: Course assessm | the course: of computationations), their computations), their computation algors to solving of propagation of propagation algors to solving of propagating algors t | k models. al units - neuror atational capabilit gorithm. Hopfiel roblems. Genetic : Introduction to als of artificial ne | ns (linear thresho ty, algorithms of d neural network and evolution al the theory of neu | old gates, polyna adaptations. Feed cs. ART neural r gorithms. | omial threshold f-forward neura networks. Using Addison |
| Brief outline of Basic models of gates, perceptro networks, back neural networks Recommended J. Hertz, A.Krog Wesley, 1991 HASSOUN, M. Course languag Notes: Course assessm | the course: of computationa ons), their compu- propagation alg s to solving of pr literature: gh, R.G. Palmer . H.: Fundament ge: | k models. al units - neuror atational capabilit gorithm. Hopfiel roblems. Genetic : Introduction to als of artificial ne | ns (linear thresho ty, algorithms of d neural network and evolution al the theory of neu | old gates, polyna adaptations. Feed cs. ART neural r gorithms. | omial threshold f-forward neura networks. Using Addison |
| Brief outline of Basic models of gates, perceptro networks, back neural networks Recommended J. Hertz, A.Krog Wesley, 1991 HASSOUN, M. Course languag Notes: Course assessm Total number of | the course: of computationa ons), their compu- propagation alg s to solving of pr literature: gh, R.G. Palmer . H.: Fundament ge: nent f assessed studer | k models. al units - neuror atational capabili gorithm. Hopfiel roblems. Genetic : Introduction to als of artificial ne nts: 346 | ns (linear thresho ty, algorithms of d neural network and evolution al the theory of neu eural networks, T | old gates, polyna adaptations. Feed cs. ART neural r gorithms. ral computation, The MIT Press, 19 | omial threshold l-forward neura networks. Using Addison 995 |
| Brief outline of Basic models of gates, perceptron networks, back neural networks Recommended J. Hertz, A.Krog Wesley, 1991 HASSOUN, M. Course languag Notes: Course assessme Total number of A 8.09 | the course: of computationation propagation algorights to solving of pro- literature: gh, R.G. Palmer . H.: Fundament ge: nent f assessed studer B 15.9 | k models. al units - neuror atational capabili gorithm. Hopfiel roblems. Genetic : Introduction to als of artificial ne nts: 346 C | bs (linear threshold) by, algorithms of d neural network and evolution al the theory of neu eural networks, T D 21.1 | old gates, polyna adaptations. Feed cs. ART neural r gorithms. ral computation, The MIT Press, 19 E | omial threshold f-forward neura networks. Using Addison 995 FX |
| Brief outline of Basic models of gates, perceptron networks, back neural networks Recommended J. Hertz, A.Krog Wesley, 1991 HASSOUN, M. Course languag Notes: Course assessme Total number of A 8.09 | the course: of computationation propagation algorights to solving of pro- literature: gh, R.G. Palmer . H.: Fundament ge: nent f assessed studer B 15.9 RNDr. Gabriela | k models. al units - neuror itational capability gorithm. Hopfiel roblems. Genetic : Introduction to als of artificial ne nts: 346 C 23.99 Andrejková, CSc | bs (linear threshold) by, algorithms of d neural network and evolution al the theory of neu eural networks, T D 21.1 | old gates, polyna adaptations. Feed cs. ART neural r gorithms. ral computation, The MIT Press, 19 E | omial threshold f-forward neura networks. Using Addison 995 FX |

| University: P. J | . Šafárik Univers | ity in Košice | | | |
|--|--------------------------------------|--------------------|-------------------|--------------------|-----------------|
| Faculty: Facult | y of Science | | | | |
| Course ID: ÚIN LAD1/15 | NF/ Course na | me: Logical asp | ects of databases | 5 | |
| Course type: I Recommende | d course-load (h er study period: | ours): | | | |
| Number of crea | lits: 4 | | | | |
| Recommended | semester/trimes | ster of the cours | e: 4. | | |
| Course level: II | | | | | |
| Prerequisities: | | | | | |
| Conditions for | course completi | on: | | | |
| logic programm Brief outline of | and to be able to ning. | | - | n databases, first | order logic and |
| Relationships b | etween databases | s, logic and logic | programming. | | |
| Recommended Serge Abitebou ISBN 0-201-53 | l, Richard Hull, Y | Victor Vianu: For | undations of Data | abases. Addison- | Wesley 1995, |
| Course languag | ge: | | | | |
| Notes: | | | | | |
| Course assessme Total number of | lent f assessed studen | ts: 64 | | | |
| А | В | С | D | E | FX |
| 34.38 | 17.19 | 21.88 | 14.06 | 10.94 | 1.56 |
| Provides: doc. 1 | RNDr. Stanislav | Krajči, PhD. | | | |
| Date of last mo | dification: 03.05 | 5.2015 | | | |
| | | Geffert, DrSc. | | | |

| | | ersity in Košice | | | |
|--|---|--|---------------------|------------------|----------------|
| Faculty: Faculty | | | | | |
| Course ID: ÚIN TSU1/15 | IF/ Course | name: Machine le | earning methods | | |
| Course type, sc Course type: L Recommended Per week: 2 / 2 Course method | Lecture / Practi l course-load (2 Per study pe | ce (hours): | | | |
| Number of cred | lits: 5 | | | | |
| Recommended | semester/trim | ester of the cour | se: 4. | | |
| Course level: II | | | | | |
| Prerequisities: | | | | | |
| Conditions for of Fnal project and | - | etion: | | | |
| Learning outco Detailed overvie | | t techniques of ma | achine learning a | nd data mining. | |
| vector machine | ning: k-NN, lin s, decision tre | ear classification a ees, naive bates temset mining and | classifier and ba | ayesian networks | , 11 |
| Kaufmann, ISB Pang-Ning Tan, ISBN 978-0321 | cheline Kambe N 978-012381 Michael Stein 321367, 2005. | r, Jian Pei. Data N 4791, 2011. bach, Vipin Kuma to Machine Learr | ar. Introduction to | o Data Mining. A | ddison-Wesley, |
| Course languag | je: | | | | |
| Notes: | | | | | |
| Course assessm Total number of | | ents: 5 | | | |
| А | В | С | D | Е | FX |
| 20.0 | 0.0 | 60.0 | 0.0 | 20.0 | 0.0 |
| | | | | | |
| Provides: doc. F | RNDr. Gabriela | a Andrejková, CS | c., RNDr. Tomáš | Horváth, PhD. | · |
| Provides: doc. F Date of last mod | | . . | c., RNDr. Tomáš | Horváth, PhD. | <u>.</u> |

| Eaculty: Faculty of Saionaa | | | | | |
|---|--|--|--|--|--|
| Faculty: Faculty of S | cience | | | | |
| Course ID: ÚMV/ MAN3a/10 | Course name: Mathematical analysis I for informaticians and physicists | | | | |
| Course type, scope a Course type: Lectur Recommended cou Per week: 4 / 3 Per Course method: pre | re / Practice rse-load (hours): study period: 56 / 42 | | | | |
| Number of credits: 8 | 3 | | | | |
| Recommended seme | ster/trimester of the course: 1. | | | | |
| Course level: I., II. | | | | | |
| Prerequisities: | | | | | |
| | se completion: ent is taken the form of small tests and two main tests during the semester. Final y continuous assessment (50%), written and oral part of the exam (50%). | | | | |
| 1 | students with the basics of mathematical analysis necessary to study physics e. The students also learn mathematical culture, notation and mathematical expression. | | | | |
| Brief outline of the c | | | | | |
| | ourse: | | | | |
| 1. Introduction - lang | guage of mathematics, basics of formal logic. | | | | |
| Introduction - lang Real numbers and | guage of mathematics, basics of formal logic. sets - ordering, boundedness, infimum, supremum. | | | | |
| Introduction - lang Real numbers and Sequences - bound | guage of mathematics, basics of formal logic. sets - ordering, boundedness, infimum, supremum. ledness, monotonicity, convergence, subsequences. | | | | |
| Introduction - lang Real numbers and Sequences - bound Series - sum, tests | guage of mathematics, basics of formal logic. sets - ordering, boundedness, infimum, supremum. ledness, monotonicity, convergence, subsequences. for convergence, absolute and relative convergence. | | | | |
| Introduction - lang Real numbers and Sequences - bound Series - sum, tests Functions of one real Continuous function Derivative, different | guage of mathematics, basics of formal logic. sets - ordering, boundedness, infimum, supremum. ledness, monotonicity, convergence, subsequences. for convergence, absolute and relative convergence. eal variable - fundamental concepts, limits and operations with them. ons and their properties on the set (interval). Elementary functions. | | | | |
| Introduction - lang Real numbers and Sequences - bound Series - sum, tests Functions of one reference Continuous function Derivative, difference Using differential e Other applications | guage of mathematics, basics of formal logic. sets - ordering, boundedness, infimum, supremum. ledness, monotonicity, convergence, subsequences. for convergence, absolute and relative convergence. eal variable - fundamental concepts, limits and operations with them. ons and their properties on the set (interval). Elementary functions. entiability, difference and differential, fundamental theorems of differential calculus for the investigation of properties of functions and their behavior. of derivative - calculation of limits, Taylor polynomials. | | | | |
| Introduction - lang Real numbers and Sequences - bound Series - sum, tests Functions of one reference Continuous function Derivative, difference Using differential e Other applications | guage of mathematics, basics of formal logic. sets - ordering, boundedness, infimum, supremum. ledness, monotonicity, convergence, subsequences. for convergence, absolute and relative convergence. eal variable - fundamental concepts, limits and operations with them. ons and their properties on the set (interval). Elementary functions. entiability, difference and differential, fundamental theorems of differential calculus for the investigation of properties of functions and their behavior. | | | | |
| Introduction - lang Real numbers and Sequences - bound Series - sum, tests Functions of one realized Continuous function Derivative, differential end Using differential end Other applications Power series - radius | guage of mathematics, basics of formal logic. sets - ordering, boundedness, infimum, supremum. ledness, monotonicity, convergence, subsequences. for convergence, absolute and relative convergence. eal variable - fundamental concepts, limits and operations with them. ons and their properties on the set (interval). Elementary functions. entiability, difference and differential, fundamental theorems of differential calculus for the investigation of properties of functions and their behavior. of derivative - calculation of limits, Taylor polynomials. dius and range of convergence, properties of the sum of power series, Taylor | | | | |
| Introduction - lang Real numbers and Sequences - bound Series - sum, tests Functions of one ro Continuous function Derivative, difference Using differential of Other applications Power series - radiseries. Recommended literation | guage of mathematics, basics of formal logic. sets - ordering, boundedness, infimum, supremum. ledness, monotonicity, convergence, subsequences. for convergence, absolute and relative convergence. eal variable - fundamental concepts, limits and operations with them. ons and their properties on the set (interval). Elementary functions. entiability, difference and differential, fundamental theorems of differential calculus for the investigation of properties of functions and their behavior. of derivative - calculation of limits, Taylor polynomials. dius and range of convergence, properties of the sum of power series, Taylor ature: Ohriska: Matematická analýza 1, vysokoškolský učebný text, UPJŠ v | | | | |
| Introduction - lang Real numbers and Sequences - bound Series - sum, tests Functions of one references Continuous function Derivative, difference Using differential end Other applications Power series - radiseries. Recommended litera B. Mihalíková, J. O Košiciach, Košice, 20 Z. Došlá, J. Kuben | guage of mathematics, basics of formal logic. sets - ordering, boundedness, infimum, supremum. ledness, monotonicity, convergence, subsequences. for convergence, absolute and relative convergence. eal variable - fundamental concepts, limits and operations with them. ons and their properties on the set (interval). Elementary functions. entiability, difference and differential, fundamental theorems of differentia calculus for the investigation of properties of functions and their behavior. of derivative - calculation of limits, Taylor polynomials. dius and range of convergence, properties of the sum of power series, Taylor ature: Ohriska: Matematická analýza 1, vysokoškolský učebný text, UPJŠ v | | | | |

Cambridge, 2006. 4. K. A. Ross: Elementary Analysis: The theory of Calculus, Springer, New York, 2010.

