Information for students of medical faculties.

BOGOMOLETS NATIONAL MEDICAL UNIVERSITY
Department of clinical and laboratory immunology, allergology and medical genetics

Schedule of classes of the department for the 2023/2024 academic year for 5 year students in Clinical Immunology and Allergology

Full name of teacher	Time to occupy	Date	Groups
Plakhotna Daria Volodimirivna 0503872860	9.00 – 13.20	15.01 - 24.01	9604a
	9.00 – 13.20	25.01 - 05.02	9601a
	9.00 – 13.20	06.02-15.02	9606a
	9.00 – 13.20	19.02 – 28.02	9608a
	9.00 – 13.20	05.03 – 14.03	9607a
	9.00 – 13.20	10.05 - 21.05	9611a
Tsaryk Vladislav Victorovich 0636708159	9.00 – 13.20	15.01- 24.01	9603a
	9.00 – 13.20	25.01 - 05.01	9602a
	9.00 – 13.20	06.02 - 15.02	9605a
	9.00 – 13.20	19.02 - 28.02	9609a
	9.00 – 13.20	05.03 – 14.03	9610a
	9.00 – 13.20	15.03 – 26.03	9612a
	9.00 – 13.20	18.04 – 22.04	10602Ca

Head of Department of clinical and laboratory immunology, allergology and medical genetics

Professor **Kurchenko A.I.**

Classrooms for practical lessons

Subject	Room number	Adress
KIA	room 328 Plakhotna D.V.	Children's Clinic №3 of Podilskyi district, Turovskaya street, 26, 3rd floor
KIA	room 330 Tsaryk V.V.	Children's Clinic №3 of Podilskyi district, Turovskaya street, 26, 3rd floor

Head of Department of clinical and laboratory immunology, allergology and medical genetics

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THEMATIC PLAN OF LECTIONS
of clinical Immunology and Allergology

for students of 5th year of medical faculties
2023/2024

№	*Theme*	*Hours*
1.	The main tasks and problems of clinical immunology and allergology.	0,5
2.	Immunodeficiency and immunodependent diseases. Modern methods of immunodiagnostics and immunotherapy.	0,5
3.	Modern views on atopic diseases as systemic diseases. Allergic diseases. Classification, clinical examples.	1,0
Total		**2**

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BOGOMOLETS NATIONAL MEDICAL UNIVERSITY

THEMATIC PLAN OF PRACTICAL CLASSES

Department of clinical and laboratory immunology, allergology and medical genetics

of clinical Immunology and Allergology

for students of 5th year of medical faculties

2023/2024

Week days	Theme	Total number of academic hours
1	Structure and principles of immune system function. Immunological research methods. Overview of immunogram.	5
2	Immune inflammation and infectious diseases.	5
3	Primary immunodeficiency diseases.	5
4	Acquired immunodeficiency diseases. Basic principles of immunotropic therapy.	5
5	Principles of transplantation immunity.	2
6	Immunology of reproduction. Immune causes of infertility.	2
7	Tumor immunology.	2
8	Immune aspects of autoimmune pathology.	2
9	Atopic diseases.	4
10	Other allergic (non-atopic) diseases. Types, immunopathogenesis, immunodiagnostic, clinical manifestation and differential diagnosis.	4
	Final module test	2
Total		**38**

Head of Department of clinical and laboratory immunology, allergology and medical genetics

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CONTENTS OF THE CURRICULUM

THEME № 1. Structure and principles of functioning of the immune system.

Definitions and types of immunity. Factors of innate immunity: cellular (monocyte-macrophage system, killer and granulocyte cells), humoral (complement system, cytokines, etc.). Specific immunity, its features, stages of

formation and cooperation of immunocompetent cells involved in the formation of the immune response.

Clinical methods of evaluation of the immune system. Instrumental methods of evaluation of the immune system. Laboratory methods of evaluation of the immune system: humoral congenital defense factors; assessment of cellular immunity; comprehensive evaluation of local immunity. A comprehensive approach to assessing a person's immune status. The main complaints of the patient with immune pathology. Features of immunological diagnosis. Determination of the main symptoms and syndromes of immune disorders. Physical symptoms of immune pathology. Methods of physical examination of a patient with pathology of the immune system. Immunogram, interpretation of results. Possibilities and limitations of immunological methods in the clinic. Features of making an immunological diagnosis.

