Department of general and clinical epidemiology and biosafety with a course in microbiology and virology

Syllabus of the academic discipline ''EPIDEMIOLOGY''

Scope of the	Total number of hours per discipline: 30 hours,
academic	1 credit.
discipline	
Semester, year of	Semesters:III, IV semester
study	(2nd year of study)
Days, time, place	Days and time - according to the schedule of classes
Days, time, place	Department of general and clinical epidemiology and biosafety
	from the course of microbiology and virology,
	St. Primorsky Boulevard, 13
Teachers	
reachers	Golubyatnikov M. I., doctor of medicine, professor, head of
	the department Drofoggers/Deptor of Medicing Dephyselve O.V. Deptor of
	Professors:Doctor of Medicine Bachynska O.V., Doctor of
	Medicine. A. I. Savchuk, Doctor of Medicine. K.O. Talalaev,
	Doctor of Medicine. Haydey V.R.
	Associate professors: Servetskyi S.K., Fedorenko T.V.
	Assistants: T.V. Gerasimenko, G.M. Jurtubaeva, O.A. Melnyk,
	K.S. Hrytsenko, L.V. Kostolonova, M.O. Makarenko.
Contact	Help by phone:
information	Melnyk O.A., head of the department; phone number -
	0965920621, responsible for organizational and educational
	work of the department.
	Gavrushko T.G., laboratory assistant of the department; phone number - 0681241260
	olha.melnyk@onmedu.edu.ua
	Face-to-face consultations: from 14.00 to 17.00 every
	Thursday,
	from 9:00 a.m. to 2:00 p.m. every Saturday
	Online consultations: from 4:00 p.m. to 6:00 p.m. every
	Thursday, from 9:00 a.m. to 2:00 p.m. every Saturday. A link
	to online counseling is provided to each group during classes
	separately.
	separatory.

COMMUNICATION

The class is held at the department, according to the schedule. Communication with applicants will take place in the classroom (face-to-face). During distance

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learning, communication develops through the Microsoft Teams platform, as well as through e-mail correspondence, Viber messengers (through groups created in Viber for each group, separately through the old group).

ABSTRACT OF THE ACADEMIC DISCIPLINE

subjectstudy of an academic discipline are: the epidemic process of infectious diseases, which is implemented through various mechanisms and ways of transmission, as well as the epidemic process of somatic diseases, which is implemented due to the influence of genetic, dangerous: chemical, physical or biological factors unfolded over time in the universal life of an individual person, the intensity of the influence of which depends on environmental conditions and social and hygienic skills.;

The purpose of teaching of the educational discipline "Epidemic Discipline" is the study of the causes and mechanisms of the emergence and infection of infectious diseases, methods of their prevention and the organization of anti-epidemic measures.

Tasks of the discipline:

1. Formation of skills and abilities: organization and implementation of anti-epidemic measures in centers of infectious diseases.

2. Improving the skills of effective identification of the sources of the pathogen and the leading ways of its transmission, the conditions for the development of the epidemic process and its forecasting.

3. Mastering the ability to interpret the manifestations of the epidemic process of specific nosological forms belonging to various group infectious diseases (respiratory, intestinal, transmissible and external coverings) in separate territories.

4. Mastering the ability to formulate working hypotheses regarding the risk of disease factors in individual territories, among different population groups and in collectives regarding specific infectious diseases.

5. To be able to use the techniques of the epidemiological research method in practice. *Expected learning outcomes*.

As a result of studying the academic discipline, the applicant must:

Know: - principles of evidence-based medicine and using them in practice.

- a manifestation of the epidemic process

- the procedure for carrying out activities related to the detection, examination, monitoring, localization and elimination of an epidemic center;

- the procedure for carrying out anti-epidemic work of a family doctor and an infectious disease doctor;

Be able:

- to organize and carry out anti-epidemic measures in centers of infectious diseases.

- to organize and carry out anti-epidemic measures in centers of infection related to the provision of medical care.

- to interpret the results of using the epidemiological research method in practice.

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- interpret the epidemiological, social and economic significance of individual nosological forms.

- fill out a document on registration and accounting of infectious patients.

- changes and interpret the epidemiological manifestations of the incidence of infections belonging to different groups (respiratory, intestinal, transmissible, and infections of external covers).

