UANL
UNIVERSIDAD AUTÓNOMA DE NUEVO LEÓN

FACULTAD DE MEDICINA

MODULE DESCRIPTION (ANALYTICAL PROGRAM).

1. Module Information Code:	
• Name of the Institution and School	Universidad Autónoma de Nuevo León, School of Medicine.
• Name of the Learning Unit	Medical Sciences II
• Total classroom hours for theory and/or practice.	500 hours
• Total extra classroom hours	310 hours
• Course Modality	Schooled
• Type of academic period in which the module is offered	9th Semester
• Type of Learning Unit in the Curriculum	Compulsory
• Curriculum area:	ACFP-I
• UANL credit points	27
• Date of module creation:	October 8, 2014
• Date of last amendment:	February 26, 2021
• Person(s) responsible for the module design and amendments:	Dr. med. Homero Nañez Terreros. Dr. Abraham Vázquez. Dr. Pedro García Hernández. Dra. med. Lucia Leal Villarreal. Dra. Elisa Guerrero González.

2. Introduction:

The Learning Unit of Medical Sciences II consists of the study of six specialties of Internal Medicine, which are Cardiology, Nephrology, Pneumology, Rheumatology, Geriatrics and Oncology, which are integrated in learning stages. In each of these stages the most common diseases are reviewed, in which clinical skills are developed with a focus on the first level of care and from a biopsychosocial perspective. The teaching-learning process in each stage includes clinical practice in real scenarios and its corresponding analysis for a better understanding and feedback of each activity performed.

3. Purpose(s)

This Learning Unit trains the undergraduate student with respect to the integral attention of the adult, with emphasis in the diagnosis and treatment of the pathologies related to Cardiology, Nephrology, Pneumology, Rheumatology, Geriatrics and Oncology, therefore, contributes to the profile of graduation in the formation of a physician who solves the main health problems of the first level of care of the individual and the community by acquiring the ability to integrate information from the clinical history, laboratory findings and scientific evidence available to prevent and establish the diagnosis and timely management of the most prevalent diseases.

Its curricular relationship presupposes the knowledge of the structure and function of the human body through the study of Anatomy, Physiology, Histology, Embryology, Microbiology, Biochemistry and Molecular Biology, Clinical Pathology and Imaging, with the objective of using this information in the integral evaluation of a patient, through the correct elaboration of an intentional clinical history and physical examination, together with the interpretation of laboratory and imaging studies. The knowledge of Pharmacology and Toxicology is also required to allow the correct selection of the treatment, taking into account its interactions. Furthermore, it is related to all the Learning Units of the Clinical Area, as well as to Bioethics.

With respect to the general competencies of the University, this Learning Unit responds in the use of formal language, the correct use of language; the use of logical and critical thinking that allows it to make decisions within its sphere of influence; handling of computer tools; and it favors autonomous learning, which will allow it to consolidate its medical training. As for the specific competences of the profession, it contributes in the scientific knowledge and its applicability through the clinic, solving the health problems of the first level of attention and referring in a timely manner to other specialists. It also promotes effective communication with patients, their families and other professionals, in addition to knowing how to work in a multidisciplinary team and always practicing medical ethics, respect, confidentiality and social commitment.

4. 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.

2. Use the logical, formal, mathematical, iconic, verbal and non-verbal languages according to their stage of life, in order to understand, interpret and express ideas, feelings, theories and streams of thinking with an ecumenical focus.

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.

4. Dominate their native language in oral and written form with correctness, relevancy, opportunity and ethics adapting its message to the situation or context, in order to transmit of ideas and scientific findings.

5. Employ logical, critical, creative and proactive thinking to analyze natural and social phenomena that let them make relevant decisions in its area of influence with social responsibility.

6. Use a second language, English in particular, with clarity and correctness to communicate in common, academic, professional and scientific contexts.

7. Develop inter, multi and transdisciplinary academic and professional proposals according to the best global practices to promote and consolidate the collaborative work.

8. Use methods and techniques of traditional and cutting-edge research for the development of their academic work, the practice of their profession and the generation of knowledge.

Personal and social interaction skills

9. Maintain an attitude of commitment and respect towards the diversity of social and cultural practices that reaffirm the principle of integration in the local, national and international context with the purpose of promoting environments of peaceful coexistence.

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.

13. Take the lead according to social and professional needs to promote relevant social change.

14. Resolve personal and social conflicts in accordance with specific techniques in the academic field and their profession for the proper decision making.

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

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

Professional Clinical Practice
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.

3.- Evaluate the development and evolution of the disease through the analysis of biomedical information and related physical, social and cultural factors, promoting health education and encouraging preventive medicine.

4.- Manages 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.