THEME № 2. Immune inflammation and infectious diseases.

Mechanisms of immune protection in bacterial and viral infections. The role of the immune system in antifungal immunity and helminth protection. The value of the immune system in the development of opportunistic and protozoal infections. Immunological methods in the diagnosis of infectious diseases.

Immune response in acute inflammatory process. Dynamics of indicators of leukograms, proteinograms and immunograms in acute, recurrent and chronic inflammation.

Types and features of specific immunoprophylaxis of infectious diseases. Immune-dependent reactions and complications in vaccination.

Etiology, immunopathogenesis, immunological methods in the diagnosis of AIDS. Dynamics of immunograms of HIV-infected and AIDS patients. AIDS immunotherapy.

THEME №3. Congenital immunodeficiency diseases

Congenital immunodeficiency diseases: definition, classification, mechanisms of development. Clinical features, immunodiagnosis, physician tactics, approaches to treatment: combined, T - and B - dependent immunodeficiencies caused by violation of the phagocytic level of immunity and deficiency of complement proteins.

THEME №4 Acquired immunodeficiency diseases

Acquired immunodeficiency diseases: definitions, causes, mechanisms of development, classification, diagnosis. The role of acquired immunodeficiency diseases in the pathogenesis of various diseases. Early detection of signs of secondary immune deficiency. Basic approaches to treatment. Basic principles of the appointment of immunotropic therapy. Immunorehabilitation, immunoprophylaxis.

Rapid fatigue syndrome; chronic fatigue syndrome.

THEME №5. Fundamentals of transplantation immunity

Basic concepts, terminology (auto-, allo-, xenograft). Pre-transplant monitoring. Mechanisms of allograft rejection: acute, acute and chronic.

Posttransplant infectious complications, diagnostic criteria. Immunosuppressive therapy: mechanisms of action, principles of appointment, complications. New immunological methods of diagnostics and therapy in transplantology.

TOPIC №6 Immunology of reproduction. Immune-dependent forms of infertility.

Immune interacting systems in the systems "father - mother", "mother - fetus". Immune status of pregnant women. Immune-dependent forms of infertility in marriage. Causes and immunological mechanisms of detection of antisperm autoantibodies in men and women, immunodiagnostics. Immune conflicts in the system "mother - fetus": diagnosis, treatment, prevention.

THEME №7. Immunology of tumors

Antiblastoma and problastoma mechanisms of interaction of the immune system the host organism and the tumor. Factors of immunological resistance of the tumor. The concept of tumor-associated antigens. Immunosuppressive effect of tumors.

Immune changes in cancer patients. Immunodiagnosis, including differential according to the CD phenotype of tumor cells. Modern approaches to immunotherapy of a patient with cancer.

THEME № 8. Immune aspects of autoimmune pathology

Definition of the concept of autoimmune reactions, autoimmune disease. Mechanisms of failure of immunological tolerance, the role of genetic factors. Immunodiagnosis, immunopathogenesis. The role of immunological research methods in the early verification of the diagnosis of autoimmune diseases.

Autoimmune component in immunopathogenesis of various human diseases. Current approaches to the use of new generation immunotropic drugs in the treatment of patients with autoimmune pathology.

THEME № 9 Atopic diseases. Other allergic (not atopic) diseases.

Role of genetic factors and environment in allergic immunopathogenesis. Modern ideas about allergy and atopy. Atopy as a systemic disease. Types and main stages of immunological response. Modern aspects of allergic diagnosis. Screening methods for allergy assessment. Eliminative and provocative tests in allergy. Types of skin tests. Principles of treatment of allergic diseases. Allergic-specific immunotherapy, indications and contraindications.

THEME №10. Other allergic diseases.

