

MINISTRY OF SCIENCE AND HIGHER EDUCATION OF THE RUSSIAN FEDERATION

**Federal State Autonomous Educational Institution of Higher Education
«National Research Lobachevsky State University of Nizhny Novgorod»**

Институт клинической медицины

УТВЕРЖДЕНО

решением президиума Ученого совета ННГУ

протокол № 1 от 16.01.2024 г.

Working programme of the discipline

Policlinical therapy

Higher education level

Specialist degree

Area of study / speciality

31.05.01 - General Medicine

Focus /specialization of the study programme

General Medicine

Mode of study

full-time

Nizhny Novgorod

Year of commencement of studies 2024

1. Место дисциплины в структуре ОПОП

Дисциплина Б1.О.45 Поликлиническая терапия относится к обязательной части образовательной программы.

2. Планируемые результаты обучения по дисциплине, соотнесенные с планируемыми результатами освоения образовательной программы (компетенциями и индикаторами достижения компетенций)

Формируемые компетенции (код, содержание компетенции)	Планируемые результаты обучения по дисциплине (модулю), в соответствии с индикатором достижения компетенции		Наименование оценочного средства	
	Индикатор достижения компетенции (код, содержание индикатора)	Результаты обучения по дисциплине	Для текущего контроля успеваемости	Для промежуточной аттестации
УК-10: Способен принимать обоснованные экономические решения в различных областях жизнедеятельности и	УК-10.1: Понимает базовые принципы функционирования экономики и экономического развития, цели формы участия государства в экономике УК-10.2: Применяет методы экономического и финансового планирования для достижения текущих и долгосрочных финансовых целей в различных областях жизнедеятельности.	УК-10.1: Понимать базовые принципы функционирования экономики и экономического развития, цели формы участия государства в экономике УК-10.2: Применять методы экономического и финансового планирования для достижения текущих и долгосрочных финансовых целей в различных областях жизнедеятельности.	Доклад-презентация	Зачёт: Дискуссия Экзамен: Контрольные вопросы
УК-11: Способен формировать нетерпимое отношение к проявлениям экстремизма, терроризма, коррупционному поведению и противодействовать им в профессиональной деятельности	УК-11.1: Анализирует действующие правовые нормы, способы профилактики, обеспечивающие борьбу с коррупцией и противодействие проявлениям экстремизма, терроризма в различных областях жизнедеятельности УК-11.2: Соблюдает правила взаимодействия на основе нетерпимого отношения к проявлению экстремизма, терроризма, коррупционному поведению в профессиональной деятельности	УК-11.1: Анализировать действующие правовые нормы, способы профилактики, обеспечивающие борьбу с коррупцией и противодействие проявлениям экстремизма, терроризма в различных областях жизнедеятельности УК-11.2: Соблюдать правила взаимодействия на основе нетерпимого отношения к проявлению экстремизма, терроризма, коррупционному поведению в профессиональной	Доклад-презентация	Зачёт: Дискуссионное обсуждение Экзамен: Контрольные вопросы

		деятельности		
УК-8: Способен создавать и поддерживать в повседневной жизни и в профессиональной деятельности безопасные условия жизнедеятельности и для сохранения природной среды, обеспечения устойчивого развития общества, в том числе при угрозе и возникновении чрезвычайных ситуаций и военных конфликтов	УК-8.1: Обеспечивает безопасные и комфортные условия труда на рабочем месте, в т.ч. с помощью средств защиты. УК-8.2: Выявляет и устраняет проблемы, связанные с нарушениями техники безопасности на рабочем месте. УК-8.3: Осуществляет действия по предотвращению возникновения чрезвычайных ситуаций (природного и техногенного происхождения) на рабочем месте, в т.ч. с помощью средств защиты	УК-8.1: Обеспечивать безопасные и комфортные условия труда на рабочем месте, в т.ч. с помощью средств защиты. УК-8.2: Выявлять и устраняет проблемы, связанные с нарушениями техники безопасности на рабочем месте. УК-8.3: Осуществлять действия по предотвращению возникновения чрезвычайных ситуаций (природного и техногенного происхождения) на рабочем месте, в т.ч. с помощью средств защиты.	Доклад-презентация Индивидуальное устное собеседование	Зачёт: Доклад Экзамен: Контрольные вопросы
ПК-3: Готовность к сбору и анализу жалоб пациента, данных его анамнеза, результатов осмотра, лабораторных, инструментальных, патолого-анатомических и иных исследований в целях распознавания состояния или установления факта наличия или отсутствия заболевания, проведение дифференциальной диагностики	ПК-3.1: Знать методы сбора анамнеза, жалоб, осмотра больного с терапевтической патологией для распознавания заболеваний, этиологию, патогенез, и клинику наиболее часто встречающихся заболеваний внутренних органов; современную классификацию, принципы и особенности основных методов клинических, лабораторных и инструментальных методов обследования, их диагностическое значение ПК-3.2: Уметь получить информацию о заболевании, интерпретировать жалобы, анамнез заболевания и жизни, данные, применить объективные методы обследования, выявить общие и специфические признаки заболевания; построить план	ПК-3.1: Знает методы сбора анамнеза, жалоб, осмотра больного с терапевтической патологией для распознавания заболеваний, этиологию, патогенез, и клинику наиболее часто встречающихся заболеваний внутренних органов; современную классификацию, принципы и особенности основных методов клинических, лабораторных и инструментальных методов обследования, их диагностическое значение ПК-3.2: Умеет получить информацию о заболевании, интерпретировать жалобы, анамнез заболевания и жизни, данные, применить объективные методы обследования, выявить общие и специфические признаки заболевания; построить план	Дискуссионное обсуждение	Зачёт: Тест Экзамен: Ситуационные задания

	<p>обследования больного с учетом стандартов и интерпретировать дополнительные методы обследования (лабораторно-инструментальные) с учетом нормы</p> <p>ПК-3.3: Владеть методами сбора анамнеза, жалоб больного с терапевтической патологии; навыком составления плана дополнительного обследования больного; интерпретацией результатов лабораторных и инструментальных исследований и проведения дифференциальной диагностики</p>	<p>обследования больного с учетом стандартов и интерпретировать дополнительные методы обследования (лабораторно-инструментальные) с учетом нормы</p> <p>ПК-3.3: Владеет методами сбора анамнеза, жалоб больного с терапевтической патологии; навыком составления плана дополнительного обследования больного; интерпретацией результатов лабораторных и инструментальных исследований и проведения дифференциальной диагностики</p>		
<p>ПК-4: Готовность к определению у пациента основных патологических состояний, симптомов, синдромов заболеваний, нозологических форм в соответствии с Международной статистической классификацией болезней и проблем, связанных со здоровьем, X пересмотра</p>	<p>ПК-4.1: Знать этиологию, патогенез заболеваний соответственно с Международной статистической классификацией болезней и проблем, связанных со здоровьем X пересмотра</p> <p>ПК-4.2: Уметь определить основные симптомы, синдромы нозологических форм заболеваний в соответствии с Международной статистической классификацией болезней и проблем, связанных со здоровьем X пересмотра</p> <p>ПК-4.3: Владеть навыками постановки диагноза на основании симптомов, синдромов нозологических форм заболеваний в соответствии с Международной статистической классификацией болезней и проблем, связанных со здоровьем X пересмотра</p>	<p>ПК-4.1: Знает этиологию, патогенез гинекологических заболеваний соответственно с Международной статистической классификацией болезней и проблем, связанных со здоровьем, X пересмотра</p> <p>ПК-4.2: Умеет определить основные симптомы, синдромы нозологических форм гинекологических заболеваний в соответствии с Международной статистической классификацией болезней и проблем, связанных со здоровьем, X пересмотра</p> <p>ПК-4.3: Владеет навыками постановки диагноза на основании симптомов, синдромов нозологических форм гинекологических заболеваний в соответствии с Международной</p>	<p>Дискуссионное обсуждение</p>	<p>Зачёт: Тест</p> <p>Экзамен: Кейс-задача</p>

