**Theoretical and practical course plan form**

**Ilam University of Medical Sciences**

Introduction of the course: Anatomy 3

Instructor of the course: Dr. Marzieh Darvish

Number and type of unit (theoretical): 1.5 theoretical units

Session duration: 2 hours

Time: 10-12 Monday

Lesson topic: Nerves

**(Lesson plan form for a training session)**

Number of learners:

Class location: School of Dentistry Prerequisites:

Audience group: Dentistry General Specifications: **First session**

Course Title: Anatomy

**General goals** (write goals according to different areas and levels)

\* **Behavioral goals:** At the end of this session, the student should be familiar with the following:

1. The organization knows the main structures of the nervous system

2. Describe the three-dimensional understanding of different parts of the brain and their proximity to each other

**Student duties:**

1- Active presence in the class

2- Participating in a practical exam

3- Participating in the semester exam

4- Participating in the final exam

**Teaching methods:**

1- Master and presenting the material in the form of a lecture

2- Problem solving and questions and answer

**Educational tools**:

1- Video projector device

2- PowerPoint program and computer device

3- Whiteboard

**The main sources of the lesson:**

1- Snell anatomy - latest edition

**How to evaluate:**

1- Class quizzes

2- Questions and answers at the beginning of the class

3- Midterm exam

4- Final exam

**(Lesson plan form for a training session)**

Number of learners:

Class location: School of Dentistry Prerequisites:

Session duration: 2 hours

Audience group: Dentistry General Specifications: **Second session**

Course Title: Anatomy Lesson topic: Nerves

**General goals** (write goals according to different areas and levels)

**\* Behavioral goals**: At the end of this session, the student should be familiar with the following:

1. Describe the constituent structures of neurons, including dendrites and axons - nerve impulses - neural communication.

2. Explain glial cells and neuronal activity.

**Student duties:**

1- Active presence in the class

2- Participating in a practical exam

3- Participating in the semester exam

4- Participating in the final exam

**Teaching methods:**

1- Master and presenting the material in the form of a lecture

2- Problem solving and questions and answers

**Educational tools:**

1- Video projector device

2- PowerPoint program and computer device

3- Whiteboard

**The main sources of the lesson**:

1- Snell anatomy - latest edition

**How to evaluate:**

1- Class quizzes

2- Questions and answers at the beginning of the class

3- Midterm exam

4- Final exam

**(Lesson plan form for a training session)**

General specifications: **Third session**

Course Title: Anatomy

Lesson topic: Nerves

**General goals** (write goals according to different areas and levels)

**\* Behavioral goals**: At the end of this session, the student should be familiar with the following:

1. Describe the histology of the central nervous system.

2. Express the histological structure of the meninges and the blood-brain barrier - the choroid.

3. Explain neuronal plasticity and nerve regeneration.

**Student duties**:

1- Active presence in the class

2- Participating in a practical exam

3- Participating in the semester exam

4- Participating in the final exam

**Teaching methods**:

1- Master and presenting the material in the form of a lecture

2- Problem solving and questions and answers

**Educational tools:**

1- Video projector device

2- PowerPoint program and computer device

3- Whiteboard

**The main sources of the lesson**:

1- Snell anatomy - latest edition

**How to evaluate**:

1- Class quizzes

2- Questions and answers at the beginning of the class

3- Midterm exam

4- Final exam

**(Lesson plan form for a training session)**

General specifications**: Session 4**

Course Title: Anatomy

Lesson topic: Nerves

**General goals** (write goals according to different areas and levels)

\* **Behavioral goals**: At the end of this session, the student should be familiar with the following:

1. Describe the structure and function of nerve fibers.

2. Express the sensory and motor nerves and its mechanism of action.

3. Explain how the physical and motor examination.

**Student duties**:

1- Active presence in the class

2- Participating in a practical exam

3- Participating in the semester exam

4- Participating in the final exam

Teaching methods:

1- Master and presenting the material in the form of a lecture

2- Problem solving and questions and answers

**Educational tools**:

1- Video projector device

2- PowerPoint program and computer device

3- Whiteboard

**The main sources of the lesson:**

1. Snell anatomy - latest edition

**How to evaluate:**

1- Class quizzes

2- Questions and answers at the beginning of the class

3- Midterm exam

4- Final exam

**(Lesson plan form for a training session)**

Number of learners:

Class location: School of Dentistry Prerequisites:

Session duration: 2 hours

Audience group: Dentistry General Specifications: **Fifth session**

Course Title: Anatomy

Lesson topic: Nerves

**General goals** (write goals according to different areas and levels)

**\* Behavioral goals**: At the end of this session, the student should be familiar with the following:

1. Explain the division of the nervous system.

2. Describe the embryology of the nervous system in general.

**Student duties**:

1- Active presence in the class

2- Participating in a practical exam

3- Participating in the semester exam

4- Participating in the final exam

**Teaching methods:**

1- Master and presenting the material in the form of a lecture

2- Problem solving and questions and answers

**Educational tools:**

1- Video projector device

2- PowerPoint program and computer device

3- Whiteboard

**The main sources of the lesson:**

1- Snell anatomy - latest edition

**How to evaluate:**

1- Class quizzes

2- Questions and answers at the beginning of the class

3- Midterm exam

4- Final exam

**(Lesson plan form for a training session)**

Number of learners:

Class location: School of Dentistry Prerequisites:

Session duration: 2 hours

Audience group: Dentistry General Specifications**: Sixth session**

Course Title: Anatomy

Lesson topic: Nerves

**General goals** (write goals according to different areas and levels)

**\* Behavioral goals**: At the end of this session, the student should be familiar with the following:

1. Describe the macroscopic structure of the spinal cord

2. Express the division of the spinal cord.

3. Explain the neural pathways of the spinal cord.

4. Describe the position and function of the ascending and descending pathways of the spinal cord.

**Student duties:**

1- Active presence in the class

2- Participating in a practical exam

3- Participating in the semester exam

4- Participating in the final exam

**Teaching methods**:

1- Master and presenting the material in the form of a lecture

2- Problem solving and questions and answers

**Educational tools:**

1- Video projector device

2- PowerPoint program and computer device

3- Whiteboard

The main sources of the lesson:

1- Snell anatomy - latest edition

**How to evaluate**:

1- Class quizzes

2- Questions and answers at the beginning of the class

3- Midterm exam

4- Final exam

**(Lesson plan form for a training session)**

Number of learners:

Class location: School of Dentistry Prerequisites:

Session duration: 2 hours

Audience group: Dentistry General Specifications: **Seventh session**

Course Title: Anatomy

Lesson topic: Nerves

**General goals** (write goals according to different areas and levels)

\* **Behavioral goals**: At the end of this session, the student should be familiar with the following:

1. Describe the anatomy of the spinal cord from a clinical point of view.

2. Express lesions of the anterior and posterior nerve roots of the spinal cord.

3. Express lesions of motor neurons.

**Student duties:**

1- Active presence in the class

2- Participating in a practical exam

3- Participating in the midterm exam

4- Participating in the final exam

**Teaching methods**:

1- Master and presenting the material in the form of a lecture

2- Problem solving and questions and answers

**Educational tools:**

1- Video projector device

2- PowerPoint program and computer device

3- Whiteboard

**The main sources of the lesson**:

1- Snell photo anatomy - latest edition

**How to evaluate:**

1- Class quizzes

2- Questions and answers at the beginning of the class

3- Midterm exam

4- The final exam

**(Lesson plan form for a training session)**

Number of learners:

Class location: School of Dentistry Prerequisites:

Session duration: 2 hours

Audience group: Dentistry General Specifications: **Eighth session**

Course Title: Anatomy

Lesson topic: Nerves

**General goals** (write goals according to different areas and levels)

\* **Behavioral goals**: At the end of this session, the student should be familiar with the following:

