MINISTRY OF HEALTH OF UKRAINE

KHARKIV NATIONAL MEDICAL UNIVERSITY

IV medical faculty

Department of Infectious Diseases

**EDUCATIONAL AND PROFESSIONAL PROGRAMME**

**“Medicine”**

**of the second (Master’s) level of higher education**

**in speciality No. 222 “Medicine”**

**in the field of knowledge No. 22 “Health Care”**

SYLLABUS

EDUCATIONAL DISCIPLINE

**INFECTIOUS DISEASES**

Academic year: 2020-2021

|  |  |  |
| --- | --- | --- |
| Approved at a meeting of the Infectious Diseases Department  Protocol No. 19 dated August 28, 2020  Head of the department,  prof. \_\_\_\_\_\_\_\_\_\_\_ K.V. Yurko |  | Approved by the methodical commission of KhNMU on problems of professional training of medical profile  Protocol No. \_\_ dated \_\_\_\_\_\_, 2020  Chairman of the methodical commission,  prof. \_\_\_\_\_\_\_\_\_\_\_ P.G. Kravchun |

**Kharkiv - 2020**

**Educational discipline "Infectious diseases"**

**Developers:**

Head of the department, DSc., prof. Yurko K.V.

PhD, ass. prof. Mohylenets O.I.

**Data about teachers:**

|  |  |
| --- | --- |
| Name, Surname | Kateryna Yurko Professor, DSc  Andriy Bondarenko Professor, DSc  Anton Sokhan Professor, DSc  Grygory Gradil Associate Professor  Dmytro Katsapov Associate Professor  Olena Mohylenets Associate Professor  Yaroslava Burma Assistant Professor  Natalia Antsyferova Assistant Professor  Igor Bodnya Assistant Professor |
| Professional interests, professional development trajectory | See profile of the teachers at the page of the Department of Infectious Diseases on the site of KhNMU  <http://www.knmu.kharkov.ua/index.php?option>  =com\_content&view=article&id=140%3A2011-05-14-18-46-26&catid=7%3A2011-05-05-09-09-08&Itemid=27&lang=uk |
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| Schedule of classes | According to the schedule of the educational office |
| Consultations | According to the schedule of the department (Monday, Tuesday, Wednesday, Thursday, Friday, from 9.00 to 16.00), educational room of the Infectious Diseases Department.  On-line consultations by preliminary agreement with a teacher |

**Information about the discipline**

**1. Description of the discipline**

Year of education: 5th

Semester: IX, X / 2020-2021 academic year

Content of the discipline: 105 hours (3,5 ECTS credits): lectures – 10 hours, practical classes – 90 hours, self-work of the students – 5 hours.

In the general system of medical education, the discipline "Infectious Diseases" occupies an important place taking into account the high prevalence of infectious pathology, the need to form for future doctors clinical thinking, practical skills that provide timely diagnosis of infectious diseases and their complications, rational treatment, choice of optimal tactics in case of emergency care. Particular attention in educational discipline is paid to the issues of early diagnosis, treatment of patients at the prehospital stage, that helps to improve the quality of medical training.

All this determines the relevance of "Infectious Diseases" discipline teaching for specialists of the second (master's) level, field of knowledge 22 - "Health care", specialty - 222 "Medicine".

Syllabus is ordered with the use of modern pedagogical principles of the educational process of higher education organization.

The subject of study of the discipline is the regularities of modern infectious diseases, peculiarities of the organization of medical care for patients with infectious diseases.

Discipline has a page in the Moodle system (http://31.128.79.157:8083/my/).

**2. Purpose and tasks of the academic discipline**

The purpose of the "Infectious Diseases" discipline teaching is to form the ability to apply the acquired knowledge, abilities, practical skills and to find out the patterns of modern course of the pathological process in infectious diseases based on the study of the prevalence of infectious diseases in the world and Ukraine, etiological factors, mechanisms and factors of their transmission, the main lines of pathogenesis, detection of interconnections between clinical features and state of the immune system, complications that aggravate their course, the principles of diagnosis and treatment of this patients category according to evidence-based medicine.

The main tasks of the "Infectious Diseases" discipline studying are:

- mastering the skills of interviewing the patients with infectious pathology;

- acquisition of the ability to determine the necessary list of laboratory and instrumental studies and evaluate their results in infectious diseases;

- acquisition of the ability to establish a preliminary and clinical diagnosis of an infectious disease;

- acquisition of the ability to determine the necessary regimen of work and rest, diet in the treatment of infectious diseases;

- acquisition of the ability to determine the principles and nature of treatment of infectious diseases;

- acquisition of the ability to diagnose emergencies that may occur in patients with infectious pathology;

- acquisition of the ability to determine tactics and skills of providing emergency medical care to infectious patients;

- mastering the skills of performing medical manipulations to patients with infectious pathology;

- acquisition of the ability to plan and carry out sanitary and hygienic, anti-epidemic and preventive measures;

- acquisition of the ability to determine the tactics of management of persons with infectious pathology who need dispensary supervision;

- acquisition of the ability to conduct medical documentation.

**3. Status and format of the discipline**

Educational discipline belongs to compulsory disciplines. Conducted in a resident course format. It has maintenance in Moodle.

**4. Teaching methods**

Among the methods of education in the study of "Infectious diseases" discipline, depending on the stage of training, are used: a method of preparation for the study of new material and the study of new material; its consolidation in the form of issues for self-control; a method of a teacher’s explaining with his direct leadership, where explanation can be used in forms of explain-illustrative, reproductive, partial search, research methods, and independent work, where the teacher's leadership is indirect.

Conducting of lectures involves the use of multimedia presentations, video materials. Conducting of practical classes on defined topics occurs with the involvement of training tools (methodical guidelines, workbook, located in the repository of KhNMU (<http://repo.knmu.edu.ua/handle/123456789/155>), Moodle system).

