

State High Educational Institution Of Ukrainian Health Ministry
"Ternopil State Medical University named by I. Ya. Gorbachevsky"

Professor L. Kovalchuk department of Surgery №1 with urology
and minimally invasive surgery

"" APPROVED "

Vice-rector for scientific and pedagogical work

prof. A.G. Shulhay

" ___ " _____ 2017

SYLLABUS OF ENDOSCOPY

Direction of preparation 1201 MEDICINE

Specialty 7.12010001 "Medicine"

7.110105 " Medical-profilactical case"

Faculty medical

Academic Year 2017-2018

Developers:

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and miniinvasive surgery

"16" June 2017 Protocol № 25

Head of Department, Professor

A.D. Bedenyuk

_____, 2017

Ternopil
2017

1. DESCRIPTION OF EDUCATIONAL DISCIPLINE

Name of indicators	Industry knowledge and direction of training, education level	Characteristics of discipline
		full-time education
credits – 1,5	Branch of knowledge Medicine	Regulatory (Optional)
	Major Medicine 1201	
The total number of hours 48	Specialty: 7.12010001 "Medicine"	year training
		4
		Semester
		7 8
		Practical, seminar
Weekly hours for full-time: classroom - 7 / 0.25 ECTS credits		30 hours
		Independent work
		18 hours
		Individual tasks:

Classroom work - 40%, independent work of students - 60%.

2 EXPLANATORY MEMORANDUM AND STRUCTURE OF DISCIPLINE

The training program of endoscopy for higher medical educational institutions of Ukraine of III-IV accreditation composed specialties 7.12010001 "medicine" field of knowledge 1201 "Medicine", for educational qualification of "specialist" with the qualification "Doctor"; 7.12010003 "Medical prophylaxis" field of knowledge 1201 "Medicine", for educational qualification of "specialist" with the qualification "Doctor".

The program is in accordance with the curriculum training educational qualification level "Specialist", relevant qualifications and specializations in higher education MHC Ukraine on the basis of educational and qualification characteristics of the industry standard of higher education Ukraine in this direction (MHC Ukraine from 08.07.2010 №539 g., the Cabinet of Ministers of Ukraine of 04.29.2015 p. №266 "on approving the list of disciplines and specialties") and curricula discussed and approved at a meeting of the academic Council SHEI "Ternopil State medical University named after I. Gorbachevskogo Ministry of Health of Ukraine "5/31/2016 Protocol №18 and entered into force on University Rector's order № 225 from 01.06 2016

Endoscopy as an academic discipline:

a) based on previously studied by students subjects like "Anatomy", "Physiology", "Pathologic Physiology", "General surgery";

b)) ensures assimilation of theoretical and practical knowledge of the etiology, pathogenesis, clinical manifestations typical and atypical symptoms of diseases of the gastrointestinal and respiratory systems, endoscopic methods of diagnosis and treatment and rehabilitation of patients according to physician training program general.

Learning discipline "Endoscopy" is performed by students in 4th year (7th and 8th semesters).

3.Aim study of educational discipline

The purpose of discipline "Endoscopy" follows the objectives of education and vocational training program for graduate medical school and determined the content of the system of knowledge and skills, which must possess medical specialist.

Learning discipline "Endoscopy" includes mastering theoretical and practical knowledge of the etiology, pathogenesis, clinical manifestations typical and atypical symptoms of diseases of the gastrointestinal and respiratory systems, endoscopic methods of diagnosis and treatment and rehabilitation of patients according to physician training program general.