1. Know the general anatomy of the brainstem.

2. Describe the appearance of the medulla oblongata.

3. Express the internal structure of the medulla oblongata and its nuclei.

**Student duties:**

1- Active presence in the class

2- Participating in a practical exam

3- Participating in the semester exam

4- Participating in the final exam

**Teaching methods:**

1- Master and presenting the material in the form of a lecture

2- Problem solving and questions and answers

**Educational tools:**

1- Video projector device

2- PowerPoint program and computer device

3- Whiteboard

**The main sources of the lesson:**

1- Snell anatomy - latest edition

**How to evaluate:**

1- Class quizzes

2- Questions and answers at the beginning of the class

3- Midterm exam

4- Final exam

**(Lesson plan form for a training session)**

General specifications: **Ninth session**

Course Title: Anatomy

Lesson topic: Nerves

**General goals** (write goals according to different areas and levels)

**\* Behavioral goals**: At the end of this session, the student should be familiar with the following:

1. Know the general anatomy of the brainstem.

2. Describe the appearance of the brain bridge.

3. Express the internal structure of the brain bridge and its nuclei.

2. Describe the appearance of the midbrain.

3. Express the internal structure of the midbrain and its nuclei.

4. Know the clinical problems caused by brainstem disorders.

**Student duties:**

1- Active presence in the class

2- Participating in a practical exam

3- Participating in the semester exam

4- Participating in the final exam

**Teaching methods**:

1- Master and presenting the material in the form of a lecture

2- Problem solving and questions and answers

**Educational tools**:

1- Video projector device

2- PowerPoint program and computer device

3- Whiteboard

**The main sources of the lesson:**

1- Snell anatomy - latest edition

**How to evaluate:**

1- Class quizzes

2- Questions and answers at the beginning of the class

3- Midterm exam

4- Final exam

**(Lesson plan form for a training session)**

Number of learners:

Class location: School of Dentistry Prerequisites:

Session duration: 2 hours

Audience group: Dentistry General Specifications: **Tenth session**

Course Title: Anatomy

Lesson topic: Nerves

**General goals** (write goals according to different areas and levels)

\* **Behavioral goals**: At the end of this session, the student should be familiar with the following:

1. Define the cerebral divisions of the brain.

2. Describe the third ventricle of the brain and its vicinity.

**Student duties:**

1- Active presence in the class

2- Participating in the practical exam

3- Participating in the semester exam

4- Participating in the final exam

**Teaching methods:**

1- Central teacher and presenting the material in the form of a lecture

2- Problem solving and questions and answers

**Educational tools:**

1- Video projector device

2- PowerPoint program and computer device

3- Whiteboard

The main sources of the lesson:

10 Snell anatomy - latest edition

**How to evaluate:**

1- Class quizzes

2- Questions and answers at the beginning of the class

3- Midterm exam

4- Final exam

**(Lesson plan form for a training session)**

Number of learners:

Class location: School of Dentistry Prerequisites:

Session duration: 2 hours

Audience group: Dentistry General Specifications: **Session 11**

Course Title: Anatomy

Lesson topic: Nerves

**General goals** (write goals according to different areas and levels)

**\* Behavioral goals**: At the end of this session, the student should be familiar with the following:

1. Explain the structure of the cerebellum and its nuclei.

2. Describe the fourth ventricle of the brain and its vicinity.

**Student duties:**

1- Active presence in the class

2- Participating in a practical exam

3- Participating in the semester exam

4-Participating in the final exam

**Teaching methods**:

1- Master and presenting the material in the form of a lecture

2- Problem solving and questions and answers

**Educational tools:**

1- Video projector device

2- PowerPoint program and computer device

3- Whiteboard

**The main sources of the lesson:**

1- Snell anatomy - latest edition

**How to evaluate:**

1. Class quizzes
2. Questions and answers at the beginning of the class

3- Midterm exam

4- Final exam

**(Lesson plan form for a training session)**

Number of learners:

Class location: School of Dentistry Prerequisites:

Session duration: 2 hours

Audience group: Dentistry General Specifications: **Session 12**

Course Title: Anatomy

Lesson topic: Nerves

**General goals** (write goals according to different areas and levels)

\* **Behavioral goals**: At the end of this session, the student should be familiar with the following:

1. Describe the anatomy of the brain.

2. Name the brain lobes and explain the function of each.

3. Express the lateral ventricles and its vicinity.

**Student duties:**

1- Active presence in the class

2- Participating in a practical exam

3- Participating in the semester exam

4- Participating in the final exam

**Teaching methods:**

1- Master and presenting the material in the form of a lecture

2- Problem solving and questions and answers

**Educational tools:**

1- Video projector device

2- PowerPoint program and computer device

3- Whiteboard

**The main sources of the lesson:**

1- Snell anatomy - latest edition

**How to evaluate:**

1- Class quizzes

2- Questions and answers at the beginning of the class

3- Midterm exam

4- Final exam

**(Lesson plan form for a training session)**

Number of learners:

Class location: School of Dentistry Prerequisites:

Session duration: 2 hours

Audience group: Dentistry General Specifications: **Session 13**

Course Title: Anatomy

Lesson topic: Nerves

**General goals** (write goals according to different areas and levels)

\* **Behavioral goals**: At the end of this session, the student should be familiar with the following:

Describe the generalities and function of the lattice organization.

Express the structure and function of the cerebral cortex.

Describe the generalities and function of the lattice organization.

Express the structure and function of the cerebral cortex.

Describe the limbic system.

**Student duties:**

1- Active presence in the class

2- Participating in a practical exam

3- Participating in the semester exam

4- Participating in the final exam

**Teaching methods:**

1- Master and presenting the material in the form of a lecture

2- Problem solving and questions and answers

**Educational tools:**

1- Video projector device

2- PowerPoint program and computer device

3- Whiteboard

**The main sources of the lesson:**

1- Snell anatomy - latest edition

**How to evaluate:**

1- Class quizzes

2-Questions and answers at the beginning of the class

3- Midterm exam

4- Final exam

**(Lesson plan form for a training session)**

Number of learners:

Class location: School of Dentistry Prerequisites:

Session duration: 2 hours

Audience group: Dentistry General Specifications: **Session 14**

Course Title: Anatomy

Lesson topic: Nerves

**General goals** (write goals according to different areas and levels)

\* **Behavioral goals**: At the end of this session, the student should be familiar with the following:

Describe the visual system and the path of the optic nerve.

Explain the auditory system and the mechanism of hearing.

**Student duties:**

1- Active presence in the class

2- Participating in a practical exam

3- Participating in the midterm exam

4- Participating in the final exam

**Teaching methods:**

1- Master and presenting the material in the form of a lecture

2- Problem solving and questions and answers

**Educational tools:**

1- Video projector device

2- PowerPoint program and computer device

3- Whiteboard

**The main sources of the lesson:**

1- Snell anatomy - latest edition

**How to evaluate:**

1- Class quizzes

2-Questions and answers at the beginning of the class

3- Midterm exam

4- Final exam

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| --- | --- | --- | --- |
| session | Title | topic | date |
| 1 | Introduction to Neuroanatomical | Definitions - Segmentation |  |
| 2 | Neurons and synapses | Histological structure of neurons |  |
| 3 | Neurons and synapses | Histological structure of glial cells |  |
| 4 | Neurons and synapses | Schwann and satellite cells and synapses |  |
| 5 | Evolution of the nervous system | Neurology and development of the brain and spinal cord |  |
| 6 | Spinal cord | External and internal structure |  |
| 7 | Spinal cord | Ascending and descending paths |  |
| 8 | Brainstem | Medulla oblongata |  |
| 9 | Brainstem | Brain bridge - midbrain |  |
| 10 | Cerebellum and fourth ventricle | General |  |
| 11 | Diencephalon and third ventricle | Diencephalon and third ventricle |  |
| 12 | Brain | Hemispheres and lobes - function and internal structure |  |
| 13 | The basal nuclei | Amygdala and hippocampus |  |
| 14 | The path of sight and hearing | mechanism |  |
| 15 | Practical | Practical |  |