

MODULE DESCRIPTION (SUMMARY PROGRAM).

1. Module Information Code:	
• Name of the Institution and School	Universidad Autónoma de Nuevo León, <u>School of Medicine</u>
• Name of the Learning Unit	Medical Imaging
• Total classroom hours for theory and/or practice.	69 hours
• Total extra classroom hours	51 hours
• Course Modality	Schooled
• Type of academic period in which the module is offered	5th semester
• Type of Learning Unit in the Curriculum	Compulsory
• Curriculum area:	ACFP-F Essential Professional
• UANL credit points	4
• Date of module creation:	February 4, 2016
• Date of last amendment:	November 10, 2020
• Person(s) responsible for the module design and amendments:	Dr. C. Guillermo Elizondo Riojas
2. Purpose(s)	
In this learning unit, the student will be able to analyze different medical imaging methods, explain its indications and interpret the radiological reports; recognize the anatomical structures, apply the main radiological signs, and analyze the main pathologies with different imaging methods;	

all this is done as part of the context held by the learning units at Internal Medicine, General Surgery, and different surgical branches, as well as Pediatrics, Gynecology, and Obstetrics, in order to solve problems from the primary health care level in the population.

The teaching-learning structure is applied through the implementation of a methodology which favors autonomous learning with aims of collaboration and mainly focused in problem solving. Likewise, the module develops in the student the competences corresponding to areas such as critical thinking and research, ethical and professional values, organizational work, personal and professional development and communication skills.

3. Competences of the graduate profile

a. General competences contributing to this learning unit.

Instrumental skills:

1. Apply autonomous learning strategies in the different levels and fields of knowledge that allow them make appropriate and relevant decisions in the personal, academic and professional fields.
3. Use the information and communication technologies as access tools to information and its transformation in knowledge, as well as for learning and collaborative work with cutting-edge techniques that allow its constructive participation in society.
6. Use a second language, English in particular, with clarity and correctness to communicate in common, academic, professional and scientific contexts.

Personal and social interaction skills

10. Intervene in front of the challenges of contemporary society at the local and global level with a critical attitude and human, academic and professional commitment to help consolidate the general wellness and sustainable development.
11. Practice the values promoted by the UANL: truth, equality, honesty, liberty, solidarity, respect for life and anyone's, peace, respect for nature, integrity, ethics behavior and justice, within their personal and professional environment in order to make a sustainable society.

Integrative skills

12. Make innovative proposals based on the holistic understanding of reality to help overcome the challenges of the interdependent global environment.

15. Achieve the adaptability required in uncertain professional and social environments of our time to improve living conditions.

b. Specific competences of the graduate profile that contributes to the learning unit

1.- Use the medicine scientific fundamentals considering economical, psychological, social, cultural and environmental factors which contribute to the development and evolution of a disease for decision-making and medical actions.

2.- Solves clinical problems through deductive reasoning, interpretation of findings and definition of their nature with the aim of making decisions and determine action principles of the medical practice to follow in a responsible way, impacting individual and collective health.

4.- Manage properly patients with the most frequent diseases from a biopsychosocial perspective, through the application of knowledge, technical procedures and basic diagnostic, based on clinical guides and attention protocols in order to solve the main health problems from the Primary Health Care level from individuals and the community.

6.- Manage human resources, diagnostic interventions, therapeutic modalities, and options on health care according to national standards, promoting a quality culture in attention and guaranteeing patients' security.

7.- Applies the scientific method for the resolution of medical problems with an innovative, analytic and self-critical attitude for preventing, diagnosing and treating diseases.

9.- Respects the patient's integrity keeping the patient's medical information as an essential part of their professional secret in order to preserve his rights.

10.- Promotes an organizational work culture for the health field, acknowledging the multidisciplinary work, respect for institutional policies and the observance of rules in order to contribute to a comprehensive treatment of patients.

4. Summative Evaluation

- Resolution of clinical cases
- Exams
- Course Integrative Product.

5. Course Integrative Product.

Resolution of Medical Imaging clinical cases in both oral and written form

6. References

Del Cura, J. L., Pedraza, S. & Gayete, A. (2010). *Radiología esencial*. México, D.F.: Editorial Panamericana.

Erkonen, W. E. & Smith, W. L. (2010). *Radiología 101: Las bases y fundamentos de los estudios de imagen*. Philadelphia, PA: Lippincott Williams & Wilkins.

Herring, W. (2013). *Radiología Básica*. España: Elsevier Saunders.

Additional references:

Brant, W.E. & Helms, C.A. (2007). *Fundamentals of Diagnostic Radiology*. Philadelphia, PA: Lippincott Williams & Wilkins

Collins, J. & Stern, E.J. (2008). *Chest Radiology: The Essentials*. Philadelphia, PA: Lippincott Williams & Wilkins

Dähnert, W. (2011). *Radiology Review Manual*. Philadelphia, PA: Lippincott Williams & Wilkins.

Goodman, L. (2007). *Felson's Principles of Chest Roentgenology*. Philadelphia, PA: Elsevier Saunders.

Herring, W. (2012). *Learning Radiology: Recognizing the Basics*. Philadelphia, PA: Elsevier.

Digital references

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