		статистической классификацией болезней и проблем, связанных со здоровьем, X пересмотра		
ПК-5: Готовность к определению тактики ведения пациентов с учетом возраста, с различными нозологическими формами (разработка плана лечения, назначение медикаментозных и немедикаментозных средств согласно клиническим рекомендациям) в том числе оказание паллиативной медицинской помощи	ПК-5.1: Знать алгоритмы постановки диагноза и лечения и тактику ведения пациентов с различными нозологическими формами ПК-5.2: Уметь определять необходимую тактику ведения пациентов с различными нозологическими формами ПК-5.3: Владеть алгоритмами постановки диагноза и лечения и навыком определения тактики ведения пациентов с различными нозологическими формами	ПК-5.1: Знает алгоритмы постановки диагноза и лечения и тактику ведения пациентов с различными нозологическими формами ПК-5.2: Умеет определять необходимую тактику ведения пациентов с различными нозологическими формами ПК-5.3: Владеет алгоритмами постановки диагноза и лечения и навыком определения тактики ведения пациентов с различными нозологическими формами	Дискуссионное обсуждение	Зачёт: Тест Экзамен: Задачи
ПК-7: Готовность к определению необходимости применения природных лечебных факторов, лекарственной, немедикаментозной терапии и других методов у пациентов, нуждающихся в медицинской реабилитации и санаторно-курортном лечении	ПК-7.1: Знать основные природные лечебные факторы, лекарственную, немедикаментозную терапию и другие методы у пациентов, нуждающихся в медицинской реабилитации и санаторно-курортном лечении. ПК-7.2: Определять необходимость применения природных лечебных факторов, лекарственной, немедикаментозной терапии и других методов у пациентов, нуждающихся в медицинской реабилитации и санаторно-курортном лечении ПК-7.3: Владеть навыками выбора алгоритма определения необходимости применения природных лечебных факторов, лекарственной, немедикаментозной	ПК-7.1: Знает основные природные лечебные факторы, лекарственную, немедикаментозную терапию и другие методы у пациентов, нуждающихся в медицинской реабилитации и санаторно-курортном лечении. ПК-7.2: Определяет необходимость применения природных лечебных факторов, лекарственной, немедикаментозной терапии и других методов у пациентов, нуждающихся в медицинской реабилитации и санаторно-курортном лечении ПК-7.3: Владеет навыками выбора алгоритма определения необходимости применения природных лечебных	Индивидуальное устное собеседование	Зачёт: Доклад-презентация Экзамен: Контрольные вопросы

	терапии и других методов у пациентов, нуждающихся в медицинской реабилитации и санаторно-курортном лечении	факторов, лекарственной, немедикаментозной терапии и других методов у пациентов, нуждающихся в медицинской реабилитации и санаторно-курортном лечении		
ПК-8: Готовностью к проведению экспертизы временной нетрудоспособности, участию в проведении медико-социальной экспертизы, констатации биологической смерти человека	<p>ПК-8.1: Знать закономерности проведения экспертизы временной нетрудоспособности; закономерности участия в проведении медико-социальной экспертизы; закономерности констатации биологической смерти человека.</p> <p>ПК-8.2: Уметь проводить экспертизу временной нетрудоспособности; участвовать в проведении медико-социальной экспертизы; констатировать биологическую смерть человека.</p> <p>ПК-8.3: Владеть методами проведения экспертизы временной нетрудоспособности; участия в проведении медико-социальной экспертизы; констатации биологической смерти человека</p>	<p>ПК-8.1: Знает закономерности проведения экспертизы временной нетрудоспособности; закономерности участия в проведении медико-социальной экспертизы; закономерности констатации биологической смерти человека.</p> <p>ПК-8.2: Умеет проводить экспертизу временной нетрудоспособности; участвовать в проведении медико-социальной экспертизы; констатировать биологическую смерть человека.</p> <p>ПК-8.3: Владеет методами проведения экспертизы временной нетрудоспособности; участия в проведении медико-социальной экспертизы; констатации биологической смерти человека</p>	Индивидуальное устное собеседование	<p>Зачёт: Доклад</p> <p>Экзамен: Контрольные вопросы</p>

3. Структура и содержание дисциплины

3.1 Трудоемкость дисциплины

	очная
Общая трудоемкость, з.е.	9
Часов по учебному плану	324
в том числе	
аудиторные занятия (контактная работа):	
- занятия лекционного типа	50
- занятия семинарского типа (практические занятия / лабораторные работы)	138

- КСР	3
самостоятельная работа	97
Промежуточная аттестация	36 Экзамен, Зачёт

3.2. Содержание дисциплины

(структурированное по темам (разделам) с указанием отведенного на них количества академических часов и виды учебных занятий)

Наименование разделов и тем дисциплины	Всего (часы)	в том числе			
		Контактная работа (работа во взаимодействии с преподавателем), часы из них			Самостоятельная работа обучающегося, часы
		Занятия лекционного типа	Занятия семинарского типа (практические занятия/лабораторные работы), часы	Всего	
	0 Ф 0	0 Ф 0	0 Ф 0	0 Ф 0	0 Ф 0
Outpatient assessment of systemic vasculitis	10	2	4	6	4
Juvenile idiopathic arthritis	10	2	4	6	4
Chrystal- induced musculoskeletal disease	10	2	4	6	4
Spondyloarthritis	8	2	4	6	2
Antiphospholipid syndrome	6		4	4	2
Idiopathic inflammatory myopathies	8		4	4	4
Metabolic bone disease	10	2	4	6	4
Phaeochromocytoma and paraganglioma	6		4	4	2
Primary Aldosteronism	10	2	4	6	4
Cushing's disease	10	2	4	6	4
Adrenal insufficiency	10	2	4	6	4
Parathyroid, Calcium and bone metabolism disorders	10	2	4	6	4
Hyperprolactinaemia. Prolactinomas	10	2	4	6	4
Acromegaly and Gigantism	6	2	2	4	2
Endocrine diseases and pregnancy	10	2	4	6	4
Polycytic ovary syndrome and other androgen excess disorders	8	2	4	6	2
Urgent situations in endocrinology	8	2	4	6	2
Urgent situations in cardiology	6	2	2	4	2
Urgent situations in pulmonology	8	2	4	6	2
Cystic fibrosis	8	2	4	6	2
Cor pulmonale	6	2	2	4	2
Pleural effusion	8	2	4	6	2
Community-acquired pneumonia	4		2	2	2

Syndrome of pulmonary infiltration	8	2	4	6	2
Electrolyte disturbance	8	2	4	6	2
Chronic kidney disease	8	2	4	6	2
Urinary tract infection	6		4	4	2
Acute kidney injury	8	2	4	6	2
Urinary stone disease	8	2	4	6	2
Approach to the patient with polyuria	6		4	4	2
Post-cholecystectomy syndrome	6		4	4	2
Dizziness. Headache. Syncope. Outpatient evaluation	6		4	4	2
Interstitial lung diseases	7		4	4	3
Interventional cardiology. Coronary angiography. Interpreting. Cardiac catheterization. Angioplasty and coronary stenting. Thrombectomy	6		4	4	2
Invasive electrophysiology. Mechanism of tachycardias. The electrophysiology study..	6		4	4	2
Thyroid gland diseases . Outpatient evaluation and treatment	8	2	4	6	2
Complications of liver cirrhosis	4		2	2	2
Аттестация	36				
КСР	3			3	
Итого	324	50	138	191	97

Contents of sections and topics of the discipline

Vasculitis. Classiers of pregnancy. Thyroid disease during pregnancy. Diabetes, adrenal disease, disorders of the pituitary and hypothalamus in pregnancy

Juvenile idiopathic arthritis. Classification. Causes. Diagnosis. Symptoms. Treatment. Outpatient assessment

Crystal-induced musculoskeletal diseases.Causes. Diagnosis. Symptoms. Treatment. Outpatient assessment

Spondyloarthritis.Causes. Diagnosis. Symptoms. Treatment. Outpatient assessment

Antiphospholipid syndrome. Causes. Diagnosis. Symptoms. Treatment. Outpatient assessment

Idiopathic inflammatory myopathies. Causes. Diagnosis. Symptoms. Treatment. Outpatient assessment

Metabolic bone disease. Causes. Diagnosis. Symptoms. Treatment. Outpatient assessment

Phaeochromocytoma and paraganglioma. Causes. Diagnosis. Symptoms. Treatment. Outpatient assessment

Primary Aldosteronism. Causes. Diagnosis. Symptoms. Treatment. Outpatient assessment

Cushing's disease. Diagnosis. Symptoms. Treatment.