5.- Handle common medical emergencies, applying treatment, procedures and minor interventions and refer in an appropriate and timely manner patients who require critical care for the preservation of life.

6.- Manages 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.

Critical Thinking and Research
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.

Professional Values and Ethics
8.- Integrates professional values and ethics into his medical practice, making no difference due to gender, race, political or sexual preference, religious beliefs, activities developed, disabilities or socioeconomic level, promoting social inclusion and contributing to the population's well-being, their life quality and human development.

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.

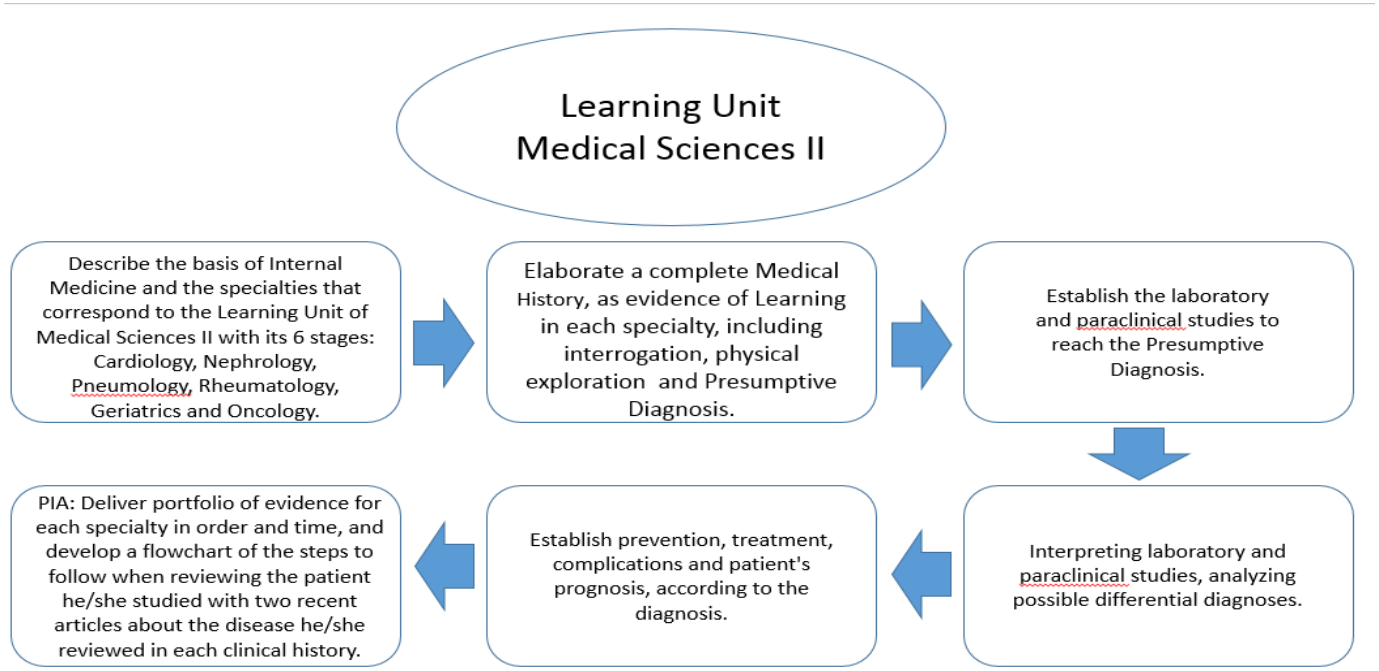
Organizational Work

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.

Communication

11.- Applies effective communication principles, establishing a respectful and sympathetic relationship with the patient, relatives, the community and other health professionals in order to use the information properly.

5. Course Roadmap:



6. Structuring into stages or phases

Stage 1. Cardiology.
Component(s) of the competence:
Perform the integral study of a patient with a Cardiological disease, by means of the elaboration of complete clinical histories, in order to make the correct diagnosis and treatment, corresponding to the most common diseases of Cardiology in the first level of attention.