5. A. Banner: The calculus lifesaver, Princeton university press, Princeton, 2007.

6. B. S. Thomson, J. B. Bruckner, A. M. Bruckner: Elementary real analysis, Prentice Hall (Pearson), Lexington, 2008.

7. J. Stewart: Calculus: Early Transcendentals, Brooks Cole (Thomson), Toronto, 2008.

Course language:

slovak

Notes:

Course assessment

Total number of assessed students: 868

| А | В | С | D | Е | FX | | |
|--|-------------------|----------------|-------|-------|-------|--|--|
| 6.57 | 8.18 | 12.9 | 15.21 | 37.56 | 19.59 | | |
| Provides: RNDr. Jaroslav Šupina, PhD., RNDr. Lenka Halčinová, PhD. | | | | | | | |
| Date of last modification: 17.09.2015 | | | | | | | |
| Approved: prof | f. RNDr. Viliam (| Geffert, DrSc. | | | | | |

| University: P. J. Šafárik University in K | Košice |
|---|--------|
|---|--------|

Faculty: Faculty of Science

| H | | |
|---|-----------------|--|
| | Course ID: ÚMV/ | Course name: Mathematical analysis II for informaticians and physicists |
| | MAN3b/10 | |

Course type, scope and the method:

Course type: Lecture / Practice

Recommended course-load (hours): Per week: 4 / 3 **Per study period:** 56 / 42

Course method: present

Number of credits: 8

Recommended semester/trimester of the course: 2.

Course level: I., II.

Prerequisities: ÚMV/MAN3a/10

Conditions for course completion:

Continuous assessment is taken the form of small tests and two main tests during the semester. Final evaluation is given by continuous assessment (50%), written and oral part of the exam (50%).

Learning outcomes:

The course provides students with the basics of mathematical analysis necessary to study physics and computer science. The students also learn mathematical culture, notation and mathematical way of thinking and expression.

Brief outline of the course:

1. Integral calculus of functions of one real variable: a) Indefinite integral - primitive function and its properties, techniques of integration; b) Definite Riemann integral - definition, elementary properties, calculation methods, classes of integrable functions, applications; c) Improper integral.

2. Ordinary differential equations - basic concepts, the first order equations (separable, homogeneous, linear, Bernoulli), linear equations of the second order (also with constant coefficients).

3. Metric space - Euclidean space, some topological properties of points and sets.

4. Function of several real variables - basic concepts, limits and continuity.

5. Differential calculus of functions of several real variables - partial derivative, differentiability and total differential (also higher order), Taylor polynomials, directional derivative, local and global extrema, constrained local extrema.

6. Double (two dimensional) integral - definition, calculation methods, applications.

Recommended literature:

1. L. Kluvánek, I. Mišík, M. Švec: Matematika I, II, SVTL, Bratislava, 1959 (in Slovak).

2. Z. Došlá, O. Došlý: Diferenciální počet funkcí více proměnných, vysokoškolský učebný text, Masarykova univerzita v Brne, Brno, 2003 (in Czech).

3. J. Eliaš, J. Horváth, J. Kajan: Zbierka úloh z vyššej matematiky 2, 3, 4, Alfa, Bratislava, 1971 (in Slovak).

4. J. C. Robinson: An introduction to ordinary differential equations, Cambridge University Press, Cambridge, 2004.

5. R. E. Williamson, H. F. Trotter: Multivariable mathematics, Prentice Hall (Pearson), Upper Saddle River, 2004.

6. B. S. Thomson, J. B. Bruckner, A. M. Bruckner: Elementary Real Analysis, Prentice Hall (Pearson), Lexington, 2008.

7. J. Stewart: Calculus: Early Transcendentals, Brooks Cole (Thomson), Toronto, 2008.

Course language:

Slovak

Notes:

Course assessment

Total number of assessed students: 396

| А | В | С | D | Е | FX | | |
|--|------|-------|-------|------|-------|--|--|
| 6.82 | 7.58 | 11.11 | 18.43 | 40.4 | 15.66 | | |
| Provides: Mgr. Jozef Kisel'ák, PhD., RNDr. Jaroslav Šupina, PhD. | | | | | | | |
| Date of last modification: 03.05.2015 | | | | | | | |
| Approved: prof. RNDr. Viliam Geffert, DrSc. | | | | | | | |

| Faculty Facult | | sity in Košice | | | |
|--|---|---|---|------------------------------------|------------------|
| racuny. racun | ty of Science | | | | |
| Course ID: ÚI MPJ1/15 | IINF/ Course name: Modern programming languages | | | | |
| Course type: Recommende | cope and the mo Lecture / Practic ed course-load (1 2 Per study per od: present | e hours): | | | |
| Number of cre | edits: 4 | | | | |
| Recommended | l semester/trime | ester of the cours | e: 3., 5. | | |
| Course level: I | ., II. | | | | |
| Prerequisities: | | | | | |
| Conditions for | · course complet | tion: | | | |
| Learning outcome Mastering the l | | d and experimenta | al programming | models and techn | iques. |
| programming - | operator overla | ading indexer F | vont programmi | ng (ayant handlin | × 11 / |
| | amming. Paralle | l and multithread lambda expressio | programming – p | processes, threadp | |
| and declarative Recommended 1. Andrew Tro 2. Joseph Alba O'REILLY | ramming. Paralle e programming – I literature: elsen, Pro C# 5.0 hari, Ben Albaha | l and multithread | programming – p ons, LINQ. Grap 5 Platform, 2012 tshell: The Defin | processes, threadphics primitives. | bool. Functional |
| and declarative Recommended 1. Andrew Tro 2. Joseph Alba O'REILLY 3. Daniel Solis | ramming. Paralle e programming – I literature: elsen, Pro C# 5.0 hari, Ben Albaha , Illustrated C# 2 | and multithread lambda expression and the .NET 4.3 ari, C# 5.0 in a Nu | programming – p ons, LINQ. Grap 5 Platform, 2012 tshell: The Defin | processes, threadphics primitives. | bool. Functional |
| and declarative Recommended 1. Andrew Tro 2. Joseph Alba O'REILLY 3. Daniel Solis Course langua | ramming. Paralle e programming – I literature: elsen, Pro C# 5.0 hari, Ben Albaha , Illustrated C# 2 | and multithread lambda expression and the .NET 4.3 ari, C# 5.0 in a Nu | programming – p ons, LINQ. Grap 5 Platform, 2012 tshell: The Defin | processes, threadphics primitives. | bool. Functional |
| and declarative Recommended 1. Andrew Tro 2. Joseph Alba O'REILLY 3. Daniel Solis Course langua Notes: Course assessm | ramming. Paralle e programming – I literature: elsen, Pro C# 5.0 hari, Ben Albaha , Illustrated C# 2 g e: | and multithread lambda expression and the .NET 4.3 ari, C# 5.0 in a Nu 2012, 2012, APRE | programming – p ons, LINQ. Grap 5 Platform, 2012 tshell: The Defin | processes, threadphics primitives. | bool. Functional |
| and declarative Recommended 1. Andrew Tro 2. Joseph Alba O'REILLY 3. Daniel Solis Course langua Notes: Course assessm | ramming. Paralle e programming – I literature: elsen, Pro C# 5.0 hari, Ben Albaha , Illustrated C# 2 ge: nent | and multithread lambda expression and the .NET 4.3 ari, C# 5.0 in a Nu 2012, 2012, APRE | programming – p ons, LINQ. Grap 5 Platform, 2012 tshell: The Defin | processes, threadphics primitives. | bool. Functional |
| and declarative Recommended 1. Andrew Tro 2. Joseph Alba O'REILLY 3. Daniel Solis Course langua Notes: Course assess Total number of | ramming. Paralle e programming – I literature: elsen, Pro C# 5.0 hari, Ben Albaha , Illustrated C# 2 ge: nent of assessed stude | and multithread lambda expression and the .NET 4.3 ari, C# 5.0 in a Nu 2012, 2012, APRE | programming – p ons, LINQ. Grap 5 Platform, 2012 tshell: The Defin SS | processes, threadphics primitives. | 2012, |
| and declarative Recommended 1. Andrew Tro 2. Joseph Alba O'REILLY 3. Daniel Solis Course langua Notes: Course assesses Total number of A 15.53 | amming. Paralle programming – I literature: elsen, Pro C# 5.0 hari, Ben Albaha , Illustrated C# 2 ge: nent of assessed stude B | and multithread lambda expression and the .NET 4.3 ari, C# 5.0 in a Nu 2012, 2012, APRE nts: 103 C 27.18 | programming – pons, LINQ. Grap 5 Platform, 2012 tshell: The Defin SS | APRESS hitive Reference, | 2012, FX |
| and declarative Recommended 1. Andrew Tro 2. Joseph Alba O'REILLY 3. Daniel Solis Course langua Notes: Course assesses Total number of A 15.53 Provides: doc. | ramming. Paralle e programming – I literature: elsen, Pro C# 5.0 hari, Ben Albaha , Illustrated C# 2 ge: nent of assessed stude B 17.48 | and multithread lambda expression and the .NET 4.3 ari, C# 5.0 in a Nu 2012, 2012, APRE nts: 103 C 27.18 brök, CSc. | programming – pons, LINQ. Grap 5 Platform, 2012 tshell: The Defin SS | APRESS hitive Reference, | 2012, FX |

| University: P. J. Šafa | árik University in Košic | e |
|---|---|----------|
| Faculty: Faculty of S | Science | |
| Course ID: ÚTVŠ/ NJ//13 | Course name: Naval | Yachting |
| Course type, scope a Course type: Practi Recommended cou Per week: 36 Per s Course method: pr | ice irse-load (hours): tudy period: 504 | |
| Number of credits: | 2 | |
| Recommended sem | ester/trimester of the c | ourse: |
| Course level: I., II. | | |
| Prerequisities: | | |
| Conditions for cour | se completion: | |
| Learning outcomes: | | |
| Brief outline of the | course: | |
| Recommended liter | ature: | |
| Course language: | | |
| Notes: | | |
| Course assessment Total number of asse | essed students: 2 | |
| | abs | n |
| | 100.0 | 0.0 |
| Provides: doc. Mgr. | Rastislav Feč, PhD. | |
| Date of last modific | ation: 03.05.2015 | |
| Approved: prof. RN | Dr. Viliam Geffert, DrS | с. |

| | | ity in Košice | | | |
|---|--|--|---|--|-------------------|
| Faculty: Faculty | v of Science | | | | |
| Course ID: ÚIN NEU1/15 | F/ Course name: Neural networks | | | | |
| Recommended | ecture / Practice l course-load (h Per study peri | ours): | | | |
| Number of cred | lits: 5 | | | | |
| Recommended | semester/trimes | ster of the cours | se: 3., 5. | | |
| Course level: II | | | | | |
| Prerequisities: | | | | | |
| Conditions for | course completi | on: | | | |
| Learning outco To understand a | | g basic paradign | ns of neural netw | orks. | |
| networks, a capa and solving opti | bility of neural n mization proble | etworks to be an ms. Kohonen ne | universal approx | Ilgorithm to adap imator. Hopfield eural networks ir | neural network |
| Wesley, 1991. | gh, R.G. Palmer: | órie neurónovýc | the theory of neu h sietí, IRIS, Bra | ral computation, tislava, 1997. | Addison |
| | | tázky neurónov | ých sítí. Matfyzp | | aha, 1996. |
| J. Šíma, R. Neru | ida: Teoretické o | tázky neurónov | ých sítí. Matfyzp | ress,MFF UK, Pr | raha, 1996. |
| | ida: Teoretické o | otázky neurónov | ých sítí. Matfyzp | | raha, 1996. |
| J. Šíma, R. Neru Course languag Notes: Course assessm | ida: Teoretické c | | ých sítí. Matfyzp | | aha, 1996. |
| J. Šíma, R. Neru Course languag Notes: Course assessm | ida: Teoretické c | | ých sítí. Matfyzp | | raha, 1996. FX |
| J. Šíma, R. Neru Course languag Notes: Course assessm Total number of | ida: Teoretické c e: ent `assessed studen | ts: 177 | | ress,MFF UK, Pr | |
| J. Šíma, R. Neru Course languag Notes: Course assessm Total number of A 12.43 | ent assessed studen 14.12 | ts: 177 C 23.16 | D 23.73 | E | FX |
| J. Šíma, R. Neru Course languag Notes: Course assessm Total number of A | ent assessed studen B 14.12 RNDr. Gabriela A | ts: 177 C 23.16 Andrejková, CSc | D 23.73 | E | FX |