Adrenal insufficiency. Genetics and management

Parathyroid, Calcium and bone metabolism disorders. Hypercalcaemia. Primary hyperparathyroidism.

Hypocalcaemic disorders. Hypoparathyroidism and pseudohypoparathyroidism

Hyperprolactinaemia. Prolactinomas. Pathogenesis. Clinical features. Investigations. Treatment

Acromegaly. Pathogenesis. Clinical features. Investigations. Treatment

Endocrine disorders and pregnancy. Causes. Diagnosis. Symptoms. Treatment. Outpatient assessment

Polycystic ovary syndrome.Causes. Diagnosis. Symptoms. Treatment. Outpatient assessment

Urgent situations in endocrinology.Causes. Diagnosis. Symptoms. Treatment. Outpatient assessment

Urgent situations in cardiology.Causes. Diagnosis. Symptoms. Treatment. Outpatient assessment

Urgent situations in pulmonology Acute respiratory distress syndrome. Pneumothorax. Causes. Diagnosis. Symptoms. Treatment.

Cystic fibrosis. Causes. Diagnosis. Symptoms. Treatment. Outpatient assessment

Cor pulmonale. Causes. Diagnosis. Symptoms. Treatment. Outpatient assessment

Pleural effusion. Causes. Diagnosis. Symptoms. Treatment. Outpatient assessment

Community-acquired pneumonia. COVID pneumonia. Causes. Diagnosis. Symptoms. Treatment. Outpatient assessment

Syndrome of pulmonary infiltration Differential diagnosis. Differentiated antibiotic therapy for lung diseases. Causes of infiltration.

Inflammatory and non-inflammatory infiltrates. Tumor infiltrates. Lung cancer in the therapeutic practice.

Pulmonary tuberculosis in the therapeutic practice. Differential diagnosis of specific, allergic infiltrates, infiltrates in venous thromboembolism, systemic connective tissue diseases, hypostatic violations in the lungs.

Fungal infections of the lungs. Concept of pulmonary eosinophilia. Differential diagnosis of lung atelectasis.

Examination and treatment.

Electrolyte disturbance. Sodium. Hyponatraemia. Hypernatraemia. Potassium. Hypokalaemia. Hyperkalaemia.

Calcium. Hypocalcaemia. Hypercalcaemia

Chronic kidney disease. Definition. Classification. Approach to management.

Urinary tract infection. Upper and lower urinary tract infections. Causes. Diagnosis. Differential diagnosis. Treatment

Acute kidney injury. Diagnosis and differential diagnosis. Prevention. Treatment. Renal replacement therapy

Urinary stone disease. Types of stones. Diagnosis and differential diagnosis. Prevention. Treatment.

Approach to the patient with polyuria. Causes. Diagnosis and differential diagnosis. Treatment.

Post-cholecystectomy syndrome. Causes. Diagnosis and differential diagnosis. Treatment.

Dizziness. Headache. Syncope. Outpatient evaluation. Etiology and pathogenesis. Causes. Diagnosis and differential diagnosis. Treatment.

Interstitial lung diseases. Causes. Diagnosis. Symptoms. Treatment. Outpatient assessment

Interventional cardiology. Coronary angiography. Interpreting. Cardiac catheterization. Angioplasty and coronary stenting. Thrombectomy

Invasive electrophysiology. Mechanism of tachycardias. The electrophysiology study. Catheter ablation.

Implantable cardioverter defibrillators

Thyroid gland diseases. Outpatient evaluation and treatment

Complications of liver cirrhosis. Mechanism of tachycardias. The electrophysiology study. Catheter ablation.

Implantable cardioverter defibrillators

Практические занятия / лабораторные работы организуются, в том числе, в форме практической подготовки, которая предусматривает участие обучающихся в выполнении отдельных элементов работ, связанных с будущей профессиональной деятельностью.

На проведение практических занятий / лабораторных работ в форме практической подготовки отводится: очная форма обучения - 8 ч.

4. Учебно-методическое обеспечение самостоятельной работы обучающихся

Самостоятельная работа обучающихся включает в себя подготовку к контрольным вопросам и заданиям для текущего контроля и промежуточной аттестации по итогам освоения дисциплины приведенным в п. 5.

Case report writing in internal medicine. Manual. N.V. Zhdankina. NNSU.2021

5. Assessment tools for ongoing monitoring of learning progress and interim certification in the discipline (module)

5.1 Model assignments required for assessment of learning outcomes during the ongoing monitoring of learning progress with the criteria for their assessment:

5.1.1 Model assignments (assessment tool - Report-presentation) to assess the development of the competency YK-10:

1. Pharmacoeconomics: principles, methods and economic evaluation of drug therapies in IHD
2. Pharmacoeconomics: principles, methods and economic evaluation of drug therapies in COPD
3. Pharmacoeconomic analysis in classic and alternative eradication therapy regimes for *Helicobacter pylori*
4. Biological therapy in adult patients with ulcerative colitis
5. Outpatient management of patients with community-acquired pneumonia

5.1.2 Model assignments (assessment tool - Report-presentation) to assess the development of the competency YK-11:

1. Ethical and legal aspects of organ donation after euthanasia
2. Acute Kidney Failure. Causes, stages, treatment prognosis. Indications for kidney transplantation. Kidney transplantation from donors following euthanasia.
3. Chronic Kidney failure. Causes, stages, treatment prognosis. Ethical controversies in kidney transplantation.
4. Cost-effectiveness of kidney transplantation
5. Corruption in healthcare and medicine. Why should physicians care and what should they do?

5.1.3 Model assignments (assessment tool - Report-presentation) to assess the development of the competency YK-8:

1. Basic concepts and classification of emergency situations
2. Damaging effects of emergencies
3. Disaster medicine: main tasks, organizational structure
4. Medical and Evacuation support for population in emergency situations
5. Stages of medical evacuation

Assessment criteria (assessment tool — Report-presentation)

Grade	Assessment criteria
pass	The student has met the minimum standards of achievement for the course.
fail	The student has not met the minimum standards of achievement for the course. Is given if the standard has not been met and the basics have not been understood

5.1.4 Model assignments (assessment tool - Individual oral interview) to assess the development of the competency YK-8:

1. Disaster medicine: development and main areas of activity
2. Medical and psychological care for the population and rescuers in emergency situations
3. Predictive medical sorting during disasters
4. Basic measures to improve the stability of health facilities in the face of damaging factors
5. Activities carried out in health care institutions upon a threat of an emergency

5.1.5 Model assignments (assessment tool - Individual oral interview) to assess the development of the competency ПК-7:

1. Inpatient stage of treatment and rehabilitation following myocardial infarction
2. Complex medical and social rehabilitation of patients with diabetes in the rehabilitation centers
3. Rehabilitation of patients after diabetes-related lower limb amputation
4. Rehabilitation in thyroid interventions
5. The main methods of rehabilitation after pneumonia

5.1.6 Model assignments (assessment tool - Individual oral interview) to assess the development of the competency ПК-8:

1. Occupational diseases. Medical and social expertise. Establishing a disability group
2. Severe respiratory insufficiency. Medical and social expertise. Establishing a disability group. Individual rehabilitation programs
3. Chronic heart failure. Assessment of the effectiveness of the rehabilitation and other measures to improve the quality of life of persons with disabilities
4. Myocardial infarction. Determining the degree of loss of health in relation to the prospects for professional work
5. Osteoarthritis. Medical and social expertise. Establishing a disability group. Individual rehabilitation programs

Assessment criteria (assessment tool — Individual oral interview)

Grade	Assessment criteria
pass	The student has met the minimum standards of achievement for the course.
fail	The student has not met the minimum standards of achievement for the course. Is given if the standard has not been met and the basics have not been understood

5.1.7 Model assignments (assessment tool - Discussion) to assess the development of the competency ПК-3:

Metabolic syndrome and the risk of cardiovascular diseases

Differential diagnosis of metabolic syndrome

Obesity as a socially defined disease. Modern medical and lifestyle management

Macro- and microvascular complications of diabetes mellitus

Iodine deficiency and therapeutic considerations

5.1.8 Model assignments (assessment tool - Discussion) to assess the development of the competency ПК-4:

Biochemical structure of glomerular basement membrane in chronic glomerulonephritis

