Study program: Special education and rehabilitation

Type and level of studies: Doctoral Academic Studies

Title of the subject: Application of assistive technology in rehabilitation of persons with intellectual disability

Lecturer: Milanović-Dobrota, Z., Biljana; Maćešić-Petrović, S., Dragana

Course status: Elective course

ECTS: 20

Prerequisites: No prerequisites

Aim: Aim of the course is to introduce doctoral students with assistive technology which can be used in the rehabilitation of persons with intellectual disability (ID)

Outcomes: Mastering the curriculum, students are familiar with assistive technology that can be used by persons with ID in education, independently performing daily activities and work tasks.

Contents:

Lectures

Assistive technology (definition, goal, equipment); Planning and implementation of assistive technology; Assistive Technology Services; Quality indicators for selection of assistive technology; Consideration/selection of assistive technology; Assistive Technology outcomes; Assistive technology for persons with ID; Learning to read using computer technology; Audio-books for students with ID; Adoption of contents and generalization of concepts at students with ID using computer instructions; Internet access for children with ID; Self management of assistive technologies to students with ID to start and perform daily tasks; Opportunities for persons with ID to use computer interface; Problems of persons with ID to handle virtual environment device: systematic evaluation; Application of assistive technology in workplace accommodation for persons with ID.

Practical exercises – Study research work

Practical application of lectures contents in designing model application of assistive technology.

Literature:

1. Alper, S., & Raharinirina, S. (2006): Assistive Technology for Individuals with Disabilities: A Review and Synthesis of the Literature. Journal of Special Education Technology, 21(2), 47-64.
2. Mechling, L.C. (2007): Assistive technology as a self-management tool for prompting students with intellectual disabilities to initiate and complete daily tasks: a literature review. Education and Training in Developmental Disabilities, 2007, 42(3), 252–269.
3. Wong, A.W.K., Chan, C.C.H., Li-Tsang, C.W.P., & Lam, C.S. (2009): Competence of people with intellectual disabilities on using human–computer interface. Research in Developmental Disabilities 30 (2009) 107–123.
4. Radić Šestić, M., Milanović Dobrota, B., Radovanović, V., Karić, J. (2012). Application of assistive technology in rehabilitation of persons with cognitive disabilities. HealthMED Journal, 6, 11, 3826- 3834.
5. Radić Šestić, M., Milanović Dobrota, B. (2012). Primena asistivne tehnologije u inkluzivnom obrazovanju osoba sa intelektualnom ometenošću i oštećenjem sluha. U M. Gligorović i S. Kaljača (Ur.) *Kognitivne i adaptivne sposobnosti dece sa lakom intelektualnom ometenošću,* 195-204. Beograd: Univerzitet u Beogradu - Fakultet za specijalnu edukaciju i rehabilitaciju ISBN 978-86-6203-027-6
6. Chadwick, D.D., Wesson, C. & Fullwood, C. (2013). Internet access by people with intellectual disabilities: Inequalities and opportunities, *Future Internet*, 5, 376-397. doi:10.3390/fi5030376
7. Nicholas, D.B., Attridge, M. & Zwaigenbaum, L. (2015). Vocational support approaches in autism spectrum disorder: a synthesis review of the literature. *Autism* 19: 235–245.
8. Raja, D. S. (2016). *Bridging the Disability Divide Through Digital Technologies*. World Bank Group.
9. Maćešić-Petrović, D ., Kovačević, J., Japundža-Milisavljević, M. (2010). Computer Treatment, Cognition And Behavior Vs. Intellectual Disability. *International Computer And Instructional Technologies Symposium Proceedings*, ISBN: 978-605-61434-2-7, Konya.PP.739-742.
10. Maćešić-Petrović, D ., Kovačević, J., Đurić-Zdravković, A., Japundža-Milisavljević, M. (2010). The Role Of Computers In The Treatmant Of The Children With Intellectual Disability. *International Computer And Instructional Technologies Symposium Proceedings*, ISBN: 978-605-61434-2-7, Konya. pp. 743-746.
11. Aleksandra Đurić-Zdravković, Dragana Maćešić-Petrović, Mirjana Japundža-Milisavljević. (2010). Računar u edukaciji dece sa intelektualnom ometenošću. *Beogradska defektološka škola*. Vol.*16 (3),* Br.48. Beograd: DDS, FASPER 531-541. ISSN 0354-8759
12. Maćešić-Petrović, D., Đurić-Zdravković, A. (2009): Računari i deca sa smetnjama intelektualnog razvoja, *Beogradska defektološka škola*, 1, 173-178., ISSN 0354-8759,
13.Maćešić-Petrović, D., Japundža-Milisavljević, M. (2010). Računar u edukaciji dece sa intelektualnom ometenošću. *Beogradska defektološka škola*. Vol.*16 (3),* Br.48, 531-541. ISSN 0354-8759

14. Maćešić-Petrović D., Japundža-Milisavljević M. (2008): Modeli pristupne tehnologije i mogućnosti inkluzije intelektualno ometene dece, U susret inkluziji – dileme u teoriji i praksi, FASPER i CIDD, Beograd, 243-251. ISNN 978-86-80113-71-5			
Number of active classes per week			
Lectures: 4	**Research work**: 10		
Teaching methods: Lectures, practical exercises, interactive teaching, group discussion			
Evaluation of knowledge (maximum score 100)			
Pre obligations	**Points**	**Final exam**	**Points**
Research project	20	Written exam	
Seminars	25	Oral exam	55