- use regulatory and instructional documentation of the Ministry of Health of Ukraine and international standards to eliminate foci of specific nosological forms belonging to various group infectious diseases (respiratory, intestinal, transmissible and external integuments, ONI).

- to interpret the regularities and features of the course of the epidemic process in infectious diseases that require special tactics.

Master the skills:

- formulation of working hypotheses regarding the risk factors of morbidity in individual territories, among different population groups and in collectives regarding specific infectious diseases.

- definition of priority problems of preventive infectious diseases by groups and nosological forms.

DESCRIPTION OF THE ACADEMIC DISCIPLINE

Forms and methods of education

The discipline will be taught in most practical (14 classroom hours) and lecture (6 years) classes; organizing the applicant's independent work (10 hours).

Teaching methods: conversation, role-playing games, solving clinical situational tasks, practicing the skills of developing anti-epidemic measures in the outbreak of an infectious disease, practicing the skills of working with medical documentation (357/o, 058/o), regulatory documents, preventive work, epidemiological investigation of infectious diseases in organized teams.

Content of the academic discipline

Topic 1.Basic epidemiological concepts. Reservoirs and sources of pathogens of infectious diseases. Mechanisms, factors and ways of transmission of pathogens of infectious diseases.

Topic 2. Disinfection and sterilization. Peculiarities of carrying out preventive and anti-epidemic measures in medical and preventive dental institutions.

Topic 3.Organization and implementation of immunoprophylaxis. Preparations for creating active and passive immunity. Vaccination plans and according to epidemic indications.

Topic 4. Anti-epidemic measures in foci of infection with an aerogenic transmission mechanism (diphtheria, measles, influenza).

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Topic 5. Anti-epidemic measures in foci of infection with a fecal-oral transmission mechanism (shigellosis, hepatitis A).

Topic 6. Anti-epidemic measures in blood cells (malaria, hepatitis B and C, HIV infection). Nosocomial infections and their prevention

*Topic*7. Epidemic process and prevention of tuberculosis.

Topic8. Prevention of occupational infectious injuries in the work of a dentist

Topic 9. Biostatistics as a component of evidence-based medicine.

Topic 10. Statistical research in the health care system.

Topic 11. Clinical epidemiology.

Topic 12. Epidemiological studies.

Topic 13. Design of epidemiological studies.

List of recommended literature:

Main:

1. Andreychyn M., Kopcha V. Bioterrorism: Medical countermeasures. – Ternopil: Ukrmedknyga, 2015. – 300 p.

2. Vinohrad N. O. General epidemiology: teaching. manual / N. O. Vinohrad, Z. p. Vasylyshyn, L. p. Kozak. - K.: VSV "Medicine", 2017. - 200 p.

3. Vinohrad N. O. Special epidemiology: teaching. manual / N. O. Vinohrad, Z. p. Vasylyshyn, L. p. Kozak. - K.: VSV "Medicine", 2018. - 367 p

4. Vinohrad, N. O. Military epidemiology: study guide / N.V. O. Vinohrad, Z. Mr. Vasylyshyn, L. Mr. Kozak. - Kyiv: Medicine, 2018. - 184 p.

5. Epidemiology in schemes: a study guide /M. d. Chemych, N. G. Malysh, O. M. Chemych, N. I. Ilyina. – Vinnytsia: Nova Kniga, 2020. – 256 p.

6. Epidemiology: anti-epidemic measures: study guide / M. d. Chemych, N. G. Malysh, N. I. Ilyina [and others]. – Vinnytsia: Nova Kniga, 2020. – 288 p.

7. Kiselyov S. M. Basic principles of evidence-based medicine: teaching. manual / S. M. Kiselov. Zaporizhzhia: ZDMU. 2018. 117 p.

8. Tick-borne infections: modern clinical and epidemiological, diagnostic and therapeutic aspects / O.K. Duda, G.V. Batsyura, V.O. Boyko, L.F. Matyukha, L.P. Kotsyubailo// Educational and methodological manual. - Kyiv, "Master Books" publishing house. - 2019. - 117 p.

9. Fundamentals of Ukrainian legislation on health care: Law of Ukraine No. 2801-XII in ed. from 07/24/2020 URL:<u>https://zakon.rada.gov.ua/laws/show/2801-12#</u> Text

10. Polymerase chain reaction in laboratory diagnostics of infectious diseases. Educational and methodological manual for doctors / edited by I.V. Dzyublyk, N.G. Horovenko. - K.-2015.-219 p.

