

**AL-FARABI KAZAKH NATIONAL UNIVERSITY**  
**Medicine and Health Care Faculty**  
**Higher School of Medicine**  
**Department of Fundamental Medicine**

**METHODICAL INSTRUCTIONS FOR PRACTICAL LESSONS**  
for the discipline OACH1201 "The Human Body (Medical terminology include)"  
(4 credits)  
**Spring semester, academic year 2021-2022**

**Practical Lesson 1**

**Topic:** The language of medicine. Pronunciation. The position of the words. Stress rules. Grammatical categories of the noun - Gender. Anatomical position. Anatomical planes and sections. Directional terms.

**Numbers of hours - 1**

**Maximum mark – 4**

**Learning outcomes:**

1. *Pronounce Latin vowels and consonants.*
2. *Pronounce Latin diphthongs and digraphs.*
3. *Use correct words position.*
4. *Use correct endings relating to the word gender*
5. *Use word stress in Latin correctly*
6. *Demonstrate the anatomical position*
7. *Describe the human body using directional and regional terms*
8. *Identify three planes most commonly used in the study of anatomy*

**Practical Lesson 2**

**Topic:** Histology introduction. Cell and non-cellular structures. Cytoplasm, organelles. Simplast, syncytium and intercellular substance.

**Numbers of hours - 1**

**Maximum mark – 4**

**Learning outcomes:**

1. *explain the technique of making histological slides*
2. *discuss the basic steps in preparing histological slides for light microscopy.*
3. *explain the difference between the resolution of light and electron microscopes and discuss which organelles can be identified with these microscopes.*
4. *explain the basics of studying 3-dimensional shapes of morphology biological structures based on examination of 2-dimensional light microscopic images*
5. *use red blood cells to estimate the size of other cells*

6. *draw a typical cell and indicate the cell organelles*

### **Practical Lesson 3**

**Topic:** The language of medicine - grammatical categories of the noun - Number, Case, Declension. The main regions of the body (axial and appendicular regions). Membranes and cavities. Organ systems

**Numbers of hours - 1**

**Maximum mark – 4**

**Learning outcomes:**

1. *Define number and case of Latin nouns.*
2. *Determine the stem and the declension of nouns.*
3. *Distinguish between the posterior (dorsal) and the anterior (ventral) body cavities, identifying their subdivisions and representative organs found in each*
4. *Describe serous membrane and explain its function, localisation, structure and relationship between structure and functions.*

### **Practical Lesson 4**

**Topic:** Human histology. Connective tissue. Actually connective tissues. Loose fibrous unformed and dense connective tissues. Connective tissues with special properties.

**Numbers of hours - 1**

**Maximum mark – 4**

**Learning outcomes:**

1. *distinguish the cells, fibers and intercellular ground substance found in connective tissue*
2. *recognise the different types of connective tissue proper: loose, dense irregular, dense regular using the light microscope*
3. *distinguish loose and dense connective tissue under the microscope*
4. *identify the reticular tissue, mucous tissue adipose tissue under the microscope and in a micrographs*
5. *describe the structural differences between loose and dense connective tissue*
6. *describe the structural characteristics and function of the reticular tissue, mucous tissue adipose tissue*

### **Practical lesson 5**

**Topic:** *The language of medicine - grammatical categories of noun - Adjective, adjective forms. Scope of Anatomy and Physiology. Human structure.*

**Numbers of hours - 1**

**Maximum mark - 4**

**Learning outcomes:**

1. *Make grammatical agreement of adjectives with nouns.*
2. *Define anatomy ,physiology relate them to each other*
3. *define the levels of human structure from the most complex to the simplest*
4. *Discuss the clinical significance of anatomical variation among humans*
5. *Explain the importance of physiological variation among persons*
6. *State the characteristics that distinguish living organisms from nonliving objects*

