

Objectives of the Course

Individuals may develop in the physiological changes at the cellular level to define, Give information about the physiology of normal cells, abnormal changes related to the clinical situation is to explain with examples.

Course Contents

Introduction to the Course - Course Description, Content, Teaching Methods and Resources, Cell Structure and Functions, Transport across the Cell Membrane, Capillary Dynamics, Blood and Interstitial Fluid Exchange, Lymphatic System and Edema, Genetic Control of Protein Synthesis and Cell Proliferation, Membrane Potential, Action Potential, Excitation and Rhythm, Carbohydrate Metabolism, Fat Metabolism, Protein Metabolism, Fluid-Electrolyte Balance and Imbalances, Hydrogen Ion Balance and Imbalances, Tissue Injury and Repair

Planned Learning Activities and Teaching Methods

Lectures, case discussions, brainstorming

Recommended Optional Programme Components

The theoretical portion of this course consists of 45 hours in total during the 15-week spring semester. According to Nevşehir Hacı Bektaş Veli University's examination regulations, students who miss more than 30% of the theoretical courses will not be able to take the final exam and will have to repeat the course.

Instructor's Assistants

It does not exist.

Presentation Of Course

Face to Face

Dersi Veren Öğretim Elemanları

Assoc. Prof. Dr. Gülden Küçükakça Çelik

Program Outcomes

1. List the basic principles of cell physiology
2. Explain the functions of cells and organelles
3. Explain the capillary dynamics of the cell with examples.
4. Explain the state of excitation in the cell with examples.
5. Explain cell metabolism.
6. Explain fluid-electrolyte balance
7. Explain acid-base balance
8. Can sequence the cellular and vascular responses of tissue repair

Weekly Contents

Order	Preparation	Info	Laboratory	Teaching Methods	Theoretical	Practise
1	Fall semester course content is prepared weekly and announced to students at the beginning of the semester. Students are required to read at least five sources (at least one source must be in English) before class, in accordance with the weekly topics.			Straight talk, case discussion, brainstorming	Introduction to the Course - Course Description, Content, Teaching Methods and Resources	
2	Fall semester course content is prepared weekly and announced to students at the beginning of the semester. Students are required to read at least five sources (at least one source must be in English) before class, in accordance with the weekly topics.			Straight talk, case discussion, brainstorming	Cell Structure and Functions	
3	Fall semester course content is prepared weekly and announced to students at the beginning of the semester. Students are required to read at least five sources (at least one source must be in English) before class, in accordance with the weekly topics.			Straight talk, case discussion, brainstorming	Transport across the Cell Membrane, Capillary Dynamics, Blood and Interstitial Fluid Exchange, Lymphatic System and Edema	

Order	Preparation Info	Laboratory	Teaching Methods	Theoretical	Practise
4	Fall semester course content is prepared weekly and announced to students at the beginning of the semester. Students are required to read at least five sources (at least one source must be in English) before class, in accordance with the weekly topics.		Straight talk, case discussion, brainstorming	Transport across the Cell Membrane, Capillary Dynamics, Blood and Interstitial Fluid Exchange, Lymphatic System and Edema	
5	Fall semester course content is prepared weekly and announced to students at the beginning of the semester. Students are required to read at least five sources (at least one source must be in English) before class, in accordance with the weekly topics.		Straight talk, case discussion, brainstorming	Genetic Control of Protein Synthesis and Cell Proliferation	
6	Fall semester course content is prepared weekly and announced to students at the beginning of the semester. Students are required to read at least five sources (at least one source must be in English) before class, in accordance with the weekly topics.		Straight talk, case discussion, brainstorming	Membrane Potential, Action Potential, Excitation and Rhythmicity	
7	Fall semester course content is prepared weekly and announced to students at the beginning of the semester. Students are required to read at least five sources (at least one source must be in English) before class, in accordance with the weekly topics.		Straight talk, case discussion, brainstorming	Membrane Potential, Action Potential, Excitation and Rhythmicity	
8				MIDTERM EXAM	
9	Fall semester course content is prepared weekly and announced to students at the beginning of the semester. Students are required to read at least five sources (at least one source must be in English) before class, in accordance with the weekly topics.		Straight talk, case discussion, brainstorming	Carbohydrate Metabolism	
10	Fall semester course content is prepared weekly and announced to students at the beginning of the semester. Students are required to read at least five sources (at least one source must be in English) before class, in accordance with the weekly topics.		Straight talk, case discussion, brainstorming	Fat Metabolism	
11	Fall semester course content is prepared weekly and announced to students at the beginning of the semester. Students are required to read at least five sources (at least one source must be in English) before class, in accordance with the weekly topics.		Straight talk, case discussion, brainstorming	Protein Metabolism	
12	Fall semester course content is prepared weekly and announced to students at the beginning of the semester. Students are required to read at least five sources (at least one source must be in English) before class, in accordance with the weekly topics.		Straight talk, case discussion, brainstorming	Fluid-Electrolyte Balance and Imbalances	
13	Fall semester course content is prepared weekly and announced to students at the beginning of the semester. Students are required to read at least five sources (at least one source must be in English) before class, in accordance with the weekly topics.		Straight talk, case discussion, brainstorming	Hydrogen Ion Balance and Imbalances	
14	Fall semester course content is prepared weekly and announced to students at the beginning of the semester. Students are required to read at least five sources (at least one source must be in English) before class, in accordance with the weekly topics.		Straight talk, case discussion, brainstorming	Tissue Injury and Repair	
15	Fall semester course content is prepared weekly and announced to students at the beginning of the semester. Students are required to read at least five sources (at least one source must be in English) before class, in accordance with the weekly topics.		Straight talk, case discussion, brainstorming	Tissue Injury and Repair	

