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## METHODOLOGICAL GUIDELINES FOR INDEPENDENT WORK OF STUDENTS

Discipline: "Musculoskeletal system and skin in norm"

Discipline code: MSSN 2211


EP name: 6B10117 - "Dentistry"

Amount of study hours/credits:30/1

Course and semester of study: 2-3

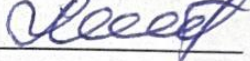
The amount of independent work: 3 hours.


Shymkent, 2024

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Methodological guidelines for students' independent work were developed in accordance with the working curriculum of the discipline (syllabus) "Musculoskeletal system and skin in norm" and discussed at a meeting of the department of "Topographic anatomy and histology"

Protocol No. 1 from "03" 09 2024

Head of the department, c.m.s., acting professor  Murzanova D.A.

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## Lesson No. 1

### 1.The theme: Dense fibrous connective tissue.

### 2. Purpose:

Sources and course of development of dense fibrous connective tissue.

### 3. Tasks

- The general outline of the structure of dense fibrous connective tissue.
- Characteristics of dense fibrous connective tissue
- General properties of connective tissues
- Localization and structural features

Connective tissue functions

### 4. The form of performance / assessment: checklist for SIW assessment

### 5. Performance criteria: work in small groups, presentation protection, glossary compilation.

Formofcontrol	Evaluation	Evaluationcriteria
Completing test tasks Completing test tasks	PerfectlyMatchesthescores: 95-100; 90-94	90-100% correctanswers
	Well Corresponds to the points: 85-89; 80-84; 75-79; 70-74	75-89% correctanswers
	Satisfactory Corresponds to the points: 65-69;60-64;50-54	50-74% correctanswers
	Unsatisfactorily Correspondstoscores 0-49	Lessthan 50% correctanswers

### Preparationofthepresentation

Formofcontrol	Evaluation	Evaluationcriteria
Preparation and protection of the presentation	Great Corresponds to the points:95-100; 90-94	The presentation was made independently, at the appointed time, with a volume of at least 15-20 slides. At least 5 literary sources have been used. The slides are informative and concise. During the defense, the author demonstrates in-depth knowledge of the topic. Does not make mistakes when answering questions during the discussion.
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	Unsatisfactorily Correspondstoscores 0-49	The presentation was not delivered on time, the volume is less than 15-20 slides. Less than 5 literary sources have been used. The slides are not meaningful. During the defense, the author makes gross mistakes when answering questions. Hedoesnotknowhisownmaterial.
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### Compiling a glossary

Formofcontrol	Evaluation	Evaluationcriteria
Compiling a glossary	Great Corresponds to the points:95-100; 90-94	The student compiled a glossary on the topic at the appointed time, independently, accurately, without errors, with a volume of at least 20 words, correctly formulated the concepts.
	Well Corresponds to the points: 85-89; 80-84; 75-79; 70-74	The student compiled a glossary on the topic at the appointed time, independently, carefully, with a volume of at least 20 words, correctly formulated the concepts, made unprincipled mistakes when compiling the glossary.
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	Unsatisfactorily Correspondstoscores 0-49	The student did not compile a glossary on the topic at the appointed time, or left it at the appointed time, but not thoroughly, carelessly, with a volume of less than 20 words on the topic, made gross mistakes when compiling the glossary.

### Solving situational problems

Formofcontrol	Evaluation	Evaluationcriteria
Solvingsituationalproblems	Great Corresponds to the points:95-100; 90-94	He actively participated in the work, showed original thinking, showed deep knowledge of the material, and used scientific achievements of other disciplines in the discussion.
	Well Corresponds to the points: 85-89; 80-84; 75-79; 70-74	He actively participated in the work, showed knowledge of the material, admitted unprincipled inaccuracies or errors corrected by the student himself.

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	Satisfactory Corresponds to the points: 65-69;60-64;50-54	When working in the group, he was passive, made inaccuracies and fundamental mistakes, and had great difficulties in systematizing the material.
	Unsatisfactorily Correspondstoscores 0-49	He did not participate in the group's work, answering the teacher's questions, made fundamental mistakes and inaccuracies, and did not use scientific terminology in his answers.

**6. Deadlines:** according to the schedule of the schedule

## 7. Literature:

### Main literature

1. Inderbir Singh. Textbook of HumanHistology.With Color Atlas and Practical Guide/8 thEdition.Jaypee Brothers Medical Publishers .2016.-302 p.ПереводГистологиячеловека
2. Dudek Ronald W. Embryology / Ronald W. Dudek. - 5th ed. - [s. l.] : Wolters Kluwer, 2014. - 158 p. Перевод заглавия: Эмбриология
3. Gartner Leslie P. Cell Biology and Histology / Leslie P. Gartner. - 8th ed. - [s. l.] :Wolters Kluwer, 2019. - 436 p. - (BRS. Board Review Series)Переводзаглавия: Клеточнаябиологияигистология

### Additional literature

Textbook of HumanHistology.Inderbir Singh /Sixth Edition/Inderbir Singh 2010.-386 p.  
Перевод Учебник по гистологии человека