Nephrotic syndrome: diagnosis and treatment

Nephrotic syndrome: pathogenesis and treatment of edema

Nephritic syndrome. Causes, mechanism of clinical symptoms, treatment

Hematuria: practice essentials and pathophysiology

5.1.9 Model assignments (assessment tool - Discussion) to assess the development of the competency IK-5:

Arterial stiffness and hypertension in the elderly

Absolute contraindications to physical activities in geriatric patients

Complete revascularization in elderly

Clinical pharmacology in old person. Age related changes in pharmacodynamics/ Medication use in elderly patients

Comorbidities in older adults

Assessment criteria (assessment tool — Discussion)

Grade	Assessment criteria
outstanding	The student has exceeded the expectations and requirements of his assignments, tests and projects. He has demonstrated a thorough understanding of the subject ("Outstanding")
excellent	The student has met the expectations and requirements of his assignments, tests and projects. He has demonstrated a thorough understanding of the subject matter. The student has exceptional critical thinking and problem solving skills and has consistently produced high-quality work ("Excellent")
very good	The student has shown a good grasp of the course material, has the necessary skills and has created work of solid quality. The answer was nearly perfect, but there was one small error. ("Very good")
good	The student has generally performed well, but there may still be areas for improvement. The answer was correct, but there were some major errors ("Good")
satisfactory	The student has met the bare minimum of what is expected, but may need to improve in several areas. He has a basic understanding of the subject but likely lack in depth knowledge, critical thinking and analytical skills. The answer was partially correct, there were many major errors ("Satisfactory")

Grade	Assessment criteria
unsatisfactory	The student has demonstrated insufficient understanding of the material, has not kept up with the coursework or has submitted incomplete or careless work ("Unsatisfactory" or "Below Average")
poor	The student has not met the minimum standards of achievement for the course ("Poor" or "Fail").

5.2. Description of scales for assessing learning outcomes in the discipline during interim certification

Шкала оценивания сформированности компетенций

Уровень сформированности компетенций (индикатора достижения компетенций)	плохо	неудовлетворительно	удовлетворительно	хорошо	очень хорошо	отлично	превосходно
	не зачтено			зачтено			
<u>Знания</u>	Отсутствие знаний теоретического материала. Невозможность оценить полноту знаний вследствие отказа обучающегося от ответа	Уровень знаний ниже минимальных требований. Имели место грубые ошибки	Минимально допустимый уровень знаний. Допущено много негрубых ошибок	Уровень знаний в объеме, соответствующем программе подготовки. Допущено несколько негрубых ошибок	Уровень знаний в объеме, соответствующем программе подготовки. Допущено несколько несущественных ошибок	Уровень знаний в объеме, соответствующем программе подготовки. Ошибок нет.	Уровень знаний в объеме, превышающем программу подготовки.
<u>Умения</u>	Отсутствие минимальных умений. Невозможность оценить наличие умений вследствие отказа обучающегося от ответа	При решении стандартных задач не продемонстрированы основные умения. Имели место грубые ошибки	Продemonстрированы основные умения. Решены типовые задачи с негрубыми ошибками. Выполнены все задания, но не в полном объеме	Продemonстрированы все основные умения. Решены все основные задачи с негрубыми ошибками. Выполнены все задания в полном объеме, но некоторые с недочетами	Продemonстрированы все основные умения. Решены все основные задачи. Выполнены все задания в полном объеме, но некоторые с недочетами.	Продemonстрированы все основные умения. Решены все основные задачи с отдельными несущественными недочетами, выполнены все задания в полном объеме	Продemonстрированы все основные умения. Решены все основные задачи. Выполнены все задания, в полном объеме без недочетов
<u>Навыки</u>	Отсутствие базовых навыков. Невозможность оценить наличие	При решении стандартных задач не продемонстрированы базовые	Имеется минимальный набор навыков для	Продemonстрированы базовые навыки при решении	Продemonстрированы базовые навыки при решении	Продemonстрированы навыки при решении	Продemonстрирован творческий подход к решению

	навыков вследствие отказа обучающегося от ответа	навыки. Имели место грубые ошибки	решения стандартных задач с некоторым и недочетами	стандартных задач с некоторым и недочетами	стандартных задач без ошибок и недочетов	нестандартных задач без ошибок и недочетов	нестандартных задач
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Scale of assessment for interim certification

Grade		Assessment criteria
pass	outstanding	All the competencies (parts of competencies) to be developed within the discipline have been developed at a level no lower than "outstanding", the knowledge and skills for the relevant competencies have been demonstrated at a level higher than the one set out in the programme.
	excellent	All the competencies (parts of competencies) to be developed within the discipline have been developed at a level no lower than "excellent",
	very good	All the competencies (parts of competencies) to be developed within the discipline have been developed at a level no lower than "very good",
	good	All the competencies (parts of competencies) to be developed within the discipline have been developed at a level no lower than "good",
	satisfactory	All the competencies (parts of competencies) to be developed within the discipline have been developed at a level no lower than "satisfactory", with at least one competency developed at the "satisfactory" level.
fail	unsatisfactory	At least one competency has been developed at the "unsatisfactory" level.
	poor	At least one competency has been developed at the "poor" level.

5.3 Model control assignments or other materials required to assess learning outcomes during the interim certification with the criteria for their assessment:

5.3.1 Model assignments (assessment tool - Discussion) to assess the development of the competency UK-10

1. Acute viral infections of the upper respiratory tract. Etiology, symptoms, classification. Cost effectiveness of antiviral treatments
2. Cor pulmonale. Etiology, diagnostic features, cost- effective treatment
3. Cost effectiveness of new and emerging treatment options for the treatment of pheochromocytoma. Diagnostic criteria, importance of topical diagnosis.
4. Coarctation of the aorta. Definition. Diagnostic criteria. Management and treatment tactics.
5. Cost -effectiveness of medical, endovascular and surgical management of ACS

Assessment criteria (assessment tool — Discussion)

Grade	Assessment criteria
pass	The student has met the minimum standards of achievement for the course.

Grade	Assessment criteria
fail	The student has not met the minimum standards of achievement for the course. Is given if the standard has not been met and the basics have not been understood

5.3.2 Model assignments (assessment tool - Control questions) to assess the development of the competency YK-10

1. Infectious myocarditis. Diagnosis and treatment. Pharmaco-economical aspects of therapy of patients with myocarditis.
2. SLE. Diagnostic criteria.Symptoms, causes. Pharmaco-economical aspects of therapy
3. Differential diagnosis and treatment of articular syndrome. Pharmaco-economical aspects of therapy
4. Chronic gastritis. Classification. Carrent treatment options in gastroenterology. Pharmaco-economical aspects of therapy
5. Complications of gastric ulcer. New approaches in treatment. Pharmaco-economical aspects of therapy

5.3.3 Model assignments (assessment tool - Control questions) to assess the development of the competency YK-11

1. Chemical terrorism. Chemical weapon components. Treatment
2. Bioterrorism. Definition, agent used. Treatment
3. Health protection against biological terrorism.
4. Radio-nuclear threats. First responders and hospitals. Antidotes.
5. Nerve gases,choking agents. Antidotes

5.3.4 Model assignments (assessment tool - Control questions) to assess the development of the competency YK-8

Characteristics and Specifics of Managing Health-related After-effects of Earthquakes

Characteristics and Specifics of Managing Health-related After-effects of Floods

Characteristics and Specifics of Managing Health-related After-effects of Radiation Accidents

Characteristics and Specifics of Managing Health-related After-effects of Chemical Accidents

Characteristics of Road Accidents and Especially the Managing Their Health–related After-effects

Characteristics of Fires and Explosions and Specifics of Managing Their Health–related After-effects

Characteristics of Terrorist Acts and Specifics of Managing Their Health–related After-effects

5.3.5 Model assignments (assessment tool - Control questions) to assess the development of the competency ПК-7

1. Physiotherapy: types,treatment,procedures, cost and side effects
2. Rheumatoid arthritis. Causes, risk factors, Treatment. Benefits of physiotherapy in rehabilitation
3. COPD. Definition. Classification. Etiology and pathogenesis. Clinical features. Physical examination. Laboratory and instrumental methods of examination. Complications. Treatment. Physiotherapy.
4. Ischemic heart disease. . Definition. Classification. Etiology and pathogenesis. Clinical features. Physical examination. Laboratory and instrumental methods of examination. Complications. Treatment. Physiotherapy for IHD