Evidence of student learning	Performance Criteria	Learning activities	Content	Resources
Medical History	**Checklist:** Complete medical history of a patient with cardiac disease including diagnosis, treatment, differential diagnosis and prognosis: **Elaboration of a clinical history with all its components and the justification of the diagnosis:** •Semiology (Interrogation) •Physical Examination •Diagnosis (Topographic, Syndromic, Differential) •Therapeutic Strategies **Proper interpretation of assigned paraclinical exams:** •Electrocardiogram •Cardiac Enzymes •Chest X-ray •Special Imaging Studies (MRI, CT)	The student reads the topic to be discussed in class and answers the pre-class activities on the platform. In class, the professor presents the relevant concepts of the topic to be treated through images. The professor asks analytical questions. • The Professor explains, clarifies and exemplifies the basic concepts and principles of what is seen in the class. • The Professor interacts with the students during the class so that they achieve an understanding of the evidence requested in all its aspects.	**Conceptual** 1. Cardiovascular Physiology 2. Diagnostic Methods in Cardiology 3. Congenital Hearth Disease 4. Hearth Failure 5. Hearth Failure Treatment 6. Cardiovascular risk factors, Aortic Pathology and Peripheral Vascular Disease 7. Mitral-Tricuspid Valve Pathology 8. Aorto-Pulmonary Valve Pathology 9. Coronary Syndromes. 10. Coronary Syndromes treatment. 11. AHT part 1 12. AHT part 2 13. Infectious Endocarditis. Pericardial Disease. Cariomyopathy. 14. Rythm disorder. Syncope	Classrooms of the School of Medicine and the University Hospital. Auditoriums of the Faculty of Medicine and the University Hospital Hospital consultation and/or Internal Medicine internship area Textbook Projector with audiovisual material Electronic platform Audiovisual material

	Bibliographic reviews • Corresponding to the Medical History submitted **Described and/or witnessed at least 2 of the following procedures and include description and indications:** • Central Venous Catheter Placement • Permanent/temporary pacing • Electrocardiogram • Transthoracic Echocardiography • Reperfusion therapies (systemic thrombolysis and angioplasty) **Format:** • Official Medical History Format, download from Project/presentation	After the class the student answers activities on the platform, which refer to analysis questions derived from a clinical case. The student attends the discussion sessions, where clinical cases are analyzed. • The students integrate a complete medical history and present it orally, the professor asks analytical questions, as well as basic concepts, where scenarios are raised and conclusions are made. • The Professor explains, clarifies and exemplifies the basic concepts and principles of patient studies. The Professor leads the discussion, asking guiding questions, and posing alternative scenarios to the established ones for the student to apply the conceptual content, in this way the student explains and justifies his or her answers.	15. Auricular-Ventricular Blocks. Pacemaker **Procedural** ● Synthetize the clinical characteristics of clinical history, interrogation, physical examination, diagnosis and treatment of the most important cardiological diseases and their differential diagnoses. ● Prioritize the sndromes with the greatest impact as a public health problema. ● Efficient search of scientific literature related to topics. **Attitudinal** **Attitudes and values** ● Punctuality, Attendance and permanence ● Participation and Respect ● Good Presentation ● Service Attitude ● Ethics, honesty, truth and justice ● Team work and solidarity. ● Responsability and integrity	

		Students attend the Guard, where their main activities are: ● Make Medical Records ● Watches or assists in: ○ Central Venous Catheter Placement ○ Permanent/temporary pacing ○ Electrocardiogram ○ Transthoracic Echocardiography ○ Reperfusion therapies (systemic thrombolysis and angioplasty) • Receive Basic CPR training • Receive HTA crisis management training • Receive training in chest pain management. • Receives training to interpret: BH,QS,ES,Electrocardiograms. • Examines assigned patient with interrogation, physical examination, required paraclinical studies, diagnosis and treatment. • The Professor explains, clarifies and exemplifies the basic concepts and principles of the patient's studies		

Stage 2. Nephrology.

Component(s) of the competence:

Perform the integral study of a patient with a disease in Nephrology, by means of the elaboration of the complete clinical history in order to make the correct diagnosis and treatment, corresponding to the most common diseases in Nephrology, at the first level of attention.

Evidence of student learning	Performance Criteria	Learning activities	Content	Resources
Medical History	**Checklist:** Prepare a complete medical history of a patient with nephrological disease including diagnosis, treatment, differential diagnosis and prognosis: **Elaboration of a clinical history with all its components and the justification of the diagnosis:** • Semiology (Interrogation) • Physical Examination • Diagnosis (Topographic, Syndromic, Differential) • Therapeutic Strategies **Proper interpretation of assigned paraclinical exams:** • Interpretation B. Hematics, P. Biochemistry and Gasometry • Interpretation of Uroanalysis and Urinary Indicators	The student reads the topic to be discussed in class and answers the pre-class activities on the platform. In class, the professor presents the relevant concepts of the topic to be treated through images. The professor asks analytical questions. • The Professor explains, clarifies and exemplifies the basic concepts and principles of what is seen in the class. • The Professor interacts with the students during the class so that they achieve an understanding of the evidence requested in all its aspects. After the class the student answers activities on the platform, which refer to analysis questions derived from a clinical case.	**Conceptual** 1. Clinical Evaluation. Laboratory and Cabinet studies. 2. Primary Arterial Hypertension 3. Secondary Arterial Hypertension 4. Unirary tract Infectio 5. Litiasis 6. Nephritic Syndrome. Nephrotic Syndrome. 7. Intersitial tuve Nephropathy 8. Diabetic Nephropathy 9. Acute Kidey Injury 10. Chorinc Kidney Disease (definition and diagnosis) 11. Chornic Kidney Disease (conservative treatament and goals) 12. Renal Replacement Therapy	Classrooms of the School of Medicine and the University Hospital. Auditoriums of the Faculty of Medicine and the University Hospital Hospital consultation and/or Internal Medicine internship area Textbook Projector with audiovisual material Electronic platform Audiovisual material

