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"Orenburg State Medical University"

Ministry of Health of the Russian Federation

Department of Faculty Surgery

**METHODOLOGICAL INSTRUCTIONS**

**ON INDEPENDENT WORK OF STUDENTS**

**BY DISCIPLINE**

**"UROLOGY"**

**BY SPECIALTY**

**05/31/01 - MEDICAL BUSINESS**

**FACULTY OF FOREIGN STUDENTS**

It is part of the main professional educational program of higher education in the specialty 31.05.01 - General Medicine (Faculty of Foreign Students) , approved by the Academic Council of the Orgmu of the Ministry of Health of Russia

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**1. Explanatory note.**

**Independent work** is a form of organization of the educational process that stimulates the activity, independence, and cognitive interest of students.

Independent work of students is an obligatory component of the educational process, as it ensures the consolidation of the acquired knowledge by acquiring the skills of comprehending and expanding their content, solving urgent problems of the formation of general cultural (universal), general professional and professional competencies, research activities, preparation for classes and passing an intermediate certification.

Independent work of students is a set of classroom and extracurricular activities and work that ensures the successful development of the educational program of higher education in accordance with the requirements of the Federal State Educational Standard. The choice of the form of organization of independent work of students is determined by the content of the academic discipline and the form of organization of training (lecture, seminar, practical lesson, etc.).

**The purpose** of independent work is to master the theoretical foundations and develop practical skills for diagnosing the most common urological diseases and syndromes, providing emergency medical care, determining the choice of appropriate methods for diagnosing, treating and preventing these diseases.

**The tasks** of independent work are :

1. Master a certain amount of theoretical knowledge on general and particular sections of urology, necessary for a general practitioner to diagnose and organize or treat major urological diseases ;

2. Master the algorithms of medical actions in case of urgent urological conditions ;

3. Master the minimum amount of practical skills necessary for the examination and supervision of urological patients.

As a result of performing independent work on the discipline "Urology", the student must: consolidate knowledge of the clinical anatomy of the urinary system; master the principles of treatment of urological diseases; to systematize methods for identifying patient complaints, his medical history, examination results, laboratory, instrumental, patho-anatomical and other studies in order to recognize the condition or establish the presence or absence of a disease.

**2. The content of students' independent work.**

The content of tasks for independent work of students in the discipline is presented ***in the fund of assessment tools for ongoing monitoring of progress and intermediate certification in the discipline*** , which is attached to the work program of the discipline, section 6 "Educational and methodological support for the discipline (module)", in the information system of the University.

The list of educational, educational, methodical, scientific literature and information resources for independent work is presented in the work program of the discipline , section 8 "List of basic and additional educational literature necessary for mastering the discipline (module)".