A study of discipline a student must

know:

- know the stages of endoscopy;
- Know current endoscopic diagnostic techniques;
- Know method of collection of material for cytological and histological examination;
- know the types of endoscopic hemostasis;
- know methods of removing a foreign body gastrointestinal tract and bodies
- Know endoscopic semiotics.
- preparing patient to endoscopy.
- preparing patient for bronchoscopy.
- position patient while performing endoscopic examinations.
- food mode on the eve of endoscopic examinations.
- principles of cleaning, disinfection and sterilization processing presterilization endoscopes.
- kontrol as disinfection presterilization cleaning and sterilization of endoscopes.

be able:

- determine indications and contraindications to perform endoscopic examinations;
- determine most common symptoms and syndromes in diseases of the gastrointestinal tract and respiratory
- To demonstrate the moral and ethical principles of medical specialist and principles of professional subordination in endoscopy
- interpret general principles of treatment, rehabilitation and prevention of the most common diseases that occur during endoscopic examination;

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4. PROGRAM TRAINING COURSE

The discipline program is structured in 2 sessions

The types of studies according to the curriculum are:

- A) practical training;
- B) independent work of students;
- C) advice.

Practical exercises include a detailed study of some theoretical propositions of the discipline with the teacher and the formation of ability and skills to practical use by an individual student performance of various tasks and solving situational problems.

Students' individual work involves mastering educational material, such as an independent on particular topics of discipline at the time free from mandatory training sessions, and provides training to all controls. Handout discipline provided a working curriculum for learning students during independent work submitted for final control along with educational material that was worked during the classes.

Consultations (individual or group) conducted to help students understand and explain complex issues for self-understanding, solve complex problems arising in self-processing training material in preparation for practical classes, final classes or before an exam.

When study subjects using appropriate methods.

According to sources of knowledge using teaching methods: verbal - story, explanation, lecture, briefing; visual - demonstration, illustration; practical - practical work solving the problem. The nature of logic used methods of cognition: analytical, synthetic, analytical and synthetic, inductive, deductive. In terms of individual mental activity used methods are problematic, partly retrieval, research.

5. MAINTENANCE PROGRAM

Specific goals:

- explore the stages of endoscopy;
- examine current endoscopic diagnostic techniques;
- explore methods of collection of material for cytological and histological examination;
- examine the types of endoscopic hemostasis;
- learn methods of removing a foreign body gastrointestinal tract and bodies
- learn endoskopical semiotics.
- learn how to prepare the patient for endoscopy.
- learn how to prepare the patient for colonoscopy.
- learn how to prepare the patient for bronchoscopy.
- learn food regime on the eve of endoscopic examinations.
- learn principles of cleaning, disinfection and sterilization processing presterilization endoscopes.
- learn quality control disinfection presterilization cleaning and sterilization of endoscopes.

Theme 1. The development of endoscopic methods. Modern techniques of endoscopic diagnosis.

Milestones endoscopy. Diagnostic capabilities endoscopy. Equipment necessary to perform endoscopic procedures.

Theme 2. Therapeutic endoscopic intervention

Endoscopic hemostasis. Endoscopic removal of a foreign body. Removing tumors. Bouginage and dilation of strictures of the gastrointestinal tract. Conducting probes. Endoprosthesis. Endoscopic surgical trans papillary intervention.

6. Structure of educational discipline

TITLE OF TOPICS	Lectures	Practical classes / seminars	INDEPENDENT WORK OF STUDENT	IPC
The development of endoscopic methods. Modern methods of endoscopic diagnosis.		15	10	
Therapeutic endoscopic intervention		15	8	
Total for discipline		30	18	
Hours in general	48			

7. TOPICS lectures - PROVIDED

8. Topics of practical classes

№	Theme of topics	Number of hours
1	Malformations of the respiratory and gastrointestinal tract	4
2	Company endoscopic service in Ukraine	3
3	Association endoscopist Ukraine	3
4	Activities endoscopic cabinet (department). Legislature	3
5	Cleaning, disinfection and sterilization of endoscopes and medical instruments	5
	All	18

9. Independent work

№	Theme of topics	Number of hours
1.	Theme 1. The development of endoscopic methods. Modern methods of endoscopic diagnosis.	15
2	Theme 2. Therapeutic endoscopic intervention	15

