Brief description of the discipline (abstract) for the catalog of elective disciplines

Current issues of COVID-19

Specialty	Medicine 222 (22 – health care)
Educational level	Master
Term of study (course)	120 hours, 4 credits ECTS (6th course)
Form of study	Full-time
Department	Department of Pediatrics and Pediatric Infectious Diseases

Summary of the course "Current issues of COVID-19". The need to teach the elective course "Current Issues of COVID-19" because of the fact that the coronavirus disease COVID-19 is currently a global pandemic and has devastating social and economic consequences. The pandemic spread of the SARS-CoV-2 virus has led to a mass admission of infectious patients and required a transition to a regime that would ensure epidemiological safety as soon as possible.

Doctors face a lot of questions every day about the features of the virus and its mutations, the need and effectiveness of vaccination, the clinical course and severity of a new coronavirus disease, complications, diagnosis and treatment tactics. Epidemiological and clinical features of coronavirus infection in children and adults are currently being studied worldwide for further development and improvement of diagnostic, therapeutic and prophylactic approaches.

The proposed course will give future doctors the opportunity to gain competencies in the diagnosis, treatment and prevention of coronavirus infection COVID-19, modern knowledge of regulation acts regarding COVID-19 in Ukraine and the world; epidemiological features and ways to prevent the disease; use of personal protective equipment and the patient's clinical route; indications for hospitalization; clinical features and complications of coronavirus disease in patients of different ages, prognostic criteria (clinical and laboratory) for the adverse course of the disease; diagnostic approaches with substantiations of diagnostic value of various methods of investigation; treatment approaches taking into account the experience of different countries and their own experience, providing emergency care in critical conditions, management of patients with postCOVID syndrome; issues of immunoprophylaxis and the feasibility of its implementation in specific situations.

Practical classes include elements of interactive technologies, in particular, master classes and simulation scenarios. At the end of the course the student will be able to decide on anti-epidemic measures in the focus of coronavirus infection and medical institution, be able to use personal protective equipment, diagnose COVID-19, choose treatment tactics in different age categories of patients and at different degrees of severity with the acquisition of relevant competencies.

Approximate list of training topics (lectures, practical classes, seminars):

- 1. Basic national documents and international guidelines for the management of patients with SARS-CoV-2 infection.
- 2. Epidemiology of coronavirus infection and ways to prevent SARS-CoV-2 infection. Master class on biological material collection for confirmation of coronavirus infection (PCR, antigen test and determination of IgM and IgG levels) and interpretation of results.
- 3. Training on the use of PPE of different levels of protection.
- 4. Pathogenesis and features of the immune response in SARS-CoV-2
- 5. Clinical features and severity of COVID-19 in patients of different ages. Coronavirus infection in newborns and young children.
- 6. Features of coronavirus pneumonia in children. Analysis of clinical cases.

- 7. Multisystem inflammatory syndrome associated with COVID-19 in children and adolescents. Master class on differential diagnosis.
- 8. COVID-19 diagnostic criteria. Training to assess laboratory parameters in patients with SARS-CoV-2 infection, to determine their prognostic value.
- 9. Treatment tactics for coronavirus infection in patients of different ages according to national and international recommendations. Approaches to the use of different groups of drugs in terms of evidence-based medicine.
- 10. Emergencies with COVID-19 in children.
- 11. Immunoprophylaxis of COVID-19. Indications, contraindications to vaccination, adverse events following immunization.
- 12. Analysis of clinical cases with investigation planning, evaluation of its results and analysis of treatment tactics.

The list of competencies, the acquisition of which the learning of discipline will provide: General competencies:

- GC1. Ability to abstract thinking, analysis and synthesis, the ability to learn and be modernly trained.
- GC2. Ability to apply knowledge in practical situations
- GC3. Understanding of subject area and professional activity
- GC4. Ability to adapt and act in a new situation
- GC5. Ability to make an informed decision; work in a team; interpersonal communicational skills
- GC7. Skills in the use of information and communication technologies
- GC8. Definiteness and perseverance in terms of tasks and responsibilities
- GC9. Ability to act with social responsibilities and awareness

Special (professional, subject) competencies:

- SC1. Skills of interviewing and clinical examination of the patient
- SC2. Ability to determine the required list of laboratory and instrumental investigations and evaluate their results
- SC3. Ability to make a preliminary and clinical diagnosis of the disease
- SC4. Ability to determine the required mode of work and rest in the treatment of diseases
- SC6. Ability to determine the principles of treatment of diseases
- SC7. Ability to diagnose emergencies
- SC8. Ability to determine the tactics of emergency medical care
- SC9. Emergency care skills
- SC11. Skills to perform medical manipulations
- SC13. Ability to carry out sanitary and hygienic and preventive measures
- SC14. Ability to plan and conduct preventive and anti-epidemic measures against infectious diseases
- SC17. Ability to complete medical records
- SC18. Ability to conduct epidemiological and medical statistical studies

The list of scientific and pedagogical (pedagogical) employees who will ensure the conduct of the elective course:

- 1. Associate Professor Mykola Garas
- 2. Associate Professor Natalia Bogutska
- 3. Associate Professor Uliana Marusyk
- 4. Associate Professor Sergiy Sazhyn
- 5. Assistant Inna Gorbatiuk

Head of the Department	prof. Olena Koloskova