***Table 1***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No. | Theme self  work | The form  independent work | Form of control of independent work  *(in accordance with section 4 of the RP)* | The form  contact  work at  carrying out  current  control |
| one | 2 | 3 | 4 | 5 |
| *Independent work in the framework of practical classes*  *disciplines "Urology"* | | | | |
| one. | Theme “Acquaintance with the department, clinic. Anomalies of the genitourinary system. Hydronephrosis. Symptomatology of urological diseases. | - *for mastering, consolidating and systematizing knowledge* : work with lecture notes; reading and note-taking of the text (textbook, primary source, additional literature, Internet resources); drawing up an electronic presentation; preparation of reports for presentation.  - *for the formation of skills* : solving tests and situational problems. | 1.Testing;  2. Interview;  3. Verification of the submitted material in the form of a report;  4.Solving situational problems. | auditorium |
| 2. | Theme “Symptomatology of urological diseases (end). BPH, prostate cancer .” | - *for mastering, consolidating and systematizing knowledge* : work with lecture notes; reading and note-taking of the text; drawing up an electronic presentation; preparation of reports for presentation.  - *for the formation of skills* : solving tests and situational problems. | 1.Testing;  2. Interview;  3. Verification of the submitted material in the form of a report;  4.Solving situational problems. | auditorium |
| 3 . | Theme "Instrumental methods of diagnosis and treatment of urolithiasis". | - *for mastering, consolidating and systematizing knowledge* : work with lecture notes; reading and note-taking of the text; drawing up an electronic presentation; preparation of reports for presentation.  - *for the formation of skills* : solving tests and situational problems. | 1.Testing;  2. Interview;  3. Verification of the submitted material in the form of a report;  4.Solving situational problems. | auditorium |
| 4. | Topic “X-ray diagnostic methods. Ultrasound diagnosis. Radioisotope methods of diagnostics”. | - *for mastering, consolidating and systematizing knowledge* : work with lecture notes; reading and note-taking of the text; drawing up an electronic presentation; preparation of reports for presentations .  - *for the formation of skills* : solving tests and situational problems. | 1.Testing;  2. Interview;  3. Verification of the submitted material in the form of a report;  4.Solving situational problems. | auditorium |
| 5. | Theme "Acute non-specific inflammatory diseases (pyelonephritis, bacteriotoxic shock, gestational pyelonephritis, paranephritis, cystitis, prostatitis, prostate abscess, orchitis, epididymoorchitis, urethritis, cavernitis, balanoposthitis, chronic balanoposthitis). Chronic pyelonephritis. Nephrogenic hypertension. Tuberculosis of the organs of the MPS. | - *for mastering, consolidating and systematizing knowledge* : work with lecture notes; reading and note-taking of the text; drawing up an electronic presentation; preparation of reports for presentation.  - *for the formation of skills* : solving tests and situational problems. | 1.Testing;  2. Interview;  3. Verification of the submitted material in the form of a report;  4.Solving situational problems. | auditorium |
| 6. | Topic "Oncourology (except for BPH and prostate cancer) - tumors of the kidney, bladder, testicle, penis." | - *for mastering, consolidating and systematizing knowledge* : work with lecture notes; reading and note-taking of the text; drawing up an electronic presentation; preparation of reports for presentations .  - *for the formation of skills* : solving tests and situational problems. | 1.Testing;  2. Interview;  3. Verification of the submitted material in the form of a report;  4.Solving situational problems. | auditorium |
| 7. | Topic "Emergency urology (emergency care for renal colic, anuria-ARF, hematuria, AUR, testicular hydatids and epididymis torsion, testicular torsion, paraphimosis, Fournier's gangrene, priapism)". | - *for mastering, consolidating and systematizing knowledge* : work with lecture notes; reading and note-taking of the text; drawing up an electronic presentation; preparation of reports for presentation.  - *for the formation of skills* : solving tests and situational problems. | 1.Testing;  2. Interview;  3. Verification of the submitted material in the form of a report;  4.Solving situational problems. | auditorium |
| eight. | Theme "Recording lesson". | - *for mastering, consolidating and systematizing knowledge* : work with lecture notes; reading the text (textbook, primary source, additional literature, Internet resources). | 1. Interview;  2. Evaluation of the quality of answers to questions. | auditorium |

**3. Guidelines for completing assignments for independent work in the discipline.**

**3.1. Guidelines for the formation of skills for taking notes on lecture material.**

1. The basis for the qualitative assimilation of lecture material is the abstract, but the abstract is not so much a device for fixing the content of the lecture as a tool for its assimilation in the future. Therefore, consider what your abstract should be like so that you can quickly and more successfully solve the following tasks:

a) finalize records in the future (clarify, enter new information);

b) work on the content of the records - compare individual parts, highlight the main ideas, draw conclusions;

c) reduce the time to find the right material in the abstract;

d) reduce the time required to repeat the studied and covered material, and increase the speed and accuracy of memorization.

In order to complete points “c” and “d”, it is advisable to make notes with a pencil during the work on the abstract:

Example 1

/ - read again;

// outline the source;

? – unclear, needs clarification;

! - boldly;

S is too hard.

Example 2

= - this is important;

[ - make statements;

[ ] – statements are made;

! - very important;

? - it is necessary to look, it is not entirely clear;

- basic definitions;

- is of no interest.

2. When taking notes, it is better to use large format notebooks - for convenience and freedom in the rational placement of notes on a sheet, as well as separate, lined sheets that can be easily and quickly connected and disconnected.