### **Practical Lesson 6**

**Topic:** Human histology. Connective tissue. Skeletal connective tissues: cartilage and bone tissues.

**Numbers of hours - 1**

**Maximum mark - 4**

**Learning outcomes:**

1. *describe the histological structure and function of cartilage*
2. *describe the structural differences between the different types of cartilage*
3. *explain the mechanical properties of the different types of cartilage*
4. *identify different types of cartilage in a micrographs*
5. *describe the histological structure and function of bone*
6. *distinguish osteoblasts, osteocytes, and osteoclasts*
7. *distinguish compact bone and trabecular bone*
8. *explain the structural arrangement of the bone to its function*

### **Practical Lesson 7**

**Topic:** Human histology. Epithelial tissues. The integumentary epithelium. Glandular epithelium.

**Numbers of hours - 1**

**Maximum mark - 4**

**Learning outcomes:**

1. *identify different types of epithelia under the microscope and in a micrographs*
2. *describe and identify simple, stratified, and pseudostratified epithelia*
3. *recognise the simple squamous, simple cuboidal, simple columnar and stratified, pseudostratified, transitional epithelia under the microscope and in a micrographs*
4. *explain the structural arrangement of the epithelium to its function*

### **Practical Lesson 8**

**Topic:** Human histology. Skin: Thick and thin skin. Skin derivatives. The skin is like an organ. Histology Current control

**Numbers of hours - 1**

**Maximum mark - 30**

**Learning outcomes:**

1. *describe the microscopic structure of the epidermis, dermis and hypodermis*
2. *describe skin appendages: eccrine and apocrine sweat glands, sebaceous glands, hairs, nails and specialised glands*
3. *discuss the structural and functional differences between apocrine and eccrine sweat glands*
4. *explain the structure and function of hair*
5. *recognize the skin on its constituent tissue elements at the microscopic level*
6. *identify the thin and thick skin under the microscope and in a micrographs*

**Practical lesson 9.**

**Topic:** Cell biophysics. Structure, properties and functions of cells.

**Numbers of hours - 1**

**Maximum mark - 4**

**Learning outcomes:**

1. *Have skills in calculating the electrical capacity of the membrane, the sedentary life and the frequency of hopping of phospholipids of the membrane.*

**Practical Lesson 10**

**Topic:** The language of medicine - grammatical categories of noun - Adjective, adjective forms. Human function. Current control- 1

**Numbers of hours - 1**

**Maximum mark - 28**

**Learning outcomes:**

1. *Make grammatical agreement of adjectives with nouns.*
2. *Define homeostasis and explain why this concept is central to physiology*
3. *Define negative feedback, give an example of it, and explain its importance to homeostasis*
4. *Define positive feedback and give examples of its beneficial and harmful effects*
5. *Define gradient, describe the variety of gradients in human physiology, and identify some forms of matter and energy that flow down gradients*

**Practical lesson 11.**

**Topic:** The structure and functions of the skin. Dermal circulation. The structure and functions of the cutaneous glands. Skin disorders

**Numbers of hours - 2**

**Maximum mark - 8**

**Learning outcomes:**

1. *list the functions of the skin and relate them to its structure;*
2. *describe the histological structure of the epidermis, dermis, and subcutaneous tissue;*
3. *describe the normal and pathological colors that the skin can have, and explain their causes; and*
4. *name two types of sweat glands, and describe the structure and function of each;*
5. *describe the location, structure, and function of sebaceous and ceruminous glands; and*
6. *discuss the distinction between breasts and mammary glands, and explain their respective functions.*
7. *relate the features of the three classes of burns to the skin functions and the priorities in burn treatment*

**Practical Lesson 12**

**Topic:** Functions of the Skeleton. General Features of Bones. Histology of Osseous Tissue

**Numbers of hours - 1**

**Maximum mark - 4**

**Learning outcomes:**

1. *name the tissues and organs that compose the skeletal system;*

2. *state functions of the skeletal system;*
3. *distinguish between bone as a tissue and as an organ;*
4. *describe the general features of a long bone and a flat bone*
5. *state the importance of each constituent of bone tissue;*
6. *distinguish between the two types of bone marrow. •describe two mechanisms of bone formation; •explain how mature bone continues to grow and remodel itself.*
7. *relate the structure of two types of bone tissue to their functions*