| University: P | J. Šafárik Univer | sity in Košice | | | | |
|----------------------------------|--|---|-----------------|------------------|-----------------|--|
| Faculty: Facul | ty of Science | | | | | |
| Course ID: ÚI PDB1/15 | JINF/ Course name: Organization and data processing | | | | | |
| Course type: Recommende | cope and the mo Lecture / Practic ed course-load (1 Per study per od: present | e hours): | | | | |
| Number of cre | dits: 4 | | | | | |
| Recommended | semester/trim | ester of the cours | e: 5. | | | |
| Course level: I | I | | | | | |
| Prerequisities: | | | | | | |
| Conditions for final exam | course comple | tion: | | | | |
| when solving o | the principles o ptimization prob | f database manage lems over big data | • | | - | |
| Hash-based in optimization, | tation, disk and dexing method transaction man | file organization s, external sortin agement, parallel g, data reduction | g, enumeration | of relational of | perators, query | |
| Education, 200 | RISHNAN, J. G 03 SCHATZ, H. F. H | EHRKE: Databas KORTH, S. SUDA | C | | C | |
| Course langua | ge: | | | | | |
| Notes: | | | | | | |
| Course assess Total number of | nent of assessed stude | nts: 61 | | | | |
| А | В | C | D | E | FX | |
| 27.87 | 19.67 | 18.03 | 13.11 | 21.31 | 0.0 | |
| Provides: doc. | RNDr. Csaba To | örök, CSc., RNDr. | Peter Gurský, P | 'hD. | | |
| Date of last mo | odification: 01.0 | 6.2015 | | | | |
| Approved: pro | C DND V'I' | Coffort Date | | | | |

| | | URSE INFORM | | | | |
|--|--|---|--|--|-----------------------------------|--|
| University: P. J | . Šafárik Univers | ity in Košice | | | | |
| Faculty: Facult | y of Science | | | - | | |
| Course ID: ÚIN PDS1/15 | VF/ Course na | F/ Course name: Parallel and distributed systems | | | | |
| Course type: 1 Recommende | ope and the me Lecture / Practice d course-load (h l Per study peri d: present | e ours): | | | | |
| Number of crea | lits: 4 | | | | | |
| Recommended | semester/trimes | ster of the cours | e: 4. | | | |
| Course level: I. | , II. | | | | | |
| Prerequisities: | | | | | | |
| Conditions for | course completi | on: | | | | |
| Learning outco to introduce the | | f parallel and dist | ributed program | ming | | |
| development, d Recommended 1. Kenneth A. H Thomson, 2005 2. Gregory R. A Addison-Wesle 3. Joseph JáJá: 0-201-54856-9 | ata structures and literature: Berman and Jeron , ISBN 0-534-42 andrews: Founda y, 2000, ISBN 0- An Introduction ntroduction to D | d programming m ne L. Paul: Algor 2057-5 tions of Multithro 201-35752-6 to Parallel Algori | ethodologies rithms: Sequenti eaded, Parallel, a thms, Addison- | allel and distribut ial, Parallel, and D and Distributed Pr Wesley, 1992, ISE e University Press | Distributed, rogramming, BN | |
| Notes: | | | | | | |
| Course assessm Total number of | ent f assessed studen | ts: 108 | | | | |
| А | В | С | D | E | FX | |
| 24.07 | 18.52 | 17.59 | 18.52 | 12.96 | 8.33 | |
| Provides: doc. 1 Galčík, PhD. | RNDr. Csaba Tö | rök, CSc., doc. R | NDr. Jozef Jirás | ek, PhD., RNDr. I | František | |
| Date of last mo | dification: 03.05 | 5.2015 | | | | |
| Approved: prof | . RNDr. Viliam | Geffert, DrSc. | | | | |
| | | | | | | |

| University: P. J. S | Šafárik Universi | ty in Košice | | | |
|--|--|------------------|----------------|-----------------|------------------|
| Faculty: Faculty | of Science | | | | |
| Course ID: Dek. UPJŠ/PPZ/13 | PF Course na on a Labou | • | Development an | nd Key Competer | nces for Success |
| Course type, sco Course type: Pr Recommended Per week: Per s Course method | actice course-load (ho study period: 1 | ours): | | | |
| Number of credi | ts: 2 | | | | |
| Recommended se | emester/trimes | ter of the cours | se: 1., 3. | | |
| Course level: II. | | | | | |
| Prerequisities: | | | | | |
| Conditions for co | ourse completio | on: | | | |
| Learning outcom | nes: | | | | |
| Brief outline of t | he course: | | | | |
| Recommended li | terature: | | | | |
| Course language | • | | | | |
| Notes: | | | | | |
| Course assessme Total number of a | - | s: 39 | | | |
| A | В | С | D | Е | FX |
| 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Provides: RNDr. | Peter Stefányi, | PhD. | | | |
| Date of last mod | ification: 03.05 | .2015 | | | |
| Approved: prof. | RNDr. Viliam C | effert, DrSc. | | | |

| University: P. J. Šafa | árik University in Košice |
|---|--|
| Faculty: Faculty of S | Science |
| Course ID: ÚINF/ PAZ1a/15 | Course name: Programming, algorithms, and complexity |
| Course type, scope a Course type: Lectu Recommended cou Per week: 3 / 4 Per Course method: pr | re / Practice arse-load (hours): r study period: 42 / 56 |
| Number of credits: | 8 |

Recommended semester/trimester of the course: 1.

Course level: I., II.

Prerequisities:

Conditions for course completion:

Get a prescribed minimum number of points for activities of continuous assessment and for solving tasks during final practical test.

Learning outcomes:

Brief outline of the course:

First part of the course (with turtle graphics): New Eclipse project, interactive communication with objects, simple turtle graphics, making user methods, local variables, variable types, arithmetic and logical expressions, random numbers, conditions, loops for and while, debugging, references, chars, Strings, arrays, instance variables, mouse events, simple array algorithms.

Second part of the course (without turtle graphics): Exceptions, using try-catch-finally block, files and directories, conversion from string variables, encapsulation, constructors with parameters, constructors hierarchy, getters and setters, interfaces, inheritance and polymorphism, abstract classes and methods, packages, visibility modifiers, sorting using Arrays.sort() and interfaces Comparable and Comparator, Java Collections Framework: autoboxing, interface List, ArrayList, LinkedList, interface Set and class HashSet, methods equals() and hashCode(), for-each loop, interface Map and class HashMap, custom Exceptions, rethrowing exceptions, exceptions' inheritance, Runtime exceptions, Errors, static variables and methods.

Recommended literature:

1. ECKEL, B.: Thinking in Java, Pearson, 2006, ISBN: 978-01-318-7248-6

2. PECINOVSKÝ, R.: OOP - Naučte se myslet a programovat objektově, Computer Press, a.s., Brno, 2010, ISBN: 978-80-251-2126-9

3. SIERRA, K., BATES, B. Head First Java, O'Reilly Media; 2nd edition, 2005, ISBN: 978-05-960-0920-5

Course language:

Slovak language, english language is required only to read Java API documentation.

Notes:

| Course assessm Total number of | ent f assessed studen | ts: 474 | | | |
|--|------------------------------------|----------------|--|---|--|
| А | B C D E FX | | | | |
| 16.03 | 16.03 7.81 12.45 15.82 12.87 35.02 | | | | |
| Provides: RNDr. Peter Gurský, PhD., RNDr. František Galčík, PhD., Mgr. Matej Nikorovič, RNDr. Ľubomír Antoni, PhD., RNDr. Zuzana Bednárová, PhD., Mgr. Miroslav Opiela, RNDr. Juraj Šebej | | | | | |
| Date of last modification: 03.05.2015 | | | | | |
| Approved: prof | . RNDr. Viliam (| Geffert, DrSc. | | - | |

| University: P. J. Šafa | árik University in Košice | |
|---|--|--|
| Faculty: Faculty of S | Science | |
| Course ID: ÚINF/ PAZ1b/15 | Course name: Programming, algorithms, and complexity | |
| Course type, scope a Course type: Lectu Recommended cou Per week: 2 / 4 Per Course method: pr | re / Practice Irse-load (hours): r study period: 28 / 56 | |
| Number of credits: | 7 | |

Recommended semester/trimester of the course: 2.

Course level: I., II.

Prerequisities: ÚINF/PAZ1a/15

Conditions for course completion:

Get a given minimum number of points for activities of continuous assessment and for solving tasks during final practical test. The final practical test focuses on application of known algorithms and techniques of efficient algorithm design.

Learning outcomes:

Brief outline of the course:

Recursion and its applications, fractals. Binary search and simple sorting algorithm with quadratic time complexity. Time and space complexity of algorithms, analysis of time complexity, O-notation. Basic data structures and their applications: linked list, stack, and queue. Hierarchical data and their representation, trees, tree traversals, binary search trees. Arithmetic expressions, evaluation of an arithmetic expression. Efficient sorting algorithm: QuickSort, MergeSort, and HeapSort. Backtrack. Techniques "divide and conquer" and dynamic programming as methods for design of efficient algorithms. Basic graph algorithms for unweighted graphs (Breadth-first search, Depth-first search, graph connectivity, graph components, graph bridges, topological sort) and for weighted graphs (shortest paths: Bellman-Ford algorithm, Dijkstra algorithm, Floyd-Warshallov algorithm; minimum spanning tree: Prim algorithm, Kruskal algorithm). String algorithms. Greedy algorithms.

Recommended literature:

WRÓBLEWSKI, P.: Algoritmy, datové struktury a programovací techniky. Computer Press, Brno, 2004

CORMEN, T.H., LEISERSON, Ch.E., RIVEST, R.L, STEIN, C. Introduction to Algorithms. The MIT Press, 2009.

KLEINBERG, J., TARDOS, E.: Algorithm Design, Cornell University, Addison Wesley, New York, 2006.

Course language:

Slovak language, literature is available in english and czech language.

Notes:

| Course assessm Total number of | nent f assessed studen | ts: 1039 | | | | |
|--|---------------------------|-----------------|-------------------|-------------------|-------------|--|
| А | В | С | D | Е | FX | |
| 11.55 | 6.16 9.72 20.6 23.68 28.3 | | | | | |
| Provides: doc. I Guniš, PhD. | RNDr. Gabriela A | Andrejková, CSc | ., RNDr. Františe | k Galčík, PhD., I | PaedDr. Ján | |
| Date of last modification: 03.05.2015 | | | | | | |
| Approved: prof | f. RNDr. Viliam (| Geffert, DrSc. | | | | |

| University: P. J. | Šafárik Ur | niversity in | Košice |
|---------------------|------------|--------------|---------|
| Chiver Sity • 1. 5. | Suluin OI | inversity in | 1105100 |

Faculty: Faculty of Science

| Course ID: ÚINF/ | Course name: Programming, algorithms, and complexity |
|------------------|---|
| PAZ1c/15 | |

Course type, scope and the method: Course type: Practice

Recommended course-load (hours):

Per week: 4 **Per study period:** 56 **Course method:** present

Number of credits: 5

Recommended semester/trimester of the course: 3.

Course level: I., II.

Prerequisities:

Conditions for course completion:

Learning outcomes:

Gain skills to design and implement complex application with three-layer architecture and well-known design patterns.

Brief outline of the course:

1. Food vending machine as an example of small project. Class identification. Use-cases. Method and instance variable identification. Unit testing in JUnit.

2. Designing CRUD application. Quote Database application example. Entity identification and design. Entity identity. Designing interfaces for Data Access Objects and demo implementation. Three-layered architecture.

3. Bussiness logics in classes. Designing a simple layered application. Class relationships with static association. Pros and cons in hardwired associations.

4. Implementing Factory design pattern as an abstraction of hardwired association. Examples and usage of factory. Briefly about MVC design pattern. Models and view in Swing. Model examples: static, dynamic, refreshing model.

5. Interface as a contract between client and class. Contract in code: input and output parameters, exceptions. Preconditions, postconditions, invariants. Favouring interface over implementation. Inheritance vs composition dilemma. Pros and cons of inheritance, choosing a suitable inheritance candidate. Favouring composition over inheritance.

6. Encapsulation: definition and real use. Best practices for enforcing encapsulation. More about pros and cons of inheritance with examples. Liskov Substitution principle. Delegation as a hybrid between inheritance and composition.

7. Associations between classes. Cardinalities: 1:1, 1:M, 1:N. Design and realization in the code.

8. Exceptions: designing exceptions, exceptions classes and best practices. Three types of exception handling. Logging with default tools and with `slf4j` library. Logging best practices.