3. Writing on one side of the sheet will allow, when working through the material, to lay out the necessary sheets on the table and, by changing their order, to bring together different parts of the course in time and space, which makes it easier to compare, establish connections, and generalize the material .

4. With any method of note-taking, it is advisable to leave free space on the sheet for subsequent additions and notes. These are either wide margins or blank pages.

5. Lectures are recorded on the right page of each sheet in a turn, the left one remains blank. If this is not done, then when preparing for exams, additional, explanatory and other information will have to be entered between the lines, and the abstract will turn into a text of little use for reading and assimilation.

6. When taking notes, the principle of distant taking notes applies, which allows separate blocks of information to be divided both horizontally and vertically when recording: separate parts of the text are separated by distinct spaces - this is vertical division; horizontally, the material is divided into zones by fields: I - outlined text, II - own notes, questions, conventional signs, III - subsequent additions, information from other sources.

7. Great help in understanding the logic of the material presented is rubrication, i.e. numbering or designation of all its sections, subsections and smaller structures. At the same time, at the same time as taking notes, a text plan is drawn up, as it were. It is important that each new thought, aspect or part of the lecture be marked with its own sign (number, letter) and separated from others.

8. The basic principle of note-taking is not to write everything, but in such a way as to preserve everything that is really important and the logic of presenting the material, which, if necessary, will allow you to completely “expand” the summary into the original text according to the formula “outline + memory = source text ».

9. In any text there are reference words, for example, helping to realize more important information (“as a result”, “as a result”, “in this way”, “summary”, “conclusion”, “summarizing all of the above”, etc. .) or difference signals, i.e. words indicating a feature, the specifics of the object of consideration (“feature”, “characteristic feature”, “specificity”, “main difference”, etc.). These words are usually followed by very important information. Pay attention to them.

10. If graphic modeling is offered during the lecture, then the reference scheme is written large, freely, since crowding and small print make it difficult to understand .

11. Usually in a lecture there are several main ideas around which the rest of the material is grouped. It is very important to highlight and clearly capture these ideas.

12. The plan, sources, concepts, definitions, basic formulas, schemes, principles, methods, laws, hypotheses, estimates, conclusions are recorded in the lecture in most detail.

13. Each listener has his own cursive writing system, which is based on the following techniques: the words most frequently encountered in a given area are reduced most strongly ; there are generally accepted abbreviations and abbreviations: “because”, “etc”, “TSO”, etc .; mathematical signs are used: "+", "-", "=", ">". "<", etc.; adjective and participle endings are often omitted; words that begin with a root are written without an ending ("Sots.", "Cap.", "Rev.", etc.) or without a middle ("number", "in-in", etc.). ).

14. The system of accents and designations helps to understand the material and quickly find what you need. During the lecture, there should be 2-3 colored pencils or felt-tip pens on the desk, with arrows, wavy lines, frames, conditional icons on the auxiliary field, outline, emphasize or indicate the key aspects of the lectures.

For example, a straight line indicates an important thought, a wavy line indicates an incomprehensible thought, a vertical line in the margins indicates a particularly important thought. The main thesis is underlined in red, the wording - in blue or black, green - the actual illustrative material .

15. The quality of assimilation of the material depends on its active listening, therefore, outwardly show your attitude to one or another of its aspects: agreement, disagreement, bewilderment, question, etc. - this will allow the lecturer to better adapt the material presented to the audience .

16. Questions to the lecturer serve as an indicator of attention to educational information. During the lecture, try to find and note those aspects of the lecture that can become a “hook” for the question, and then in the following lectures, learn to formulate questions without distracting from the perception of the content.

**3.2. Methodological instructions for students on preparation for practical exercises.**

A practical lesson is a form of organization of the educational process, aimed at improving the practical skills and abilities of students through a group discussion of a topic, an educational problem under the guidance of a teacher.

*When developing an oral response in a practical lesson, you can use the classical scheme of oratory. This scheme is based on 5 stages* :

1. Selection of the necessary material for the content of the upcoming speech.

2. Drawing up a plan, dismembering the collected material in the required logical sequence.

3. " Verbal expression", literary processing of speech, saturation of its content .