**5. Recommended literature**

1. **Infectious Diseases:** textbook / O.A. Holubovska, M.A. Andreichyn, A.V. Shkurba et al.; edited by O.A. Holubovska. – Kyiv: AUS Medicine Publishing, 2018. – 664 p.
2. Atlas of Infectious Disease Pathology / ed. B. H. Schmitt. - Cham : Springer, 2017. - X, 255 p. : fig. - (Atlas of Anatomic Pathology / ed. Liang Cheng).
3. Clinical Infectious Disease / ed.: D. Schlossberg. – [2nd Ed.]. – Cambridge University Press, 2015 [pdf 46 MB].
4. Mandell, Douglas, and Bennett's Infectious Disease Essentials / ed.: J. E. Bennett, R. Dolin, M. J. Blaser. - Philadelphia : Elsevier, 2017. - XI, 520 p. - (ExpertConsult).
5. Infectious Diseases / J. Cohen, W. J. Powderly, S. M. Opal. - 4th ed. - [S. l.] : Elsevier, 2017 - Vol. 1. - XXXVII, 1-811 p.
6. Emergency Management of Infectious Diseases / ed.: R. L. Chin, B. W. Frazee ; associate ed. Z. Coralic. - 2nd ed. - Cambridge ; New York : Cambridge University Press, 2018. - XI, 627 p.

**6. Prerequisites and requisites of the discipline**

Discipline is integrated with such disciplines like medical and biological physics, normal and pathological anatomy, microbiology, virology and immunology, physiology, pathophysiology, internal diseases, surgery, neurology, dermatology, epidemiology, ophthalmology, otolaryngology, endocrinology, clinical pharmacology, critical care medicine.

**7. Learning results**

As a result of discipline learning the students should

**know:**

* basics of health care legislation and policy documents governing the activities of health authorities and institutions;
* general issues of organization of infectious services in Ukraine and in the world;
* anti-epidemic measures in the event of an outbreak;
* principles of diseases treatment;
* tactics of providing emergency medical care;
* tactics and organization of dispensary supervision;
* organization of work at hospital and polyclinic departments;
* organization of ambulance and emergency care for the adult population;
* principles of diet therapy, physiotherapy and therapeutic exercises;
* forms and methods of sanitary and educational work;
* modern literature by profession;

**be able:**

* to collect information about the patient;
* to establish a preliminary clinical diagnosis of the disease;
* to make a differential diagnosis;
* to diagnose emergencies;
* to make the plan of examenation of the patient;
* to determine the necessity for special research methods (laboratory, functional), to organize their implementation and give their correct interpretation;
* to estimate the results of laboratory and instrumental research;
* to determine the necessary mode of work and rest in patients with infectious diseases;
* to determine the necessary diet;
* tosubstantiate medical tactics and methods of treatment taking into account the individual characteristics of the patient and the general patterns of the disease;
* to provide emergency medical care;
* to perform medical manipulations;
* to carry out sanitary and hygienic and preventive measures;
* to plan preventive and anti-epidemic measures for infectious diseases;
* to carry out medical and evacuation measures;
* to generalize scientific and practical literature;
* to take an active part in the spreading of medical knowledge among the population;
* to carry out educational work (conversations, lectures) among the population, patients and in institutions of general medical service.

**Contents of the discipline**

**Educational and thematic plan**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Discipline sections and themes | Number of hours | | | | | |
| Form of study (full-time study) | | | | | |
| In total | including | | | | |
| Lectures | Practical | Laboratory | Individual | Self-work |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Discipline section 1 | | | | | | |
| Theme 1. Introduction to the course of infectology. Nosocomial infections. General characteristics of infectious diseases with fecal-oral mechanism of transmission. Typhoid fever. Paratyphoids A and B. | 6 | 2 | 4 | - | - | - |
| Theme 2. Intestinal infections with a predominant affection of the small intestine. Cholera. Salmonellosis. Food-borne toxicoinfections. Rotaviral gastroenteritis. Escherichiasis. Campylobacteriosis. | 6 | 2 | 4 | - | - | - |
| Theme 3. Intestinal infectious diseases with a predominant affection of the colon. Shigellosis. Amoebiasis. Balantidiasis. Giardiasis. Yersiniosis. | 5 | - | 5 | - | - | - |
| Theme 4. Botulism. Enteroviral diseases. Poliomyelitis. | 5 | - | 5 | - | - | - |
| Theme 5. Helminthiasis. Final control of knowledge of intestinal infections. | 5 | - | 5 | - | - | - |
| Total hours in section 1 | 27 | 4 | 23 | - | - | - |
| Discipline section 2 | | | | | | |
| Theme 1. General characteristics of the group of infectious diseases with airborne mechanism of transmission. Influenza. Other ARVI: parainfluenza, adenoviral disease, RS-infection, rhinoviral infection. Atypical pneumonia. Legionellosis. Mycoplasmosis. Ornithosis. Coronavirus diseases (SARS, MERS, COVID-19). | 7 | 2 | 5 | - | - | - |
| Theme 2. Meningeal syndrome in the clinic of infectious diseases. Differential diagnosis of serous and purulent meningitis. Meningococcal infection. | 5 | - | 5 | - | - | - |
| Theme 3. Diphtheria. Differential diagnosis of tonsillitis. Herpesviral infections. Infectious mononucleosis. | 5 | - | 5 | - | - | - |
| Theme 4. Children infections in adults. Measles. Rubella. Mumps. | 5 | - | 5 | - | - | - |
| Theme 5. General characteristics of infectious diseases with a transmissible mechanism of transmission. Rickettsioses. Epidemic typhus and Brill's disease. Marseille fever. Q-Fever. Tick-borne encephalitis. Lyme borreliosis. | 5 | - | 5 | - | - | - |
| Theme 6. Malaria. Leishmaniasis. Final control of knowledge of respiratory and transmissible infectious diseases. | 4 | - | 4 | - | - | - |
| Total hours in section 2 | 31 | 2 | 29 | - | - | - |
| Discipline section 3 | | | | | | |
| Theme 1. General characteristics of viral hepatitis. Viral hepatitis with fecal-oral mechanism of transmission. Acute viral hepatitis with parenteral mechanism of transmission. Laboratory diagnosis of viral hepatitis. Treatment of acute viral hepatitis. Chronic viral hepatitis. Viral hepatitis C. | 6 | 2 | 4 | - | - | - |
| Theme 2. HIV-infection. AIDS-associated infections and invasions. TORCH-infections. Toxoplasmosis. | 6 | 2 | 4 | - | - | - |
| Theme 3. Fever of unknown origion. Brucellosis. Sepsis. Examination of a patient for student’s medical case history. | 5 | - | 5 | - | - | - |
| Theme 4. Infectious diseases with predominant affection of kidneys: leptospirosis, hemorrhagic fever with renal syndrome. Yellow fever. Ebola, Marburg virus diseases and Lassa fever. | 5 | - | 5 | - | - | - |
| Theme 5. Infectious diseases with a predominant affection of the nervous system: rabies, tetanus. Immunoprophylaxis of infectious diseases (planned and emergency). Complications of drug use in the practice of infectious diseases. | 5 | - | 5 | - | - | - |
| Theme 6. Diseases with multiple mechanisms of transmission. Especially dangerous and quarantine infections. Plague. Anthrax. Tularemia. | 5 | - | 5 | - | - | - |
| Theme 7. Infectious diseases with predominant skin affection: erysipelas, erysipeloid. Rat-bite fever (sodoku). Cat scratch disease (felinosis). Final control of knowledge of the section. | 5 | - | 5 | - | - | - |
| Total hours in section 3 | 37 | 4 | 33 | - | - | - |
| Theme 8. Protection of student’s medical case history. Differential credit. | 10 | - | 5 | - | - | 5 |
| Total hours | 105 | 10 | 90 |  |  | 5 |