9. Service classes: two design approaches. Configuration vs input parameters.

10. Database access with Spring JDBC Template. Mapping objects and relationships.

Recommended literature:

SIERRA, K., BATES, B.: Head First Java (2nd Edition), 2005 ECKEL, B.: Thinking in Java (4th Edition), 2006

| Course languag | ge: | | | | |
|------------------------------------|---------------------------|----------------|---|---|------|
| Notes: | | | | | |
| Course assessm Total number of | nent f assessed studen | ıts: 252 | | | |
| А | В | С | D | Е | FX |
| 36.11 20.63 16.27 11.51 10.32 5.16 | | | | | 5.16 |
| Provides: RND | r. Róbert Novotn | ý, PhD. | | | |
| Date of last mo | dification: 03.05 | 5.2015 | | | |
| Approved: prof | f. RNDr. Viliam | Geffert, DrSc. | | | |

| University: P J Šafá | rik University in Košice | |
|---|--|--|
| Faculty: Faculty of S | | |
| Course ID: ÚINF/ PDSI1/15 | | to diploma thesis in informatics |
| Course type, scope a Course type: Practic Recommended cou Per week: 2 Per stu Course method: pre | ce rse-load (hours): dy period: 28 | |
| Number of credits: 2 | 2 | |
| Recommended seme | ster/trimester of the cours | e: 3. |
| Course level: II. | | |
| Prerequisities: | | |
| Conditions for cours | e completion: | |
| | | ey are suitable to work in diploma theses. In the of diploma theses, goals and recommended study |
| Brief outline of the c The seminar is orient | | to preparations of Diploma theses. |
| 2004. 316 s. ISBN 80 ISO 690: 1987 Docu ISO 2145: 1978 Doc Eco, U.: Jak napsat d Olomouc, Votobiax. | ŠČÁK, D. Akademická príru)-8063-150-6 mentation - Bibliographic re umentation - Numbering of o iplomovou práci, z taliančin | čka. 1. vyd. Vydavateľstvo Osveta : Martin, ferences. Content, form and structure. divisions and subdivisions in written documents. y Come si fa una tesi di laures, Milano, 1977, ovej práce podľa odporúčania vedúceho |
| Course language: | | |
| Notes: | | |
| Course assessment Total number of asse | ssed students: 398 | |
| | abs | n |
| | 99.75 | 0.25 |
| Provides: RNDr. Pete PhD. | er Gurský, PhD., doc. RNDr | Ľubomír Šnajder, PhD., RNDr. František Galčík |
| Date of last modifica | ition: 03.05.2015 | |
| Approved: prof. RNI | Dr. Viliam Geffert, DrSc. | |

| University: P. J. S | Šafárik Univers | ity in Košice | | | |
|--|--|-------------------|------------------|------------------|-------------|
| Faculty: Faculty | of Science | | | _ | |
| Course ID: KPPaPZ/PPZMg/ | Course name: Psychology and Health Psychology (Master's Study) | | | | |
| Course type, sco Course type: Le Recommended Per week: 1 / 2 Course method | ecture / Practice course-load (h Per study perio | ours): | | | |
| Number of credi | ts: 4 | | | | |
| Recommended s | emester/trimes | ster of the cours | e: | | |
| Course level: II. | | | | | |
| Prerequisities: | | | | | |
| Conditions for condit | ourse completi | on: | | | |
| Learning outcon | nes: | | | | |
| Brief outline of t | he course: | | | | |
| Recommended li | iterature: | | | | |
| Course language | 2: | | | | |
| Notes: | , | | | | |
| Course assessme Total number of | | ts: 223 | | | |
| Α | В | С | D | E | FX |
| 19.73 | 25.56 | 25.56 | 12.56 | 16.14 | 0.45 |
| Provides: PhDr. <i>A</i> PhD. | Anna Janovská, | PhD., PhDr. Kar | rolína Barinková | , PhD., Mgr. Luc | ia Hricová, |
| Date of last mod | ification: 03.05 | 5.2015 | | | |
| Approved: prof. | RNDr. Viliam (| Geffert, DrSc. | | | |

| University: P. J. Šaf | árik University in Košice | | |
|--|---|------------|--|
| Faculty: Faculty of | Science | | |
| Course ID: ÚINF/ PPU1a/15 | | | |
| Course type, scope Course type: Pract Recommended cou Per week: 2 Per st Course method: pr | ice 1rse-load (hours): udy period: 28 | | |
| Number of credits: | 2 | | |
| Recommended sem | ester/trimester of the cours | se: 4., 6. | |
| Course level: II. | | | |
| Prerequisities: | | | |
| Conditions for cour | se completion: | | |
| Learning outcomes | : | | |
| Brief outline of the | course: | | |
| Recommended liter | ature: | | |
| Course language: | | | |
| Notes: | | | |
| Course assessment Total number of ass | essed students: 127 | | |
| | abs n | | |
| | 99.21 | 0.79 | |
| Provides: | | · | |
| Date of last modific | ation: 03.05.2015 | | |
| Approved: prof. RN | Dr. Viliam Geffert, DrSc. | | |

| University: P. J. Šaf | árik University in Košice | | |
|--|---|----------------|--|
| Faculty: Faculty of | Science | | |
| Course ID: ÚINF/ PPU1b/15 | | | |
| Course type, scope Course type: Pract Recommended cou Per week: 3 Per st Course method: pr | ice 1rse-load (hours): udy period: 42 | | |
| Number of credits: | 3 | | |
| Recommended sem | ester/trimester of the cou | rse: 3. | |
| Course level: II. | | | |
| Prerequisities: | | | |
| Conditions for cour | se completion: | | |
| Learning outcomes | : | | |
| Brief outline of the | course: | | |
| Recommended liter | ature: | | |
| Course language: | | | |
| Notes: | | | |
| Course assessment Total number of ass | essed students: 85 | | |
| | abs n | | |
| | 100.0 | 0.0 | |
| Provides: | | · | |
| Date of last modific | ation: 03.05.2015 | | |
| Approved: prof. RN | Dr. Viliam Geffert, DrSc. | | |

| University: P. J. Šafá | rik University in Košice | | |
|---|---|---------------|--|
| Faculty: Faculty of S | Science | | |
| Course ID: ÚTVŠ/ Course name: Seaside Aerobic Exercise ÚTVŠ/CM/13 | | | |
| Course type, scope a Course type: Practi Recommended cou Per week: 36 Per st Course method: pro | ce rse-load (hours): tudy period: 504 | | |
| Number of credits: 2 | 2 | | |
| Recommended seme | ester/trimester of the cours | e: | |
| Course level: I., II. | | | |
| Prerequisities: | | | |
| Conditions for cours | se completion: | | |
| Learning outcomes: | | | |
| Brief outline of the o | course: | | |
| Recommended litera | ature: | | |
| Course language: | | | |
| Notes: | | | |
| Course assessment Total number of asse | ssed students: 7 | | |
| abs n | | | |
| | 57.14 42.86 | | |
| Provides: Mgr. Alena | a Buková, PhD., Mgr. Agata | Horbacz, PhD. | |
| Date of last modifica | ation: 03.05.2015 | | |
| Approved: prof. RN | Dr. Viliam Geffert, DrSc. | | |

| University: P. J. Š | afárik Univers | ity in Košice | | | |
|--|--|-------------------|-------------------|------------------|------------|
| Faculty: Faculty of | of Science | | | | |
| Course ID: ÚINF OPS1/15 | F/ Course name: Security of computer networks | | | | |
| Course type, scop Course type: Le Recommended o Per week: 2 / 2 I Course method: | cture / Practice course-load (h Per study peri | ours): | | | |
| Number of credit | as: 5 | | | | |
| Recommended se | emester/trimes | ster of the cours | e: 6. | | |
| Course level: II. | | | | | |
| Prerequisities: | | | | | |
| Conditions for co | ourse completi | on: | | | |
| Learning outcom | es: | | | | |
| Brief outline of th | ne course: | | | | |
| Recommended lit | terature: | | | | |
| Course language: | : | | | | |
| Notes: | | | | _ | |
| Course assessmen Total number of a | | ts: 5 | | | |
| A | В | С | D | Е | FX |
| 60.0 | 0.0 | 0.0 | 40.0 | 0.0 | 0.0 |
| Provides: doc. Ing Jozef Jirásek, PhD | | lová, CSc., RND | r. Rastislav Kriv | oš-Belluš, PhD., | doc. RNDr. |
| Date of last modi | fication: 03.05 | 5.2015 | | | |
| Approved: prof. I | RNDr. Viliam (| Geffert, DrSc. | | | |

| University: P. J. | Šafárik Univers | sity in Košice | | | |
|---|--|--|--|---|-----------------|
| Faculty: Faculty | of Science | | | | |
| Course ID: ÚM VKM/10 | V/ Course n | ame: Selected to | pics in mathemat | tics | |
| Course type, sco Course type: L Recommended Per week: 2 / 2 Course method | ecture / Practice course-load (h Per study peri | e iours): | | | |
| Number of cred | its: 5 | | | | |
| Recommended | semester/trime | ster of the cours | se: 3. | | |
| Course level: II. | | | | | |
| Prerequisities: | | | | | |
| Conditions for o Awarded accord points). | - | | points), written | exam (20 points) | , oral exam (40 |
| | ne fundamentals | 1 2 | heory, random pr is on practical ap | ocesses, algebra plications. | of polynomials, |
| geometrical prob Random process Polynomials over | ssical definition bability. ses, Markov cha er a field. Decor inear and intege | ins. nposition into irr | educible factors. | acteristics of ran Roots of polynor plex method. Du | nials. |
| T. Katriňák a ko Plesník, Dupáčo Riečan a kol.:Pr | MacLane: Prehľ l.: Algebra a teo vá, Vlach: Line avdepodobnosť | oretická aritmetik árne programova a matematická š | ebry, Alfa Bratisl a 1, Alfa Bratisla mie, Alfa, Bratisl tatistika, Alfa, Br UPJŠ, Košice, 2 | ava, 1985 lava 1990 ratislava, 1984 | |
| Course languag Slovak | e: | | | | |
| Notes: | | | | | |
| Course assessm Total number of | | nts: 31 | | | |
| А | В | C | D | Е | FX |
| 12.9 | 19.35 | 32.26 | 16.13 | 16.13 | 3.23 |
| Provides: doc. R | NDr. Miroslav | Ploščica, CSc., d | loc. RNDr. Roma | an Soták, PhD. | |

Date of last modification: 03.05.2015

Approved: prof. RNDr. Viliam Geffert, DrSc.

| Faculty: Faculty of S | cience |
|--|--|
| Course ID: ÚINF/ SWB/15 | Course name: Semantic web |
| Course type, scope a Course type: Practic Recommended cour Per week: 3 Per stu Course method: pre | ce rse-load (hours): dy period: 42 |
| Number of credits: 4 | |
| Recommended seme | ster/trimester of the course: 4. |
| Course level: II. | |
| Prerequisities: | |
| Conditions for cours | e completion: |
| semantic web applica databases. | ntic web languages RDF, RDFS, OWL, ability to use them ina practical tions, experience with ontology modelling and communication with ontology |
| XML, syntax, prog Examples in of proce Semantic web mode Semantic web query Software tools: Jena Introduction to Desa Inferencing in Desc | tivation, problems, visions. ramming models DOM, SAX, StAX, namespaces in XML, XPath, XQuery. essing in Java. elling languages: RDF, RDFS, OWL y language SPARQL a, Sesame, Protege, Ontopia cription logic ription logic |
| Semantic web - modeling XML, syntax, progeling Examples in of proceders Semantic web modeling Semantic web query Software tools: Jena Introduction to Desa Inferencing in Descent Recommended literation [1]Grigoris Antonious Edition. MIT Press, 22 [2] Franz Baader, Diele Peter Patel-Schneiders Implementation and 23 [3] http://www.openr [4] http://protege.star [5] http://jena.source | tivation, problems, visions. ramming models DOM, SAX, StAX, namespaces in XML, XPath, XQuery. essing in Java. elling languages: RDF, RDFS, OWL y language SPARQL a, Sesame, Protege, Ontopia cription logic ription logic nture: a and Frank van Harmelen: Semantic Web Primer, Second 2008. ISBN: 978-0-262-01242-3 ego Calvanese, Deborah McGuinness, Daniele Nardi, r: The Description Logic Handbook. Theory, Applications df.org/ nford.edu/ |