Workload

Activities	Number	PLEASE SELECT TWO DISTINCT LANGUAGES
Vize	1	2,00
Final	1	3,00
Derse Katılım	14	3,00
Ders Öncesi Bireysel Çalışma	14	2,00
Ara Sınav Hazırlık	7	2,00
Tartışmalı Ders	14	3,00
Vaka Çalışması	14	3,00

Assesments

Activities	Weight (%)
Araştırma Sunumu	40,00
Final	60,00

	P.O. 1	P.O. 2	P.O. 3	P.O. 4	P.O. 5	P.O. 6	P.O. 7	P.O. 8	P.O. 9	P.O. 10	P.O. 11	P.O. 12	P.O. 13	P.O. 14
L.O. 1	1	4		3	1		2	2		1	1			
L.O. 2	1	4			4	1		2	2		1	1		
L.O. 3	1	4			4	1		2	2		1	1		
L.O. 4	1	3			4	1		2	2		1	1		
L.O. 5	1	3			4	1		2	2		1	1		
L.O. 6	1	4			5	1		2	2		1	1		
L.O. 7	1	3			5	1		2	2		1	1		
L.O. 8	1	3			5	1		2	2		1	1		

Table :

- P.O. 1 :** Hemşirelik felsefesini bilir
- P.O. 2 :** Hemşireliğin temel kavamları arasındaki ilişkiyi analiz eder
- P.O. 3 :** Hemşireliğin mesleki değerlerini içselleştirir
- P.O. 4 :** Hemşirelik alanında derin ve sistematik bir bilgi düzeyine sahip olur
- P.O. 5 :** Sağlık alanındaki modern, teknik ve bilgi teknolojilerini bilerek kanita dayalı hemşirelik uygulamaları doğrultusunda bilgi ve becerisini kullanır
- P.O. 6 :** Grup içinde "lider ve/veya üye olarak" uyum içinde çalışır.
- P.O. 7 :** İş yaşamında yeni durumları çabuk öğrenir ve farklı beceriler geliştirir.
- P.O. 8 :** Geliştirdiği profesyonel hemşirelik bilincini hemşirelik bakımına yansıtır
- P.O. 9 :** Hemşirelik alanına katkı sağlayacak araştırmalar yapar
- P.O. 10 :** Hemşirelik alanına özgü bilimsel gelişmeleri izler
- P.O. 11 :** Hemşirelik alanına özgü eriştiği bilgiyi analiz eder
- P.O. 12 :** Kanita dayalı uygulamaları hemşirelik bakımına yansıtır
- P.O. 13 :** Hemşirelik öğretiminin temel felsefesini bilir
- P.O. 14 :** Hemşirelik öğretiminde uygun öğretim ilke ve yöntemleri kullanır
- L.O. 1 :** Hücre fizyolojisinin temel ilkelerini sıralayabilir
- L.O. 2 :** Hücre ve organellerin fonksiyonlarını açıklayabilir
- L.O. 3 :** Hücrenin kapiller dinamiğini örneklerle açıklayabilir
- L.O. 4 :** Hücrede uyarmış durumunu örneklerle açıklayabilir
- L.O. 5 :** Hücre metabolizmasını açıklayabilir.
- L.O. 6 :** Sıvı- elektrolit dengesini açıklayabilir
- L.O. 7 :** Asit-baz dengesini açıklayabilir
- L.O. 8 :** Doku onarımının hücresel ve damarsal tepkilerini sıralayabilir