11. On ensuring sanitary and epidemic welfare of the population: Law of UkraineNo. 4005-XII in Ed. from10/16/2020 URL:https://zakon.rada.gov.ua/laws/show/4004-12# Text

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Additional:

1. Epidemiology: a textbook for students. higher med. education institutions / A. M. Andreychyn, Z. p. Vasylishyn, N. O. Vinohrad; under the editorship I. p. Kolesnikova. Vinnytsia: Nova Kniga, 2012. 576 p.: illustrations.

2. Order of the Ministry of Health of Ukraine No. 595 "On the procedure for conducting prophylactic vaccinations in Ukraine and quality control and maintenance of medical immunobiological preparations" dated September 16, 2011.

3. Provision of first aid in emergency situations in the city: educational method. manual K., 2016. 56 p.

4. Measures of anti-epidemic protection in the Armed Forces, and their research in military epidemiology: training. Manual, 2015. 212 p.

5. Current issues of epidemiology and prevention of some infections in the armed forces, among the population of Ukraine and in the world. K. 2015. 372 p.

6. Selected issues of prevention of emergencies caused by epidemics in the Armed Forces of Ukraine. K. 2015. 344 p.

7. Evolutionary aspects of the epidemic process in the armed forces of Ukraine. K., 2015. 312 p.

8. Atlas of infectious diseases / [M.A. Andreychyn, V.S. Kopcha, S.O.Kramaryov, etc.]; under the editorship MA. Andreychyna - 2nd ed., Ex. and added – Ternopil: Handbooks and manuals, 2017. – 288 p

9. Vinohrad N. O. Terminological dictionary: Biological safety. Epidemiology. Parasitology: education. manual/N. O. Vinohrad. - Vinnytsia: "New Book", 2019. - 308 p.

10. Infectious diseases / A. O. Golubovsky [and others]; under the editorship O. A. Golubovska. 2nd ed., revised and supplemented - K.: VSV "Medicine", 2018. - 688 p.

11. Infectious diseases: Textbook / Nikitin E.V., Andreychyn M.A., Servetskyi K.L., Kachor V.O., Golovchenko A.M., Usychenko E.M.; Edited by: E.V. Nikitina, M.A. Andreychyna – Ternopil: Ukrmedknyga, 2014. 364 p.

EVALUATION

Forms and methods of current control: oral (survey), practical (solving clinical situational problems, practicing the skills of developing anti-epidemic measures in the outbreak of an infectious disease, practicing the skills of working with medical documentation (357/o, 058/o), regulatory documents, preventive work, epidemiological investigation of infectious disease lesions in organized teams).

- 1. Evaluation of theoretical knowledge on the subject of the lesson:
 - methods: survey, solving a situational clinical problem;
 - the maximum score is 5, the minimum score is 3, the unsatisfactory score is 2.
- 2. Evaluation of practical skills and manipulations on the subject of the lesson:

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- methods: assessment of the correctness of the performance of practical skills
- maximum score -5, minimum score -3, unsatisfactory score -2;
- 3. Evaluation of the work on the ability to conduct an epidemiological investigation, collect an epidemiological history, prescribe anti-epidemic measures for infectious diseases with external transmission mechanisms, with multiple transmission mechanisms, in patients with infectious diseases of international importance, according to the topic of the lesson:
 - methods: assessment of: a) communication skills of communication with the patient, b) the correctness of the appointment and assessment of laboratory tests to confirm the diagnosis of an infectious disease, in support of the algorithm for carrying out anti-epidemic measures aimed at separate links of the epidemic process,) substantiation of anti-epidemic and preventive measures of spread. infectious disease in the cell, e) drawing up a plan for anti-epidemic work; forecasting the epidemic process in this area
 - maximum score -5, minimum score -3, unsatisfactory score -2;

The grade for one seminar session is the arithmetic average of all components and can only have a whole value (5, 4, 3, 2), which is rounded according to the statistical method.