Notes:

| Course assessment Total number of assessed students: 37 | | | | | | |
|--|------------------------------------|---|---|---|------|--|
| А | В | С | D | Е | FX | |
| 75.68 8.11 10.81 0.0 0.0 5.41 | | | | | 5.41 | |
| Provides: RND | Provides: RNDr. Peter Gurský, PhD. | | | | | |
| Date of last modification: 03.05.2015 | | | | | | |
| Approved: prof | f. RNDr. Viliam (| Approved: prof. RNDr. Viliam Geffert, DrSc. | | | | |

| University: P. J. | Šafárik Univers | ity in Košice | | | |
|-------------------------------------|--|---|---------------------------------------|--|------------------|
| Faculty: Faculty | of Science | | | | |
| Course ID: ÚIN SPS1/15 | F/ Course na | ame: Seminar in | network progra | mming | |
| | ractice course-load (h er study period: | ours): | | | |
| Number of cred | lits: 3 | | | | |
| Recommended s | semester/trimes | ster of the cours | e: 5. | | |
| Course level: I., | II. | | | | |
| Prerequisities: | | | | | |
| Conditions for c | course completi | on: | | | |
| Learning outcor To render curren | | f programing in | network distribu | uted environment. | |
| Procedure Calls. | Server-side pro ponent Object M SL, dynamic ex | gramming, CGI, lodel, Corba, da tensions of HTM | PHP, basics of l tabase connection | and concurrent s Perl and Python. S on's interfaces. D | Script languages |
| Recommended I Internet sources | | ns. | | | |
| Course languag | e: | | | | |
| Notes: | | | | | |
| Course assessme Total number of | | ts: 50 | | | |
| А | В | С | D | E | FX |
| 68.0 | 16.0 | 14.0 | 0.0 | 2.0 | 0.0 |
| | | | | | |
| Provides: RNDr | . Rastislav Krivo | oš-Belluš, PhD. | | | |
| Provides: RNDr Date of last mod | | | | | |

| University: P. J. Šafa | árik University in Košice | |
|--|--|---|
| Faculty: Faculty of S | Science | |
| Course ID: ÚINF/ DST1a/15 | Course name: Seminar in | theoretical informatics |
| Course type, scope a Course type: Practa Recommended cou Per week: 2 Per stu Course method: pr | ice irse-load (hours): udy period: 28 | |
| Number of credits: | 2 | |
| Recommended seme | ester/trimester of the cours | e: 4. |
| Course level: II. | | |
| Prerequisities: | | |
| Conditions for cour | se completion: | |
| current state in the a | edges in the area of the theor rea using conference proceed | etical informatics in the seminar form. To follow lings and special journals. |
| Brief outline of the Seminar is oriented t theoretical foundation | to an individual work with stu | udents which have the diploma theses in the area: |
| supervisor. Katuščák, D.: Ako p ISO 690: 1987 Docu | literature connected to Diplo ísať vysokoškolské a kvalifil mentation - Bibliographic re | omaa theses according to recommendations of kačné práce, 2. vydanie Bratislava, 1998 ferences. Content, form and structure. divisions and subdivisions in written documents. |
| Course language: | | |
| Notes: | | |
| Course assessment Total number of asse | essed students: 3 | |
| | abs | n |
| | 100.0 | 0.0 |
| Provides: prof. RND | Dr. Viliam Geffert, DrSc. | |
| Date of last modific | ation: 03.05.2015 | |
| | | |

| University: P. J. Šaf | árik University in Košice | | |
|--|--|--|--|
| Faculty: Faculty of | Science | | |
| Course ID: ÚINF/ DST1b/15 | | | |
| Course type, scope Course type: Pract Recommended cou Per week: 2 Per st Course method: pr | ice irse-load (hours): udy period: 28 | | |
| Number of credits: | 2 | | |
| Recommended sem | ester/trimester of the course | e: 5 | |
| Course level: II. | | | |
| Prerequisities: ÚIN | F/DST1a/15 | | |
| Conditions for cour | se completion: | | |
| | | etical informatics in the seminar form. To follow ings and special journals. | |
| Brief outline of the Seminar is oriented theoretical foundation | to an individual work with stu | idents which have the diploma theses in the area: | |
| supervisor. Katuščák, D.: Ako p ISO 690: 1987 Docu | literature connected to Diplo ísať vysokoškolské a kvalifik mentation - Bibliographic re | omaa theses according to recommendations of ačné práce, 2. vydanie Bratislava, 1998 ferences. Content, form and structure. livisions and subdivisions in written documents. | |
| Course language: | | | |
| Notes: | | | |
| Course assessment Total number of asso | essed students: 2 | | |
| | abs | n | |
| | 100.0 | 0.0 | |
| Provides: prof. RNI | Dr. Viliam Geffert, DrSc. | | |
| Date of last modific | ation: 03.05.2015 | | |
| | | | |

| University: P. J. Šafá | rik University in Košice | |
|---|---|--|
| Faculty: Faculty of S | cience | |
| Course ID: ÚINF/ DSA1a/15 | Course name: Seminar on | applied informatics |
| Course type, scope a Course type: Practic Recommended cour Per week: 2 Per stu Course method: pre | ce rse-load (hours): dy period: 28 | |
| Number of credits: 2 | | |
| Recommended seme | ster/trimester of the course | e: 4. |
| Course level: II. | | |
| Prerequisities: | | |
| Conditions for cours | e completion: | |
| - | dges in the area of applied in conference proceedings and | formatics in the seminar form. To follow current d specialized journals. |
| | o an individual work with st | udents which have the diploma theses related to combinatorial algorithms etc. |
| supervisor. Katuščák, D.: Ako pí ISO 690: 1987 Docur | literature connected to Diplo sať vysokoškolské a kvalifik nentation - Bibliographic re | omaa theses according to recommendations of ačné práce, 2. vydanie Bratislava, 1998 ferences. Content, form and structure. livisions and subdivisions in written documents. |
| Course language: | | |
| Notes: | | |
| Course assessment Total number of asses | ssed students: 12 | |
| | abs | n |
| | 91.67 | 8.33 |
| Provides: doc. RNDr | Gabriel Semanišin, PhD. | |
| Date of last modifica | tion: 03.05.2015 | |
| Approved: prof. RNI | | |

| University: P. J. Šafa | nrik University in Košice | | |
|--|--|---|--|
| Faculty: Faculty of S | Science | | |
| Course ID: ÚINF/ DSA1b/15 | 11 | | |
| Course type, scope a Course type: Practi Recommended cou Per week: 2 Per stu Course method: pr | ce rse-load (hours): ıdy period: 28 | | |
| Number of credits: | 2 | | |
| Recommended sem | ester/trimester of the cours | e: 5 | |
| Course level: II. | | | |
| Prerequisities: ÚINI | F/DSA1a/15 | | |
| Conditions for cour | se completion: | | |
| state in the area usin | edges in the area of applied in g conference proceedings and | nformatics in the seminar form. To follow current d specialized journals. | |
| | to an individual work with st | tudents which have the diploma theses related to combinatorial algorithms etc. | |
| supervisor. Katuščák, D.: Ako p ISO 690: 1987 Docu | literature connected to Diplo ísať vysokoškolské a kvalifik mentation - Bibliographic re | omaa theses according to recommendations of cačné práce, 2. vydanie Bratislava, 1998 ferences. Content, form and structure. divisions and subdivisions in written documents. | |
| Course language: | | | |
| Notes: | | | |
| Course assessment Total number of asse | essed students: 10 | | |
| | abs | n | |
| | 100.0 | 0.0 | |
| Provides: doc. RND | r. Gabriel Semanišin, PhD. | | |
| Date of last modific | ation: 03.05.2015 | | |
| | | | |

| University: P. J. | Šafárik Univers | sity in Košice | | | |
|--|--|--|---------------------------------------|--|-------------------------|
| Faculty: Faculty | of Science | | | | |
| Course ID: ÚINI SPG1/15 | F/ Course na | ame: Seminar on | computer graph | ics | |
| Course type, sco Course type: Pr Recommended Per week: 2 Per Course method | actice course-load (h · study period: | ours): | | | |
| Number of credi | ts: 3 | | | | |
| Recommended s | emester/trime | ster of the course | e: 4., 6. | | |
| Course level: II. | | | | | |
| Prerequisities: | | | | | |
| Conditions for co | ourse completi | ion: | | | |
| Learning outcon | nes: | | | | |
| presents actual th algorithms of cor | cte to the lecture leoretical and in nputer graphics | e UGR Introduction nplementation pros s, geometric mode R and good prog | oblems. Main go elling and realist | oal in interest is o tic drawing of sce | priented to quick enes. |
| Recommended li | iterature: | | | | |
| Course language | | | | | |
| Notes: | | | | | |
| Course assessme Total number of a | | its: 33 | | | |
| A | В | C | D | E | FX |
| 75.76 | 12.12 | 9.09 | 3.03 | 0.0 | 0.0 |
| Provides: RNDr. | Rastislav Kriv | oš-Belluš, PhD., o | doc. RNDr. Joze | f Jirásek, PhD. | |
| Date of last mod | ification: 03.05 | 5.2015 | | | |
| | | | | | |

| University: P. J. S | Šafárik Univers | ity in Košice | | | |
|--|---|-----------------------------|--------------------|--------------------|----------------|
| Faculty: Faculty | of Science | | | | |
| Course ID: ÚINF SDM1a/15 | NF/ Course name: Seminár on data mining | | | | |
| Course type, sco Course type: Pr Recommended Per week: 2 Per Course method | actice course-load (he study period: | ours): | | | |
| Number of credi | ts: 2 | | | | |
| Recommended s | emester/trimes | ter of the cours | e: 4. | | |
| Course level: II. | | | | | |
| Prerequisities: | | | | | |
| Conditions for co | ourse completi | on: | | | |
| Learning outcon Deepened knowle | | l overview of the | e state-of-the-art | in the area of dat | ta mining. |
| Brief outline of t The seminar is de | | and discussion a | bout recent adva | nces in the field | of data mining |
| Recommended li Jiawei Han, Mich Kaufmann, ISBN Pang-Ning Tan, M ISBN 978-03213 Ethem Alpazdin. 2004. | neline Kamber, 1 978-01238147 Michael Steinba 21367, 2005. | 91, 2011. ch, Vipin Kuma | r. Introduction to | Data Mining. A | ddison-Wesley |
| Course language | : | | | - | |
| Notes: | | | | | |
| Course assessme Total number of a | | ts: 23 | | | |
| A | В | С | D | E | FX |
| | 8.7 | 21.74 | 13.04 | 8.7 | 0.0 |
| 47.83 | I | | | | |
| | Tomáš Horváth | , PhD. | l | | |
| 47.83 Provides: RNDr. Date of last mode | | · | | · | |

| University: P. J. Šafá | rik University in Košice | |
|---|--|---|
| Faculty: Faculty of S | cience | |
| Course ID: ÚINF/ DSL1a/15 | Course name: Seminar on | logic of information systems |
| Course type, scope a Course type: Practi Recommended cou Per week: 2 Per stu Course method: pro | ce rse-load (hours): Idy period: 28 | |
| Number of credits: 2 | 2 | |
| Recommended seme | ster/trimester of the cours | e: 4. |
| Course level: II. | | |
| Prerequisities: | | |
| Conditions for cours | se completion: | |
| form. To follow curre Brief outline of the c | ent state in the area using concourse: o an individual work with stu | aformation and knowledge systems in the seminar inference proceedings and special journals. |
| Recommended litera Special and research supervisor. Katuščák, D.: Ako pi ISO 690: 1987 Docu | ature: literature connected to Diplo isať vysokoškolské a kvalifil mentation - Bibliographic re | omaa theses according to recommendations of kačné práce, 2. vydanie Bratislava, 1998 ferences. Content, form and structure. divisions and subdivisions in written documents. |
| Course language: | | |
| Notes: | | |
| Course assessment Total number of asse | ssed students: 1 | |
| | abs | n |
| | 100.0 | 0.0 |
| Provides: RNDr. Pet | er Gurský, PhD., RNDr. Ton | náš Horváth, PhD. |
| Date of last modifica | ation: 03.05.2015 | |
| Approved: prof. RN | Dr. Viliam Geffert, DrSc. | |

| University: P. J. Šafa | arik University in Košice | |
|--|--|--|
| Faculty: Faculty of S | Science | |
| Course ID: ÚINF/ DSL1b/15 | Course name: Seminar on | logic of information systems |
| Course type, scope a Course type: Practi Recommended cou Per week: 2 Per stu Course method: pr | ice irse-load (hours): idy period: 28 | |
| Number of credits: | 2 | |
| Recommended sem | ester/trimester of the cours | e: 5. |
| Course level: II. | | |
| Prerequisities: ÚINI | F/DSL1a/15 | |
| Conditions for cour | se completion: | |
| • | edges in the area of logic of ir | formation and knowledge systems in the seminar nference proceedings and special journals. |
| Brief outline of the Seminar is oriented to logic of information | to an individual work with stu | idents which have the diploma theses in the area: |
| supervisor. Katuščák, D.: Ako p ISO 690: 1987 Docu | literature connected to Diplo ísať vysokoškolské a kvalifil mentation - Bibliographic re | omaa theses according to recommendations of ačné práce, 2. vydanie Bratislava, 1998 ferences. Content, form and structure. divisions and subdivisions in written documents. |
| Course language: | | |
| Notes: | | |
| Course assessment Total number of asse | essed students: 13 | |
| | abs | n |
| | 100.0 | 0.0 |
| Provides: RNDr. Pet | er Gurský, PhD., RNDr. Ton | náš Horváth, PhD. |
| Date of last modific | ation: 03.05.2015 | |
| Approved: prof. RN | | |

