

## COURSE INFORMATION SHEET

**University:** Catholic University in Ružomberok

**Faculty:** Faculty of Education

**Course code:** KIN/In-MD204A/22

**Course title:** Didactics of Informatics 1

**Type and range of planned learning activities and teaching methods:**

**Form of instruction:** Lecture / Seminar

**Recommended study range:**

**hours weekly:** 2 / 2    **hours per semester:** 26 / 26

**Teaching method:** on-site

**Credits:** 4

**Working load:** 100 hours

**Recommended semester/trimester:** 1.

**Level of study:** II.

**Prerequisites:**

**Requirements for passing the course:**

On-going assessment: partial subject activities according to the semester assignment, micro-presentation, report (50%),

Final assessment: submission, presentation and defense of one's own portfolio for the subject (50%).

Subject evaluation:

A – 100%-93%

B – 92%-85%

C – 84%-77%

D – 76%-69%

E – 68%-60%

Fx – 59%- 0%

**Learning outcomes of the course:**

Objective of the course: To introduce students to the didactics of informatics, to familiarize themselves in detail with the content and methods of teaching informatics according to the Innovative State Education Program (ISCED 2, ISCED 3). To present in the form of micro-performances motivational tasks for the teaching of specified thematic areas. Refer to current information on the selected subject topic.

Learning outcomes:

After completing the subject, the student will acquire the following knowledge, skills and competences:

- recognizes the place of informatics in the state educational program,
- can identify individual areas of informatics within ISCED 2 and ISCED 3,
- learns the main principles of teaching and the basic conceptual apparatus of computer science teaching units, which are determined by the state educational program for primary and secondary schools,
- knows computer science textbooks for primary and secondary schools and can use them in preparing lessons,
- knows how to use various activating methods in the teaching of informatics,
- is able to prepare written lesson plans and teach them in exercises.

**Course contents:**

Basic terms from didactics, goals and content of didactics of informatics, tasks of didactics of informatics, relationship of informatics and didactics of informatics to other scientific disciplines. Didactic principles and principles in the subject. Forms, methods and means of teaching. State educational program and school educational program. Objectives of teaching informatics, educational standards. Framework curriculum. Time-thematic plans. Teacher preparation for lessons. Creation of tasks and assessment in the subject of computer science. Methodology of thematic areas of iŠVP for the 2nd grade of elementary schools and for gymnasiums and preparation for the lesson: Representations and tools (work with graphics, work with text, work with presentations, work with multimedia, work with tables, information, structures), Communication and cooperation (working with a website, searching the web, working with tools for communication, presenting information through a website, working with tools for collaboration and information sharing), Software and hardware (working with files and folders, working with an operating system, computer and additional devices, work in a computer network and on the Internet, programs against viruses and espionage), Information Society (security and risks, digital technologies in society, legality of software use). Report. Didactic project.

#### **Recommended or required literature:**

- Petlák, E.: Všeobecná didaktika. Bratislava: IRIS, 1997. ISBN 80-88778-49-2
- Turek, I.: Didaktika. 3.vyd. Wolters Kluwer, 2014.
- Kalhous, O. a kol.: Školní didaktika, Portál 2009, ISBN 978-80-7367-571-4
- Učebnice informatiky pre 2. stupeň základnej školy a gymnáziá
- Jacková, J., Majherová, J.: Didaktika informatiky 1 (DidINF1), študijná elektronická podpora <https://moodle.pf.ku.sk/course/view.php?id=91>
- Sudolská, M. Didaktika informatiky. UMB, Banská Bystrica: 2004.
- Varga, M., Kalaš, I., Tomcsányiová, M.: Didaktika informatiky na ZŠ. Bratislava, 2011. [https://www.statpedu.sk/files/sk/o-organizacii/projekty/projekt-dvui/publikacie/didaktika\\_informatiky\\_na\\_zs.pdf](https://www.statpedu.sk/files/sk/o-organizacii/projekty/projekt-dvui/publikacie/didaktika_informatiky_na_zs.pdf)
- Černák, I., Polčin, D.: Didaktika informatiky 1. Multimedálna učebnica na DVD 2007, Ružomberok: Pedagogická fakulta KU, ISBN: 978- 80-8084-174-4.
- Černák, I., Polčin, D.: Didaktika informatiky 2. Multimedálna učebnica na DVD 2008, Ružomberok: Pedagogická fakulta KU, ISBN 978-80-8084-278-9.
- Guniš, J., Sudolská, M., Šnajder, L.: Aktivizujúce metódy vo výučbe školskej informatiky. Bratislava, 2009. [https://www.statpedu.sk/files/sk/o-organizacii/projekty/projekt-dvui/publikacie/aktivizujuce\\_metody.pdf](https://www.statpedu.sk/files/sk/o-organizacii/projekty/projekt-dvui/publikacie/aktivizujuce_metody.pdf)
- Guniš, J., Šnajder, L.: Tvorba úloh a hodnotenie žiakov v predmete informatika. Bratislava, 2009. [https://www.statpedu.sk/files/sk/o-organizacii/projekty/projekt-dvui/publikacie/tvorba\\_uhol\\_a\\_hodnotenie.pdf](https://www.statpedu.sk/files/sk/o-organizacii/projekty/projekt-dvui/publikacie/tvorba_uhol_a_hodnotenie.pdf)
- Inovovaný Štátny vzdelávací program <https://www.statpedu.sk/sk/svp/inovovany-statny-vzdelavaci-program/>
- Štátny pedagogický ústav. Metodická príručka Zavádzanie inovovaných štátnych vzdelávacích programov pre vzdelávaci oblast' Matematika a práca s informáciami v základnej škole [online]. Bratislava : Štátny pedagogický ústav, september 2015. [http://www.statpedu.sk/files/sk/metodicky-portal/metodicke-podnety/matematika\\_a\\_praca\\_s\\_informaciami.pdf](http://www.statpedu.sk/files/sk/metodicky-portal/metodicke-podnety/matematika_a_praca_s_informaciami.pdf)
- Tkáčová, Z., Hanesz, A., Tomcsányiová, M., Tomcsányi, P., Trajtel, L., Jacková, J. Lovászová, G., Cápay, M., Michaličková, V. Zbierka inovatívnych metodík z Informatiky pre 2. stupeň základných škôl a stredné školy Bratislava: Centrum vedecko-technických informácií SR, 2020. ISBN 978-80-89965-60-1. <https://vzdelavanie.itakademia.sk/vystupy/zim-inf-zs-ss.pdf>
- ECDL. Odporučané študijné materiály. <https://www.ecdl.sk/odporucane-studijne-materialy>
- Zborníky konferencie DidInfo <http://didinfo.net/predchozi-rocniky>

**Language of instruction:**

Slovak

**Notes:**

**Course evaluation:**

Assessed students in total: 3

A	B	C	D	E	FX
33.33	0.0	33.33	0.0	0.0	33.33

**Name of lecturer(s):** Ing. Jana Jacková, PhD.

**Last modification:** 06.12.2022

**Supervisor(s):**

People responsible for the delivery, development and quality of the study programme:

prof. PhDr. Ingrid Emmerová, PhD., PhDr. ThLic. Martin Taraj, PhD., doc. Ing. Igor Černák, PhD.