Study program: Special education and rehabilitation – Module of visual impairments

Type and level of studies: Master academic studies

**Title of the subject:** Orthoptics

Lecturer: Miroslav R. Stamenkovic

Course status: Elective for the Module of visual impairments

**ECTS:** 6

**Prerequisites:** There are no prerequisites

# Aim:

Acquiring knowledge about new trends in orthotics and its place in the treatment of ophthalmic patients.

### **Outcomes:**

Mastering the techniques of modern orthopedic treatment in ophthalmology.

#### **Content**

#### Lectures:

The history and place of orthoptics in the treatment of ophthalmic patients. Contemporary orthoptics. Anatomy and physiology of the visual system. Neuroanatomy. Pharmacology. Physiological and visual optics. Diagnostic procedures. Oculomotor diseases and their treatment. Ocular manifestations of systemic diseases. Modern treatment of eye disease. Fundamentals of technology and techniques in ophthalmology. Low vision. Amblyopia screening. Research in orthoptics.

### Practical work:

Techniques of modern treatment of convergence and accommodation insufficiency. Treatment of symptomatic heterophoria. Anti-suppression training. Amblyopia screening in practice.

# Literature

- 1. Matta, N. S., Silbert, D. I. (2012). Vision screening across the world. *American Orthoptic Journal*, 62(1), 87-89.
- 2. Morale, S. E., Hughbanks-Wheaton, D. K., Cheng, C., Subramanian, V., O'Connor, A. R., Birch, E. E. (2012). Visual acuity assessment of children with special needs. *American Orthoptic Journal*, 62(1), 90-98.
- 3. McIntyre, A. et al. (1999). *Spasm of the Near Reflex: Analysis of the Clinical Characteristics*. Trans. 25<sup>th</sup> ESA Meeting 1999 Ed. Micheline Spiritus. P55-60.
- 4. Beardsell, R., Clarke, S., Hill, M. (1999). Outcome of occlusion treatment for amblyopia. *Journal of Pediatric Ophthalmology and Strabismus*, 36(1), 19-24.
- 5. Cornell E, Predebon J, Vu YP: The effect of orthoptic treatment on the proximal component of the near response. In: Pritchard C. (ed.): Orthoptics in Focus: Transactions of the IX International Orthoptic Congress. Stockholm: 1999. pp. 123-126.
- Fujita, J., Aoki, S., Shimizu, K. (2000). Orthoptist in Low Vision Clinic. *Japanese Orthoptic Journal*, 28, 239-243.
- 7. Tanabe, T., Kangi, H., Nukina, K., Oh, A. (1997). Near Vision Optical Aids for Low Vision Patients. *Japanese Orthoptic Journal*, 25, 119-126.

Number of active classes per week:	Lecture: 2	Practical work: 2
Teaching methods:		

Lectures, exercises, seminars, consultations, practice, presentations.

Evaluation of knowledge (maximum score 100)			
Pre obligations	Score	Final exam	Score
activities during the lectures	10	written exam	/
practical teaching	10	oral exam	50
midterm(s)	15		
seminars	15		