| University: P. J. Šafá | rik University in Košice | |
|---|--|---|
| Faculty: Faculty of S | cience | |
| Course ID: ÚINF/ DSN1a/15 | Course name: Seminar on | neural networks and stringology |
| Course type, scope a Course type: Practi Recommended cou Per week: 2 Per stu Course method: pro | ce rse-load (hours): ıdy period: 28 | |
| Number of credits: 2 | 2 | |
| Recommended seme | ester/trimester of the course | e: 4. |
| Course level: II. | | |
| Prerequisities: | | |
| Conditions for cours | se completion: | |
| - | edges in the area of neural n n the area using conference p | etworks and stringology in the seminar form. To proceedings and special journals. |
| | o an individual work with stu | idents which have the diploma theses in the area: |
| supervisor. Katuščák, D.: Ako p ISO 690: 1987 Docu | literature connected to Diplo ísať vysokoškolské a kvalifik mentation - Bibliographic re | omaa theses according to recommendations of cačné práce, 2. vydanie Bratislava, 1998 ferences. Content, form and structure. divisions and subdivisions in written documents. |
| Course language: | | |
| Notes: | | |
| Course assessment Total number of asse | essed students: 3 | |
| | abs | n |
| | 100.0 | 0.0 |
| Provides: doc. RND | . Gabriela Andrejková, CSc. | |
| Date of last modifica | ation: 03.05.2015 | |
| | | |

| University: P. J. Šafá | rik University in Košice | |
|---|--|--|
| Faculty: Faculty of S | cience | |
| Course ID: ÚINF/ DSN1b/15 | Course name: Seminar on | neural networks and stringology |
| Course type, scope a Course type: Practi Recommended cou Per week: 2 Per stu Course method: pro | ce rse-load (hours): idy period: 28 | |
| Number of credits: 2 | 2 | |
| Recommended seme | ester/trimester of the cours | e: 5. |
| Course level: II. | | |
| Prerequisities: | | |
| Conditions for cours | se completion: | |
| follow current state i | n the area using conference | etworks and stringology in the seminar form. To proceedings and special journals. |
| Brief outline of the of Seminar is oriented t neural networks and | o an individual work with stu | idents which have the diploma theses in the area: |
| supervisor. Katuščák, D.: Ako p ISO 690: 1987 Docu | literature connected to Diplo isať vysokoškolské a kvalifil mentation - Bibliographic re | omaa theses according to recommendations of ačné práce, 2. vydanie Bratislava, 1998 ferences. Content, form and structure. divisions and subdivisions in written documents. |
| Course language: | | |
| Notes: | | |
| Course assessment Total number of asse | ssed students: 1 | |
| | abs | n |
| | 100.0 | 0.0 |
| Provides: doc. RND | . Gabriela Andrejková, CSc. | |
| Date of last modifica | ation: 03.05.2015 | |
| | Dr. Viliam Geffert, DrSc. | |

| DSB1a/15 Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: present Number of credits: 2 Recommended semester/trimester of the course: 4. Course level: II. Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Seminar is oriented to an individual work with students which have the diploma theses in the area: the security of computer networks. Recommended literature: Special and research literature connected to Diplomaa theses according to recommendations of supervisor. Katuščák, D.: Ako písať vysokoškolské a kvalifikačné práce, 2. vydanie Bratislava, 1998 ISO 690: 1987 Documentation - Bibliographic references. Content, form and structure. ISO 2145: 1978 Documentation - Numbering of divisions and subdivisions in written documents. Course assessment Total number of assessed students: 3 abs n 100.0 0.0 | University: P. J. Šafá | rik University in Košice | | |
|--|---|---|--|--|
| DSB1a/15 Course type, scope and the method: Course type: Practice Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: present Number of credits: 2 Recommended semester/trimester of the course: 4. Course level: II. Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Seminar is oriented to an individual work with students which have the diploma theses in the area: the security of computer networks. Recommended literature: Special and research literature connected to Diplomaa theses according to recommendations of supervisor. Katuščák, D.: Ako písať vysokoškolské a kvalifikačné práce, 2. vydanie Bratislava, 1998 ISO 690: 1987 Documentation - Bibliographic references. Content, form and structure. ISO 2145: 1978 Documentation - Numbering of divisions and subdivisions in written documents. Course language: Notes: Course assessment Total number of assessed students: 3 abs n 100.0 0.0 | Faculty: Faculty of S | cience | | |
| Course type: Practice Recommended course-load (hours): Per week: 2 Per study period: 28 Course method: present Number of credits: 2 Recommended semester/trimester of the course: 4. Course level: II. Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Seminar is oriented to an individual work with students which have the diploma theses in the area: the security of computer networks. Recommended literature: Special and research literature connected to Diplomaa theses according to recommendations of supervisor. Katuščák, D.: Ako písať vysokoškolské a kvalifikačné práce, 2. vydanie Bratislava, 1998 <iso -="" 1987="" 690:="" and="" bibliographic="" content,="" documentation="" form="" references.="" structure.<="" td=""> ISO 2145: 1978 Documentation - Numbering of divisions and subdivisions in written documents. Course language: Notes: Course assessment Total number of assessed students: 3 abs n 100.0 0.0</iso> | Course ID: ÚINF/ DSB1a/15 | 5 I | | |
| Recommended semester/trimester of the course: 4. Course level: II. Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Seminar is oriented to an individual work with students which have the diploma theses in the area: the security of computer networks. Recommended literature: Special and research literature connected to Diplomaa theses according to recommendations of supervisor. Katuščák, D.: Ako písať vysokoškolské a kvalifikačné práce, 2. vydanie Bratislava, 1998 ISO 690: 1987 Documentation - Bibliographic references. Content, form and structure. ISO 2145: 1978 Documentation - Numbering of divisions and subdivisions in written documents. Course language: Notes: Course assessment Total number of assessed students: 3 abs n 100.0 0.0 | Course type: Practic Recommended cour Per week: 2 Per stu | ce rse-load (hours): dy period: 28 | | |
| Course level: II. Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Seminar is oriented to an individual work with students which have the diploma theses in the area: the security of computer networks. Recommended literature: Special and research literature connected to Diplomaa theses according to recommendations of supervisor. Katuščák, D.: Ako písať vysokoškolské a kvalifikačné práce, 2. vydanie Bratislava, 1998 ISO 690: 1987 Documentation - Bibliographic references. Content, form and structure. ISO 2145: 1978 Documentation - Numbering of divisions and subdivisions in written documents. Course language: Notes: Course assessment Total number of assessed students: 3 abs n 100.0 0.0 | Number of credits: 2 | | | |
| Prerequisities: Conditions for course completion: Learning outcomes: Brief outline of the course: Seminar is oriented to an individual work with students which have the diploma theses in the area: the security of computer networks. Recommended literature: Special and research literature connected to Diplomaa theses according to recommendations of supervisor. Katuščák, D.: Ako písať vysokoškolské a kvalifikačné práce, 2. vydanie Bratislava, 1998 ISO 690: 1987 Documentation - Bibliographic references. Content, form and structure. ISO 2145: 1978 Documentation - Numbering of divisions and subdivisions in written documents. Course language: Notes: Course assessment Total number of assessed students: 3 abs n 100.0 0.0 | Recommended seme | ster/trimester of the cours | e: 4. | |
| Conditions for course completion: Learning outcomes: Brief outline of the course: Seminar is oriented to an individual work with students which have the diploma theses in the area: the security of computer networks. Recommended literature: Special and research literature connected to Diplomaa theses according to recommendations of supervisor. Katuščák, D.: Ako písať vysokoškolské a kvalifikačné práce, 2. vydanie Bratislava, 1998 ISO 690: 1987 Documentation - Bibliographic references. Content, form and structure. ISO 2145: 1978 Documentation - Numbering of divisions and subdivisions in written documents. Course language: Notes: Course assessment Total number of assessed students: 3 abs n 100.0 0.0 | Course level: II. | | | |
| Learning outcomes: Brief outline of the course: Seminar is oriented to an individual work with students which have the diploma theses in the area: the security of computer networks. Recommended literature: Special and research literature connected to Diplomaa theses according to recommendations of supervisor. Katuščák, D.: Ako písať vysokoškolské a kvalifikačné práce, 2. vydanie Bratislava, 1998 ISO 690: 1987 Documentation - Bibliographic references. Content, form and structure. ISO 2145: 1978 Documentation - Numbering of divisions and subdivisions in written documents. Course language: Notes: Course assessment Total number of assessed students: 3 abs n 100.0 0.0 | Prerequisities: | | | |
| Brief outline of the course: Seminar is oriented to an individual work with students which have the diploma theses in the area: the security of computer networks. Recommended literature: Special and research literature connected to Diplomaa theses according to recommendations of supervisor. Katuščák, D.: Ako písať vysokoškolské a kvalifikačné práce, 2. vydanie Bratislava, 1998 ISO 690: 1987 Documentation - Bibliographic references. Content, form and structure. ISO 2145: 1978 Documentation - Numbering of divisions and subdivisions in written documents. Course language: Notes: Course assessment Total number of assessed students: 3 abs n 100.0 0.0 | Conditions for cours | e completion: | | |
| Seminar is oriented to an individual work with students which have the diploma theses in the area: the security of computer networks. Recommended literature: Special and research literature connected to Diplomaa theses according to recommendations of supervisor. Katuščák, D.: Ako písať vysokoškolské a kvalifikačné práce, 2. vydanie Bratislava, 1998 ISO 690: 1987 Documentation - Bibliographic references. Content, form and structure. ISO 2145: 1978 Documentation - Numbering of divisions and subdivisions in written documents. Course language: Notes: Course assessment Total number of assessed students: 3 abs n 100.0 0.0 | Learning outcomes: | | | |
| Special and research literature connected to Diplomaa theses according to recommendations of supervisor. Katuščák, D.: Ako písať vysokoškolské a kvalifikačné práce, 2. vydanie Bratislava, 1998 ISO 690: 1987 Documentation - Bibliographic references. Content, form and structure. ISO 2145: 1978 Documentation - Numbering of divisions and subdivisions in written documents. Course language: Notes: Course assessment Total number of assessed students: 3 abs n 100.0 0.0 | Seminar is oriented to | o an individual work with st | udents which have the diploma theses in the area: | |
| Notes: Course assessment Total number of assessed students: 3 abs n 100.0 0.0 | Special and research supervisor. Katuščák, D.: Ako pí ISO 690: 1987 Docu | literature connected to Diplo sať vysokoškolské a kvalifil nentation - Bibliographic re | cačné práce, 2. vydanie Bratislava, 1998 ferences. Content, form and structure. | |
| Course assessment Total number of assessed students: 3 abs n 100.0 0.0 | Course language: | | | |
| Total number of assessed students: 3 n abs n 100.0 0.0 | Notes: | | | |
| 100.0 0.0 | Course assessment Total number of asses | ssed students: 3 | | |
| | | abs | n | |
| | | 100.0 | 0.0 | |
| Provides: doc. RNDr. Jozef Jirásek, PhD. | Provides: doc. RNDr. | Jozef Jirásek, PhD. | | |
| Date of last modification: 03.05.2015 | Date of last modifica | tion: 03.05.2015 | | |
| Approved: prof. RNDr. Viliam Geffert, DrSc. | Approved: prof. RNI | Dr. Viliam Geffert, DrSc. | | |

| University: P. J. Šafá | arik University in Košice | |
|--|--|--|
| Faculty: Faculty of S | Science | |
| Course ID: ÚINF/ DSB1b/15 | Course name: Seminar on | security of computer networks |
| Course type, scope a Course type: Practi Recommended cou Per week: 2 Per stu Course method: pr | ce irse-load (hours): idy period: 28 | |
| Number of credits: | 2 | |
| Recommended seme | ester/trimester of the course | e: 5. |
| Course level: II. | | |
| Prerequisities: | | |
| Conditions for cour | se completion: | |
| networks. To follow | to study new knowledges in current state in the area using | the area of cryptology and security of computer g conference proceedings and special journals. |
| Brief outline of the of Seminar is oriented to the security of comp | to an individual work with stu | idents which have the diploma theses in the area: |
| supervisor. Katuščák, D.: Ako p ISO 690: 1987 Docu | literature connected to Diplo ísať vysokoškolské a kvalifik mentation - Bibliographic re | omaa theses according to recommendations of ačné práce, 2. vydanie Bratislava, 1998 ferences. Content, form and structure. livisions and subdivisions in written documents. |
| Course language: | | |
| Notes: | | |
| Course assessment Total number of asse | essed students: 3 | |
| | abs | n |
| | 100.0 | 0.0 |
| Provides: doc. RND | r. Jozef Jirásek, PhD. | |
| Date of last modification | ation: 03.05.2015 | |
| Approved: prof. RN | Dr. Wiliam Caffart Dr.C. | |