**Thematic plan of lectures**

|  |  |  |
| --- | --- | --- |
| № | Topic title | Number of hours |
| 1. | The concept of infectious process and infectious diseases. Principles of diagnostics of infectious diseases. Prevention and immunoprophylaxis (specific, nonspecific) of infectious diseases, principles of application. | 2,0 |
| 2. | General characteristics of diseases with fecal-oral mechanism of transmission. Salmonellosis. | 2,0 |
| 3. | General characteristics of diseases with airborne mechanism of transmission. Influenza. | 2,0 |
| 4. | Viral hepatitis. | 2,0 |
| 5. | HIV-infection and HIV-associated diseases. | 2,0 |
| Total hours | | 10,0 |

**Thematic plan of practical classes**

|  |  |  |
| --- | --- | --- |
| № | Topic title | Number of hours |
| 1. | Introduction to the course of infectology. Nosocomial infections. General characteristics of infectious diseases with fecal-oral mechanism of transmission. Typhoid fever. Paratyphoids A and B. | 4,0 |
| 2. | Intestinal infections with a predominant affection of the small intestine. Cholera. Salmonellosis. Food-borne toxicoinfections. Rotaviral gastroenteritis. Escherichiasis. Campylobacteriosis. | 4,0 |
| 3. | Intestinal infectious diseases with a predominant affection of the colon. Shigellosis. Amoebiasis. Balantidiasis. Giardiasis. Yersiniosis. | 5,0 |
| 4. | Botulism. Enteroviral diseases. Poliomyelitis. | 5,0 |
| 5. | Helminthiasis. Final control of knowledge of intestinal infections. | 5,0 |
| 6. | General characteristics of the group of infectious diseases with airborne mechanism of transmission. Influenza. Other ARVI: parainfluenza, adenoviral disease, RS-infection, rhinoviral infection. Atypical pneumonia. Legionellosis. Mycoplasmosis. Ornithosis. Coronavirus diseases (SARS, MERS, COVID-19). | 5,0 |
| 7. | Meningeal syndrome in the clinic of infectious diseases. Differential diagnosis of serous and purulent meningitis. Meningococcal infection. | 5,0 |
| 8. | Diphtheria. Differential diagnosis of tonsillitis. Herpesviral infections. Infectious mononucleosis. | 5,0 |
| 9. | Children infections in adults. Measles. Rubella. Mumps. | 5,0 |
| 10. | General characteristics of infectious diseases with a transmissible mechanism of transmission. Rickettsioses. Epidemic typhus and Brill's disease. Marseille fever. Q-Fever. Tick-borne encephalitis. Lyme borreliosis. | 5,0 |
| 11. | Malaria. Leishmaniasis. Final control of knowledge of respiratory and transmissible infectious diseases. | 4,0 |
| 12. | General characteristics of viral hepatitis. Viral hepatitis with fecal-oral mechanism of transmission. Acute viral hepatitis with parenteral mechanism of transmission. Laboratory diagnosis of viral hepatitis. Treatment of acute viral hepatitis. Chronic viral hepatitis. Viral hepatitis C. | 4,0 |
| 13. | HIV-infection. AIDS-associated infections and invasions. TORCH-infections. Toxoplasmosis. | 4,0 |
| 14. | Fever of unknown origion. Brucellosis. Sepsis. Examination of a patient for student’s medical case history. | 5,0 |
| 15. | Infectious diseases with predominant affection of kidneys: leptospirosis, hemorrhagic fever with renal syndrome. Yellow fever. Ebola, Marburg virus diseases and Lassa fever. | 5,0 |
| 16. | Infectious diseases with a predominant affection of the nervous system: rabies, tetanus. Immunoprophylaxis of infectious diseases (planned and emergency). Complications of drug use in the practice of infectious diseases. | 5,0 |
| 17. | Diseases with multiple mechanisms of transmission. Especially dangerous and quarantine infections. Plague. Anthrax. Tularemia. | 5,0 |
| 18. | Infectious diseases with predominant skin affection: erysipelas, erysipeloid. Rat-bite fever (sodoku). Cat scratch disease (felinosis). Final control of knowledge of the section. | 5,0 |
| 19. | Protection of student’s medical case history. Differential credit. | 5,0 |
| Total hours | | 90 |