4. Learning, memorizing the text of speech or its individual aspects (if necessary).

5. Pronunciation of speech with appropriate intonation, facial expressions, gestures.

*Recommendations for constructing the composition of an oral response:*

1. The introduction should:

- to attract attention, arouse the interest of listeners to the problem, the subject of the answer;

- explain why your judgments about the subject (problem) are authoritative, significant;

- establish contact with listeners by pointing out common views, previous experience.

2. The advance notice should:

- reveal the history of the problem (subject) of the speech;

- show its social, scientific or practical significance;

- disclose previously known attempts to solve it.

3. In the process of argumentation, it is necessary:

- formulate the main thesis and give, if necessary for its clarification, additional information;

- formulate an additional thesis, if necessary, accompanying it with additional information;

- formulate a general conclusion;

- point out the disadvantages of alternative positions and the advantages of your position .

4. In conclusion, it is advisable:

- summarize your position on the problem under discussion, your final conclusion and decision;

- justify what are the consequences in case of abandoning your approach to solving the problem.

*Recommendations for drawing up a detailed response plan*

*to theoretical questions of practical training*

1. When reading the studied material for the first time, divide it into main semantic parts, highlight the main thoughts, conclusions.

2. When drawing up a detailed outline plan, formulate its paragraphs, subparagraphs, determine what exactly should be included in the outline plan to disclose each of them.

3. The most significant aspects of the material being studied (abstracts) consistently and briefly state in your own words or quote.

4. Include in the abstract both the main provisions and specific facts and examples, but without their detailed description.

5. Write individual words and whole sentences abbreviated, write out only key words, instead of quoting, make only links to the pages of the cited work, use conventions.

6. Arrange paragraphs in steps, use colored pencils, markers, felt-tip pens to highlight significant places.

**3.3. Guidelines for the preparation of an oral report.**

A report is a public communication or document that contains information and reflects the essence of a question or study in relation to a given situation.

*Algorithm for completing the task* :

1) clearly formulate the topic;

2) study and select the literature recommended on the topic, highlighting three sources of bibliographic information:

- primary (articles, dissertations, monographs, etc.);

- secondary (bibliography, abstract journals, signal information, plans, graph diagrams, subject indexes, etc.);

- tertiary (reviews, compilation works, reference books, etc.);

3) write a plan that is fully consistent with the chosen topic and logically reveals it;

4) write a report, observing the following requirements:

- to the structure of the report - it should include: a brief introduction, substantiating the relevance of the problem; main text; conclusion with brief conclusions on the problem under study; list of used literature;

- to the content of the report - general provisions should be supported and explained with specific examples; not to retell individual chapters of a textbook or manual, but to state their own thoughts on the merits of the issues under consideration, to make their own proposals;

5) arrange the work in accordance with the requirements.

**3.4. Guidelines for the preparation of a written abstract.**

Synopsis (from Latin conspectus - review, presentation) - 1) a written text that systematically, concisely, logically and coherently conveys the content of the main source of information (articles, books, lectures, etc.); 2) a synthesizing form of recording, which may include a plan of the source of information, extracts from it and its abstracts.

In the process of performing independent work, you can use the following types of abstracts: ( *the teacher can immediately indicate the required type of abstract, based on the goals and objectives of independent work)*

- planned summary (plan-summary) - a summary based on a formed plan, consisting of a certain number of points (with headings) and sub-points corresponding to certain parts of the information source;

- textual summary - a detailed form of presentation based on extracts from the source text and its citation (with logical connections);

- arbitrary summary - a summary that includes several ways of working on the material (extracts, quoting, plan, etc.);

- schematic summary (context diagram) - a summary based on a plan made up of points in the form of questions that need to be answered;

- thematic summary - development and coverage in a concise form of a specific issue, topic;

- reference summary (introduced by V.F. Shatalov) - a summary in which the content of the information source is encoded using graphic symbols, drawings, numbers, keywords, etc.;

- summary summary - processing of several texts in order to compare, compare and reduce them to a single structure;

- selective abstract - a choice of information from the text on a specific topic.

