Information sheet for the course
Vaccinology

University: *Alexander Dubček University of Trenčín*	
Faculty : *Faculty of Health Care*	
Course unit code: Vakc/e	**Course unit title:** Vaccinology
Planned types, learning activities and teaching methods: *Lecture:2 hours weekly/26 hours per semester of study; full-time*	
Number of credits: 2	
Recommended semester: *6th semester in the 3rd year (part-time)*	
Degree of study: *I (bachelor)*	
Course prerequisites: none	
Assessment methods: The student will acquire 100 points per semester – essay on the topic of vaccinology (25 points) – oral examination (75 points) To obtain the assessment A must be obtained at least 90 points, to get assessment B at least 80 points, for the assessment C at least 70 points , for the assessment D at least 60 points , for the assessment E at least 50 points.	
Learning outcomes of the course unit: By studying the object a student acquires a basic knowledge of the principles of creating specific immunity naturally and by vaccination, of the composition of the vaccines, of their application. The student can distinguish between true and false contraindications and divide side effects. He/she can describe immunization programs in developed countries and compare them with national immunization programs of SR. He/she can identify the type of vaccination in children and adults, indications for vaccination as well as trends of development and research in vaccinology. He/she can formulate a vaccination program for a child or an adult of all ages, when traveling abroad or due to occupational exposure.	
Course contents: 1. Vaccination and its effect on the incidence of infectious diseases, vaccination history, the importance of individual and collective immunity after vaccination. 2. The immune system and its components, naturally and artificially acquired specific immunity. 3. The immune response to vaccination and its types, basic vaccination, booster, modifications of vaccination schedules. 4. The vaccine composition (active and inactive ingredients), the types and the kinds of vaccines. 5. Application of vaccines, transport and storage of vaccines. 6. Indications and contraindications of vaccination, adverse reactions after vaccination. 7. Vaccination in national immunization programs, national immunization program of SR, history and presence, legislative regulations of vaccination in Slovakia. 8. Vaccination of specific groups (health and professional and indications of vaccination). 9. Vaccination when traveling abroad. 10. Preventable diseases within mandatory vaccination. 11. Ppreventable diseases within the recommended vaccination. 12. Monitoring of specific immunity of an individual and a collective (immunogenicity of vaccines, monitoring of individual-specific immunity, immunological surveys).	

13. The future of vaccination (new methods of delivering vaccines, research and development of vaccines, new adjuvants, therapeutic vaccines, DNA vaccines, protein vaccines, vaccines based on recombinant viruses and bacteria).

Recommended of required reading:

1. NOVÁKOVÁ E., OLEÁR V., KLEMENT C. 2007. *Lekárska Vakcinológia* nielen pre *medikov. PRO Banská Bystrica , 2007. 141s. ISBN 978-80-89057-18-4*
2. BERAN J., HAVLÍK, *J*. a kol. 2008. *Lexikon očkování*. 1. vyd. Praha : Maxdorf, 2008. 352 s. ISBN 978-80-7345-164-6
3. HUDEČKOVÁ H., ŠVIHROVÁ, V. 2013. Očkovanie. Martin: Osveta, 2013. 221 s. ISBN 978-80-80633-96-7
4. JESEŇÁK, M., URBANČÍKOVÁ, I. a kol. 2013. Očkovanie v špeciálnych situáciách. Mladá fronta, 2013. 240 s. *ISBN*: 978-80-204-2805-9.

Language: Slovak

Remarks:

Evaluation history: *Number of evaluated students*

A	B	C	D	E	FX

Lectures:
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Last modification: 22.04.2014

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