**Thematic plan of independent work**

|  |  |  |
| --- | --- | --- |
| № | Topic title | Number of hours |
| 1. | Writing of student’s medical case history. | 3,0 |
| 2. | Preparation for differential credit | 2,0 |
| Total hours | | 5,0 |

**Discipline Policy**

It is expected that students will attend all lectures and practical classes. Missed lectures and practical classes should be worked out (in accordance with the schedule at the information stand of the department) by generally accepted in the KhNMU form.

Preparation for practical classes involves completing the workbook from the relevant topic. Students conduct examination of the patient and write the student’s medical case history.

During the lecture classes, students are recommended to conduct a summary of classes and maintain a sufficient level of silence. Questions can be asked for a lecturer.

During the practical classes active participation in discussions are desired. Students must be prepared in detail in the material, ask questions, express their point of view, to discuss. During the discussion it is important:

* + respect for colleagues,
  + tolerance to others and their experience,
  + susceptibility and impartiality,
  + the ability to disagree with the opinion, but to honor the opponent's personality,
  + a thorough argumentation of his opinion and courage to change his position under the influence of evidence,
  + I-expression when a person avoids unnecessary generalizations, describes his feelings and formulates his wishes with his own thoughts and emotions,
  + mandatory acquaintance with primary sources.

A creative approach in its various manifestations is welcomed. Students are expected to interest in urban, all-Ukrainian and international conferences, competitions and other events from the substantive profile. For participation in conferences, Olympiads, conducting scientific research, writing abstracts, students of the student account for additional points (up to 10), which are added to Discipline Final Grade.

At the first lesson, the teacher carries out a safety instrument. Each student needs to know where the nearest evacuation exit, where there is a fire extinguisher, how to use them, features work with infectious patients, etc. The form of clothing is a medical gown, hat, medical mask, variable shoes.

Student is important to adhere to the rules of proper behavior at the university. These rules are common to all, they also relate to the entire teaching staff and employees, and are fundamentally different from generally accepted norms.

During classes are allowed:

* + to leave the audience for a short time as needed and by the lecturer's permission;
  + drink non-alcoholic beverages;
  + take pictures of presentations slides;
  + take an active part in the course of occupation;

are not allowed:

* + to eat (with the exception of persons, special medical condition requires another - in this case, a medical confirmation is necessary);
  + smoking, drink alcohol and even low-alcohol drinks or narcotic drugs;
  + undermine or use words that offend the honor and dignity of colleagues and professors-teaching staff;
  + play gambling;
  + to harm the material and technical base of the university (spoil equipment, equipment; furniture, walls, floors, clogging the premises and territories);
  + to shout, to cry, to scream or listen to loud music in audiences and even in corridors during classes.

**Plagiarism and Academic Integrity**

The Department of Infectious Diseases maintains zero tolerance to plagiarism. Students and students are expected to have to constantly raise its own awareness in academic writing.

**Evaluation policy**

Current control is carried out in the form of an oral questioning, computer tests, written tests control, control of practical skills.

Final control is carried out in the form of a differential credit.

During the assessment of the assimilation of each study theme (current educational activity – CEA) and final lesson (FL) a student gets the mark according to the traditional 4-point system: "Excellent", "Good", "Satisfactory" and "Unsatisfactory".

The final score for CEA, FL and student’s medical case history is defined as the arithmetic mean of traditional marks for each lesson, rounded to 2 signs after a coma and is recalculated in a multipoint scale according to Table 1.

The minimum number of points that permits a student to be admitted to differentiated credit – 70 points, a minimum positive assessment on the differential credit is 50 points respectively.

The final lesson must be held during the semester on schedule, during classes. The final lesson involves solving test tasks in the discipline, which cover the content of the educational material of the final lesson (in the amount of at least 30 tests. Evaluation criterion – 90,5% of correctly solved tasks; "passed" or "failed"), assessment of the practical skills (assessment criteria - "performed" or "failed"); assessment of the student's knowledge on theoretical issues from this final lesson (the student is given a traditional mark, which is converted into a multi-point scale together with the marks for CEA according to table 1).

During differential credit teacher estimates:

* + the level of theoretical knowledge;
  + development of creative thinking;
  + self-work skills;
  + competences – ability to synthesize the acquired knowledge and apply them in solving practical tasks.

The differential credit includes solving the test task package in an amount of at least 30 tests (assessment criterion - 100% correctly solved tasks, "passed - failed"), assessment of assimilation of practical skills and theoretical knowledge on all topics of discipline on the day of differential credit.

If the assessment of practical skills is carried out according to the criteria "performed ", "failed", evaluating of theoretical knowledge is carried out according to Table 2.

Only students who have completed all missed lectures and practical classes are admitted to the final lesson and differential credit.

The score of discipline is defined as an average arithmetic points for all semesters, during which the discipline was studied, which are transferred to a 120-point scale of ECTS (Table 1) with the addition of points obtained directly for differential credit.

The maximum number of points that a student can score for studying the discipline - 200 points, including the maximum number of points for current educational activities - 120 points, as well as the maximum number of points for the results of diff. credit - 80 points. The minimum number of points is 120, including the minimum current educational activity - 70 and the results of diff. credit - 50 points.

Evaluation of the results of the study of disciplines is carried out immediately after the differential credit. The grade in the discipline is defined as the sum of points for HDPE and diff. offset and is min - 120 to max - 200.