| University: P. J. Šafá | rik University in Ko | šice |
|--|---|---|
| Faculty: Faculty of S | cience | |
| Course ID: ÚINF/ SDI1a/15 | Course name: Sem | ninar to diploma theses in informatics |
| Course type, scope a Course type: Practi- Recommended cou Per week: 2 Per stu Course method: pre | ce rse-load (hours): ıdy period: 28 | |
| Number of credits: 2 | 2 | |
| Recommended seme | ster/trimester of th | e course: 4. |
| Course level: II. | | |
| Prerequisities: ÚINF | 7/PDSI1/15 | |
| Conditions for cours | se completion: | |
| Learning outcomes: Monitoring and publ | | ork done so fare on thesis preparation |
| recognition, the follo thirty pages) and at le area, possible researc judged more strictly) help and user friendly For both parts there v | compulsory theoretic owing is necessary: a east twenty pages of th goals, own results a . For the SW part: a te y user interface not r will be an oral preser | cal part and may also contain a software part. To gain detailed compilation of studied literature (a minimum of text containing the candidate's own views of the problem are welcome (if the thesis is purely theoretical, this will be ested implementation (must conform to user requirements, necessary at this stage) and access to source texts. ntation and discussion. |
| Recommended litera | ature: | |
| Course language: | | |
| Notes: | | |
| Course assessment Total number of asse | ssed students: 120 | |
| | abs | n |
| | ô | 2.5 |
| | 97.5 | |
| Provides: doc. RNDr | - | vá, CSc., doc. RNDr. Jozef Jirásek, PhD. |
| Provides: doc. RNDr Date of last modifica | . Gabriela Andrejkov | |

| University: P. J. Šafá | rik University in Košice | | | |
|--|--|---|--|--|
| Faculty: Faculty of S | cience | | | |
| Course ID: ÚINF/ SDI1b/15 | Course name: Seminar to diploma theses in informatics | | | |
| Course type, scope a Course type: Practic Recommended cour Per week: 2 Per stu Course method: pre | ce rse-load (hours): dy period: 28 | | | |
| Number of credits: 2 | | | | |
| Recommended seme | ster/trimester of the cou | rse: 5. | | |
| Course level: II. | | | | |
| Prerequisities: ÚINF | /SDI1a/15 | | | |
| Conditions for cours | e completion: | | | |
| Learning outcomes: Monitoring and publi | c presentation of work do | ne so fare on thesis preparation | | |
| recognition, the follo thirty pages) and at le area, possible research judged more strictly). help and user friendly | wing is necessary: a detail east twenty pages of text co h goals, own results are we For the SW part: a tested in | rt and may also contain a software part. To gain ed compilation of studied literature (a minimum of ontaining the candidate's own views of the problem lcome (if the thesis is purely theoretical, this will be mplementation (must conform to user requirements, ary at this stage) and access to source texts. | | |
| Recommended litera | iture: | | | |
| Course language: | | | | |
| Notes: | | | | |
| Course assessment Total number of asses | ssed students: 111 | | | |
| | abs n | | | |
| | 100.0 | 0.0 | | |
| | | | | |
| Provides: doc. RNDr | . Gabriela Andrejková, CS | c., doc. RNDr. Jozef Jirásek, PhD. | | |
| Provides: doc. RNDr Date of last modifica | | c., doc. RNDr. Jozef Jirásek, PhD. | | |

| University: P. J. Šafá | rik University in Ko | sice | | | |
|---|--|---|--|--|--|
| Faculty: Faculty of S | cience | | | | |
| Course ID: ÚINF/ SDI1c/15 | VF/ Course name: Seminar to diploma theses in informatics | | | | |
| Course type, scope a Course type: Practic Recommended cour Per week: 2 Per stu Course method: pre | ce rse-load (hours): dy period: 28 | | | | |
| Number of credits: 2 | 2 | | | | |
| Recommended seme | ster/trimester of th | e course: 6. | | | |
| Course level: II. | | | | | |
| Prerequisities: ÚINF | /SDI1b/15 | | | | |
| Conditions for cours | e completion: | | | | |
| Learning outcomes: Monitoring and public | c presentation of wo | ork done so fare on thesis preparation | | | |
| recognition, the follo thirty pages) and at le area, possible researc judged more strictly). help and user friendly | ompulsory theoretic wing is necessary: a east twenty pages of h goals, own results For the SW part: a to y user interface not i | cal part and may also contain a software part. To gain a detailed compilation of studied literature (a minimum of text containing the candidate's own views of the problem are welcome (if the thesis is purely theoretical, this will be ested implementation (must conform to user requirements, necessary at this stage) and access to source texts. ntation and discussion. | | | |
| Recommended litera | iture: | | | | |
| Course language: | | | | | |
| Notes: | | | | | |
| Course assessment Total number of asse | ssed students: 97 | | | | |
| | abs | n | | | |
| | 100.0 | 0.0 | | | |
| Provides: doc. RNDr | . Gabriela Andrejko | vá, CSc., doc. RNDr. Jozef Jirásek, PhD. | | | |
| Date of last modifica | tion: 03 05 2015 | | | | |
| | Clon: 05.05.2015 | | | | |

| University: P. J. Šafán | ik University | in Košice | | | |
|---|---|-------------------|---|--|--|
| Faculty: Faculty of So | cience | | | | |
| Course ID: KPPaPZ/SPVKE/07 | Course name: Social-Psychological Training of Coping with Critical Life Situations | | | | |
| Course type, scope an Course type: Practic Recommended cour Per week: 2 Per stue Course method: pre | e se-load (hour dy period: 28 | | | | |
| Number of credits: 2 | | | | | |
| Recommended seme | ster/trimester | of the course: 2. | | | |
| Course level: II. | | | | | |
| Prerequisities: | | | | | |
| Conditions for cours | e completion: | | | | |
| Learning outcomes: | | | | | |
| Brief outline of the c | ourse: | | | | |
| Recommended litera | ture: | | | | |
| Course language: | | | | | |
| Notes: | | | | | |
| Course assessment Total number of asses | sed students: | 111 | | | |
| abs | | n | Z | | |
| 97.3 2.7 0.0 | | | | | |
| Provides: Mgr. Ondre | j Kalina, PhD | | | | |
| Date of last modifica | tion: 03.05.20 | 15 | | | |
| Approved: prof. RNI | r. Viliam Geff | fert, DrSc. | | | |

| University: P. J. | Šafárik Univers | sity in Košice | | | | |
|---|--|---|--|--|--|--|
| Faculty: Faculty | of Science | | | | | |
| Course ID: ÚIN PRJm1a/15 | IF/ Course name: Software project | | | | | |
| Course type, sco Course type: P Recommended Per week: 4 Pe Course method | ractice course-load (h r study period: | ours): | | | | |
| Number of cred | its: 4 | | | | | |
| Recommended | semester/trime | ster of the cours | e: 4. | | | |
| Course level: II. | | | | | | |
| Prerequisities: | | | | | | |
| Conditions for a | course complet | ion: | | | | |
| | ods in a preparat | ion of some bigge entation, testing). | | phases of its life | cycle (analysis, | |
| They report regulation defense session This semester is system specificat Project themes we enrolment for the subjects (neural systems and correction) | ularly on their p before an exami s mainly devote tion. will be publishe the following yea networks, comp nputer graphics | ork on their own rogress. Before re- nation board. d to a detailed a d at the Compute ar. The projects v outer network sec). The student sha th the subject of 1 | ecognition they r nalysis of user r er Science Depar vill be divided in urity, mathemati all enrol in one o | report on their pr requirements and the prior to the nto five areas ac cal models, logic | d corresponding he students final cording to their c of information | |
| Recommended | literature: | | | | | |
| Course languag | e: | | | | | |
| Notes: | | | | | | |
| Course assessm Total number of | | its: 0 | | | | |
| А | В | С | D | Е | FX | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Provides: Mgr. A | Alexander Szaba | ari, PhD., RNDr. | Róbert Novotný, | , PhD. | | |
| Date of last mod | lification: 03.03 | 5.2015 | | | | |
| Approved: prof. | RNDr. Viliam | Geffert, DrSc. | | | | |

| | | sity in Košice | | | | |
|---|--|---|--|-----------------------------|------------------|--|
| Faculty: Faculty | of Science | | | | | |
| Course ID: ÚINF PRJm1b/15 | F/ Course na | Course name: Sofware project | | | | |
| Course type, scop Course type: Pr Recommended Per week: 4 Per Course method: | actice course-load (h • study period: | nours): | | | | |
| Number of credi | ts: 4 | | | | | |
| Recommended so | emester/trime | ster of the cours | e: 5. | | | |
| Course level: II. | | | | | | |
| Prerequisities: Ú | INF/PRJm1a/1 | 15 | | | | |
| Conditions for co | ourse complet | ion· | | | | |
| | | 1011. | | | | |
| Learning outcom To learn a method specifications, so | nes: ls in a preparat lution, implem | tion of some bigg | | phases of its life | cycle (analysis | |
| Learning outcom To learn a method | nes: Is in a preparat lution, implem he course: eminar continu | tion of some bigg tentation, testing) tes on the project | by a realisation of | of the developed | | |
| Learning outcom To learn a method specifications, so Brief outline of the The work in the s | nes: Is in a preparat lution, implem he course: eminar continu n of the projec | tion of some bigg tentation, testing) tes on the project | by a realisation of | of the developed | | |
| Learning outcom To learn a method specifications, so Brief outline of th The work in the s on a documetatio | tes: ls in a preparat lution, implem he course: eminar continu n of the projec terature: | tion of some bigg tentation, testing) tes on the project | by a realisation of | of the developed | | |
| Learning outcom To learn a method specifications, so Brief outline of th The work in the s on a documetatio Recommended li | tes: ls in a preparat lution, implem he course: eminar continu n of the projec terature: | tion of some bigg tentation, testing) tes on the project | by a realisation of | of the developed | | |
| Learning outcom To learn a method specifications, so Brief outline of th The work in the s on a documetatio Recommended li Course language | nes: ds in a preparat lution, implem he course: eminar continu n of the projec terature: : nt | tion of some bigg tentation, testing) tes on the project t and a public pre | by a realisation of | of the developed | | |
| Learning outcom To learn a method specifications, so Brief outline of th The work in the s on a documetatio Recommended li Course language Notes: Course assessme | nes: ds in a preparat lution, implem he course: eminar continu n of the projec terature: : nt | tion of some bigg tentation, testing) tes on the project t and a public pre | by a realisation of | of the developed | | |
| Learning outcom To learn a method specifications, so Brief outline of th The work in the s on a documetatio Recommended li Course language Notes: Course assessme Total number of a | nes: ds in a preparat lution, implem he course: eminar continu n of the projec terature: : nt assessed studer | tion of some bigg tentation, testing) tes on the project t and a public pre | by a realisation of the sentation of the | of the developed a results. | solution, a work | |
| Learning outcom To learn a method specifications, so Brief outline of th The work in the s on a documetatio Recommended li Course language Notes: Course assessme Total number of a A 0.0 | nes: ds in a preparat lution, implem he course: eminar continu n of the projec terature: : nt assessed studer B 0.0 | tion of some bigg entation, testing) les on the project t and a public pre nts: 0 C 0.0 | by a realisation of the provident of the | E 0.0 | solution, a work | |
| Learning outcom To learn a method specifications, so Brief outline of th The work in the s on a documetatio Recommended li Course language Notes: Course assessme Total number of a A | nes: ds in a preparat lution, implem he course: eminar continu n of the projec terature: : nt assessed studer B 0.0 lexander Szaba | tion of some bigg entation, testing) ues on the project t and a public pre nts: 0 C 0.0 ari, PhD., RNDr. | by a realisation of the provident of the | E 0.0 | solution, a work | |

