UNIVERSIDAD AUTONOMA DE NUEVO LEON
SCHOOL OF MEDICINE
Ba CLINICAL CHEMISTRY

SYNTHETIC PROGRAM

1. Module identification code.	
Name of the institution:	Universidad Autónoma de Nuevo León
Name of the school:	School of Medicine
Name of the degree program:	Clinical Chemistry
Name of the course (learning unit):	Pathology
Total number of class hours-theory and practice:	48
Class hours per week:	2
Independent study:	12
Course modality:	Face-to-face instruction
Module level:	Fourth semester
Core/elective module:	Core
Curriculum area:	ACFB
UANL credit points:	2
Create date:	January 30th, 2018
Date of last amendment made:	June 10th, 2024
Person(s) responsible for the design	MD. María de Lourdes Chávez Briones, MD. Adriana Gpe. Ancer Arellano, MD. Ivette

and amendment of the module:	C. Miranda Maldonado. PhD. Marta Graciela Ortega Martínez, PhD. Gilberto Jaramillo Rangel, PhD. Iván Marino Martínez

2. Purpose:

This Learning Unit (LU) promotes the training of professionals who contribute with an ethical attitude in the diagnosis of diseases, with a program designed for the development of skills to identify and classify various pathological entities, as well as to recognize molecular changes. structural and physiological that accompany them at the cellular, tissue, or organic level; so that you can relate them to the alterations observed in clinical laboratory tests.

During the development of the LU, he manages communication technologies for the search for information and the analysis of the conditions in which different pathologies appear, applies learning strategies for the management of cutting-edge information and can point out and describe with the own vocabulary the morphological characteristics of each one; It also achieves the adaptability required by the different learning experiences in the classroom during the development of the LU.

In relation to specific competencies, it allows you to interpret the results of clinical laboratory analyzes by relating them to changes in tissue structure and contrasting them with normal parameters.

Within the learning units of the curriculum, it is related to Cellular Biology and Morphological Sciences, from which it takes the bases of normality of biological structures and identifies the level of organization where the disease occurs; with Microbiology through the analysis of infectious etiological agents and relates them to the morphological alterations observed at the cellular and tissue level and with Medical Physiology, where the normal physiological bases are obtained to understand the pathophysiology of the disease; It provides the AUs of Genetics and Clinical Biochemistry with the physio-morphological bases of diseases.

3. Competences of the graduate profile

General competences to which this module (learning unit) contributes:

Instrumental skills:

1.-To apply autonomous learning strategies at different levels and fields of knowledge that allow them to make timely and relevant decisions in the personal, academic and professional spheres.

3.- To manage Digital Information, Communication, Knowledge and Learning Technologies (TICCAD), in academic, personal and professional environments with cutting-edge techniques that allow their constructive and collaborative participation in society

4.- To master their mother tongue orally and in writing with correctness, relevance, timeliness and ethics, adapting their message to the situation or context, for the transmission of ideas and scientific findings.

Personal and social interaction skills:

11.-To practice the values promoted by the UANL: truth, equity, honesty, freedom, solidarity, respect for life and others, peace, respect for nature, integrity, ethical behavior and justice, in their personal and professional environment to contribute to building a sustainable society

Integrative skills:
15.- To achieve the adaptability required by the uncertain social and professional environments of our time to create better living conditions.

Specific competences of the graduate profile to which this module (learning unit) contributes:

3.-To handle chemical and biological materials following official Mexican and/or international standards that guarantee their correct use and disposal to preserve health and the environment.

4.- To validate bioanalytical methods under established performance criteria that allow reliability of the results obtained in chemical-biological samples

6.- To interpret the results of analyses based on established criteria that allow timely and pertinent decision-making in clinical, toxicological, chemical, food, forensic, and environmental diagnosis.

4. Factors to consider for evaluating the learning unit

- Evidences.
- Reports.
- Written evaluation
- Accredited activities
- Course integrative project/product.

5. Course integrative project/product:

Written essay on a pathological process assigned

6. References:

- Kumar. Vinay y cols. (2021) Patologia esencial, 1ª Ed, España, Editorial Elsevier
- Valencia M., y cols (2015). *Patología*, Barcelona, España, Editorial: Mc Grow Hill Interamericana.
- College of American Pathologist (2018). PathologyOutlines.com. https://www.pathologyoutlines.com/
- The Pathology Guy. Recuperado el 10 de enero de 2024 *www.pathguy.com*
- https://www.uanl.mx/enlinea/
- http://www.medicina.uanl.mx/plataforma/login/index.php