- 10. THEME of Seminar work - provided**
- 11. THEME laboratory classes - provided**
- 12. Individual lesson - provided**

13. LIST OF PRACTICAL SKILLS FOR FINAL CONTROL With ENDOSCOPY

1. Determination of indications and contraindications for endoscopic surgery.
2. Prepare the patient for endoscopy.
3. Preparing the patient for colonoscopy.
4. Prepare patient for bronchoscopy.
5. Position the patient while performing endoscopic examinations.
6. The food mode of endoscopic examinations.
7. Collecting the material for cytological and histological examination.
8. The principles of cleaning, disinfection and sterilization processing presterilization endoscopes.
9. Quality control disinfection presterilization cleaning and sterilization of endoscopes.

14. The list of tasks for individual work of students (IRS)

- Participation in student science club and presentations at scientific forums.
- Participation in Olympiad on discipline.
- Production of laminated tables with topics relevant discipline.
- Selection of video and audio material from sections of discipline.

15. METHODS AND FORMS OF CONTROL

In assessing students given preference standardized methods of control:

- Testing (oral, written, computer);
- structured written work;
- structured control of practical skills;
- oral examination;
- oral interview.

Forms of control:

Previous (input) control serves as a means of identifying existing knowledge of students to use their teacher on a practical guidance as to the complexity of the material. Conducted to assess the strength and knowledge to determine the degree of perception of new educational material.

Current control is carried out on each class according to specific objectives topic. All workshops used objective control of theoretical training and learning practical skills in order to check the preparedness of students to classes.

Landmark (thematic) control of the section is at the end of the study unit related topics on a test, oral interview and perform practical tasks. Thematic control is an indicator of the quality of learning topics sections of discipline and related cognitive, methodological, psychological and organizational qualities of students. A specially designated for the final session.

Final control provides control function is performed to assess learning outcomes at a particular educational qualification level or completed some of its stages. Produced in the form of exam or differentiated credit scoring to determine the actual content in terms of student learning, quality and depth, as well as skills to apply them in practice. During the final control takes into account the results of putting all kinds of educational work in accordance with the structure of the work program.

Evaluate success

Upon completion of STUDY COURSE

Assessment of the discipline defined as the total number of points and the current performance evaluation obtained in the exam.

The maximum number of points that a student can get the study course is 200 points, including the current educational activity - 120 points, the examination final control (exam) - 80 points. Scores of discipline converted to a traditional four-point scale by absolute criteria:

Score a 200-point scale	Evaluation of a 4-point scale
180-200 points	5 – excellent
140-179 points	4– well
101-139 points	3 – Satisfactory
100 points or less	2– unsatisfactory

EVALUATION CRITERIA current success

Assessment of current progress made by calculating the average score at the end of the current success of the discipline. This assessment is carried out round the scheme, ranging from 0 to 0.24 rounded up to the lower unit; in the range of 0.25 to 0.74 is rounded to 0.5; in the range of 0.99 to vid0,75 rounded up more units.

Transfer estimates for the current success of the 12-point scale to 120 point scale is as follows:

Ranking 12-point scale	Scale assessment of current performance
4	66
4,5	69
5	72
5,5	75
6	78
6,5	81
7	84
7,5	87
8	90
8,5	93
9	96
9,5	99
10	102
10,5	105
11	108
11,5	111
12	114

The maximum number of points that a student can collect for current educational activity at the study subjects with the addition of scores for individual student work (IRS) is 120 points.