| University: P. J. Šafári | k Univers | ity in Košice | | |
|--|-----------------------------------|---|--|--|
| Faculty: Faculty of Sc | ience | | | |
| Course ID: ÚTVŠ/ TVa/11 | Course name: Sports Activities I. | | | |
| Course type, scope an Course type: Practice Recommended cours Per week: 2 Per stud Course method: pres | e se-load (he ly period: | ours): | | |
| Number of credits: 2 | | | | |
| Recommended semes | ter/trimes | ter of the course: 1. | | |
| Course level: I., I.II., I | Ι. | | | |
| Prerequisities: | | | | |
| Conditions for course | completi | on: | | |
| Learning outcomes: | | | | |
| Brief outline of the co | urse: | | | |
| Recommended literat | ure: | | | |
| Course language: | | | | |
| Notes: | | | | |
| Course assessment Total number of assess | sed studen | ts: 7947 | | |
| abs | | n | neabs | |
| 87.96 8.12 3.93 | | | | |
| Ivan Matúš, PhD., Mgi PhD., PaedDr. Milena | :. Zuzana I Švedová, I | , doc. PhDr. Ivan Šulc, CSc., doc. Küchelová, Mgr. Peter Bakalár, Ph PhD., Mgr. Agata Horbacz, PhD., gr. Lucia Kršňáková, PhD., Mgr. | nD., doc. PaedDr. Ivan Uher, Mgr. Marek Valanský, prof. | |
| Date of last modificat | ion: 03.05 | .2015 | | |
| Approved: prof. RND | r. Viliam (| Geffert, DrSc. | | |

| University: P. J. Šafá | rik Univers | ity in Košice | | | |
|---|--|--|---|--|--|
| Faculty: Faculty of S | cience | | | | |
| Course ID: ÚTVŠ/ TVb/11 | Course name: Sports Activities II. | | | | |
| Course type, scope a Course type: Practic Recommended cour Per week: 2 Per stu Course method: pre | ce rse-load (h dy period: | ours): | | | |
| Number of credits: 2 | 2 | | | | |
| Recommended seme | ster/trimes | ster of the course: 2. | | | |
| Course level: I., I.II., | II. | | | | |
| Prerequisities: | | | | | |
| Conditions for cours | e completi | on: | | | |
| Learning outcomes: | | | | | |
| Brief outline of the c | ourse: | | | | |
| Recommended litera | iture: | | | | |
| Course language: | | | | | |
| Notes: | | | | | |
| Course assessment Total number of asses | ssed studen | ts: 7437 | | | |
| abs | | n | neabs | | |
| 85.03 10.93 4.03 | | | | | |
| Ivan Matúš, PhD., Mg PhD., PaedDr. Milena | gr. Zuzana I Švedová, I il, DrSc., M | o, doc. Mgr. Rastislav Feč, PhD., č Küchelová, doc. PaedDr. Ivan Uhe PhD., Mgr. Agata Horbacz, PhD., Igr. Lucia Kršňáková, PhD., Mgr. | er, PhD., Mgr. Peter Bakalár, Mgr. Marek Valanský, prof. | | |
| Date of last modifica | tion: 03.05 | 5.2015 | | | |
| Approved: prof RNI | Dr. Viliam (| Seffert DrSc | | | |

Approved: prof. RNDr. Viliam Geffert, DrSc.

| University: P. J. Šafár | ik Universi | ity in Košice | | |
|--|-------------------------------------|---|---|--|
| Faculty: Faculty of Sc | eience | | | |
| Course ID: ÚTVŠ/ TVc/11 | Course name: Sports Activities III. | | | |
| Course type, scope an Course type: Practic Recommended cour Per week: 2 Per stud Course method: pres | e se-load (he ly period: | ours): | | |
| Number of credits: 2 | | | | |
| Recommended semes | ter/trimes | ter of the course: 3. | | |
| Course level: I., I.II., | II. | | | |
| Prerequisities: | | | | |
| Conditions for course | e completio | on: | | |
| Learning outcomes: | | | | |
| Brief outline of the co | ourse: | | | |
| Recommended litera | ture: | | | |
| Course language: | | | | |
| Notes: | | | | |
| Course assessment Total number of asses | sed student | ts: 4650 | | |
| abs | | n | neabs | |
| 89.63 | | 4.71 | 5.66 | |
| Mgr. Ivan Matúš, PhD Švedová, PhD., Mgr. H | ., Mgr. Zuz Peter Bakal | , doc. Mgr. Rastislav Feč, PhD., c zana Küchelová, doc. PaedDr. Iva ár, PhD., Mgr. Agata Horbacz, Ph gr. Lucia Kršňáková, PhD., Mgr. | n Uher, PhD., PaedDr. Milena nD., Mgr. Marek Valanský, prof. | |
| Date of last modificat | tion: 03.05 | .2015 | | |
| Approved: prof. RND | r. Viliam C | Geffert, DrSc. | | |

| University: P. J. Šafárik Unive | ersity in Košice | | |
|---|---|--|--|
| Faculty: Faculty of Science | | | |
| Course ID: ÚTVŠ/ Course TVd/11 | name: Sports Activities IV. | | |
| Course type, scope and the n Course type: Practice Recommended course-load Per week: 2 Per study perio Course method: present | (hours): | | |
| Number of credits: 2 | | | |
| Recommended semester/trin | nester of the course: 4. | | |
| Course level: I., I.II., II. | | | |
| Prerequisities: | | | |
| Conditions for course compl | etion: | | |
| Learning outcomes: | | | |
| Brief outline of the course: | | | |
| Recommended literature: | | | |
| Course language: | | | |
| Notes: | | | |
| Course assessment Total number of assessed stud | ents: 3884 | | |
| abs | n | neabs | |
| 85.79 6.77 7.44 | | | |
| Ivan Matúš, PhD., Mgr. Zuzan PhD., doc. PaedDr. Ivan Uher, | ko, doc. Mgr. Rastislav Feč, PhD., o a Küchelová, PaedDr. Milena Švedo PhD., Mgr. Agata Horbacz, PhD., N Mgr. Lucia Kršňáková, PhD., Mgr. nD. | ová, PhD., Mgr. Peter Bakalár, Mgr. Marek Valanský, prof. | |
| Date of last modification: 03 | | | |
| Approved: prof. RNDr. Viliar | | | |

| University: P. J. Š | afárik Universi | ty in Košice | | | |
|---|--------------------------------|------------------|-------------------|-----|-----|
| Faculty: Faculty of | of Science | | | | |
| Course ID: ÚINF/ SVK1/15 | Course na | me: Student sci | entific conferenc | e | |
| Course type, scop Course type: Recommended c Per week: Per s Course method: | ourse-load (ho tudy period: | | | | |
| Number of credit | | | | | |
| Recommended se | mester/trimest | ter of the cours | e: 6. | | |
| Course level: I., II | [| | | | |
| Prerequisities: | | | | | |
| Conditions for co | urse completio | on: | | | |
| Learning outcom | es: | | | | |
| Brief outline of th | e course: | | | | |
| Recommended lit | erature: | | | | |
| Course language: | | | | | |
| Notes: | | | | | |
| Course assessmen Total number of a | | s: 116 | | | |
| A | В | С | D | Е | FX |
| 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Provides: | | | 1 | 1 | |
| Date of last modif | fication: 03.05. | 2015 | | | |
| Approved: prof. R | NDr. Viliam G | effert, DrSc. | | | |

| University: P. J. Šafá | rik University in Košice | | | |
|---|--|----|--|--|
| Faculty: Faculty of S | Science | | | |
| Course ID: ÚTVŠ/ LKSp//13 | Course name: Summer Course-Rafting of TISA River | | | |
| Course type, scope a Course type: Practi Recommended cou Per week: 36 Per st Course method: pro | ce rse-load (hours): tudy period: 504 | | | |
| Number of credits: 2 | 2 | | | |
| Recommended seme | ester/trimester of the cours | e: | | |
| Course level: I., II. | | | | |
| Prerequisities: | | | | |
| Conditions for cours | se completion: | | | |
| Learning outcomes: | | | | |
| Brief outline of the o | course: | | | |
| Recommended litera | ature: | | | |
| Course language: | | | | |
| Notes: | | | | |
| Course assessment Total number of asse | ssed students: 92 | | | |
| | abs n | | | |
| 35.87 64.13 | | | | |
| Provides: Mgr. Peter | Bakalár, PhD. | | | |
| Date of last modific: | ation: 03.05.2015 | | | |
| Approved: prof. RN | Dr. Viliam Geffert, DrSc. | | | |

| University: P. J. Šafá | nrik University in Košice | | | |
|--|---|-----------|--|--|
| Faculty: Faculty of S | Science | | | |
| Course ID: ÚTVŠ/ KP/12 | Course name: Survival Co | purse | | |
| Course type, scope a Course type: Practi Recommended cou Per week: 36 Per st Course method: pr | ce rse-load (hours): tudy period: 504 | | | |
| Number of credits: 2 | 2 | | | |
| Recommended seme | ester/trimester of the cours | e: | | |
| Course level: I., II. | | | | |
| Prerequisities: | | | | |
| Conditions for cour | se completion: | | | |
| Learning outcomes: | | | | |
| Brief outline of the o | course: | | | |
| Recommended liter | ature: | | | |
| Course language: | | | | |
| Notes: | | | | |
| Course assessment Total number of asse | essed students: 251 | | | |
| | abs n | | | |
| 43.82 56.18 | | | | |
| Provides: Mgr. Mare | k Valanský, MUDr. Peter D | ombrovský | | |
| Date of last modific: | ation: 03.05.2015 | | | |
| Approved: prof. RN | Dr. Viliam Geffert, DrSc. | | | |

| University: P. J. S | Šafárik Univers | ity in Košice | | | | |
|--|---|---|--------------|------|------|--|
| Faculty: Faculty | of Science | | | | | |
| Course ID: KPPaPZ/UPR/03 | Course na | Course name: The Art of Aiding by Verbal Exchange | | | | |
| Course type, sco Course type: Pr Recommended Per week: 2 Per Course method | actice course-load (h · study period: | ours): | | | | |
| Number of credi | ts: 2 | | | | | |
| Recommended se | emester/trimes | ter of the cours | e: 4. | | | |
| Course level: II. | | | | | | |
| Prerequisities: | | | | | | |
| Conditions for co | ourse completi | on: | | | | |
| Learning outcom | nes: | | | | | |
| Brief outline of t | he course: | | | | | |
| Recommended li | terature: | | | | | |
| Course language | • | | | | | |
| Notes: | | | | | | |
| Course assessme Total number of a | - | ts: 49 | | | | |
| A | В | С | D | Е | FX | |
| 85.71 | 4.08 | 2.04 | 2.04 | 2.04 | 4.08 | |
| Provides: Mgr. O | ndrej Kalina, P | hD. | | | | |
| Date of last mod | ification: 03.05 | .2015 | | | | |
| Approved: prof. | RNDr. Viliam (| Geffert, DrSc. | | | | |

| University: P. J. Šafá | rik University in Košice | | | | |
|---|---|------|--|--|--|
| Faculty: Faculty of Science | | | | | |
| Course ID: ÚTVŠ/ ZKLS//13 | Course name: Winter Ski Training Course | | | | |
| Course type, scope a Course type: Practi Recommended cou Per week: 36 Per st Course method: pro | ce rse-load (hours): tudy period: 504 | | | | |
| Number of credits: 2 | 2 | | | | |
| Recommended semester/trimester of the course: | | | | | |
| Course level: I., II. | | | | | |
| Prerequisities: | | | | | |
| Conditions for cours | se completion: | | | | |
| Learning outcomes: | | | | | |
| Brief outline of the o | course: | | | | |
| Recommended litera | ature: | | | | |
| Course language: | | | | | |
| Notes: | | | | | |
| Course assessment Total number of asse | ssed students: 81 | | | | |
| | abs | n | | | |
| | 32.1 | 67.9 | | | |
| Provides: PaedDr. Imrich Staško, doc. PhDr. Ivan Šulc, CSc. | | | | | |
| Date of last modifica | ation: 03.05.2015 | | | | |
| Approved: prof. RNDr. Viliam Geffert, DrSc. | | | | | |

| University: P. J. Šat | fárik University in Košice | | | | |
|---|---|------|--|--|--|
| Faculty: Faculty of Science | | | | | |
| Course ID: D PrávF/ZP2/11 | Course name: Základy práva pre prirodovedcov II | | | | |
| Course type, scope Course type: Lect Recommended co Per week: 2 / 1 Pe Course method: p | ure / Practice urse-load (hours): r study period: 28 / 14 | | | | |
| Number of credits: | 4 | | | | |
| Recommended semester/trimester of the course: | | | | | |
| Course level: II. | | | | | |
| Prerequisities: | | | | | |
| Conditions for cou | rse completion: | | | | |
| Learning outcomes | : | | | | |
| Brief outline of the | course: | | | | |
| Recommended lite | rature: | | | | |
| Course language: | | | | | |
| Notes: | | | | | |
| Course assessment Total number of ass | essed students: 95 | | | | |
| | abs | n | | | |
| | 97.89 | 2.11 | | | |
| Provides: | | | | | |
| Date of last modified | cation: 03.05.2015 | | | | |
| Approved: prof. RNDr. Viliam Geffert, DrSc. | | | | | |