Non-atopic diseases: species, immunopathogenesis, immunodiagnosis, clinical manifestations and differential diagnosis. Cellular - mediated allergic diseases (serum sickness, Arthus phenomenon, contact dermatitis, etc.): immunopathogenesis, clinic, immunodiagnosis, immunotherapy. Differential diagnosis of diseases caused by allergic processes and pseudo-allergic reactions. Principles of anti-allergic therapy and immunotropic treatment in allergy

6. PLAN OF PRACTICAL TRAINING OF STUDENTS IN CLINICAL IMMUNOLOGY AND ALLERGOLOGY

№	Topic	Number of hours
1.	Preparation for practical classes including: - filling workbooks on topics of employment; - mastering the skills to analyze the data of immunological research methods: 1. orientation tests (level I) (quantitative indicators of cellular and humoral factors of innate and specific immunity, evaluation of phagocytosis, etc.). 2. analytical tests (II level) (evaluation of the proliferative activity of T and B lymphocytes, assessment of the activity of natural killers, determination of levels of cytokines, components of complement, etc.) - mastering the skills of interpreting data of a physical examination of a patient with pathology of the immune system (ultrasound, radiological, immunohistochemistry, etc.). - control of control of immunostimulatory, immunosuppressive and cytostatic therapy;	8
2.	Preparation for practical classes including: - filling workbooks on topics of employment; - to master screening clinical and anamnestic criteria for the detection of immune system dysfunctions: 1. Clinical symptoms; 2. Family history; 3. Antenatal history; 4. History of life and illness; 5. Immunological laboratory data. - mastering the clinical and laboratory criteria for the detection of congenital and acquired immunodeficiency states;	8

	- mastering the severity of congenital and acquired immunodeficiency states; - mastering the definition of clinical syndromes of immune system dysfunction: infectious, allergic, autoimmune, immunoproliferative; - mastering the principles of treatment of immunodeficiency diseases. - master the skills of interpreting phenotyping data for matching donor - recipient pair - master the skills of evaluating the results of the determination of tumor associated and oncofetal antigens in the diagnosis of tumors.	
3.	Preparation for practical classes including: - filling workbooks on topics of employment; - mastering the skills to analyze the data of allergic methods of research; - mastering the skills of conducting a test; - mastering the skills of providing medical care to patients with acute allergic reaction - mastering the assessment of indicators of the function of external respiration in patients with bronchial asthma - mastering the skills of evaluating the effectiveness of anti-allergic therapy	8
4.	Curating a patient with a student's medical history writing	5
6.	Preparation for final module control	6
Total		**35**

Individual work of students:
Preparing a review of scientific literature or conducting scientific research (optional):

1. Immuno - neuro-endocrine regulation of body functions.
2. Apoptosis as a regulation of the immune response.
3. Immunology of mucous membranes.
4. Immunopathogenesis and immunotherapy of sepsis;
5. Epstein - Barr viral infection: immunopathogenesis, immunotherapy
6. Polynosis. Allergic-specific immunotherapy: principles of prescription. Indications and contraindications, the development of complications.
7. Drug allergy.

- Curation of a patient with immunological or allergic pathology.
- Report of the patient's medical history in a practical session.
- Report of an abstract or presentation in a practical lesson
- Writing abstracts, articles

The organization of the educational process should ensure that students participate in the conduct of at least one hospitalized or outpatient patient. If it is not possible to access patients of any category, students complete a medical history record with diagnoses / problems of that category.

The necessity of writing such a story is determined by the assistant / assistant professor (assistant professor of the department) based on the review of data on the presence of appropriate patients in the wards or on an outpatient basis.

Students' daily patient admissions / examination reports are stored and provided to the assistant / assistant professor to monitor the required number of patient examinations and to display patients with the most common immunosuppressive and allergic diseases without undue recurrence. Didactic classes are held during the morning classes, lectures and classes. Assistants supervise that each student has the necessary competency in the following areas: physical examination and questioning of the patient, oral report, completing documentation, making diagnostic decisions (critical thinking).

In addition, assistants monitor student activity to make sure that they have acquired practical skills.

Schedule of ongoing and pre-module consultations
IN CLINICAL IMMUNOLOGY AND ALLERGOLOGY
for 5th year students of medical faculties
for the 2023/2024 YEAR

Current and pre-module consultations on clinical immunology and allergology are agreed with the group teacher for each group individually on the eve of the final control.