5. Pneumonia. . Definition. Classification. Etiology and pathogenesis. Clinical features. Physical examination. Laboratory and instrumental methods of examination. Complications. Treatment. Chest physiotherapy for pneumonia in adults

5.3.6 Model assignments (assessment tool - Control questions) to assess the development of the competency ПК-8

1. Principals of temporary disability evaluation in rheumatoid arthritis
2. The international classification of functioning, disability and health in practice in rheumatological care
3. Disability in arthrosis: degree and conditions
4. Bronchial asthma as a cause of temporary disability
5. Disability evaluation in respiratory medicine

Assessment criteria (assessment tool — Control questions)

Grade	Assessment criteria
outstanding	The student has exceeded the expectations and requirements of his assignments, tests and projects. He has demonstrated a thorough understanding of the subject ("Outstanding")
excellent	The student has met the expectations and requirements of his assignments, tests and projects. He has demonstrated a thorough understanding of the subject matter. The student has exceptional critical thinking and problem solving skills and has consistently produced high-quality work ("Excellent")
very good	The student has shown a good grasp of the course material, has the necessary skills and has created work of solid quality. The answer was nearly perfect, but there was one small error. ("Very good")
good	The student has generally performed well, but there may still be areas for improvement. The answer was correct, but there were some major errors ("Good")
satisfactory	The student has met the bare minimum of what is expected, but may need to improve in several areas. He has a basic understanding of the subject but likely lack in depth knowledge, critical thinking and analytical skills. The answer was partially correct, there were many major errors ("Satisfactory")
unsatisfactory	The student has demonstrated insufficient understanding of the material, has not kept up with the coursework or has submitted incomplete or careless work ("Unsatisfactory" or "Below Average")
poor	The student has not met the minimum standards of achievement for the course ("Poor" or "Fail").

5.3.7 Model assignments (assessment tool - Discussion) to assess the development of the competency УК-11

1. What are forms of corruption in helthcare and medicine?

2. What should physicians do to tackle the menace of corruption?
3. Fighting corruption in the health sector- methods, tools and good practices
4. Medical research. Fatal clinical trials
5. Patient rights and responsibilities

Assessment criteria (assessment tool — Discussion)

Grade	Assessment criteria
pass	The student has met the minimum standards of achievement for the course.
fail	The student has not met the minimum standards of achievement for the course. Is given if the standard has not been met and the basics have not been understood

5.3.8 Model assignments (assessment tool - Report) to assess the development of the competency YK-8

Organization of Sanitary and Disease Control in Emergency Situations.

Goals and Objectives of Disease Control in Emergency Situations

Organization of Preventive Measures in Case of an Emergency

Organization of Medical Supplies in Emergency Situations .

Goals and Objectives of Medical Supplies in Emergency Situations

Organization of Medical Supply in Emergency Situations

Preparation of Medical Institutions for Work in Emergency Situations

Basic Measures to Improve the Stability of Health Facilities in the Face of Damaging Factors

Activities Carried out in Health Care Institutions upon a Threat of an Emergency

Evacuation of Health Care Institutions .

Medical and Psychological Protection of the Population and Rescuers in Emergency Situations

Psychological Traumatic Factors of Emergency Situations

Specific Behavioral Responses in Emergency Situations .

Medical and Psychological Care for the Population and Rescuers in Emergency Situations

5.3.9 Model assignments (assessment tool - Report) to assess the development of the competency IIK-8

1. Types of biological death. Stages.
2. Views, signs of death: pre-agonal state and agony
3. Biological death: its main features and difference from the clinical
4. What is clinical death-the causes and main symptoms.
5. Resuscitation of the patient with suspected or confirmed COVID-19
6. Cardiopulmonary resuscitation of a cardiac arrest patients
7. Basic and advanced cardiopulmonary resuscitation

Assessment criteria (assessment tool — Report)

Grade	Assessment criteria
pass	The student has met the minimum standards of achievement for the course.
fail	The student has not met the minimum standards of achievement for the course. Is given if the standard has not been met and the basics have not been understood

5.3.10 Model assignments (assessment tool - Test) to assess the development of the competency ПК-3

A 41-year-old man has been drinking large quantities of water--up to 20 liters per day--for the past week. On physical examination he has diminished skin turgor and dry mucous membranes. Laboratory studies show sodium 162 mmol/L, potassium 4.1 mmol/L, chloride 121 mmol/L, and bicarbonate 27 mmol/L. His serum glucose is 75 mg/dL and creatinine 1.0 mg/dL. His serum osmolality is 343 mOsm/kg. A deficiency of which of the following hormones is most likely present in this man?

1. Vasopressin
2. Oxytocin
3. Insulin
4. Growth hormone
5. Prolactin

A 50-year-old man has a lump on his neck found at physical examination. A fine needle aspirate of this lump shows a follicular neoplasm of the thyroid. He undergoes a total thyroidectomy. Within a day following surgery, he is noted to have tingling sensations and neuromuscular irritability. Which of the following serum laboratory tests should be ordered immediately to determine further therapy for this man?

1. TSH
2. Parathormone
3. Thyroxine
4. Calcium
5. Calcitonin
6. Iodine

A 30-year-old woman from Barcelona has noted enlargement of her neck over the past 4 months. On physical examination, she has a diffusely enlarged thyroid that is not painful to palpation. Her TSH level is 0.2 mU/L. A subtotal thyroidectomy is performed and histologically the tissue shows follicles with papillary infoldings lined by tall columnar cells. Which of the following is the most likely diagnosis?

1. Subacute granulomatous thyroiditis
2. Papillary carcinoma
3. Multinodular goiter
4. Hashimoto thyroiditis
5. Graves disease

A 57-year-old man is found comatose. On physical examination he has decreased skin turgor. Laboratory studies show a blood glucose of 780 mg/dL. Urinalysis reveals no ketosis or proteinuria, though there is 4+ glucosuria. Which of the following is the most likely diagnosis?

1. Neuroendocrine tumor secreting glucagon
2. Type I diabetes mellitus
3. Cushing syndrome
4. Ingestion of a large quantity of sugar
5. Type II diabetes mellitus

A 23-year-old man wants to increase his muscle mass for playing physical contact sports. He attempts to accomplish this by injections of a substance obtained from a 'friend'. Over the next year he develops acne, icterus, and increased fatigue. An infertility workup reveals hypospermia. Laboratory studies show Hgb 19.2 g/dL, Hct 58.1.4%, platelet count 330,300/microliter, and WBC count 7410/microliter. Which of the following neoplasms is he at greatest risk for developing in the future?

1. Hepatocellular carcinoma
2. Papillary carcinoma
3. Renal cell carcinoma
4. Rhabdomyosarcoma
5. Seminoma

A 33-year old woman has had increased anxiety with headaches and diaphoresis over the past 2 months. On physical examination she is afebrile, with a heart rate of 90/minute and blood pressure 150/90 mm Hg. Laboratory studies show elevated urinary catecholamines, elevated plasma renin activity, and normal TSH. Her plasma cortisol level is normal. An abdominal CT scan is performed. At which of the following locations is a mass lesion most likely to be found?

1. Aortic bifurcation
2. Hepatic capsule
3. Pancreatic tail
4. Mediastinum
5. Splenic hilum

5.3.11 Model assignments (assessment tool - Test) to assess the development of the competency IIK-4

A 45-year-old man has a 4 month history of nonfocal, generalized headaches. On physical examination he is found to have a blood pressure of 170/110 mm Hg. Laboratory studies show a serum sodium of 146 mmol/L, potassium 2.3 mmol/L, chloride 103 mmol/L, CO₂ 27 mmol/L, glucose 82 mg/dL, and creatinine 1.2 mg/dL. His plasma renin activity is 0.1 ng/mL/hr and his serum aldosterone 65 ng/mL. Which of the following is the most likely cause for his findings?