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Points	Evaluation criteria
1	Exhibited in cases where the student does not reveal the content of educational material has not fulfilled practical work, not designed protocol.
2	Assigned to students when it is poorly versed in the learning material, manifested by offering him additional questions reveals ignorance of the content of practical work.
3	Assigned to students when it opens fragmented content of educational material, admits gross errors in defining concepts and use of terminology, practical work performed partly designed protocol.
4	Assigned when the student is guided in the base material, but can not independently and consistently articulate response, prompting the teacher to offer him leading questions, fragmented performed practical work.
5	Assigned to students when it opens fragmented content of educational material, shows the original idea of the subject of the study, performed the practical task is not the end.
6	Assigned to students when it plays the main course material, but its presentation assumes substantial errors, gives a simple example, insufficient definitions, describes the general features of objects nedooformyv protocol session.
7	Assigned to students when it reveals the basic content of educational material; allows for minor violations of the sequence of the material, the use of scientific concepts and terms clearly formulates conclusions versed in methods of practical work, it is not executed in full.
8	Exhibits when a student reveals the main content of educational material; giving incomplete definitions; admits inaccuracies when using scientific terms, clearly formulated conclusions completed practical work, but made a minor error during the study.
9	Assigned to students as it reveals the basic content of educational material; gives a full definition of biological concepts and terms, allowing for minor violations of the sequence of exposition, independently, competently executed practical methods of work, but allowed the discrepancies in the sequence of work.
10	Exhibited in cases where the student finds full knowledge of factual material, able to analyze, assess and disclose the phenomena and processes studied; establish causal relationships; logically judge, a protocol designed workshops, allowing minor errors in the application of scientific terms and concepts.
11	Assigned to students as it shows the deep, strong and system knowledge in volume curriculum accurately answer all questions, reasonably formulate conclusions, using materials that are brought to students' independent work, correctly and consistently, with knowledge of techniques performed practical work ; in full protocol designed workshops, using correct scientific terms and concepts.
12	Assigned to students when it independently, competently and consistently exhaustively in using additional literature and answered questions from the manifestation of the ability to characterize the relevant phenomena and processes; clearly and correctly gives definition and meaning reveals scientific terms and concepts independently and correctly performed practical work without error protocol designed practical classes.

During the practical lesson

Assessment of current progress made by the twelve rating scale.

Score practice session considered positive if it is 4 or more points. This takes into account all types of work, provided methodological development (instructions) for studying the topic of practical lessons.

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EVALUATION CRITERIA
Individual work of students (IRS)

Points	Evaluation criteria
1	SELECTION OF TWO VIDEO MATERIAL FROM SECTIONS disciplines. or SELECTION OF TWO SECTIONS OF AUDIO MATERIAL TRAINING COURSE.
2	MAKING Laminate table with discipline related topics. or SPEECH AT THE MEETING student science club.
3	PARTICIPATION Student Olympiad on discipline. or JOB FOR STUDENTS IN THE FORM scientific meetings abstracts.
4	JOB FOR STUDENTS IN THE FORM OF SCIENTIFIC FORUM POSTER.
5	WORK FORUM ON student research presented orally report.
6	Prizes for participating in student competitions in discipline.

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EVALUATION CRITERIA OF PRACTICAL CHALLENGES

Points	Evaluation criteria
0	Assigned when a student reveals total ignorance of the content of work.
1 - 3	Assigned when a student partially reveals knowledge content of work.
4 - 6	Assigned to students when it is poorly oriented in methods of work, performed it incomplete, avoiding blunders during investigations.
7 - 9	Assigned to students when it independently, competently executed practical methods of work, but allowed the discrepancies in the sequence of work.
10 - 12	Assigned when a student yourself correctly and consistently, with knowledge of techniques, practical work performed correctly using scientific terms and concepts.

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EVALUATION CRITERIA Theoretical training