In the process of performing independent work, the student can use the following forms of note-taking: ( *the teacher can immediately indicate the required form of note-taking, based on the content of the task and the goals of independent work)*

- plan (simple, complex) - a form of note-taking, which includes an analysis of the structure of the text, generalization, highlighting the logic of the development of events and their essence;

- extracts - the simplest form of note-taking, almost verbatim reproducing the text;

- theses - a form of note-taking, which represents conclusions drawn on the basis of what has been read;

- citation - verbatim extract, which is used when it is impossible to convey the author's thought in your own words.

*Task execution algorithm* :

1) determine the purpose of compiling the abstract;

2) write down the title of the text or its part;

3) write down the output data of the text (author, place and year of publication);

4) highlight the main semantic parts of the text during the initial reading;

5) highlight the main provisions of the text;

6) highlight concepts, terms that require clarification;

7) consistently and briefly state in your own words the essential provisions of the material being studied;

8) include in the record conclusions on the main provisions, specific facts and examples (without a detailed description);

9) use techniques for visually reflecting the content (paragraphs in “steps”, various underlining methods, pens of different colors);

10) follow the citation rules (the quotation must be enclosed in quotation marks, a link to its source is given, the page is indicated).

**3.5. Guidelines for preparing a computer presentation.**

Computer presentation: demonstration in a visual form of the main provisions of the report, the degree of mastering the content of the problem.

*Algorithm for preparing a computer presentation* :

1) preparation and coordination with the supervisor of the text of the report;

2) development of the structure of the presentation;

3) creating a presentation in PowerPoint;

4) rehearsal of the report using the presentation.

*Requirements for the design of a computer presentation:*

- The presentation must fully comply with the text of your report . First of all, you need to compose the text of the report itself, and secondly, create a presentation.

- The title slide should contain the topic of the report and the surname, name and patronymic of the speaker.

- The sequence of slides should clearly correspond to the structure of your report. Do not plan to return to previous slides during the presentation or flip them forward, this will complicate the process and may confuse the course of your reasoning.

- Do not try to reflect the entire text of the report in the presentation! Slides should show only the main points of your report.

- Slides should not be overloaded with graphic and textual information , various animation effects.

- The text on the slides should not be too small (size 24-28).

- Sentences should be short, maximum 7 words . Each separate information should be in a separate sentence or on a separate slide .

- Abstracts of the report should be generally understandable .

Spelling errors in the text of the presentation are not allowed !

- Illustrations (figures, graphs, tables) must have a clear , concise and expressive title .

- Adhere to the principle of “less is more” in presentation design

- Do not use more than 3 different colors on one slide.

- Beware of light colors , they are hard to see from a distance.

- The combination of background and text colors should be such that the text can be easily read . Best combination: white background, black text . It is recommended to use black or dark blue as the main font.

- It's better to use one color scheme throughout your presentation rather than different styles for each slide.

- Use only one type of font . It's better to use a plain typeface instead of exotic and ornate typefaces.

- The final slide, as a rule, thank you for your attention , give information for contacts.

*Requirements for the text of the presentation:*

- do not write long;

- split text information into slides;

- use headings and subheadings;

- to improve readability, use: formatting, lists, selection of fonts.

*Presentation background requirements:*

Recommended use: blue on white, black on yellow, green on white, black on white, white on blue, green on red, red on yellow, red on white, orange on black, black on red, orange on white, red on green .

*Requirements for presentation illustrations:*

- The more abstract the material, the more effective the illustration.

- What can be depicted, it is better not to describe in words.

- Depict what is difficult or impossible to describe in words.

- Use animation as one of the effective means of attracting the user's attention and controlling it.

- Use video information that allows you to demonstrate information in real time in dynamics, which is not available with traditional training.

- Remember that video information requires a lot of computing resources and significant costs for the delivery and playback of the image.

**4. Criteria for evaluating the results of completing assignments for students' independent work.**

The criteria for evaluating completed assignments are presented ***in the fund of assessment tools for ongoing monitoring of progress and intermediate certification in the discipline*** , which is attached to the work program of the discipline, section 6 "Educational and methodological support for the discipline (module)", in the information system of the University.