### **Practical Lesson 13**

**Topic:** Medical imaging I. X-ray examination; Positron emission tomography

**Numbers of hours - 1**

**Maximum mark - 4**

**Learning outcomes:**

1. *Explain the nature of the occurrence of x-rays*
2. *Calculate the amount of energy released by ionizing radiation*
3. *Recognize the level of danger of radiation*
4. *Describe the types doses and dosimeters.*

### **Practical Lesson 14**

**Topic:** Bone development. Bone disorders

**Numbers of hours - 1**

**Maximum mark - 4**

**Learning outcomes:**

1. *describe the processes by which minerals are added to and removed from bone tissue;*
2. *discuss the role of the bones in regulating blood calcium and phosphate levels;*
3. *name the main hormones that regulate bone physiology, and describe their effects name and describe several bone diseases;*
4. *name and describe the types of fractures;*
5. *explain how a fracture is repaired;*
6. *discuss some clinical treatments for fractures and other skeletal disorders*

### **Practical lesson 15.**

**Topic:** Medical Imaging II. Computed tomography. Magnetic resonance imaging. Ultrasound examination. Biophysics Current Control.

**Numbers of hours - 1**

**Maximum mark - 20**

**Learning outcomes:**

1. *carry out mathematical processing of biomedical information, calculate the measurement errors of the obtained experimental data.*

### **Practical lesson 16.**

**Topic:** Overview of the Skeleton. The Vertebral Column. Cranial Bones

**Numbers of hours - 2**

**Maximum mark - 8**

**Learning outcomes:**

1. *define the two subdivisions of the skeleton;*
2. *state the anatomical variation of the vertebral column;*
3. *define several terms that denote surface features of bones.*
4. *describe the general features of the vertebral column and those of a typical vertebra;*
5. *describe the structure of the intervertebral discs and their relationship to the vertebrae;*
6. *describe the special features of vertebrae in different regions of the vertebral column and discuss the functional significance of the regional differences*
7. *distinguish between cranial and facial bones;*
8. *name the bones of the cranial skull and their anatomical features;*
9. *identify the cavities in the skull and in some of its individual bones;*
10. *name the principal sutures that join the bones of the skull;*
11. *describe the development of the skull from infancy through childhood.*

### **Practical Lesson 17**

**Topic:** Cranial Bones. Facial Bones. CC2

**Numbers of hours - 2**

**Maximum mark - 42**

**Learning outcomes:**

1. *name the bones of the cranial skull and their anatomical features;*
2. *name the bones of the facial skull and their anatomical features.*

### **Practical Lesson 18**

**Topic:** Pectoral Girdle. Thoracic cage. Pelvic Girdle.

**Numbers of hours - 2**

**Maximum mark - 8**

**Learning outcomes:**

1. *describe the anatomy of the sternum and ribs and how the ribs articulate with the thoracic vertebrae.*
2. *identify and describe the features of the clavicle, scapula.*
3. *identify and describe the features of the pelvic girdle.*
4. *compare the anatomy of the male and female pelvic girdles and explain the functional significance of the differences.*

### **Practical Lesson 19**

**Topic:** Upper Limb Bones. Lower Limb Bones.

**Numbers of hours - 2**

**Maximum mark - 8**

**Learning outcomes:**

1. *identify and describe the features of the humerus, radius, ulna, and bones of the wrist and hand.*
2. *identify and describe the features of the pelvic girdle, femur, patella, tibia, fibula, and bones of the foot;*

**Practical Lesson 20**

**Topic:** Practical Lesson 20 Joints and their classification. Synovial joints and their movements.

**Numbers of hours - 2**

**Maximum mark - 8**

**Learning outcomes:**

1. *explain what joints are, how they are named, and what functions they serve;*
2. *name and describe the four major categories of joints, their subcategories and give an example of each;*
3. *explain, with examples, why some joints change categories as a person ages*
4. *identify the anatomical components of a typical synovial joint;*
5. *discuss the factors that determine a joint's range of motion;*
6. *name and describe six classes of synovial joints;*
7. *use the correct standard terminology for joint movements, define the axes, planes and range of motions for them*

**Practical Lesson 21**

**Topic:** Anatomy and physiology of the temporomandibular, atlanto-occipital, atlanto-axial, intervertebral, shoulder, elbow joints.