Points	Evaluation criteria
1	Exhibited in cases where the student does not reveal the content of the training material.
2	Assigned to students when it is poorly versed in the learning material, manifested by offering him additional questions.
3	Assigned to students when it opens fragmented educational content material, admits gross errors in defining concepts and use of terminology.
4	Assigned when the student is guided in the base material, but can not smoothly and consistently articulate response, prompting the teacher to offer him leading questions.
5	Assigned to students when it opens fragmented content of educational material, shows the original idea of the object of study.
6	Assigned to students when it plays the main course material, but its presentation assumes substantial errors, gives a simple example, insufficient definition of the basic concepts, describes the general characteristics of nosological units.
7	Assigned to students when it reveals the basic content of educational material; allows for minor violations of the sequence of the material, the use of scientific concepts and surgical terms, clearly formulated conclusions.
8	Exhibits when a student reveals the main content of educational material; giving incomplete definitions; admits inaccuracies when using scientific terms, clearly formulated conclusions.
9	Assigned to students as it reveals the basic content of educational material; gives full definition of relevant concepts and terms, allowing for minor violations of the sequence of presentation.
10	Exhibited in cases where the student finds full knowledge of factual material, able to analyze, assess and disclose the clinic, diagnosis and treatment; establish causal relationships; logically judge.
11	Assigned to students as it shows the deep system knowledge and strong volume in the curriculum, accurately respond to all questions for substantiated conclusions, using the materials submitted for independent work.
12	Assigned to students when it independently, competently and consistently exhaustively in using additional literature and answered questions from the manifestation of the ability to characterize the clinic, diagnosis and treatment; clearly and correctly gives definition and meaning reveals scientific terms and concepts.

**EVALUATION CRITERIA practical skills
in MATRIKULA PRACTICAL SKILLS**

MATRIKULA considered to be passed when the student with full knowledge of the techniques themselves, in strict sequence of work performed practical skills and well-formulated conclusions. During the practical skills the teacher has the right to direct student who admits errors and minor mistakes in carrying out the work.

MATRIKULA considered to be ignored when the student, focusing on factual shows ignorance techniques inability of practical skills admits gross errors in the sequence of work and the formulation of conclusions.

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METHOD OF EXAMINATION ON DISCIPLINE

A student is considered to be admitted to the examination (examination final control) when he attended all the lectures and workshops satisfactorily completed all work provided a working plan with all sections of the discipline received positive evaluation outcomes studies, entered a minimum score on the current progress (66 points), mastered practical skills provided in MATRIKULA.

Examination final control (exam) is performed at the end of the study discipline (section) and involves determining the level of mastering theoretical and practical material on discipline.

Produced in writing, orally in two stages:

1. Written by monitoring response to tests conducted in independent testing NNV university students.

2. Oral interview with the teacher, carried out at the department by answering three design tasks with complete analysis and evaluation of the pathogenesis, clinical manifestations, diagnosis and treatments for lymphoma units studied within the section (discipline).

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EVALUATION CRITERIA KNOWLEDGE AND SKILLS STUDENTS DURING THE EXAMINATION

Exam Score is calculated taking into account the proportion of the number of points earned by a student assembly test control (75%) and the proportion of the number of points gained by a student during an interview with the examiner (25%).

The maximum score on the exam that the student can get is 80.

The exam is considered passed if the student scored at least 50 points.

If the student was not a yiz components of the exam, he is deemed to have not made a final control examination in general. Student pereskladaye only that part which is not made.

16. The list of tasks for the final control KNOWLEDGE (Exam questions) provided

17. EVALUATION CRITERIA writing (test) Control

Assessment of student learning and transfer of results of mastering the knowledge gained made the following scale:

Number of correct answers in the preparation of tests in independent testing NNV students	The number of points assigned to students
1-24	Was not
25, 26	38
27	39
28	40
29	41
30	42
31	43
32	44
33	45
34	46
35	47
36	48
37	49
38	50
39	51
40	52
41	53
42	54
43	55
44	56
45	57
46	58
47	59
48	60

18. EVALUATION CRITERIA oral interview with the examiner

Assessment of student learning is done by exhibiting points depending on the correct answers to questions with regard to the completeness of the answers to the following scale:

Evaluation of the accuracy of the answers to the questions the completeness of answers consideration	The number of points that put the student for the answer to one question
Lack of correct answers to questions	0
The partial answer to the question	1
Incomplete answer questions	2
The full answer to the question	3

The scale of the transfer:

The total number of points obtained in response to specific issues	The number of points
Lack of correct answers on any questions	Was not
3	12
4	13
5	14
6	15
7	16
8	18
9	20

The minimum number of points you can get a student during an oral interview with the examiner - 12 points maximum score - 20.