Head of Department of clinical and laboratory immunology, allergology and medical genetics

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LIST OF QUESTIONS FOR PREPARING STUDENTS FOR TOTAL MODULAR CONTROL

1. The subject and tasks of clinical immunology and allergology. History of immunology development. The main directions of development.
2. A modern understanding of the structure, function and ontogeny of the immune system. Central and peripheral organs of the immune system.
3. Cellular congenital defense factors, their interaction in the implementation of the immune response.
4. Monocyte - macrophage system: functions, features, role in the formation and realization of the immune response. Modern aspects of phagocytosis.
5. Killing effect as a component of immunobiological surveillance. Basic types of killer cells, their function and properties. The role of granulocyte blood cells in the formation of the immune response.
6. Humoral factors of innate immunity. Biological effects of complement system activation.
7. T-lymphocytes. Subpopulations of T lymphocytes. Major markers and clusters of differentiation.
8. T - lymphocytes - helper type 1 and type 2. The value of the functional balance between T-helpers (Th1 \ Th2).
9. Regulatory T- lymphocytes, basic functions.
10. Apoptosis as special type of necrocytosis. His role is in physiology and pathological processes.
11. B-cells. Basic markers and functions. Structure of receptor that recognizes an antigen. Concept about T-independent and T- dependent types of immune answer.

12. Immunoproteins: structure, functions, classes. A role of immune complexes is in development of pathology.
13. Cytokines of the immune system. Interleukins (IL): classification, functions and participating is in immune processes.
14. Grouth factors, factors of necrosis of tumors, interferons and molecules of adhesion. Description. Participating is in becoming of immune answer.
15. Immunological system of mucous membranes. Lymphoid tissue associated with a gastrointestinal tract.
16. A modern idea is about a structure and function of main complex of histocompatability. Structure of antigens of HLA. Propensity to the diseases depending on HLA- to the phenotype.
17. Basic principles of classification of immunodeficiency. Innate combined immunodeficiency s and B-, T- immunodeficiency : mechanisms of development, feature of clinical motion, immunodiagnosis and treatment.
18. Congenital immunodeficiencies of the phagocytic level of the immune system and the complement system: mechanisms of development, features of clinical course, immunodiagnosis and treatment.
19. Concept of the acquired immunodeficiency. Reasons of origin, clinical signs, immunodiagnosis and immunotherapy.
20. Chronic fatigue syndrome : etiology, clinical, instrumental, laboratory and immunological criteria of diagnostics, differential diagnostics, basic principles of immunotherapy.
21. Syndrome of lymphadenopathy : etiology, pathogeny, classification, research methods, immunological criteria of diagnostics, differential diagnostics, basic principles of immunotherapy/.
22. Immunopathogenesis, stages of development, classification of HIV is infections/of AIDS.
23. Criteria of diagnostics, principles of treatment of HIV/of AIDS.
24. Basic principles of prophylaxis of HIVof AIDS are in Ukraine. Medical workers as persons of "high-risk of an increase risk group" in relation to morbidity on HIV/AIDS.
25. Stresses, disorders. Chronic fatigue syndrome.
26. Transplantation immunology.
27. Features of pre- and post-transplant immunological monitoring. Types of rejection crisis, their clinical and immunological characteristics and prognosis.
28. Antitumoral factors, factors, that repress immunity, and also пробластні factors that strengthen the height of tumor. A concept is about tumor-associated antigens.
29. Oncologic patients have immune changes. An immune-diagnosis is in oncology. The modern fitting is for immune therapy of patients with oncologic illnesses.
30. Determination of concept of autoimmunity. Mechanisms of blowing off tolerance, pre-condition of development of diseases.
31. Immunopathogenesis, immunodiagnosis, immunotherapy of autoimmune diseases.

32. Reasons of forming of allergic pathology. Stages of forming of allergic reaction.
33. Allergy and atopy. Classification of allergens. Reasons and mechanisms of forming of the allergic states.
34. Methods of diagnostics of allergy: laboratory methods, skin tests and provocative tests.
35. Principles of anti-allergic treatment. ASIT: mechanism of action, testimony and contra-indication, prognosis of efficiency.
36. Drug allergy.
37. A concept is an allergy and pseudoallergy, differential diagnostics. Mechanisms of development of pseudoallergic reactions. Principles of treatment.
38. Development of pseudoallergic reactions is at violations of activating of the system of комплементу and metabolism of arachidonic acid. Principles of treatment.
39. Classification, general principles of diagnostics of autoimmune illnesses. The modern going is near application of immunotherapy.
40. Laboratory criteria of immunodiagnosis of autoimmune diseases.
41. Classification of immunotherapeutic drugs.
42. Principles of clinical use of immunotropic drugs, indications and contraindications to the appointment, dose selection, control of therapeutic efficacy.
43. Basic types of immunorehabilitation, its strategy, tactics and basic principles.
44. Quantitative and functional immunological tests. Immunogramme, basic indexes.
45. Methods of determination of quantitative and functional descriptions of T-cells.
46. 41. Methods of determination of quantitative and functional descriptions of B- cells.
47. Methods of determination of phagocytosis.
48. Methods of determination of concentration of serum immunoproteins of basic classes.