**Numbers of hours - 2**

**Maximum mark - 8**

**Learning outcomes:**

1. *identify the major anatomical features of the temporomandibular, atlanto-occipital, atlanto-axial, intervertebral, shoulder, elbow joints;*
2. *explain how the anatomical differences between these joints are related to differences in function.*

**Practical Lesson 22**

**Topic:** Anatomy and physiology of the joints of the hand, hip joint, knee, ankle, foot joints. Current control 3.

**Numbers of hours - 2**

**Maximum mark - 58**

**Learning outcomes:**

1. *identify the major anatomical features of the hand, hip joint, knee, ankle, foot joints;*
2. *explain how the anatomical differences between these joints are related to differences in function.*

## METHODICAL INSTRUCTIONS FOR THE LESSONS

**Aim of the discipline** is to generate knowledge of the typical normal structure of the human body, an understanding of the functions of organs and body systems based on the application of the principles of bioengineering, to form knowledge of medical terminology - anatomical, pharmacological, clinical.

### Learning outcomes:

1. describe and determine the general plan of the structure of the human body;
2. describe and localize the bones of the trunk, skull and limbs, taking into account age, gender and individual characteristics;
3. describe and localize the joints of the bones of the trunk, head and limbs, their structure and movements in them, taking into account age, gender and individual characteristics;
4. describe and localize muscles, places of their beginning and attachment, function taking into account age, gender and individual characteristics;
5. to find and show the anatomical structures of their musculoskeletal system on the image, model and preparation, medical imaging materials (taking into account age-related characteristics), call them, including in Latin;
6. find and palpate bone and muscle landmarks on a living person;
7. apply the basics of medical international terminology - anatomical, and clinical;
8. integrate knowledge of anatomy, physiology, histology and medical biophysics to explain the main phenomena of important medical value;
9. independently find, analyze and summarize educational and scientific information in relation to situations related to the course content;
10. work in a team, defend your point of view reasonably, consider the opinions of others, provide and receive feedback correctly using interpersonal and group communication skills.

### Work plan:

1. Read the basic and additional literature, use textbooks, syllabus and these instructions, and online resources to prepare for practical classes.
2. Prepare for classes and actively participate in group discussions and discussion of problems/cases.
3. Use examples (including previously reviewed cases, your own experience) to illustrate the theoretical material.
4. Use various tools to explore, discuss, and visualize thoughts - drawing, mind maps, and 3d modeling
5. Use group case work to develop teamwork, communication, problem solving, and self-study skills.

### Response quality scale (written/oral response)

Mark	Criteria	Scale, points
Excellent	<ol style="list-style-type: none"><li>1. all key aspects are included and presented logically;</li><li>2. high accuracy (relevance, without redundancy) and constant attention to the issue;</li><li>3. excellent integration of theoretical questions;</li><li>4. providing relevant examples;</li><li>5. in-depth analysis and theoretical justification of the problem (if applicable), all key aspects identified and interpreted;</li><li>6. fluency in professional terminology</li></ol>	90 - 100



Good	<ol style="list-style-type: none"> <li>1. all key aspects are included and presented logically;</li> <li>2. constant focus on the issue with satisfactory accuracy, relevance, and / or some redundancy;</li> <li>3. satisfactory integration of theoretical questions;</li> <li>4. the lack of examples;</li> <li>5. satisfactory analysis and theoretical justification of the problem (if applicable), most of the key aspects identified and interpreted;</li> <li>6. correct use of professional terminology</li> </ol>	70 - 89
Satisfactory	<ol style="list-style-type: none"> <li>1. most of the key aspects are included;</li> <li>2. satisfactory focus on the question - some errors and / or noticeable redundancy;</li> <li>3. theoretical problems presented without noticeable integration;</li> <li>4. Providing failed examples or no examples;</li> <li>5. some analysis and theoretical justification of this problem (if applicable), most of the key aspects are defined and interpreted;</li> <li>6. correct use of professional terminology</li> </ol>	50 - 69
Unsatisfactory (FX)	<ol style="list-style-type: none"> <li>1. most of the key aspects are omitted;</li> <li>2. lack of attention to the issue-irrelevant and significant redundancy;</li> <li>3. some theoretical problems presented without integration and understanding;</li> <li>4. missing or outdated examples;</li> <li>5. some analysis and theoretical justification of this problem (if applicable), most of the key aspects are omitted;</li> <li>6. problems in using professional terminology</li> </ol>	25 - 49
Unsatisfactory (F)	<ol style="list-style-type: none"> <li>1. most or all of the key aspects are omitted;</li> <li>2. no focus on the question, not much related to the issue of information;</li> <li>3. significant gaps in theoretical questions, or their superficial consideration;</li> <li>4. the lack of examples or irrelevant examples;</li> <li>5. there is no analysis and no theoretical justification for the given problem (if applicable), most of the key aspects are omitted;</li> <li>6. problems in using professional terminology</li> </ol>	0-24