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19. LIST educational materials

Basic

1. Endoscopy internals / Yevtushenko AI, Zakharash MP, Kovalchuk LY, V. Polyachenko, Feschenko YI, Maksymlyuk VI Kyiv, tidings, 2008, p. 9-47.

Support

1. The history of endoscopy / OL Kovalchuk, OG Netsyuk, Y. Butnytskyy // Achievements of Clinical and Experimental Medicine, 2011, 2nd room with. 6-10.
2. Modern hastroyntestynalnaya endoscopy (Internet, Review). Kalashnikov NA, niello VN Goncharov KA Ukrainian Journal minimally invasive and endoscopic surgery 2006. Vol. 10. № 1-2, 5.
3. Modern approaches for diseases diagnostics esophagus, stomach and colon dvenadtsatyperstnoy: zhelatelnaya endoskopycheskaya tactics from the point of view of the therapist. Perederiy VG, Tkach SM Ukrainian Journal minimally invasive and endoscopic surgery. 2003. Vol 7, №3. 11.
4. Modern principles of teaching gastrointestinal endoscopy. Nykyshaev VI, Boyko VV Ukrainian Journal minimally invasive and endoscopic surgery. 2006, Vol. 10, number 3, 18.
5. Survey Standardization endoskopicheskogo. Nykyshaev VI Ukrainian Journal minimally invasive and endoscopic surgery 2003. Vol 7, №3. 13.
6. Hromoskopyya in endoscopy pyschevartelnoho tract. Nykyshaev VI, Music SV Ukrainian Journal minimally invasive and endoscopic surgery. 2003. Vol 7, №3. 3.
7. Endoskopycheskaya orientation in onion dvenadtsatyperstnoy intestine. Nykyshaev VI Ukrainian Journal minimally invasive and endoscopic surgery. 2009. Vol. 13, №3, 31.
8. Vydeoendoskopyya with an increase in the absence Identify Helicobacter pylori and Modified podopytelyalnykh kapulyarov availability with Helicobacter pylori - sobennosty Structure podopytelyalnykh kapulyarov provedennoy after eradication therapy. Nykyshaev VI Ukrainian Journal minimally invasive and endoscopic surgery 2008. Vol. 12, №3, 13.
9. Vyrtualnaya hromoendoskopyya: New Technology to Increase quality endoskopicheskogo osmotra. Nykyshaev VI Ukrainian Journal minimally invasive and endoscopic surgery 2007. Vol. 11, №3, 12.
10. Disinfectants and detergents used for processing of endoscopes and instruments to them. Nikishayev VI, Morozova NS, Lemko II Ukrainian Journal minimally invasive and endoscopic surgery 2005. Vol. 9. № 1-2, 21.
11. obrabotku endoskopov in therapeutic Uchrezhdenie: problems and solutions. A. Chistyakov, Markov JN Ukrainian Journal minimally invasive and endoscopic surgery 2005. Vol. 9, № 1-2.
12. Application vyrtualnykh symulyatorov in learning endohyrurhov - Review Rossiyskogo Peace and experience. Gorshkov MD, Nikitenko AI Ukrainian Journal minimally invasive and endoscopic surgery 2008. Vol. 12, №4, 30.

20. INFORMATION RESOURCES

1. Materials to prepare students for practical training.

2. Mastery of Endoscopic and Laparoscopic Surgery (Soper, Mastery of Endoscopic and Laparoscopic Surgery) Fourth Edition

by [Lee L. Swanstrom MD](#) (Author), [Nathaniel J. Soper MD](#) (Author) , October 30, 2013

3. Practical gastro-intestinal endoscopy (Sixth edition) by Peter B.Cotton, Christopher B. Williams, 2015