Rating	Evaluation criteria
perfectly "5"	The acquirer freely uses the material, supports active participation in the discussion and solution of the situational clinical problem, confidently demonstrates practical skills during the collection of epidemiological history, planning of anti-epidemic measures in outbreaks of infectious diseases with various transmission mechanisms, planning of preventive measures, forecasting the epidemic situation and interpreting the results of clinical, laboratory and instrumental research in a specific patient, to confirm the preliminary diagnosis of an infectious disease, expresses his opinion on the topic of the lesson, demonstrates epidemiological thinking.
Fine "4"	The acquirer of good material by material, thanks to participation in the discussion and solution of the situational clinical problem, demonstrates practical skills during the collection of epidemiological anamnesis, planning anti-epidemic measures in outbreaks of infectious diseases with systemic transmission mechanisms, planning preventive measures, forecasting the epidemic situation and interpreting the results of clinical, laboratory and instrumental research in a specific patient, to confirm the

Current evaluation criteria for practical employment:

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	preliminary diagnosis of an infectious disease with some errors, expresses his opinion on the topic of the lesson, demonstrates epidemiological thinking.
Satisfactorily "3"	The acquirer does not have sufficient knowledge of the material, is unsure of developing participation in discussing and solving a situational clinical problem, demonstrates practical skills when collecting epidemiological history, planning anti-epidemic measures in foci of infectious diseases with various mechanisms of transmission, planning preventive measures, forecasting an epidemic situation and interpreting the results of clinical and laboratory and instrumental research in a specific patient, to confirm the preliminary diagnosis of an infectious disease with significant errors, expresses his opinion on the subject of the lesson, demonstrates epidemiological thinking.
Unsatisfactorily "2"	The acquirer does not possess the material, does not require participation in the discussion and solution of the situational clinical problem, does not demonstrate practical skills during the collection of epidemiological anamnesis, planning anti-epidemic measures in foci of infectious diseases with various transmission mechanisms, planning preventive measures, forecasting the epidemic situation and interpreting the results of clinical, laboratory and instrumental research in a specific patient to confirm the diagnosis of an infectious disease.

Forms and methods of final control: Credit is given to the applicant who completes all the tasks of the work program of the academic discipline, takes an active part in practical classes, performs and defends an individual task, has an average current grade of at least 3.0 and has no academic employment. Assessment is made at the last lesson.

The possibility and conditions of obtaining additional (bonus) points: not provided.

INDEPENDENT WORK OF STUDENTS OF HIGHER EDUCATION Independent work of preparation for each practical lesson.

POLICY OF EDUCATIONAL DISCIPLINE

Policy on delays and rescheduling:

• Absences of classes for unimportant reasons are made up according to the

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schedule of the teacher on duty.

• Absences for valid reasons are worked out according to an individual schedule with the permission of the dean's office.

Academic Integrity Policy:

Applicants must observe academic integrity, namely:

- independent performance of all types of work, tasks, forms of control provided for by the work program of this educational discipline;
- references to sources of information in case of use of ideas, developments, statements, information;
- compliance with the legislation on copyright and related rights;
- provision of reliable information about the results of one's own educational (scientific) activity, used research methods and sources of information.

Unacceptable in educational activities for participants of the educational process are:

- the use of family or official ties to obtain a positive or higher grade during any form of control of academic performance or academic merit;
- use of prohibited auxiliary materials or technical means (cheat sheets, notes, micro-earphones, telephones, smartphones, tablets, etc.) during control measures;
- passing the procedure of control of training results by false persons.

For violation of academic integrity, students may be held to the following academic responsibility:

- decrease in the results of assessment of control work, evaluations on employment, credits, etc.;
- retaking the assessment (test, credit, etc.);
- additional control measures (additional individual tasks, control papers, tests, etc.);
- conducting an additional inspection of other works authored by the violator.

Attendance and Tardiness Policy:

Uniform: a medical gown that completely covers the outer clothing, or medical pajamas, a cap, a mask, and a change of shoes.

Equipment: notebook, pen, phonendoscope.

State of health: those with acute infectious diseases, including respiratory diseases, are not allowed to attend classes.

A student who is late for class can attend it, but if the teacher has put "nb" in the journal, he must complete it in the general order.

Use of mobile devices:

Mobile devices may be used by students with the permission of the instructor if they are needed for the assignment.

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Behavior in the audience:

The behavior of applicants and teachers in the classrooms should be working and calm, strictly complying with the established rules.Regulations on academic integrity and ethics of academic relations at Odesa National Medical University., in accordance withCode of Academic Ethics and University Community Relations of Odessa National Medical University,Regulation on prevention and formation of academic plagiarism in research and educational work of higher education applicants, scientists and teachers of Odesa National Medical University.