### **METHODICAL INSTRUCTIONS FOR THE TEAMWORK**

The medical profession involves working in multidisciplinary teams, so these skills are identified as key in the competence of the doctor and other health professionals in all countries.

Therefore, group work is included as a mandatory component in the practical classes of our course. In addition, it is designed to provide a safe environment in which you can try out new ideas and practices and acquire appropriate group skills. These can be tasks to perform in pairs, threes, or small groups of 4-6 people (working with cases, tasks of the IWS, etc.).

When you are working on a project or task as a team, you can use the different strengths of the team members to create a broader and better project or task than if you were working on your own.

Learning in groups means that you need to share your knowledge and ideas with other students. There are two benefits to this: you need to think carefully about your own ideas in order to explain them to others, and you expand your own understanding by taking into account the knowledge and ideas of others.

### **Interpersonal communication and discussion**

Take some time to chat and get to know each of your bandmates. The more familiar you are with each other and the more comfortable you are with each other, the more effective you will be able to work together.

Create a culture of mutual respect in your group. You probably had little or no choice when forming study groups and small teams in the classroom. Therefore, you will have to learn to overcome the differences that occur between people. In addition, you will not be able to choose employees in the workplace, and at work you will experience significantly more pressure to be a productive member of the team.

For effective communication and discussion in the team: you should not hesitate to Express their opinions and it is important to feel that those views will be heard; it is important to feel that all group members are contributing to the solution of tasks adhere to agreed rules and plans and doing the work qualitatively and in time; it is important to know that the feelings of each are considered members of the team, but the goals and objectives of the group are not put at risk in favor of the whims or desires of individual members;

Try to Express your opinion and listen to others. There is nothing wrong with disagreeing with your classmates, no matter how confident they are in what they are saying. When you disagree, be constructive and focus on the problem, not the person. Similarly, when someone disagrees with you, respect what they say and the risk they took in expressing their opinion. Try to find a way that everyone can agree on, and it's not necessarily the opinion of the loudest or smartest team member.

Here are some examples of constructive and destructive group behavior

#### **Constructive group behavior - a person who:**

*What unites us is an interest in the views and opinions of others and a willingness to adapt to the interests of others*

*Clarifies*-clearly identifies issues for the group by listening, summarizing, and focusing the discussion

*Inspires*-encourages the group, encourages participation and progress

*Harmonizes*-encourages group unity and teamwork. For example, it uses humor as a release after difficult situations.

*Takes a risk*-a willingness to take risks to the detriment of yourself for the success of a group or project

*Manages the process-organizes* a group on process issues: for example, a plan, schedule, timeline, topic, solution methods, and information usage

#### **Destructive group behavior:**

*Dominance*-takes a lot of time expressing your opinions and views. Tries to take control by capturing energy, time, and so on

*Fussiness*-hurries the group to move quickly before the task is completed. Impatient to listen to other opinions and work together.

*Suspension*-removes itself from the discussion or decision-making. Opt-out

*Ignoring*-does not respect or belittle the ideas and suggestions of the team or individuals. The extreme manifestation of ignoring is an insult in the form of ridicule.

*Distraction* – excessive chatter, tells stories and leads groups away from the goal

*Blocking* – stopping the progress of the group by rejecting all ideas and suggestions. "It won't work because..."»