The grade in the discipline is given only to students who have passed all the final control classes and differential credit.

After completing the study of the discipline, the teacher puts the number of points and a corresponding grade in the score book and fill in progress of students in the discipline in the form: U-5.03V – differential credit. The grade "unsatisfactory" is given for students who were admitted to the differential credit, but did not pass it and those who were not allowed to the differential credit.

Students who did not comply with the requirements of educational programs of disciplines receive grades of FX or F. Grade FX ("2") is exposed to students who were allowed to the differentiated credit, but did not pass it and in the future have the opportunity to rearrange it. Grade F ("2") is given to students who were not admitted to the differential credit. Such students do not have the right to rearrange without re-studying those parts of the discipline from which they owe.

Table 1

**Recalculation of the average score for current activities in a multi-point scale**

**(for disciplines ending with a differentiated credit)**

| 4-point scale | 120-point scale |  | 4-point scale | 120-point scale |
| --- | --- | --- | --- | --- |
| 5 | 120 | 3.91-3,94 | 94 |
| 4.95-4,99 | 119 | 3.87-3,9 | 93 |
| 4.91-4,94 | 118 | 3.83- 3,86 | 92 |
| 4.87-4,9 | 117 | 3.79- 3,82 | 91 |
| 4.83-4,86 | 116 | 3.74-3,78 | 90 |
| 4.79-4,82 | 115 | 3.7- 3,73 | 89 |
| 4.75-4,78 | 114 | 3.66- 3,69 | 88 |
| 4.7-4,74 | 113 | 3.62- 3,65 | 87 |
| 4.66-4,69 | 112 | 3.58-3,61 | 86 |
| 4.62-4,65 | 111 | 3.54- 3,57 | 85 |
| 4.58-4,61 | 110 | 3.49- 3,53 | 84 |
| 4.54-4,57 | 109 | 3.45-3,48 | 83 |
| 4.5-4,53 | 108 | 3.41-3,44 | 82 |
| 4.45-4,49 | 107 | 3.37-3,4 | 81 |
| 4.41-4,44 | 106 | 3.33- 3,36 | 80 |
| 4.37-4,4 | 105 | 3.29-3,32 | 79 |
| 4.33-4,36 | 104 | 3.25-3,28 | 78 |
| 4.29-4,32 | 103 | 3.21-3,24 | 77 |
| 4.25- 4,28 | 102 | 3.18-3,2 | 76 |
| 4.2- 4,24 | 101 | 3.15- 3,17 | 75 |
| 4.16- 4,19 | 100 | 3.13- 3,14 | 74 |
| 4.12- 4,15 | 99 | 3.1- 3,12 | 73 |
| 4.08- 4,11 | 98 | 3.07- 3,09 | 72 |
| 4.04- 4,07 | 97 | 3.04-3,06 | 71 |
| 3.99-4,03 | 96 | 3.0-3,03 | 70 |
| 3.95- 3,98 | 95 | < 3 | not enough |

Table 2

**Evaluation of theoretical knowledge if practical skills are evaluated according to the criteria "Fulfilled", "Failed"**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| The number of questions | «5» | «4» | «3» | An oral answer to examination tickets that include the theoretical part of the discipline | For each answer student receives from 10 to 16 points corresponding to:  «5» - 16 points;  «4» - 13 points;  «3» - 10 points. |
| 1 | 16 | 13 | 10 |
| 2 | 16 | 13 | 10 |
| 3 | 16 | 13 | 10 |
| 4 | 16 | 13 | 10 |
| 5 | 16 | 13 | 10 |
|  | 80 | 65 | 50 |

**Correspondence of grades by the 200-point scale to the**

**four-point (national) scale and the ECTS scale**

|  |  |  |
| --- | --- | --- |
| Grades by the 200-point scale | Grades by the ECTS scale | Grades by the four-point (national) scale |
| 180–200 | А | excellent |
| 160–179 | В | good |
| 150–159 | С | good |
| 130–149 | D | satisfactory |
| 120–129 | E | satisfactory |
| Менше 120 | F, Fx | unsatisfactory |

**Control questions, tasks for independent work**

1. The concept of "infection", "infectious process", "infectious disease". Features of infectious diseases.

2. The main stages of development of infectology. Scientific contribution of Ukrainian and foreign scientists to the study of infectious diseases.

3. Classification of infectious diseases.

4. Principles of diagnostics of infectious diseases.

5. Methods of specific diagnostics of infectious diseases.

6. Preventive measures, principles of immunoprophylaxis of infectious diseases.

7. Principles of treatment of infectious diseases.

8. Directions of treatment of infectious diseases.

9. Structure and mode of operation of an infectious hospital. Indications for hospitalization, rules of examination and discharge of patients from an infectious hospital. Features of medical documentation.

10. General characteristics of infectious diseases with a fecal-oral mechanism of transmission.

11. Typhoid fever, paratyphoid A and B: etiology, epidemiology, pathogenesis, clinical course, laboratory diagnostics, differential diagnosis, complications, treatment, prevention. The procedure of hospitalization, rules of discharge of patients from an infectious hospital.

12. Cholera: etiology, epidemiology, pathogenesis, clinical course, laboratory diagnostics, differential diagnosis, complications, treatment, prevention. The procedure of hospitalization, rules of discharge of patients from an infectious hospital.

13. Dehydration shock: definition, pathogenesis, clinical manifestation, differential diagnosis. Clinical and laboratory diagnostics of water-electrolyte disorders at different degrees of dehydration. Emergency aid.

14. Salmonellosis: etiology, epidemiology, classification, pathogenesis, clinical course, laboratory diagnostics, differential diagnosis, complications, treatment, prevention. The procedure of hospitalization, rules of discharge of patients from an infectious hospital.