### Electronic publications

1. ATLAS OF HISTOLOGY with Functional Correlations. Thirteenth Edition, Wolters Kluwer.2017.- 1102 p.
2. Theory and practice of Histological techniques.Eighth edition.Elsevier Limited.2019.-554 p.
3. Textbook of HumanHistology.With Color Atlas and Practical Guide/8 thEdition.Jaypee Brothers Medical Publishers .2011.-386 p.
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5. Zhumabayeva, S.E., Boken, T.S.  
Cytology and histology : Educational-methodical complex. . - Kokshetau: KGU, 2017. - 101 p.<http://rmebrk.kz/>
6. Бородулина, О.В. Цитология и гистология – Cytology and histology : Практикум. / Костанайский гос. педагогический университет им. У. Султангазина. - Костанай: КГПУ им.У.Султангазина, 2020. - 100 с. - <http://rmebrk.kz/>

## 8. Control:

1. Loose fibrous connective tissue
2. Cells, fibers, amorphous substance: morphological characteristics
3. The fine structure of collagen fibers
4. Dense fibrous connective tissues
5. Connective tissues with special properties.

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## Lesson No. 2

### 1. The theme: Bone restructuring, factors affecting its structure. Bone connection.

### 2. Purpose:

- The sources and course of development of bone restructuring and factors affecting its structure.
- Structural and functional features of bone connection

### 3. Tasks

- Types and functions of bone tissue.
- Cells and intercellular matrix of bone tissue.
- Intercellular matrix of bone tissue.
- Coarse-fibrous and lamellar bone tissue.
- Histogenesis and regeneration of bone tissue.
- Bone restructuring and factors affecting its structure.


### 4. The form of performance / assessment: checklist for SIW assessment

### 5. Performance criteria: work in small groups, presentation protection, glossary compilation.

Form of control	Evaluation	Evaluation criteria
Completing test tasks Completing test tasks	Perfectly Matchest the scores: 95-100; 90-94	90-100% correct answers
	Well Corresponds to the points: 85-89; 80-84; 75-79; 70-74	75-89% correct answers
	Satisfactory Corresponds to the points: 65-69; 60-64; 50-54	50-74% correct answers
	Unsatisfactorily Corresponds to scores 0-49	Less than 50% correct answers

### Preparation of the presentation

Form of control	Evaluation	Evaluation criteria
Preparation and protection of the presentation	Great Corresponds to the points: 95-100; 90-94	The presentation was made independently, at the appointed time, with a volume of at least 15-20 slides. At least 5 literary sources have been used. The slides are informative and concise. During the defense, the author demonstrates in-depth knowledge of the topic. Does not make mistakes when answering questions during the discussion.
	Well Corresponds to the points: 85-89; 80-84; 75-79; 70-74	The presentation was made independently, at the appointed time, with a volume of at least 20 slides. At least 5 literary sources have been used. The slides are informative and concise. During the defense, the author demonstrates good knowledge of the topic. He makes unprincipled mistakes when answering questions that he corrects himself.

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	<p>Satisfactory</p> <p>Corresponds to the points: 65-69;60-64;50-54</p>	The presentation was made independently, at the appointed time, with a volume of at least 15-20 slides. At least 5 literary sources have been used. The slides are not meaningful. During the defense, the author makes fundamental mistakes when answering questions.
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### Compiling a glossary

Formofcontrol	Evaluation	Evaluationcriteria
Compiling a glossary	<p>Great</p> <p>Corresponds to the points:95-100; 90-94</p>	The student compiled a glossary on the topic at the appointed time, independently, accurately, without errors, with a volume of at least 20 words, correctly formulated the concepts.
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### Solving situational problems

Formofcontrol	Evaluation	Evaluationcriteria
Solvingsituationalproblems	<p>Great</p> <p>Corresponds to the points:95-100; 90-94</p>	He actively participated in the work, showed original thinking, showed deep knowledge of the material, and used scientific achievements of other disciplines in the discussion.

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## **7. Literature:**

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## **8 Control:**

1. Bone formation
2. Histology and bone structure



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3. Histogenesis and regeneration of bone tissue.
4. Bone matrix
5. Structural and functional features of the bone
6. Bone metabolism and its dependence on the nature of nutrition

### Занятие №3

#### 1.Тема: Muscle tissues of epidermal and neural origin.

#### 2. Purpose:

- Muscle tissues of epidermal and neural origin.
- Types of muscle tissue and their origin

Key features of different fabrics

- General properties of muscle tissues

#### 3. Tasks

- Classification and functions of muscle tissue.
- Striated muscle tissue.
- The heart muscle.
- Smooth muscle tissue.
- Histogenesis and regeneration of muscle tissue.

#### 4. The form of performance / assessment: checklist for SIW assessment

#### 5. Performance criteria: work in small groups, presentation protection, glossary compilation.

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### Solving situational problems

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Form of control	Evaluation	Evaluation criteria
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## 7. Literature:

### Main literature


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### 8. Control:

1. Skeletal striated muscle tissue
2. Ultramicroscopic structure of muscle fibers
3. Muscle as an organ
4. Regeneration of skeletal muscle tissue
5. Cardiac striated muscle tissue
6. Smooth muscle tissue