Effective group work does not occur by itself. A conscious and planned effort is needed, and since there are many people involved, you can't rely on memory; you have to make notes. **Following these steps** will help you and your group work together effectively.

**1. Define clear goals.** At each stage, you should try to coordinate the tasks. They include a schedule for completing the project, as well as more specific tasks (such as “agree on an approach to completing the task by Friday”). Each meeting or discussion should also start with a specific goal (for example, making a list of tasks to complete). Tasks should be divided into smaller parts and scheduled. Sometimes one part can't be started until the other part is finished, so you may need to draw a simple temporary map.

\* discuss the resources you have and the ones you will need to find.

\* formulate the desired result.

\* think about how you will know when you have done it well enough?

\* divide tasks between the team and

\* set deadlines for sub-tasks and times for future meetings.

**2. Set the basic rules.** Discussions can become messy and can prevent more modest group members from participating if you don't have rules to encourage discussion, resolve differences, and make a decision without repetition. Set the rules from the beginning and change them as necessary. For example: an interesting rule that one group developed is that anyone who missed a meeting will buy the rest of the group coffee at a coffee shop. No one ever missed a meeting after that.

**3. Communicate effectively.** Make sure that you communicate regularly with the group members. Try to be clear and positive in what you say without repeating yourself.

**4. Find a consensus.** People work together most effectively when they are working towards a goal they have agreed to. Make sure everyone has their own opinion, even if you need time to get more participants to say something. Make sure you listen to everyone's ideas and then try to come to an agreement that everyone shares and everyone has contributed.

**5. Define roles.** Divide the work that needs to be done into separate tasks that you can use the strengths of individual team members to accomplish. Define roles for both your tasks and meetings / discussions (for example, Arani is responsible for summarizing the discussions, Joseph is responsible for everyone's opinions and decisions, and so on).

Examples of assigning roles and functions:

*Facilitator or leader* (depending on the context) - to clarify the goals of the meeting and to summarize the discussions and decisions; ensures that the meeting takes place, continues, and the basic rules are followed.

*Secretary*-keep a record of ideas discussed and decisions made, and who does what.

*Time Manager* - to make sure that you discuss everything you need in the allotted time for the meeting.

*Controller*-make sure that the work is completed by the agreed time, and solve problems if they are not completed.

*A process observer* is someone who monitors the process, not the content, and can bring issues to the attention of the team. In this role, it is important to be positive, not judgmental.

*The editor* is to bring all the materials together, to identify gaps or overlap and to ensure consistency in the final presentation.

**6. Clarify.** When a decision is made, it should be explained in such a way that it is absolutely clear to everyone what was decided, including the timing.

**7. Keep good records.** Always summarize your discussions and document your decisions and publish them (for example, in a whatsapp chat) so that you can always return to them. This includes lists of those who agreed to do what.

**8. Stick to the plan.** If you agreed to do something as part of the plan, do it. Your group relies on you to do what you agreed to do and in the way you agreed to do it, not in the way you would like to do it. If you think the plan should be revised, discuss it.

**9. Keep track of progress and adhere to deadlines.** Discuss the progress together in relation to your schedule and deadlines. Make sure that you personally meet the deadlines so that you don't let your group down.

## **Co-writing a document / report**

Joint writing is one of the most difficult parts of group work. There are many ways to do this, and your group must decide how to divide the work of writing, composing, editing, and finalizing your work. Writing as a group (six people huddle around the keyboard) is a recipe for conflict and lack of progress. The other extreme - where one person takes all the responsibility and ends up doing most of the work - is also unproductive and contributes to conflicts.

There are three possible approaches to working on a common document:

1-one person writes most of it-this means that a narrow range of ideas is used, and the rest of the team does not learn (and will not learn) to write reports and documents.

2-each person writes one section - then it is difficult to make a single consistent report, and you will not learn about the rest except your own section.

3-co-writing. This is the most productive way to solve group tasks and provides the greatest benefit from working together. For example: each section has a writer and at least one reviewer, and each team member is the author of a section and the reviewer of another section.