15. Food-borne toxicoinfections: etiology, epidemiology, pathogenesis, clinical course, laboratory diagnostics, differential diagnosis, complications, treatment, prevention. Indications for hospitalization, rules for discharge of patients from an infectious hospital.

16. Rotaviral infection: etiology, epidemiology, pathogenesis, clinical course, laboratory diagnosis, differential diagnosis, complications, treatment, prevention. Indications for hospitalization, rules for discharge of patients from an infectious hospital.

17. Enteroviral diseases: etiology, epidemiology, classification, pathogenesis, clinical course, laboratory diagnosis, differential diagnosis, complications, treatment, prevention. Indications for hospitalization, rules for discharge of patients from an infectious hospital.

18. Intestinal yersiniosis: etiology, epidemiology, classification, pathogenesis, clinical course, laboratory diagnostics, differential diagnosis, complications, treatment, prevention. The procedure of hospitalization, rules of discharge of patients from an infectious hospital.

19. Pseudotuberculosis: etiology, epidemiology, classification, pathogenesis, clinical course, laboratory diagnostics, differential diagnosis, complications, treatment, prevention. The procedure of hospitalization, rules of discharge of patients from an infectious hospital.

20. Shigellosis: etiology, epidemiology, classification, pathogenesis, clinical course, laboratory diagnostics, differential diagnosis, complications, treatment, prevention. The procedure of hospitalization, rules of discharge of patients from an infectious hospital.

21. Amebiasis: etiology, epidemiology, classification, pathogenesis, clinical course, laboratory diagnostics, differential diagnosis, complications, treatment, prevention. The procedure of hospitalization, rules of discharge of patients from an infectious hospital.

22. Giardiasis: etiology, epidemiology, pathogenesis, clinical course, laboratory diagnostics, differential diagnosis, complications, treatment, prevention.

23. Botulism: etiology, epidemiology, classification, pathogenesis, clinical course, laboratory diagnostics, differential diagnosis, complications, prognosis, treatment, prevention. The procedure of hospitalization, rules of discharge of patients from a hospital.

24. Classification of helminthiasis. The influence of helminths on the human body. Methods of laboratory diagnostics of helminthiasis.

25. Ascariasis: etiology, epidemiology, pathogenesis, clinical course, laboratory diagnostics, differential diagnosis, complications, treatment, prevention.

26. Enterobiosis: etiology, epidemiology, pathogenesis, clinical course, laboratory diagnostics, differential diagnosis, complications, treatment, prevention.

27. Whipworm infection (Trichuriasis): etiology, epidemiology, pathogenesis, clinical course, laboratory diagnostics, differential diagnosis, complications, treatment, prevention.

28. Hookworm disease: etiology, epidemiology, pathogenesis, clinical course, laboratory diagnostics, differential diagnosis, complications, treatment, prevention.

29. Strongyloidiasis: etiology, epidemiology, pathogenesis, clinical course, laboratory diagnostics, differential diagnosis, complications, treatment, prevention.

30. Trichinellosis: etiology, epidemiology, pathogenesis, clinical course, laboratory diagnostics, differential diagnosis, complications, treatment, prevention.

31. Heartworm disease: etiology, epidemiology, pathogenesis, clinical course, laboratory diagnostics, complications, treatment, prevention.

32. Toxocariasis: etiology, epidemiology, pathogenesis, clinical course, laboratory diagnostics, complications, treatment, prevention.

33. Diphyllobotriasis: etiology, epidemiology, pathogenesis, clinical course, laboratory diagnostics, differential diagnosis, complications, treatment, prevention.

34. Beef tapeworm disease (Teniarinhosis): etiology, epidemiology, pathogenesis, clinical course, laboratory diagnostics, differential diagnosis, complications, treatment, prevention.

35. Teniosis, cysticercosis: etiology, epidemiology, pathogenesis, clinical course, laboratory diagnostics, differential diagnosis, complications, treatment, prevention.

36. Hymenolepiasis: etiology, epidemiology, pathogenesis, clinical course, laboratory diagnostics, differential diagnosis, complications, treatment, prevention.

37. Echinococcosis: etiology, epidemiology, pathogenesis, clinical course, laboratory diagnostics, differential diagnosis, complications, treatment, prevention.

38. Alveococcosis: etiology, epidemiology, pathogenesis, clinical course, laboratory diagnostics, complications, treatment, prevention.

39. Opisthorchiasis: etiology, epidemiology, pathogenesis, clinical course, laboratory diagnostics, differential diagnosis, complications, treatment, prevention.

40. General characteristics of infectious diseases of the respiratory tract.

41. Influenza: etiology, epidemiology, pathogenesis, clinical course, laboratory diagnostics, differential diagnosis, complications, treatment, anti-epidemic measures, principles of immunoprophylaxis. Indications for hospitalization.

42. Parainfluenza: etiology, epidemiology, pathogenesis, clinical course, laboratory diagnostics, differential diagnosis, complications, treatment, prevention. Indications for hospitalization.

43. Adenovirus disease: etiology, epidemiology, pathogenesis, clinical course, laboratory diagnostics, differential diagnosis, complications, treatment, prevention. Indications for hospitalization.

44. RS-infection: etiology, epidemiology, pathogenesis, clinical course, laboratory diagnostics, differential diagnosis, complications, treatment, prevention. Indications for hospitalization.

45. Rhinovirus infection: etiology, epidemiology, pathogenesis, clinical course, laboratory diagnostics, differential diagnosis, complications, treatment, prevention. Indications for hospitalization.

46. Coronavirus diseases (SARS, MERS, COVID-19): etiology, epidemiology, pathogenesis, clinical course, laboratory diagnostics, differential diagnosis, complications, treatment, prevention. Indications for hospitalization.

46. Classification of human herpesviruses. General characteristics of herpesviral diseases.

47. Herpetic infection: etiology, epidemiology, pathogenesis, classification, clinical course, laboratory diagnostics, differential diagnosis, complications, treatment, prevention. Indications for hospitalization.