	• Interpretation of Kidney and Urinary Tract Ultrasound • Glomerular Filtration Rate (GFR) Calculation **Bibliographic reviews** • Corresponding to the Medical History submitted **Described and/or witnessed at least 2 of the following procedures and include description and indications:** • Vascular Access Placement • Hemodialysis Procedure • Peritoneal Dialysis Procedure • Renal Transplant • Renal Biopsy **Format:** • Official Medical History Format, download from Project/presentation	The student attends the discussion sessions, where clinical cases are analyzed. • The students integrate a complete medical history and present it orally, the professor asks analytical questions, as well as basic concepts, where scenarios are raised and conclusions are made. • The Professor explains, clarifies and exemplifies the basic concepts and principles of patient studies. The Professor leads the discussion, asking guiding questions, and posing alternative scenarios to the established ones for the student to apply the conceptual content, in this way the student explains and justifies his or her answers. Students attend the Guard, where their main activities are: ● Make Medical Records (3) ● Watches or assists in: ○ Vascular Access Placement ○ Hemodialysis Procedure	(peritoneal dialysis and hemodialysis) 13. Renal Replacement Therapy (donation and kidney trasplantation) 14. Hydroelectrolytic disorders (water, sodium, potassium) 15. Acid-base disorder. **Procedural** ● Synthetize the clinical characteristics of clinical history, interrogation, physical examination, diagnosis and treatment of the most important kidney diseases and their differential diagnoses. ● Prioritize the sndromes with the greatest impact as a public health problema. ● Efficient search of scientific literature related to topics. **Attitudinal** **Attitudes and values** ● Punctuality, Attendance and permanence ● Participation and Respect ● Good Presentation ● Service Attitude	

		○ Peritoneal Dialysis Procedure ○ Renal Transplant ○ Renal Biopsy • Receive Basic CPR training • Receive HTA crisis management training • Receives training in the management of nephrotic, nephritic and uremic syndrome • Receives training to interpret: BH,QS,ES,Gasometries, General of Urine. • Examines assigned patient with interrogation, physical examination, required paraclinical studies, diagnosis and treatment. • The Professor explains, clarifies and exemplifies the basic concepts and principles of the patient's studies	● Ethics, honesty, truth and justice ● Team work and solidarity. ● Responsability and integrity	

Stage 3. Pneumology.

Component(s) of the competence:

Perform a comprehensive study of a patient with a Pneumological disease, through the preparation of a complete clinical history in order to make the correct diagnosis and treatment, corresponding to the most common diseases of Pneumology in the first level of care.

Evidence of student learning	Performance Criteria	Learning activities	Content	Resources
Medical History	**Checklist:** Prepare a complete medical history of a patient with a pneumological condition including diagnosis, treatment, differential diagnosis and prognosis: **Elaboration of a clinical history with all its components and the justification of the diagnosis:** • Semiology (Interrogation) • Physical Examination • Diagnosis (Topographic, Syndromic, Differential) • Therapeutic Strategies **Proper interpretation of assigned paraclinical exams:** • Interpretation Chest X-ray • Spirometry Interpretation • Arterial Gasometry Interpretation • Basic interpretation of Thoracic Tomography	The student reads the topic to be discussed in class and answers the pre-class activities on the platform. In class the professor presents the relevant concepts of the topic to be treated through images. The professor asks analytical questions. ● The Professor explains, clarifies and exemplifies the basic concepts and principles of what is seen in the class. ● The Professor interacts with the students during the class so that they achieve an understanding of the evidence requested in all its aspects. After the class the student answers activities on the platform, which refer to	**Conceptual** 1. Acute Respiratory Insufficency. 2. Image studies. CAT SCANS. Spirometry. 3. Upper Respiratory Infections: Viral and Bacterial. 4. Community-adquired pneumonia 5. Pulmonary Abscess and Bronchiectasis 6. Pulmonary Tuberculosis Part 1. 7. Pulmonary Tuberculosis Part 2. 8. Coccidioidomycosis 9. Chronic Obstructive Pulmonary Disease 10. Lung Cancer 11. Asthma 12. Obstructive Sleep Apnea 13. Pleural diseases. Pleural effusions. Pneumothorax 14. Interstitial Lung Disease. 15. Venous Thromboembolic Disease.	Classrooms of the School of Medicine and the University Hospital. Auditoriums of the Faculty of Medicine and the University Hospital Hospital consultation and/or Internal Medicine internship area Textbook Projector with audiovisual material Electronic platform Audiovisual material