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REFERENCE LIST OF PRACTICAL WORKS AND TASKS IS FOR FINAL MODULE CONTROL

1. To canvass inspection of patients with immunodeficient diseases (to take the immunological history, define the inherited propensity to development of immunodeficits, estimation of data of methods of researches).
2. Able to fill the immunological questionnaire of patient on the basis of data of that to define a "high-risk group" in relation to an immunopathology.
3. A capture of determination of necessary spectrum of immunological tests skills is for the inspection of patients with immune depending pathology.
4. To identify the presence of the main clinical symptoms there of syndromes of immune disorders.
5. To carry out differential diagnosis, substantiate and formulate the diagnosis for the main immunodeficiency syndromes on the basis of analysis of laboratory and instrumental examination data.
6. Conduct clinical and immunological differential diagnosis of congenital and acquired immunodeficiencies.
7. Mastering the skills of data interpretation and basic principles for interpretation of data of leukograms and immunograms, taking into account the clinic, period of illness, immunological history, etc.
8. Mastering the skills of assessing the impact of negative environmental factors on immunological parameters.
9. Identify clinical signs of local immunity decompensation.
10. Identify signs of irritation of the immune system according to leukograms.
11. To appoint immunotropic treatment, to determine the prognosis, to carry out primary and secondary immunoprophylaxis in immuno-dependent diseases.
12. To know the basic principles of the appointment of immunotropic therapy in the complex treatment of immunological diseases.
13. Be able to take preventive measures during vaccination. Possess the principles of immunoprophylaxis.
14. Mastering the skills of determining the need for clinical and allergic examination.
15. To conduct interviews and physical examination of patients with allergopathology (to be able to collect allergic history, to determine the presence of genetic predisposition for the formation of allergic pathology).
16. To make a plan of examination of patients with allergic diseases.
17. To acquire the skills to perform skin allergy tests (tests).
18. Mastering the skills of evaluating laboratory allergy tests.
19. Master the skills to identify allergens with oriental antigenic determinants to make recommendations for allergic prophylaxis.
20. Master the skills to perform picfluometry and to evaluate its performance.
21. To make differential diagnosis, substantiate and formulate a diagnosis for major allergic diseases based on the analysis of laboratory and instrumental examination data.
22. To appoint treatment, to determine prognosis, to carry out primary and secondary prophylaxis for allergic diseases.
23. Provide immediate assistance in acute allergic or pseudo-allergic pathology.

24. To put into practice the standards of diagnosis and treatment of allergic diseases.
25. To master the skills to prescribe anti-allergic drugs, to know the recipe for basic anti-allergic drugs.
26. Mastering the skills of evaluating the laboratory results of determining the immunological criteria for autoimmune pathology.
27. To apply in practice the standards of immunodiagnostics and the appointment of immunosuppressive therapy with an assessment of its effectiveness in autoimmune diseases.
28. Interpret donor and recipient screening data for transplantation.
29. Mastering the skills to diagnose an acute, acute and chronic rejection crisis in organ and tissue transplantation.
30. Perform differential diagnosis of rejection crisis and infectious complications in patients after transplantation.
31. Prescribe immunosuppressive therapy and evaluate its effectiveness after organ and tissue transplantation.
32. To interpret indicators of immunograms in cancer patients with the evaluation of anti-blastomatic factors of protection.
33. Evaluate the results of the determination of tumor-associated antigens in the early immunodiagnosis of tumors and early detection of relapses.
34. Master the principles of immunotherapy and immunoprophylaxis of tumors.
35. Provide immediate assistance in acute allergic or pseudo-allergic pathology.
36. To appoint immunotropic therapy in the complex treatment of infectious diseases.
37. To evaluate the effectiveness of assigned immunotherapy in the dynamics.
38. Possess the principles of immunoprophylaxis and use them in the clinic.
39. Conduct replacement therapy with immunoglobulin drugs.
40. Conduct antiviral immunotherapy for the administration of interferon drugs and interferon inducers.
41. Prescribe and evaluate the effectiveness of specific immunotherapy in the treatment of pollinosis and allergic rhinitis.