48. Chickenpox. Herpes zoster. Etiology, epidemiology, pathogenesis, clinical course, laboratory diagnostics, differential diagnosis, complications, treatment, prevention. Indications for hospitalization, rules for discharge of patients from the hospital.

49. Infectious mononucleosis: etiology, epidemiology, pathogenesis, classification, clinical course, laboratory diagnostics, differential diagnosis, complications, treatment, prevention. Indications for hospitalization.

50. Features of the course of herpesviral infections in patients with HIV/ AIDS.

51. Measles: etiology, epidemiology, pathogenesis, classification, clinic, peculiarities in adults, laboratory diagnostics, differential diagnosis, complications, treatment, anti-epidemic measures, principles of immunoprophylaxis. Indications for hospitalization, rules for discharge of patients from an infectious hospital.

52. Rubella: etiology, epidemiology, pathogenesis, classification, clinic, peculiarities in adults, laboratory diagnosis, differential diagnosis, complications, treatment, anti-epidemic measures, principles of immunoprophylaxis. Indications for hospitalization, rules for discharge of patients from an infectious hospital.

53. Mumps: etiology, epidemiology, pathogenesis, classification, clinic, peculiarities in adults, laboratory diagnostics, differential diagnosis, complications, treatment, anti-epidemic measures, principles of immunoprophylaxis. Indications for hospitalization, rules for discharge of patients from an infectious hospital.

54. Diphtheria: etiology, epidemiology, pathogenesis, classification, clinical course, laboratory diagnostics, differential diagnosis, complications, treatment, principles of immunoprophylaxis. A procedure of hospitalization, the rules of discharge from an infectious hospital.

55. Meningococcal infection: etiology, epidemiology, pathogenesis, classification, clinical course, laboratory diagnostics, differential diagnosis, complications, principles of treatment of various clinical forms, emergency care at the prehospital stage, prevention. The procedure of hospitalization, rules of discharge of patients from an infectious hospital.

56. ITS: definition, pathogenesis, classification, clinical and laboratory diagnostics, principles of treatment, emergency care at the prehospital stage.

57. Brain oedema: definition, pathogenesis, classification, clinical and laboratory diagnosis, principles of treatment, emergency care at the prehospital stage.

58. Respiratory mycoplasmosis: etiology, epidemiology, pathogenesis, classification, clinical course, laboratory diagnostics, differential diagnosis, complications, principles of treatment of various clinical forms, prevention. Indications for hospitalization.

59. Ornithosis: etiology, epidemiology, pathogenesis, classification, clinical course, laboratory diagnostics, differential diagnosis, complications, principles of treatment of various clinical forms, prevention. Indications for hospitalization.

60. Legionellosis: etiology, epidemiology, pathogenesis, classification, clinical course, laboratory diagnostics, differential diagnosis, complications, principles of treatment of various clinical forms, prevention. Indications for hospitalization.

61. Acute respiratory failure: definition, classification, pathogenesis, clinical and laboratory diagnostics, principles of treatment, emergency care at the prehospital stage.

62. General characteristics of blood infectious diseases.

63. HAV: etiology, epidemiology, pathogenesis, classification, clinical course, laboratory diagnostics, differential diagnosis, complications, principles of treatment, immunoprophylaxis. Indications for hospitalization, rules for discharge of patients from the hospital.

64. HEV: etiology, epidemiology, pathogenesis, classification, clinical course, laboratory diagnostics, differential diagnosis, complications, principles of treatment, prevention. Indications for hospitalization, rules for discharge of patients from an infectious hospital.

65. HBV: etiology, epidemiology, pathogenesis, classification, clinical course, laboratory diagnostics, differential diagnosis, complications, principles of treatment, anti-epidemic measures, principles of immunoprophylaxis, prognosis. Indications for hospitalization, rules for discharge of patients from an infectious hospital.

66. HCV: etiology, epidemiology, pathogenesis, classification, clinical course, laboratory diagnostics, differential diagnosis, complications, principles of treatment, prevention, prognosis. Indications for hospitalization, rules for discharge of patients from an infectious hospital.

67. HDV: etiology, epidemiology, pathogenesis, classification, clinical course, laboratory diagnostics, differential diagnosis, complications, principles of treatment, prevention, prognosis. Indications for hospitalization, rules for discharge of patients from an infectious hospital.

68. Differential diagnosis of jaundice.

69. Fulminant viral hepatitis: pathogenesis, clinical and laboratory diagnostics, principles of treatment.

70. Chronic viral hepatitis: etiology, epidemiology, pathogenesis, classification, clinical course, laboratory diagnostics, differential diagnosis, principles of treatment, prognosis.

71. HIV-infection: etiology, epidemiology, pathogenesis, classification, clinical course, laboratory diagnostics, differential diagnosis, complications, principles of treatment, prevention, prognosis. The procedure of hospitalization, examination, dispensary.

72. AIDS-associated protozoan invasions: cryptosporidiosis, isosporiasis, cerebral toxoplasmosis. Clinical and laboratory diagnostics. Principles of treatment and prevention. Indications for hospitalization.

73. AIDS-associated mycoses: candidiasis, pneumocystis pneumonia, cryptococcosis. Clinical and laboratory diagnostics. Principles of treatment and prevention. Indications for hospitalization.

74. General characteristics of infectious diseases with a transmissible mechanism of transmission.

75. Malaria: etiology, epidemiology, pathogenesis, classification, clinical course, laboratory diagnostics, differential diagnosis, complications, treatment, prevention. Indications for examination for malaria. The procedure of hospitalization, rules of discharge of patients from an infectious hospital.

76. Leishmaniasis: etiology, epidemiology, pathogenesis, classification, clinical course, laboratory diagnostics, complications, principles of treatment and prevention. Indications for hospitalization.