	Bibliographic reviews • Corresponding to the Medical History submitted **Described and/or witnessed at least 2 of the following procedures and include description and indications:** • Thoracentesis • Bronchoscopy • Thoracic ultrasound • Placement of pleural catheter • Performing spirometry **Format:** • Official Medical History Format, download from Project/presentation	analysis questions derived from a clinical case. The student attends the discussion sessions, where clinical cases are analyzed. ● The students integrate a complete medical history and present it orally, the professor asks analytical questions, as well as basic concepts, where scenarios are raised and conclusions are made. ● The Professor explains, clarifies and exemplifies the basic concepts and principles of patient studies. The Professor leads the discussion, asking guiding questions, and posing alternative scenarios to the established ones for the student to apply the conceptual content, in this way the student explains and justifies his or her answers. Students attend the Guard, where their main activities are: ● Make Medical Records (3) ● Watches or assists in: ○ Thoracentesis ○ Bronchoscopy ○ Thoracic ultrasound	**Procedural Content** ● Synthetize the clinical characteristics of clinical history, interrogation, physical examination, diagnosis and treatment of the most important lung diseases and their differential diagnoses. ● Prioritize the sndromes with the greatest impact as a public health problema. ● Efficient search of scientific literature related to topics. **Attitudinal** **Attitudes and values** ● Punctuality, Attendance and permanence ● Participation and Respect ● Good Presentation ● Service Attitude ● Ethics, honesty, truth and justice ● Team work and solidarity. Responsability and integrity	

		○ Placement of pleural catheter ○ Performing spirometry ● Receive Basic CPR training ● Receive training in asthma crisis management ● Receive training in tuberculosis management ● Receives training to interpret: BH,QS,ES,Gasometries, Chest X-ray and Spirometries. • Examines assigned patient with interrogation, physical examination, required paraclinical studies, diagnosis and treatment. • The Professor explains, clarifies and exemplifies the basic concepts and principles of patient studies.		

Stage 4. Rheumatology.

Component(s) of the competence:

Perform the integral study of a patient with a Rheumatology disease, by means of the elaboration of the complete clinical history in order to make the correct diagnosis and treatment, corresponding to the most common diseases of Rheumatology in the first level of attention.

Evidence of student learning	Performance Criteria	Learning activities	Content	Resources
Medical History	**Checklist:** Prepare a complete medical history of a patient with rheumatological disease including diagnosis, treatment, differential diagnosis and prognosis: **Elaboration of a clinical history with all its components and the justification of the diagnosis:** • Semiology (Interrogation) • Physical Examination • Diagnosis (Topographic, Syndromic, Differential) • Therapeutic Strategies **Proper interpretation of assigned paraclinical exams:** • Interpretation of basic radiographic studies in Rheumatology • Interpretation of basic laboratory studies in Rheumatology	The student reads the topic to be discussed in class and answers the pre-class activities on the platform. In class the professor presents the relevant concepts of the topic to be treated through images. The professor asks analytical questions. ● The Professor explains, clarifies and exemplifies the basic concepts and principles of what is seen in the class. ● The Professor interacts with the students during the class so that they achieve an understanding of the evidence requested in all its aspects. After the class the student answers activities on the platform, which refer to analysis questions derived from a clinical case.	**Conceptual** 1. Classification of Rheumatic Diseases 2. Rheumatoid Arthritis. Part 1 / Early Arthritis 3. Rheumatoid Arthritis. Part 2 / 4. Generalized Lupus Erythematosus. Part 1 5. Generalized Lupus Erythematosus. Parte 2. Antiphospholipid syndromes 6. Lyme disease / Septic arthritis 7. Scleroderma 8. Spondyloarthritis 9. Fibromyalgia 10. Gout 11. Inflammatory Myopaties, Mixed Connective Tissue Disease 12. Osteoarthrosis 13. Sjögren syndrome 14. Vasculitis	Classrooms of the School of Medicine and the University Hospital. Auditoriums of the Faculty of Medicine and the University Hospital Hospital consultation and/or Internal Medicine internship area Textbook Projector with audiovisual material Electronic platform Audiovisual material

