UNIVERSITY OF NOVI SAD FACULTY OF MEDICINE



Study program: Integrated Academic Studies in Medicine

Course title: Special Epidemiology of Communicable Diseases

Teacher: Vladimir J. Petrović, Mioljub M. Ristić

Course status: elective

ECTS Credits: 3
Condition:

Course aim

The aim of this course is to provide students with contemporary knowledge about the epidemiology of communicable diseases, to recognize and implement measures of prevention and control of communicable diseases and to be able to apply in practice the knowledge and skills acquired.

Expected outcome of the course:

Students gain theoretical knowledge (Epidemiology of diseases transmitted by food, water, droplets, air, vectors, epidemiology of vaccine preventable diseases and sexually transmitted infections) and practical skills (Application of epidemiological methods in communicable disease epidemiology research and outbreak investigation, analyses of epidemiological surveillance, evaluation of efficacy of prevention and control measures) necessary for further work in medicine in the area of routine work of the physician encompassing epidemiology of communicable diseases.

Course description

Theoretical education - Distance learning

- 1. Epidemiological process (natural history of disease, gradient of infection, iceberg phenomenon, characteristics according placeand time).
- 2. Chain of infection (reservoir and source of infection, place of entry, routes of transmission, dose and virulence of agents, disposition).
- 3. Application of epidemiological methods in communicable disease epidemiology research and outbreak investigation.
- 4. Epidemiology of infectious respiratory diseases (epidemiological indices, risk factors, prevention and control, characteristics).
- 5. Epidemiology of intestinal infectious diseases (epidemiological indices, risk factors, prevention and control, characteristics).
- 6. Epidemiology of sexually transmitted diseases (epidemiological indices, risk factors, prevention and control, characteristics).
- Natural foci, zoonotic diseases and vector diseases (epidemiological indices, risk factors, prevention and control, characteristics).
 Epidemiological surveillance (definitions, significance, goals, classification, elements, evaluation, surveillance in our country).
- 9. International aspects of communicable diseases

Practical education - Distance learning

- Investigation of epidemiology (preparations for field work, epidemics, confirmation of diagnosis, identification of the sick, descriptive-epidemiological analysis, setting and testing a hypothesis, additional testing, fighting epidemics, public announcement)- data bases for detection, step-by-step examination of infectious epidemics, examples.
- 2. Respiratory epidemics characteristics, respiratory diseases, examples, research.
- 3. Contact epidemics characteristics, contact borne diseases, examples, research.
- 4. Water borne epidemics characteristics, diseases, examples, research.
- 5. Food-borne epidemics characteristics, diseases, examples, research.
- 6. Immunization types of vaccines and their use, contraindications, organization of vaccination, documentation, reports of unwanted reactions.
- 7. Immunization systemic immunization, epidemiologic and clinical indications, vaccination of international travellers, vaccination schedule, examples.

Literature

Compulsory

- 1. Nelson KE, Williams CM, Graham NMH. Infectious disease epidemiology. Gaithersburg: Aspen publishers; 2001.
- 2. Chin J. Control of communicable disease manual. 17th edition, Washington: American Public Association, 2000.
- 3. Heymann DL. Control of Communicable Diseases Manual, 20th Edition. APHA Press. 2014.

Additional

1. Benenson AS. Control of Communicable Diseases Manual, 16th Edition. American Public Health Association. 1995.

Number of active classes Theoretical classes: 15 Practical classes: 30

Teaching methods

Students will choose the way on how to attend the classes immediately upon the selection of this subject for their personal curriculum. They will choose between ex-cathedra teaching (with overall number of 30 classes for theoretical lectures and 15 for practical sessions or distance learning through electronic system installed and accessed on web site of Medical Faculty (total 45 classes)

Registration for distance learning will be required through web/site of Medical Faculty of Novi Sad. Each student will use his/her name and surname in the form *name.surname* as a *username* and *password* will be student's index number. After the registration student will be able to access the system and start the education followed by exam through testing (quiz).

Students will have the possibility to access especially prepared presentations through the web site of the Medical Faculty. They will beable to look into presentations and learn from them as long as they need to and minimum time needed to adopt the knowledge will be 45 hours. Each of the communicable diseases will have special presentation(s) that will encompass its epidemiology. We will create at least one question from each of the slides in the presentation, with two or more answers offered where only one will be correct. That ishow we will form a bank of questions. Quiz with minimum 20 questions will be randomly created for each of the topics covered, and one question could appear only once within the quiz.

System will inform the student whether the answer given was correct. It will take 60% of correct answers to pass each quiz. Upon quiz passed student will receive certificate through his e-mail address that he has to report at the beginning, during registration process. Educational materials will be accessible during the semester.

All quizzes passed through distance learning or signatures from lectures and sessions collected during ex cathedra lectures will be preconditions for final exam.

Student activity assessment (maximally 100 points)			
Pre-exam activities	points	Final exam	points
Lectures	(30)	Written	55
Practices	(15)	Oral	
Distance learning	45		
Essay			