77. Tick-borne encephalitis: etiology, epidemiology, classification, pathogenesis, clinical course, laboratory diagnostics, differential diagnosis, complications, prognosis, principles of treatment and prevention.

78. Lyme disease: etiology, epidemiology, classification, pathogenesis, clinical course, laboratory diagnosis, differential diagnostics, complications, prognosis, principles of treatment and prevention.

79. Epidemic typhus and Brill's disease: etiology, epidemiology, pathogenesis, classification, clinical course, laboratory diagnostics, differential diagnosis, complications, treatment, prevention. The procedure of hospitalization, rules of discharge of patients from an infectious hospital.

80. Marseille fever: etiology, epidemiology, pathogenesis, classification, clinical course, laboratory diagnostics, differential diagnosis, complications, treatment, prevention. The procedure of hospitalization, rules of discharge of patients from an infectious hospital.

81. General characteristics of infectious diseases with a wound mechanism of transmission.

82. Leptospirosis: etiology, epidemiology, pathogenesis, classification, clinical course, laboratory diagnostics, differential diagnosis, complications, treatment, prevention. The procedure of hospitalization, rules of discharge of patients from an infectious hospital.

83. HFRS: etiology, epidemiology, pathogenesis, classification, clinical course, laboratory diagnostics, differential diagnosis, complications, treatment, prevention. The procedure of hospitalization, rules of discharge of patients from an infectious hospital.

84. Acute renal failure: definition, pathogenesis, classification, clinical and laboratory diagnostics, principles of treatment, emergency care at the prehospital stage.

85. Rabies: etiology, epidemiology, classification, pathogenesis, clinical course, diagnostics, differential diagnosis, complications, prognosis, principles of treatment and immunoprophylaxis. The procedure of hospitalization.

86. Tetanus: etiology, epidemiology, classification, pathogenesis, clinical course, diagnostics, differential diagnosis, complications, prognosis, principles of treatment and prevention. Principles of immunoprophylaxis. The procedure of hospitalization.

87. Erysipelas: etiology, epidemiology, classification, pathogenesis, clinical course, diagnostics, differential diagnosis, complications, prognosis, principles of treatment and prevention. Indications for hospitalization.

88. Felinosis: etiology, epidemiology, classification, pathogenesis, clinical course, diagnostics, differential diagnosis, complications, prognosis, principles of treatment and prevention. Indications for hospitalization.

89. Rat-bite fever: sodoku, streptobacillosis. Etiology, epidemiology, classification, pathogenesis, clinical course, diagnostics, complications, prognosis, principles of treatment and prevention. Indications for hospitalization.

90. Definition of consepts "especially dangerous" and "quarantine" diseases.

91. General characteristics of infectious diseases with multiple mechanisms of transmission.

92. Plague: etiology, epidemiology, pathogenesis, classification, clinical course, laboratory diagnostics, differential diagnosis, complications, prognosis, treatment, prevention. The procedure of hospitalization, rules of discharge of patients from an infectious hospital. Preventive measures in the nidus of infection

93. Anthrax: etiology, epidemiology, pathogenesis, classification, clinical course, laboratory diagnostics, differential diagnosis, complications, prognosis, treatment, prevention. The procedure of hospitalization, rules of discharge of patients from an infectious hospital. Preventive measures in the nidus of infection.

94. Tularemia: etiology, epidemiology, pathogenesis, classification, clinical course, laboratory diagnostics, differential diagnosis, complications, prognosis, treatment, prevention. The procedure of hospitalization, rules of discharge of patients from an infectious hospital. Preventive measures in the nidus of infection.

95. Smallpox: etiology, epidemiology, pathogenesis, classification, clinical course, laboratory diagnostics, complications, prognosis, principles of treatment and prevention.

96. Yellow fever: etiology, epidemiology, pathogenesis, classification, clinical course, laboratory diagnostics, differential diagnosis, complications, prognosis, treatment, anti-epidemic measures, principles of immunoprophylaxis. The procedure of hospitalization, rules of discharge of patients from an infectious hospital.

97. Congo-Crimean fever: etiology, epidemiology, pathogenesis, classification, clinical course, laboratory diagnostics, differential diagnosis, complications, prognosis, treatment, prevention. The procedure of hospitalization, rules of discharge of patients from an infectious hospital.

98. Marburg and Ebola virus diseases, Lassa fever: etiology, epidemiology, pathogenesis, classification, clinical course, laboratory diagnostics, complications, prognosis, treatment, prevention. The procedure of hospitalization, rules of discharge of patients from an infectious hospital.

99. Brucellosis: etiology, epidemiology, pathogenesis, classification, clinical course, laboratory diagnostics, differential diagnosis, complications, prognosis, treatment, prevention. The procedure of hospitalization, rules of discharge of patients from an infectious hospital.

100. Sepsis: definition, pathogenesis, classification, clinical course, laboratory diagnostics, differential diagnosis, prognosis, principles of treatment and prevention. The procedure of hospitalization, rules of discharge of patients from an infectious hospital.

101. The concept of syndrome of fever of unknown origin. Algorithm of examination of the patients.

102. The concept of TORCH-infection: definition, etiology, epidemiology, clinical and laboratory diagnostics, prognosis. Principles of examination, treatment and prevention.

103. Toxoplasmosis: etiology, epidemiology, pathogenesis, classification, clinical course, laboratory diagnostics, differential diagnosis, complications, prognosis, principles of treatment and prevention. Indications for hospitalization.

104. Nosocomial infections: general characteristics, features of the clinical course, diagnostics, principles of treatment and prevention.

105. Anaphylactic shock: pathogenesis, classification, clinical manifestation, differential diagnosis, emergency care.

106. Serum sickness: pathogenesis, clinical manifestation, differential diagnosis, emergency care.