	• Interpretation of immunorheumatological tests • Compound indexes of activity in Rheumatology **Bibliographic reviews** • Corresponding to the Medical History submitted **Described and/or witnessed at least 2 of the following procedures and include description and indications:** • Rheumatological Physical Examination • Arthrocentesis • Joint infiltration • Capillaroscopy **Format:** ● Official Medical History Format, download from Project/presentation	The student attends the discussion sessions, where clinical cases are analyzed. ● The students integrate a complete medical history and present it orally, the professor asks analytical questions, as well as basic concepts, where scenarios are raised and conclusions are made. ● The Professor explains, clarifies and exemplifies the basic concepts and principles of patient studies. The Professor leads the discussion, asking guiding questions, and posing alternative scenarios to the established ones for the student to apply the conceptual content, in this way the student explains and justifies his or her answers. Students attend the Guard, where their main activities are: ● Make Medical Records (3) ● Watches or assists in: • Rheumatological Physical Examination • Arthrocentesis • Joint infiltration • Capillaroscopy	**Procedural** ● Synthetize the clinical characteristics of clinical history, interrogation, physical examination, diagnosis and treatment of the most important rheumatic diseases and their differential diagnoses. ● Prioritize the sndromes with the greatest impact as a public health problema. ● Efficient search of scientific literature related to topics. **Attitudinal** **Attitudes and values** ● Punctuality, Attendance and permanence ● Participation and Respect ● Good Presentation ● Service Attitude ● Ethics, honesty, truth and justice ● Team work and solidarity. ● Responsability and integrity	

		• Receive Basic CPR training • Receive training in mono- and polyarthritis management • Receive training in pain management • He receives training to interpret: BH,QS,ES,and immunological tests (ANA'S, ANCA'S, Rheumatoid Factor, complement, among others).		

Stage 5. Geriatrics.

Component(s) of the competence:

Perform the integral study of a patient with a Geriatric disease, through the elaboration of the complete clinical history in order to make the correct diagnosis and treatment, corresponding to the most common diseases in Geriatrics at the first level of care.

Evidence of student learning	Performance Criteria	Learning activities	Content	Resources
Medical History	**Checklist:** Prepare a complete medical history of a geriatric patient including diagnosis, treatment, differential diagnosis and prognosis: **Elaboration of a clinical history with all its components and the**	The student reads the topic to be discussed in class and answers the pre-class activities on the platform. In class the professor presents the relevant concepts of the topic to be treated through images. The	**Conceptual** 1. Aging, geriatrics and gerontology. 2. Theories of aging. 3. Physiology of aging. Pharmacology aging. 4. Demography and propaedeutics in geriatrics	Classrooms of the School of Medicine and the University Hospital. Auditoriums of the Faculty of Medicine and the University Hospital Hospital consultation and/or Internal Medicine internship area Textbook Projector with audiovisual material

	justification of the diagnosis: • Semiology (Interrogation) • Physical Examination • Diagnosis (Topographic, Syndromic, Differential) • Therapeutic Strategies **Proper interpretation of:** • Folstein MiniMental • Geriatric Depression Scale • Katz Scale • Lawton Brody Scale • Global Scale of Cognitive Impairment • Rockwood Fragility Scale • Mini-nutritional Assessment • Fall Risk Scale • Gijon Scale **Bibliographic reviews** • Corresponding to the Medical History submitted • Recent (last 5 years) • Related to Geriatric Syndrome **Described and/or witnessed at least 2 of the following scales and includes description and indications:** • Folstein MiniMental	professor asks analytical questions. ● The Professor explains, clarifies and exemplifies the basic concepts and principles of what is seen in the class. ● The Professor interacts with the students during the class so that they achieve an understanding of the evidence requested in all its aspects. After the class the student answers activities on the platform, which refer to analysis questions derived from a clinical case. The student attends the discussion sessions, where clinical cases are analyzed. ● The students integrate a complete medical history and present it orally, the professor asks analytical questions, as well as basic concepts, where scenarios are raised and conclusions are made. ● The Professor explains, clarifies and exemplifies the basic	5. Geriatric evaluation and geriatric syndromes 6. Memory disorders 7. Affective and sleep disorders 8. Walking and falling 9. Fragile syndrome 10. Incontinence 11. Pressure Sores and Foot problems 12. Nutrition and Sarcopenia 13. Hyporexia 14. Pain 15. Rehabilitation **Procedural** ● Synthetize the clinical characteristics of clinical history, interrogation, physical examination, diagnosis and treatment of the most important geriatric diseases and their differential diagnoses. ● Prioritize the sndromes with the greatest impact as a public health problema. ● Efficient search of scientific literature related to topics. **Attitudinal** **Attitudes and values** ● Punctuality, Attendance and permanence	Electronic platform Audiovisual material

	• Geriatric Depression Scale • Katz Scale • Lawton Brody Scale • Global Scale of Cognitive Impairment • Rockwood Fragility Scale • Mini-nutritional Assessment • Fall Risk Scale • Gijon Scale **Format:** ● Official Medical History Format, download from Project/presentation	concepts and principles of patient studies. The Professor leads the discussion, asking guiding questions, and posing alternative scenarios to the established ones for the student to apply the conceptual content, in this way the student explains and justifies his or her answers. Students attend the Guard, where their main activities are: ● Make Medical Records (3) ●	● Participation and Respect ● Good Presentation ● Service Attitude ● Ethics, honesty, truth and justice ● Team work and solidarity. ● Responsability and integrity	

Stage 6. Oncology.