1. 21-hydroxylase enzyme deficiency
2. Adrenal cortical adenoma
3. Pituitary adenoma
4. Exogenous corticosteroid administration
5. Renal cell carcinoma

A 40-year-old woman has noted painless swelling of her neck for the past 3 weeks. On physical examination there is diffuse enlargement of her thyroid. Laboratory studies show an increased titer of anti-thyroid peroxidase and anti-thyroglobulin antibodies. Within a month, the swelling has diminished. Which of the following complications is she most likely to develop?

1. Amyloidosis
2. Hypothyroidism
3. Non-Hodgkin lymphoma
4. Papillary carcinoma
5. Riedel thyroiditis

A 45-year-old woman with severe rheumatoid arthritis has been on chronic corticosteroid therapy for the past 15 years. She is admitted for an orthopedic procedure to correct joint deformity from her disease. She continues to receive her regular dosage of 5 mg of prednisone per day. Three days postoperatively, she develops an aspiration pneumonia with *Klebsiella pneumoniae* cultured from sputum. Five days following the surgery, she becomes obtunded. Laboratory findings at that time include: sodium 105 mmol/L, potassium 5.4 mmol/L, chloride 87 mmol/L, CO₂ 16 mmol/L, glucose 40 mg/dL, and creatinine 1.1 mg/dL. Which of the following complications is most likely to have occurred in this patient?

1. Anterior pituitary necrosis
2. Waterhouse-Friderichsen syndrome
3. Acute Addisonian crisis
4. Conn syndrome
5. 21-hydroxylase deficiency

A 38-year-old woman has had a feeling of fullness in her neck for the past year. She is otherwise asymptomatic. Her physician's assistant palpates a symmetrically enlarged but nontender thyroid gland. She has no difficulty swallowing. There is no palpable lymphadenopathy. She is afebrile. Her serum TSH is 3.5 mU/L with total thyroxine of 8.2 micrograms/dL. Thyroid peroxidase antibody is not detected. Two years later, her thyroid has not appreciably changed in size. Which of the following conditions is she most likely to have?

1. Graves disease
2. Nodular goiter
3. Hashimoto thyroiditis
4. Anaplastic carcinoma
5. Follicular adenoma
6. Papillary carcinoma

A 15-year-old boy has had worsening headaches for 2 months. On examination he has diminished peripheral vision, but no loss of visual acuity. A head CT scan reveals a 4 cm mass expanding the sella turcica and eroding the sphenoid bone. The mass is cystic with scattered calcifications. Which of the following is the most likely diagnosis?

1. Prolactinoma
2. Metastatic seminoma
3. Empty sella syndrome
4. Anaplastic astrocytoma
5. Craniopharyngioma
6. Osteosarcoma

A 50-year-old man has had weight loss of 4 kg over the past 6 months, along with bruises on his skin with even minor trauma and back pain. He has smoked 2 packs a cigarettes per day for 35 years. On physical examination he has obesity in a truncal distribution, plethora, and a blood pressure of 160/110 mm Hg. A radiograph of the spine reveals a compressed fracture of T11. Which of the following neoplasms is he most likely to have?

1. Pheochromocytoma of bladder

2. Follicular carcinoma of thyroid
3. Osteosarcoma of femur
4. Small cell anaplastic carcinoma of lung
5. Neuroendocrine carcinoma of pancreas

5.3.12 Model assignments (assessment tool - Test) to assess the development of the competency IIK-5

A 40-year-old woman notes increasing enlargement and discomfort in her neck over the past week. The nurse practitioner palpates diffuse, symmetrical enlargement with tenderness in the region of the thyroid gland. Thyroid function tests show serum TSH of 0.8 mU/L and thyroxine of 11.9 micrograms/dL. She is referred to an endocrinologist, but the next available appointment is in 8 weeks. When examined by the endocrinologist her thyroid is no longer palpable and there is no pain. Repeat thyroid function tests reveal a serum TSH of 3.8 mU/L and thyroxine of 5.7 micrograms/dL. Which of the following thyroid diseases is most likely to produce these findings?

1. Nodular goiter
2. Non-Hodgkin lymphoma
3. DeQuervain disease
4. Hashimoto thyroiditis
5. Graves disease
6. Riedel thyroiditis
7. Iodine deficiency

A 33-year-old previously healthy man has lateral visual field deficits, but his residual vision is 20/20. His facial features have changed over the past year. His shoe size has increased. A head CT scan reveals enlargement of the sella turcica. Which of the following hormones is most likely being secreted in excessive amounts in this man?

1. Antidiuretic hormone
2. Prolactin
3. ACTH
4. Growth hormone
5. Luteinizing hormone

A 47-year-old woman has felt a 'lump' in her neck for the past 2 months. On physical examination there is a firm nodule in the right lobe of her thyroid. Following fine needle aspiration and cytologic diagnosis of a neoplasm, a thyroidectomy is performed. Grossly, there is a 3 cm mass in the right lower pole that on sectioning is cystic and has papillary excrescences. Which of the following microscopic pathologic findings is most typical for this lesion?

1. Giant cells
2. Amyloid stroma
3. Small thyroid follicles
4. Clear nuclear chromatin
5. Pleomorphic spindle cells

The mother of an 11-month-old infant had noted enlargement of the baby's abdomen within the past month. This is confirmed by the osteopathic physician, who notes that the baby is otherwise normally developed. An abdominal CT scan reveals a 6 cm mass, with some scattered calcifications, above the right kidney. Laboratory studies show a greatly elevated urinary vanillylmandelic acid (VMA), while the urinary homovanillic acid (HVA) is only slightly increased. The mass is removed and microscopically is composed of sheets of small blue cells. What is the most likely diagnosis?

1. Congenital adrenal hyperplasia
2. Adrenal cortical carcinoma
3. Neuroblastoma
4. Non-Hodgkin lymphoma
5. Pheochromocytoma
6. Aldosteronoma

A 53-year-old woman has pain in her neck for the past month. On physical examination her vital signs include T 37°C, P 77/minute, RR 16/minute, and BP 130/80 mm Hg. There is an irregular firm mass palpable in her left neck. A CT scan shows an infiltrative mass involving the left lobe of the thyroid and extending into adjacent soft tissues. Laboratory studies show TSH 2.9 mU/L, total serum thyroxine 8.6 microgm/dL, calcium 8.7 mg/dL, and phosphorus 2.8 mg/dL. A fine needle aspiration biopsy of the mass shows malignant spindle-shaped cells present that are strongly positive for nuclear p53 protein immunohistochemically. Which of the following neoplasms is this woman most likely to have?

1. Anaplastic carcinoma
2. Follicular carcinoma
3. Medullary carcinoma
4. Non-Hodgkin lymphoma
5. Papillary carcinoma
6. Parathyroid carcinoma

Assessment criteria (assessment tool — Test)

Grade	Assessment criteria
pass	More than 60% of correct answers
fail	Less than 60% of correct answers

5.3.13 Model assignments (assessment tool - Situational tasks) to assess the development of the competency ПК-3

An 35-year-old woman has had insomnia for the past 4 months, as well as episodes of diarrhea with up to 4 loose stools per day. On physical examination, she exhibits bilateral proptosis. Her outstretched hands have a fine tremor. On palpation of her neck, the thyroid gland does not appear to be enlarged and no masses are palpable. Laboratory studies show a serum TSH of 8.8 microU/mL in association with a serum total thyroxine of 15.1 microgram/dL. Which of the following is the most likely diagnosis?

A 25-year-old woman has had a 7 kg weight loss over the past 6 months without dieting or trying to lose weight. On physical examination she appears anxious and worried. Her hands are warm and tremulous. Vital signs show her temperature to be 37.4°C, pulse 110/minute, respirations 26/minute, and blood pressure 135/75 mm Hg. Serum laboratory data include glucose 78 mg/dL and creatinine 0.8 mg/dL. Which of the following additional laboratory test findings is most likely to be present in this woman?

A 50-year-old man has episodic headaches for 3 months. On physical examination his blood pressure is 185/110 mm Hg, with no other remarkable findings. Laboratory studies show sodium 145 mmol/L, potassium 4.3 mmol/L, chloride 103 mmol/L, CO₂ 26 mmol/L, glucose 91 mg/dL, and creatinine 1.3 mg/dL. An abdominal

CT scan shows a 7 cm left adrenal mass. During surgery, as the left adrenal gland is removed, there a marked rise in blood pressure. Which of the following laboratory test findings most likely explains his findings?