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REFERENCE LIST OF PRACTICAL WORKS AND TASKS IS FOR FINAL MODULE CONTROL

1. To canvass inspection of patients with immunodeficient diseases (to take the immunological history, define the inherited propensity to development of immunodeficits, estimation of data of methods of researches).
2. Able to fill the immunological questionnaire of patient on the basis of data of that to define a "high-risk group" in relation to an immunopathology.
3. A capture of determination of necessary spectrum of immunological tests skills is for the inspection of patients with immune depending pathology.
4. To identify the presence of the main clinical symptoms there of syndromes of immune disorders.
5. To carry out differential diagnosis, substantiate and formulate the diagnosis for the main immunodeficiency syndromes on the basis of analysis of laboratory and instrumental examination data.
6. Conduct clinical and immunological differential diagnosis of congenital and acquired immunodeficiencies.
7. Mastering the skills of data interpretation and basic principles for interpretation of data of leukograms and immunograms, taking into account the clinic, period of illness, immunological history, etc.
8. Mastering the skills of assessing the impact of negative environmental factors on immunological parameters.
9. Identify clinical signs of local immunity decompensation.
10. Identify signs of irritation of the immune system according to leukograms.
11. To appoint immunotropic treatment, to determine the prognosis, to carry out primary and secondary immunoprophylaxis in immuno-dependent diseases.
12. To know the basic principles of the appointment of immunotropic therapy in the complex treatment of immunological diseases.
13. Be able to take preventive measures during vaccination. Possess the principles of immunoprophylaxis.
14. Mastering the skills of determining the need for clinical and allergic examination.
15. To conduct interviews and physical examination of patients with allergopathology (to be able to collect allergic history, to determine the presence of genetic predisposition for the formation of allergic pathology).
16. To make a plan of examination of patients with allergic diseases.
17. To acquire the skills to perform skin allergy tests (tests).
18. Mastering the skills of evaluating laboratory allergy tests.
19. Master the skills to identify allergens with oriental antigenic determinants to make recommendations for allergic prophylaxis.
20. Master the skills to perform picfluometry and to evaluate its performance.
21. To make differential diagnosis, substantiate and formulate a diagnosis for major allergic diseases based on the analysis of laboratory and instrumental examination data.
22. To appoint treatment, to determine prognosis, to carry out primary and secondary prophylaxis for allergic diseases.
23. Provide immediate assistance in acute allergic or pseudo-allergic pathology.

24. To put into practice the standards of diagnosis and treatment of allergic diseases.
25. To master the skills to prescribe anti-allergic drugs, to know the recipe for basic anti-allergic drugs.
26. Mastering the skills of evaluating the laboratory results of determining the immunological criteria for autoimmune pathology.
27. To apply in practice the standards of immunodiagnostics and the appointment of immunosuppressive therapy with an assessment of its effectiveness in autoimmune diseases.
28. Interpret donor and recipient screening data for transplantation.
29. Mastering the skills to diagnose an acute, acute and chronic rejection crisis in organ and tissue transplantation.
30. Perform differential diagnosis of rejection crisis and infectious complications in patients after transplantation.
31. Prescribe immunosuppressive therapy and evaluate its effectiveness after organ and tissue transplantation.
32. To interpret indicators of immunograms in cancer patients with the evaluation of anti-blastomatic factors of protection.
33. Evaluate the results of the determination of tumor-associated antigens in the early immunodiagnosis of tumors and early detection of relapses.
34. Master the principles of immunotherapy and immunoprophylaxis of tumors.
35. Provide immediate assistance in acute allergic or pseudo-allergic pathology.
36. To appoint immunotropic therapy in the complex treatment of infectious diseases.
37. To evaluate the effectiveness of assigned immunotherapy in the dynamics.
38. Possess the principles of immunoprophylaxis and use them in the clinic.
39. Conduct replacement therapy with immunoglobulin drugs.
40. Conduct antiviral immunotherapy for the administration of interferon drugs and interferon inducers.
41. Prescribe and evaluate the effectiveness of specific immunotherapy in the treatment of pollinosis and allergic rhinitis.