Component(s) of the competence:

Perform the comprehensive study of a patient with an oncological disease, through the preparation of a complete clinical history in order to make the correct diagnosis and treatment, corresponding to the most common diseases of Oncology in the first level of care

Evidence of student learning	Performance Criteria	Learning activities	Content	Resources
Medical History	**Checklist:** Prepare a complete medical history of a patient with oncological condition including diagnosis, treatment, differential diagnosis and prognosis: **Elaboration of a clinical history with all its components and the justification of the diagnosis:** • Semiology (Interrogation) • Physical Examination • Diagnosis (Topographic, Syndromic, Differential) • Therapeutic Strategies **Proper interpretation of assigned paraclinical exams:** • Tumor markers	The student reads the topic to be discussed in class and answers the pre-class activities on the platform. In class the professor presents the relevant concepts of the topic to be treated through images. The professor asks analytical questions. ● The Professor explains, clarifies and exemplifies the basic concepts and principles of what is seen in the class. ● The Professor interacts with the students during the class so that they achieve an understanding of the evidence requested in all its aspects. After the class the student answers activities on the platform, which refer to analysis questions derived from a clinical case.	**Conceptual** 1. Introduction to Cancer 2. Breast Cancer 3. Genitourinary Tumors (prostate, bladder and kidney) 4. Colorectal cancer 5. Cervical cancer 6. Lung cancer 7. Esophago-gastric cancer 8. Endometrial cancer 9. Hepatocellular cancer / pancreatic cancer 10. Ovarian cancer 11. Testicular cancer 12. Gestational trophoblastic disease 13. Pediatric Tumors 14. Central Nervous System 15. Psycho-oncology and oncological palliativ care **Procedural** -Analize the format of the medical history in Oncology	Classrooms of the School of Medicine and the University Hospital. Auditoriums of the Faculty of Medicine and the University Hospital Hospital consultation and/or Internal Medicine internship area Textbook Projector with audiovisual material Electronic platform Audiovisual material

	• Image studies for TNM staging **Bibliographic reviews** • Corresponding to the Medical History submitted **Described and/or witnessed at least 2 of the following procedures and include description and indications:** • Chemotherapy application procedure • Radiation therapy simulation procedure • Radiation therapy application procedure **Format:** ● Official Medical History Format, download from Project/presentation	The student attends the discussion sessions, where clinical cases are analyzed. ● The students integrate a complete medical history and present it orally, the professor asks analytical questions, as well as basic concepts, where scenarios are raised and conclusions are made. • The Professor explains, clarifies and exemplifies the basic concepts and principles of patient studies. • The Professor leads the discussion, asking guiding questions, and posing alternative scenarios to the established ones for the student to apply the conceptual content, in this way the student explains and justifies his or her answers. Students attend the Guard, where their main activities are: ● Make Medical Records (3)	- Synthetize the clinical characteristics of clinical history, interrogation, physical examination, diagnosis and treatment of the most important geriatric diseases and their differential diagnoses. - Apply intentional interrogation -Describe the different laboratories and cabinet diagnositc methods used. - Prioritize the sndromes with the greatest impact as a public health problema. - Efficient search of scientific literature related to topics. **Attitudinal** **Attitudes and values** ● Punctuality, Attendance and permanence ● Participation and Respect ● Good Presentation ● Service Attitude ● Ethics, honesty, truth and justice ● Team work and solidarity. ● Responsability and integrity	

7. Summative Evaluation

90 POINTS

CARDIOLOGY		
Rubric	Value	Breakdown - Value
THEORY	80%	EXAM - 95 POINTS
	100 POINTS	PLATFORM - 5 POINTS
PRACTICE	20%	DIALOGUE
	100 POINTS	*ASSISTANCE CHECK 80%
100% = 15 POINTS (OF TOTAL AVERAGE)		

NEPHROLOGY		
Rubric	Value	Breakdown - Value
THEORY	80%	EXAM - 95 POINTS
	100 POINTS	PLATFORM - 5 POINTS
PRACTICE	20%	DIALOGUE
	100 POINTS	*ASSISTANCE CHECK 80%
100% = 15 POINTS (OF TOTAL AVERAGE)		