The final product must be reviewed by all team members before being finalized by the editor. Alternatively, you can have one author with others editing, adding, and checking, and someone else puts the finished report in order.

Try to divide the writing of source documents into tasks and solve them individually or in pairs. After the first drafts of the sections are written, send out all the components and read them. You will probably need to get together to discuss how to combine them so that they fit together. Any participants who were not involved in preparing the drafts can do some of this work. Then edit, improve, and Polish the draft. It is convenient to work together on documents in Google documents.

When preparing a report/final document, regularly check the following:

- is the project goal clear from the report?
- are the Conclusions or recommendations clear?
- do the conclusions follow from the main part of the report?
- do the sections fit together well?
- does the report meet the goals (and evaluation criteria)?
- are the necessary components sufficiently covered?

Whatever method you use, all team members should agree on the process and how they are going to maximize the collaborative approach to writing the final document.

## **Monitoring the effectiveness of the group and overcoming challenges**

Attached below is a checklist that includes a list of common problems encountered in group work. Use it regularly to identify problems before they get out of control. If there are serious problems and tensions, use it to identify where something might go wrong. First answer each question about yourself, then answer it about the group as a whole. Then gather a group and discuss where you think problems might occur, and think about how you can overcome these problems.

Each participant must complete this checklist. You should perform this exercise regularly to track and improve the performance of your team.

1. Answer each question about your work in the team.
2. Answer each question about the rest of the team.
3. Gather your entire team and discuss where you think any problems are occurring.
4. Discuss what you are going to do to overcome these problems.

**Checklist for self-assessment of the team's performance.**

<b>You</b>	<b>I personally</b>	<b>Group as a whole</b>	<b>Comments</b>
Effectively clarify your tasks and tasks at each stage?			
Evaluating the progress of work?			
We clarify and document everything that the group has decided?			
We clarify who will do what and how?			
Making it clear by what date each task should be completed?			
Setting up rules for managing meetings?			
Follow the agreed rules?			
Listening to each other?			
Let some team members dominate?			
Allow some team members to refuse/recuse themselves?			
Sacrificing personal desires for the team's success?			
Recognize the feelings of other team members?			
Making an equal contribution to the team's progress?			
We adhere to the agreed rules for writing and naming files?			

**Points and rating**

Group tasks and tasks mean that grades are assigned to the entire group based on the results of the entire group. It should be in everyone's interest to ensure the effective contribution of all team members and to ensure the high quality of the task performed. Sometimes a peer-to-peer or peer-to-peer evaluation form and a team-work evaluation form will be used to evaluate the relative contribution of each person to the group process. This can be used to soften ratings for a task, or just as a way to give feedback about your work in the group. The following are examples of criteria for evaluation of student team learning.

№	Student evaluation criteria in practical classes
1	<i>Preparing for classes:</i> Examines information focused on the case and issues of concern, uses various sources, and supports claims with appropriate links
2	<i>Group skills and professional attitude:</i> Demonstrates excellent attendance, reliability, and responsibility Takes the initiative, actively participates in the discussion, helps group members, willingly takes tasks
3	<i>Communication skills:</i> Actively listens, shows emotions according to the situation, is receptive to non-verbal and emotional signals, shows respect and correctness towards others, helps resolve misunderstandings and conflicts
4	<i>Skills for providing feedback:</i> Demonstrates a high level of self-analysis, critically evaluates himself and colleagues, provides constructive and objective feedback in a friendly manner, and accepts feedback without opposition
5	<i>Critical thinking and effective learning skills:</i> Effectively participates in generating hypotheses and formulating problematic questions, provides relevant examples from life, skillfully applies knowledge to the problem/case under consideration, critically evaluates information, makes conclusions, explains and justifies statements, draws diagrams and drawings, demonstrates constant interest in the material being studied
6	<i>Theoretical knowledge and skills on the topic of the lesson:</i> All key aspects are presented logically; accuracy, relevance of answers to questions without redundancy; integration of theoretical questions; use of relevant examples; correct use of professional terminology

