

SYNTHETC 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):	Management and quality in the clinical laboratory
Total number of class hours-theory and practice:	40
Class hours per week:	2 hours
Independent study:	20
Course modality:	Face-to-face instruction
Module level:	Eighth semester
Core/elective module:	Core
Curriculum area:	ACFP-F
UANL credit points:	2
Create date:	June 4 th , 2018
Date of last amendment made:	January 23 rd , 2024
Person(s) responsible for the design and amendment of the module:	PhD Sonia Lozano Quintanilla

2. Purpose:

The purpose of this learning unit is to contribute to achieving the profile of the graduate through the development of competence, based on contemporary theories, and the implementation of the necessary tools to create and establish an administrative system that allows compliance with official requirements. and quality for the organization and operation of the clinical laboratory.

The unit collaborates with the achievement of three general competencies by developing individual logical and critical thinking, as well as a purposeful sense to establish and support administrative systems in the clinical laboratory and related areas. It allows the administrator to know and assume responsibility in making decisions based on the demand for quality, costs and efficiency to achieve the satisfaction of users of the laboratory service. It empowers graduates to intervene in the challenges and needs of Mexican society through critical development and human, academic, and mainly professional commitment to contribute to the well-being of society and the sustainability of services. Likewise, it provides the bases to resolve personal and social conflicts according to the appropriate administrative tools.

Regarding the acquisition of specific competencies, the learning unit confers knowledge and logical and critical thinking to guarantee the reliability of the analytical results obtained in the clinical laboratory through the application of current quality control guidelines. Likewise, the content of the unit enables the graduate to ensure the necessary material, human, financial and infrastructure resources, applying quality management systems for the proper functioning and continuous improvement of clinical laboratories.

The learning unit of Administration and quality in the clinical laboratory is taught in the eighth semester of the Clinical Chemist Biologist Educational Program and is related to various learning units reviewed in previous semesters, such as: Ethics and Culture of Legality and Social Responsibility and Sustainable Development, which are based on the social sciences as well as administration, promote human development and elementary values for social interaction, in addition to presenting the foundations for the resolution of administrative problems and allowing the development of the critical thinking for decision making. All the learning units that make up Clinical Pathology are also related by combining the technical skills of clinical diagnosis and the administrative principles of quality control with the development and management of a clinical laboratory. The competencies acquired in the learning units prior to this unit provide the bases for the direction and achievement of quality services in the clinical laboratory.

3. Competences of the graduate profile:

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

Instrumental skills:

5. To use logical, critical, creative and proactive thinking to analyze natural and social phenomena that allow them to make relevant decisions in their sphere of influence with social responsibility.

Personal and social interaction skills:

10. To intervene in the face of the challenges of contemporary society at the local and global level with a critical attitude and human, academic and professional commitment to contribute to consolidating general well-being and sustainable development.

Integrative skills:

14. To resolve personal and social conflicts, in accordance with specific techniques in the academic field and in their profession for appropriate decision-making.

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

7. To guarantee the reliability of the analytical results obtained by applying quality control guidelines as established by laboratory policies for correct decision-making.
8. To ensure the necessary resources by applying quality management systems for the proper functioning and continuous improvement of the laboratories.

4. Summative evaluation:

- Daily evidences
- Partial exams
- PIA

5. Course integrative product:

Written assessment with multiple choice questions and exercises on the content of the learning unit.

6. References:

Arias, F. and Heredia, V., (2006). *Human Resources Management: for high performance* , 6th Edition, Mexico: Editorial Trillas.

Fernández-Espina, C. and Mazziota , D., (2005). *Quality Management in the Clinical Laboratory* , 1st Edition, Buenos Aires: Editorial Médica Panamericana.

Münch, L. and García, J., (2020). *Fundamentals of Administration* , 14th Edition, Mexico: Editorial Trillas.

Ministry of Economy. (2015). NMX-CC-9001-IMNC-2015, *Quality management systems - requirements* . Mexico: Mexican Institute for Standardization and Certification.

Ministry of Economy. (2015). NMX-EC-15189-IMNC-2015, *Clinical laboratories - Quality and competence requirements*. Mexico: Mexican Institute for Standardization and Certification.

Ministry of Environment and Natural Resources. (2002). NOM-087-ECOL-SSA1-2002, *Environmental protection - Environmental health - Biological-infectious hazardous waste - Classification and handling specifications*. Mexico: Official Journal of the Federation. Retrieved January 11, 2017, from <http://www.salud.gob.mx/unidades/cdi/nom/087ecolssa.html>

Ministry of Health. (2017). PROY-NOM-007-SSA3-2017, *For the organization and operation of clinical laboratories*. Mexico: Official Journal of the Federation. Retrieved June 6, 2018, from http://www.dof.gob.mx/nota_detalle.php?codigo=5511878&fecha=01/31/2018

Ministry of Health. (2012) NOM-016-SSA3-2012, *Which establishes the minimum infrastructure and equipment requirements for hospitals and specialized medical care offices* . Mexico: Official Gazette of the Federation. Retrieved on June 6, 2018, from http://www.dof.gob.mx/nota_detalle.php?codigo=5284306&fecha=08/01/2013

Ministry of Labor and Social Welfare. (2004). PROY-NOM-005-STPS-2004, *Management of hazardous chemical substances – Safety and health conditions and procedures in the workplace* . Mexico: Official Gazette of the Federation. Retrieved on June 6, 2018, from <http://www.dof.gob.mx/normasOficiales/3427/STPS/STPS.htm>