A 47-year-old woman feels a 'lump' in her neck that she didn't notice 5 months before. Her physician's assistant palpates a firm nodule 2 cm in size to the left of midline in the region of the thyroid gland. By scintigraphic scanning this nodule appears 'cold' with normal activity in the surrounding normally sized thyroid gland. Which of the following is the most likely diagnosis?

A 56-year-old woman has had diffuse, dull, constant abdominal pain for the past 2 months. On physical examination no abnormal findings are noted. An abdominal CT scan shows a 3 cm right adrenal mass. The right adrenal is excised and on microscopic examination the mass is composed of cells resembling adrenal cortex. Which of the following features is the most reliable indicator that this mass is malignant?

Assessment criteria (assessment tool — Situational tasks)

Grade	Assessment criteria
outstanding	The student has exceeded the expectations and requirements of his assignments, tests and projects. He has demonstrated a thorough understanding of the subject ("Outstanding")
excellent	The student has met the expectations and requirements of his assignments, tests and projects. He has demonstrated a thorough understanding of the subject matter. The student has exceptional critical thinking and problem solving skills and has consistently produced high-quality work ("Excellent")
very good	The student has shown a good grasp of the course material, has the necessary skills and has created work of solid quality. The answer was nearly perfect, but there was one small error. ("Very good")
good	The student has generally performed well, but there may still be areas for improvement. The answer was correct, but there were some major errors ("Good")
satisfactory	The student has met the bare minimum of what is expected, but may need to improve in several areas. He has a basic understanding of the subject but likely lack in depth knowledge, critical thinking and analytical skills. The answer was partially correct, there were many major errors ("Satisfactory")
unsatisfactory	The student has demonstrated insufficient understanding of the material, has not kept up with the coursework or has submitted incomplete or careless work ("Unsatisfactory" or "Below Average")
poor	The student has not met the minimum standards of achievement for the course ("Poor" or "Fail").

5.3.14 Model assignments (assessment tool - Case-task) to assess the development of the competency ПК-4

A 29-year-old primigravida who received no prenatal care has marked vaginal bleeding after the onset of labor at 38 weeks gestation. Cesarean section is performed and a lacerated low-lying placenta is removed. She remains hypotensive for 6 hours and requires transfusion of 12 packed RBC units. Postpartum, she becomes unable to breast-feed the infant. She does not have a resumption of normal menstrual cycles. She becomes more sluggish and tired. Laboratory findings include hyponatremia, hyperkalemia, and hypoglycemia. Which of the following pathologic lesions is she most likely to have had following delivery?

A 58-year-old man with a history of diabetes mellitus has noted the presence of bone pain, especially of his hands, for the past 6 months. On physical examination there is no swelling or redness of his hands, no joint deformity, but the range of motion is slightly decreased. Laboratory studies show sodium 139 mmol/L, potassium 4.0 mmol/L, chloride 98 mmol/L, CO₂ 22 mmol/L, glucose 153 mg/dL, creatinine 7.8 mg/dL, calcium 7.8 mg/dL, phosphorus 5.7 mg/dL, total protein 6.2 g/dL, and albumin 4.0 g/dL. Which of the following conditions is this man most likely to have?

A 49-year-old woman has had increasing cold intolerance, weight gain of 4 kg, and sluggishness over the past two years. A physical examination reveals dry, coarse skin and alopecia of the scalp. Her thyroid is not palpably enlarged. Her serum TSH is 11.7 mU/L with thyroxine of 2.1 micrograms/dL. A year ago, anti-thyroglobulin and anti-thyroid peroxidase autoantibodies were detected at high titer. Which of the following thyroid diseases is she most likely to have?

A 47-year-old man has a palpable mass in the right lobe of his thyroid gland. Ultrasound examination reveals a 3 cm right lobe mass and a 1 cm left lobe mass. Laboratory studies show a normal TSH and free T₄. A fine needle aspiration biopsy of the masses is performed. Microscopic findings include nests of round to ovoid cells without follicle development, consistent with parafollicular C cells. Which of the following is the most likely diagnosis?

A 48-year-old woman has experienced constant back pain exacerbated by movement over the past month. She reports increasing weakness over the past 3 months. On physical examination her blood pressure is 165/110 mm Hg. She has a BMI of 28 kg/m². Her face appears plethoric. A radiograph of the spine reveals a compressed fracture at T10. Laboratory findings include a serum glucose of 155 mg/dL. Which of the following pathologic lesions is most likely to explain her findings?

A 33-year-old woman has noted a weight gain of 6 kg over the past year. She has normal menstrual periods. On physical examination her blood pressure is 170/105 mm Hg. Her skin shows marked plethora. Abdominal striae are present. A serum electrolyte panel shows sodium 141 mmol/L, potassium 4.4 mmol/L, chloride 100 mmol/L, CO₂ 25 mmol/L, glucose 181 mg/dL, and creatinine 1.0 mg/dL. Which of the following radiologic findings would you most expect to be present in this patient?

Assessment criteria (assessment tool — Case-task)

Grade	Assessment criteria
outstanding	The student has exceeded the expectations and requirements of his assignments, tests and projects. He has demonstrated a thorough understanding of the subject ("Outstanding")
excellent	The student has met the expectations and requirements of his assignments, tests and projects. He has demonstrated a thorough understanding of the subject matter. The student has exceptional critical thinking and problem solving skills and has consistently produced high-quality work ("Excellent")

Grade	Assessment criteria
very good	The student has shown a good grasp of the course material, has the necessary skills and has created work of solid quality. The answer was nearly perfect, but there was one small error. ("Very good")
good	The student has generally performed well, but there may still be areas for improvement. The answer was correct, but there were some major errors ("Good")
satisfactory	The student has met the bare minimum of what is expected, but may need to improve in several areas. He has a basic understanding of the subject but likely lack in depth knowledge, critical thinking and analytical skills. The answer was partially correct, there were many major errors ("Satisfactory")
unsatisfactory	The student has demonstrated insufficient understanding of the material, has not kept up with the coursework or has submitted incomplete or careless work ("Unsatisfactory" or "Below Average")
poor	The student has not met the minimum standards of achievement for the course ("Poor" or "Fail").

5.3.15 Model assignments (assessment tool - Tasks) to assess the development of the competency ИК-5

A 31-year-old woman, who has two healthy children, notes that she has had no menstrual periods for the past 6 months, but she is not pregnant and takes no medications. Within the past week, she has noted some milk production from her breasts. She has been bothered by headaches for the past 3 months. After nearly hitting a bus while changing lanes driving her vehicle, she is concerned with her vision. An optometrist finds her lateral vision to be reduced. On physical examination she is afebrile and normotensive. Which of the following laboratory test findings is most likely to be present in this woman?

A 28-year-old woman has had difficulty concentrating at work for the past month. She is constantly getting up and walking around to visit co-workers. She complains that the work area is too hot. She seems nervous and often spills her coffee. She has been eating more but has lost 5 kg in the past 2 months. On physical examination her temperature is 37.5°C, pulse 108/minute, respiratory rate 24/minute, and blood pressure 145/85 mm Hg. Which of the following laboratory findings is most likely to be present in this woman?

A 19-year-old previously healthy woman has had a mild pharyngitis followed by a high fever over the past 24 hours. When seen in the emergency room, her skin now shows extensive areas of purpura. Vital signs include temperature 39°C, pulse rate 102/minute, respiratory rate 26/minute, and blood pressure 80/55 mm Hg. Laboratory studies show a serum sodium of 115 mmol/L, potassium 5.3 mmol/L, chloride 92 mmol/L, CO₂ 22 mmol/L, glucose 42 mg/dL, and creatinine 1.1 mg/dL. Which of the following is the most likely diagnosis?

A 40-year-old woman has noted enlargement of her anterior neck region over the past 8 months. On physical examination her vital signs include T 36.8°C, P 64/minute, RR 16/minute, and BP 155/105 mm Hg. There is diffuse, symmetrical thyroid enlargement without tenderness. A chest radiograph is normal. Fine needle aspiration of the thyroid yields cells consistent with a neoplasm. Laboratory studies show that she is euthyroid,

but her serum ionized calcium is elevated. She is taken to surgery and frozen sections of several thyroid masses show a malignant neoplasm composed of polygonal cells in nests. A thyroidectomy is performed. Immunostaining for calcitonin of the permanent sections is positive, and the neoplasm has an amyloid stroma with Congo red staining. Which of the following neoplasms is she most likely to have?