**Basic literature:**

1. Saladin, Kenneth S: Anatomy & Physiology. The Unity of Form and Function, 9th Edition (2020, McGraw-Hill Education), ISBN-10 1260571297, 978-1260571295
2. Costanzo, Linda S.: BRS Physiology. Board Review Series.7 edition. -Wolters Kluwer Health, 2018.- 307p. - ISBN 1496367693, 9781496367693
3. Leslie P. Gartner: Color Atlas and Text of Histology. - 7th Edition. - Wolters Kluwer, 2017. ISBN 1496346734, 9781496346735
4. Russell K. Hobbie, Bradley J. Roth: Intermediate Physics for Medicine and Biology. - Springer, 2015. - ISBN 3319126822, 9783319126821
5. Andersson D, Medical Terminology: The Best and Most Effective Way to Memorize, Pronounce and Understand Medical Terms: Second Edition, ISBN-13 : 978-1519066626, 2016
6. Shoibekova, Alima Zhorabaevna. Latin and Fundamentals of Medical Terminology for Medical Students with Training English [Text] : educational man. / A. Zh. Shoibekova, 2016. - 163, [1] p.
7. Sembulingam, K. Essentials of Medical Physiology [Text] : [monogr.] / K. Sembulingam, P. Sembulingam ; Madha Medical College [et al.]. - 7th ed. - New Delhi ; London ; Philadelphia : Jaypee, 2016. - 1112 p. : il. - Ind.: p. 1069-1112. - ISBN 978-93-85999-11-6

**Additional literature:**

8. Standing, Susan: Gray's Anatomy: The Anatomical Basis of Clinical Practice. - 41 Elsevier Limited, 2016
9. Elaine N. Marieb, Lori A. Smith: Human Anatomy & Physiology Laboratory Manual, Main Version. - 11 edition. - Pearson Education, 2015. - ISBN 9780133999143
10. Scanlon V. C, Essentials of Anatomy and Physiology 8th Edition, F.A. Davis Company, 2018
11. Victor P. Eroschenko, Atlas of Histology with Functional Correlations 13th Edition, LWW, 2017
12. William Bialek: Biophysics: Searching for Principles. - Princeton University Press, 2012. - ISBN 0691138915, 9780691138916
13. Ghosh, Byas Deb. Human Anatomy [Text] : For Students / B. D. Ghosh ; [Anatomical Society of India (West Bengal Chapter) et al.]. - 2nd ed. - New Delhi ; Panama City ; London : Jaypee, 2013. - 948 p. : il. - Ind.: p. 913-948. - ISBN 978-93-5025-942-9
14. Mazumdar, Sibani. Anatomy at a Glance [Text] : An Exam-Oriented Text / S. Mazumdar ; Calcutta National Medical College [et al.]. - 2nd ed. - New Delhi ; London ; Philadelphia : Jaypee, 2014. - 534 p. : il. - Ind.: p. 525-534. - ISBN 978-93-5152-355-0 : App.: p. 519-520. Glossary: p. 521-524.
15. Baktybayeva, Lyaila Kyrgyzbayevna. Base of Physiology [Text] : laboratory practicum / L. K. Baktybayeva, G. T. Zhamanbayeva, M. S. Kulbayeva ; Al-Farabi Kazakh National University. - Almaty : Qazaq University, 2017. - 146 p. : il. - Bibliogr.: p. 145. - ISBN 978-601-04-3138-6

## Online resources:

1. <https://app.lecturio.com/#/>
2. <https://3d4medical.com/>
3. [https://www.youtube.com/channel/UCc\\_I2c2bUtO0p4DVeo6-Kxg](https://www.youtube.com/channel/UCc_I2c2bUtO0p4DVeo6-Kxg)
4. <https://sites.google.com/a/umich.edu/bluelink/curricula/anatomy-403?authuser=0>
5. <https://histologyknmu.wixsite.com/info/gistologicheskie-sajty>
6. <http://www.histology-world.com/contents/contents.htm>
7. <http://www.histologyguide.com/slidebox/02-epithelium.html>
8. <https://histology.medicine.umich.edu/resources>
9. <https://web.duke.edu/histology/>
10. <http://virtuallslides.med.umich.edu/Histology/view.apml?listview=1&>