PNEUMOLOGY		
Rubric	Value	Breakdown - Value
THEORY	80%	EXAM - 95 POINTS
	100 POINTS	PLATFORM - 5 POINTS
PRACTICE	20%	DIALOGUE
	100 POINTS	*ASSISTANCE CHECK 80%
100% = 15 POINTS (OF TOTAL AVERAGE)		

RHEUMATOLOGY		
Rubric	Value	Breakdown - Value
THEORY	80%	EXAM - 95 POINTS
	100 POINTS	PLATFORM - 5 POINTS
PRACTICE	20%	DIALOGUE
	100 POINTS	*ASSISTANCE CHECK 80%
100% = 15 POINTS (OF TOTAL AVERAGE)		

GERIATRICS		
Rubric	Value	Breakdown - Value
THEORY	80%	EXAM - 95 POINTS
	100 POINTS	PLATFORM - 5 POINTS
PRACTICE	20%	DIALOGUE
	100 POINTS	*ASSISTANCE CHECK 80%
100% = 15 POINTS (OF TOTAL AVERAGE)		

ONCOLOGY		
Rubric	Value	Breakdown - Value
THEORY	80%	EXAM - 95 POINTS
	100 POINTS	PLATFORM - 5 POINTS
PRACTICE	20%	DIALOGUE
	100 POINTS	*ASSISTANCE CHECK 80%
100% = 15 POINTS (OF TOTAL AVERAGE)		

\+ 10 POINTS

RUBRIC	VALUE
PIA	2 POINTS
GUARD	8 POINTS

= 100 POINTS

To pass this Learning Unit it is necessary to pass both sections: both the 6 Stages, On-call duty, Platform and CIP activities together and the Final Exam independently, this means that the student must obtain at least a score of 70 in 6 Stages, On-call duty, Platform and CIP activities and 70 in Final Exam. If you get a score below 70 in either area, you will automatically fail the course.

The points of the evidence and the PIA will be taken into account for your final grade only in the ordinary exam.

8. Course Integrative Product:

Portfolio in which all the above-mentioned evidence is presented in order and on time.

9. References

Cecil Textbook of Medicine. En inglés, Goldman/Ausiello, 25th. Edition, Ed.Saunders. Año 2015

Reference Bibliography

- Kasper, D. L., & **Harrison**, T. R. (2018). **Harrison's principles of internal medicine**. New York: McGraw-Hill, **Medical** Pub. Division.
- Casciato, D. &Territo, M. (2013). *Manual de Oncología Clínica*. Philadelphia, PA: Lippincott Williams & Wilkins.
- Rose B., Post T. (2002).*Trastornos de los electrolitos y del equilibrio ácido-base.* México: Marban.
- Brocklehurts. Textbooks of Geriatric Medicine an Gerontology. 8th Edition
- Gilbert, S. (2018). *National Kidney Foundation Primer on Kidney Diseases*.: Elsevier
- Mann, D. L., Zipes, D. P., Libby, P., Bonow, R. O., & Braunwald, E. (2015). *Braunwald's heart disease: A textbook of cardiovascular medicine* (Tenth edition.). Philadelphia, PA: Elsevier/Saunders

Electronic resources

http://medicina.uanl.mx/medicinainterna/?page_id=40

http://www.medicina.uanl.mx/plataforma/

http://www.ilae.org/Commission/Class/documents/Spanish-Berg2010.pdf

APPENDIX.

ASSESSMENT AND WORKLOAD

Module workload		Number of hours	Percentage
Contact hours	Class-based instruction	89h (17.8%)	61.72%= 500 hours
	Discussion of clinical cases	135h (27%)	
	Clinical practice (consultation)	48h (9.6%)	
	On-call duty	216h (43.2%)	
	Exam taking	12h (2.4%)	
Independent study	Study	150h (48.38%)	38.27%= 310 hours
	Exam preparation	120h (38.70%)	
	Activities assigned via platform	20h (6.45%)	
	Course integrative product (CIP)	20h (6.45%)	
Total hours of the workload: 30 hours X 27 credits UANL/ECTS*		810 h	

*European Credit Transfer and Accumulation System
1 UANL credit = 30 hours

NOTE: Rubrics, checklists and evaluation formats are elaborated by using the performance criteria described in each stage of the module.

SUPLEMENTO COVID-19

Siguiendo las recomendaciones de la Secretaría de Salud del país y la Rectoría de la Universidad, ante la coyuntura de salud COVID-19, la organización de la docencia desde marzo del 2020, seguirá un modelo híbrido, donde la docencia se ajustará a los horarios aprobados por la Secretaría de Salud siguiendo un modelo de Presencialidad / No presencialidad en la medida en que las circunstancias sanitarias y la normativa lo permitan. Los estudiantes asistirán a las clases de manera no presencial mediante la transmisión de las mismas de manera síncrona/asíncrona vía “on line”.