CONTROL FORMS

Evaluation - it one of the finishing stages of educational activity and determination of success of studies. An estimation from discipline is proposed as middle from estimations for the modules, on that educational discipline is structured.

CURRENT EVALUATION CRITERIA

DISCIPLINES "CLINICAL IMMUNOLOGY AND ALLERGOLOGY"

FOR MEDICAL FACULTIES, DENTAL AND

MEDICAL-PSYCHOLOGICAL FACULTY

3 CREDITS / 90 HOURS: 2 hours lectures, 38 hours practical classes,

50 hours of individual work

Dissees of the discipline "Clinical Immunology and Allergology", which students receive

Evaluation of current learning activities		Individual Work	Amount
Traditional scale	Conversion to points	10	200
«5»	10		
«4»	8		
«3»	6		
«2»	0		

Assessment of knowledge in the discipline "Clinical immunology and allergology" is carried out on the appropriate scale:

Score	Explanation	
Score in points	National scale assessment	ECTS score
170-200	Perfectly	A Excellent (excellent performance with only a small number of errors)
155-169	Well	B In Very Good (above average with multiple errors)
140-154	Well	C Good (generally correct execution with a certain number of significant errors)
125-139	Satisfactory	D Satisfactory (not bad, but with a significant number of drawbacks)
111-124	Satisfactory	E Sufficient (execution meets the minimum criteria)
60-110	Disappointing	FX Unsatisfactory (re-assemblable)
1-59	Disappointing	F Unsatisfactory (with the obligatory re-study of the discipline)

3. Policy of the course: mandatory observance of academic integrity by students, namely:

- Independent implementation of all types of work, tasks, forms of control provided by the working program of this academic discipline;

- Reference to the sources of information at the time of use of ideas, developments, statements, information;

- Compliance with the rules of copyright and civil rights legislation;

- providing additional information about the results of their own educational (scientific, creative) activities, used methods of reports and sources of information.

- How to solve the issue of catching up with certain types of work for what reasons it is possible (sick leave, mobility, unforeseen circumstances, etc.).

The maximum number of points that a student can earn while studying the module is 80 points. It is calculated by multiplying the number of points corresponding to the grade "5" by the number of topics in the module.
Assessment of students' individual work (individual tasks):
Scores for individual tasks are awarded to the student only if they are successfully completed and protected. The number of points that you accrue for different types of individual tasks depends on their size and significance, but no more than 5 points. They are added to the sum of the points earned by the student for his / her current educational activity or to the points of final control.
Independent work of students, which is provided in the subject along with the classroom work, is assessed during the ongoing control of the topic in the relevant lesson. The assimilation of topics that are presented only for independent work, is controlled by the final modular control.
The final control is carried out upon completion of the study of all topics of the module at the last control lesson from the module.
List of points assigned to students:
Final control is allowed for students who have attended 75% of the academic curriculum of the classroom training course. A student who, for good reason, had a pass from all classes, is allowed to work on academic debt during the holidays.
The maximum number of points that a student can earn in the final examination is 120 points.
The module is considered enrolled if the student has scored at least 55% of the maximum number of points, which is 111 points.
Assessment of student achievement in the discipline is a rating and is ranked on a multi-scale scale as an arithmetic mean of mastering the relevant modules and is determined by the ECTS system and the traditional scale adopted in Ukraine.

Head of Department of clinical and laboratory immunology, allergology and medical genetics

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LIST OF TEACHING AND METHODOLOGICAL LITERATURE

Literature	Books	Year	Authors
1) Case studies in immunology : a clinical companion 6th ed.	Book	2012	I Raif Geha, Luigi Notarangelo.
2) IMMUNOLOGY Clinical Case Studies and Disease Pathophysiology	Textbook	2009	Warren Strober, Susan R.S. Gottesman
3) Human Genetics: From Molecules to Medicine	Book	2012	Christian Patrick Schaaf, Johannes Zschocke, Lorraine Potocki

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