A 37-year-old man experiences abdominal pain, nausea, and constipation for the past 3 days. On physical examination he has no palpable abdominal masses and bowel sounds are present. His lungs are clear to auscultation. He has a heart rate of 80/min with an irregular rhythm. An electrocardiogram demonstrates a shortened QT(corrected) interval and a prolonged PR interval. He has a stool positive for occult blood. Upper GI endoscopy reveals multiple 1 cm diameter shallow ulcerations of the gastric antrum. Which of the following laboratory test findings is most likely to be present in this man?

Assessment criteria (assessment tool — Tasks)

Grade	Assessment criteria
outstanding	The student has exceeded the expectations and requirements of his assignments, tests and projects. He has demonstrated a thorough understanding of the subject ("Outstanding")
excellent	The student has met the expectations and requirements of his assignments, tests and projects. He has demonstrated a thorough understanding of the subject matter. The student has exceptional critical thinking and problem solving skills and has consistently produced high-quality work ("Excellent")
very good	The student has shown a good grasp of the course material, has the necessary skills and has created work of solid quality. The answer was nearly perfect, but there was one small error. ("Very good")
good	The student has generally performed well, but there may still be areas for improvement. The answer was correct, but there were some major errors ("Good")
satisfactory	The student has met the bare minimum of what is expected, but may need to improve in several areas. He has a basic understanding of the subject but likely lack in depth knowledge, critical thinking and analytical skills. The answer was partially correct, there were many major errors ("Satisfactory")
unsatisfactory	The student has demonstrated insufficient understanding of the material, has not kept up with the coursework or has submitted incomplete or careless work ("Unsatisfactory" or "Below Average")
poor	The student has not met the minimum standards of achievement for the course ("Poor" or "Fail").

5.3.16 Model assignments (assessment tool - Report-presentation) to assess the development of the competency ΠK-7

Resistant hypertension. Non-pharmacological methods of treatment

Non-pharmacological treatment of asthma

Implementation of non-pharmacological interventions for the treatment of pyelonephritis

Non-pharmacological treatments as a method improving the safety of pharmacotherapy of Diabetes mellitus

Aspects of the non-pharmacological treatment of irritable bowel syndrome

Rehabilitation of patients with chronic pyelonephritis using mineral waters

Assessment criteria (assessment tool — Report-presentation)

Grade	Assessment criteria
pass	The student has met the minimum standards of achievement for the course.
fail	The student has not met the minimum standards of achievement for the course. Is given if the standard has not been met and the basics have not been understood

6. Учебно-методическое и информационное обеспечение дисциплины (модуля)

Основная литература:

1. Allan H. Goroll. Primary Care Medicine : Office Evaluation and Management of the Adult Patient. - Lippincott Williams & Wilkins, 2021. - 1 online resource. - ISBN 9781469883694. - ISBN 9781451151497. - Текст : электронный., <https://e-lib.unn.ru/MegaPro/UserEntry?Action=FindDocs&ids=856234&idb=0>.
2. Applied economics in medicine. - Майкоп : МГТУ, 2020. - 88 с. - Книга из коллекции МГТУ - Языкознание и литературоведение. - ISBN 978-5-907004-55-9., <https://e-lib.unn.ru/MegaPro/UserEntry?Action=FindDocs&ids=858901&idb=0>.
3. Data Analytics in Medicine : Concepts, Methodologies, Tools, and Applications. - IGI Global, 2019. - 1 online resource. - ISBN 9781799812050. - ISBN 9781799812043. - Текст : электронный., <https://e-lib.unn.ru/MegaPro/UserEntry?Action=FindDocs&ids=856171&idb=0>.

Дополнительная литература:

1. Giovanni Maio. Essays in Medical Ethics : Plea for a Medicine of Prudence. - Thieme Medical Publishing Inc., 2017. - 1 online resource. - ISBN 9783132411456. - ISBN 9783132411364. - Текст : электронный., <https://e-lib.unn.ru/MegaPro/UserEntry?Action=FindDocs&ids=856071&idb=0>.
2. John Raffensperger, Author. Insights into Medicine and Surgery. - Cambridge Scholars Publishing, 2022. - 1 online resource. - ISBN 9781527578906. - ISBN 9781527578012. - Текст : электронный., <https://e-lib.unn.ru/MegaPro/UserEntry?Action=FindDocs&ids=856217&idb=0>.
3. Azin Alizadehasl, Editor. Practical Cardiology Review: A Self-assessment Tool. - Cambridge Scholars Publishing, 2019. - 1 online resource. - ISBN 9781527539778. - ISBN 9781527537293. - Текст : электронный., <https://e-lib.unn.ru/MegaPro/UserEntry?Action=FindDocs&ids=856074&idb=0>.
4. Selected questions of interventional cardiology : study guide / Stolyarova V. V., Leshchankina N.

- У., Skorobogatova L. N., Gorshenina E. I., Nazarkina M. G., Chegodaeva L. V., Ahmad S. - Саранск : МГУ им. Н.П. Огарева, 2023. - 104 с. - Книга из коллекции МГУ им. Н.П. Огарева - Медицина. - ISBN 978-5-7103-4511-5., <https://e-lib.unn.ru/MegaPro/UserEntry?Action=FindDocs&ids=895373&idb=0>.
5. Maria Gonzalez. Washington Manual Rheumatology Subspecialty Consult. - Lippincott Williams & Wilkins, 2021. - 1 online resource. - ISBN 9781975113407. - ISBN 9781975113391. - Текст : электронный., <https://e-lib.unn.ru/MegaPro/UserEntry?Action=FindDocs&ids=856235&idb=0>.
6. Salah Hamdi, Author. Grammar Formalism for Medical Data Analysis: Its Application in ECG, Scintigraphy and Tomography. - Cambridge Scholars Publishing, 2022. - 1 online resource. - ISBN 9781527584303. - ISBN 9781527584297. - Текст : электронный., <https://e-lib.unn.ru/MegaPro/UserEntry?Action=FindDocs&ids=856108&idb=0>.
7. Ashok Kumar Pandurangan. Diagnostic and Treatment Methods for Ulcerative Colitis and Colitis-Associated Cancer. - IGI Global, 2021. - 1 online resource. - ISBN 9781799835813. - ISBN 9781799835806. - Текст : электронный., <https://e-lib.unn.ru/MegaPro/UserEntry?Action=FindDocs&ids=856160&idb=0>.
8. Konakbaeva R. D. Criteria for diagnosis and algorithms of treatment of gastro-intestinal tract diseases / Konakbaeva R. D., Larushina E. M., Igimbaeva G. T. - Караганда : КапГМУ, 2013. - 111 с. - Книга из коллекции КапГМУ - Медицина., <https://e-lib.unn.ru/MegaPro/UserEntry?Action=FindDocs&ids=799336&idb=0>.
9. Lippincott Visual Nursing : A Guide to Clinical Diseases, Skills, and Treatments. - Lippincott Williams & Wilkins, 2019. - 1 online resource. - ISBN 9781496381798. - ISBN 9781496381781. - Текст : электронный., <https://e-lib.unn.ru/MegaPro/UserEntry?Action=FindDocs&ids=856285&idb=0>.

Программное обеспечение и Интернет-ресурсы (в соответствии с содержанием дисциплины):

ЭБС «Юрайт». Режим доступа: <http://biblio-online.ru>.

ЭБС «Консультант студента». Режим доступа: <http://www.studentlibrary.ru>.

ЭБС «Лань». Режим доступа: <http://e.lanbook.com/>.

ЭБС «Znanium.com». Режим доступа: www.znanium.com.

7. Материально-техническое обеспечение дисциплины (модуля)

Учебные аудитории для проведения учебных занятий, предусмотренных образовательной программой, оснащены мультимедийным оборудованием (проектор, экран), техническими средствами обучения.

Помещения для самостоятельной работы обучающихся оснащены компьютерной техникой с возможностью подключения к сети "Интернет" и обеспечены доступом в электронную информационно-образовательную среду.

Программа составлена в соответствии с требованиями ФГОС ВО по направлению подготовки/специальности 31.05.01 - General Medicine.

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