

## MODULE DESCRIPTION (ANALYTICAL PROGRAM).

<b>1. Module Information Code:</b>	
• Name of the Institution and School	Universidad Autónoma de Nuevo León, School of Medicine
• Name of the Learning Unit	Basic Clinical Integration II
• Total classroom hours for theory and/or practice.	45 hours
• Total extra classroom hours	45 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
• UANL credit points	3
• Date of module creation:	June 14, 2016
• Date of last amendment:	February 01, 2021
• Person(s) responsible for the module design and amendments:	Dra.med. Raquel Garza Guajardo, Dra.med. Oralia Barboza Quintana Professors: Dr. Med. Marco A. Ponce Camacho, Dr. Med. Juan Pablo Flores Gutierrez, Dra. Natalia Vilches Cisneros, Dr. Med. Luis Angel Ceceñas Falcón, Dra. med. Gabriela Sofía Gomez Macias, Dr. Rodolfo Franco Marquez, Dr. Álvaro Barboza Quintana, Dr.med. Alberto Niderhauser García, Dra. Adriana Guadalupe Áncer Arellano, Dra.med. María de Lourdes Chávez Briones, Dra. med. Ivett Carmelila Miranda Maldonado.
<b>2. Introduction:</b>	
The learning unit of Basic-Clinical Integration II, as its name indicates, is a subject that links basic and clinical subjects; it is composed of 7 stages that include common pathologies of various organs and tissues, among which are inflammatory, immunological and infectious diseases, as well as benign and malignant neoplasms and precursor lesions.	

It deals with the knowledge of the diseases, analyzing its clinical picture, its etiology, its mechanisms, morphological changes and its evolution, so that the future professional identifies the main findings of these diseases and relates them to the results of the diagnostic tests that will be evaluated in his/her professional performance.

The topics were selected based on the frequent epidemiology of these diseases, and on the importance of the first contact physician identifying them, diagnosing them in a timely manner, and, when appropriate, referring patients to the appropriate instance.

The methodology will be based on small groups, the professor will direct the students' performance in work teams, each stage the student will analyze clinical cases for the anatomical-clinical correlation; it will include the following phases: discussion of the topics, oral presentation of the clinical case and integration session.

### **3. Purpose(s):**

The main purpose of this learning unit is for the student to analyze through clinical cases, the physiopathology, the anatomo-clinical correlation and the main pathological mechanisms of inflammatory, immunological and common diseases of the skin, gynecological tract, the mammary gland, the digestive tract, the genitourinary tract and the lung.

It is directly linked to the basic learning units such as: Pathology, Anatomy, Histology, Physiology, Immunology, to understand the diverse physiopathological mechanisms involved; as well as to the clinical area, analyzing the groups affected by the diseases, their topography, the clinical manifestations, the main macro and microscopic aspects, the natural evolution of the disease and its prognosis, and basic generalities of the diagnosis.

It contributes to the general and specific competencies of the profession by analyzing clinical cases to establish the clinical-pathological correlation, based on clinical reasoning. It favors the handling of information in an ethical and professional way.

It highlights the application of autonomous learning strategies and the use of information technologies for its analysis, which allows it to make a judgment and transform it into knowledge. Likewise, collaborative work is privileged.

### **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.

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.

**Personal and social interaction skills**

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**

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

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

**Specific Competencies of Surgeon and Midwife**

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.

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. Manages information and communication technologies as a tool for accessing to information and transform it into knowledge, as well as for learning purposes and collaborative work with cutting-edge techniques which allow an edifying participation in society.

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.

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.

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.

## 5. Course Roadmap:

### GRAPHIC REPRESENTATION BASIC CLINICAL INTEGRATION II

Identifies the main morphological, tissue and cellular alterations of the main diseases.

Identifies the clinical data of the cases to be solved.

Interprets the morphological and diagnostic test findings described.

Conducts a review of sources of information about the assigned case.

Correlates clinical data and morphological findings with assigned content.

**CIP:**  
Documentation of the analysis and discussion of clinical cases of the main inflammatory, infectious, immunological, preneoplastic and neoplastic pathologies in our country.

6. Structuring into stages or phases				
Phase 1: Inflammatory pathology.				
Component(s) of the competence:				
Apply the basic concepts of inflammatory and infectious pathology through the study of morphological changes and physiopathology in order to identify the alterations associated with the diseases and establish the anatomical-clinical correlation.				
Evidence of student learning	Performance Criteria	Learning activities	Content	Resources
<b>Evidence 1:</b> Resolution of clinical cases of inflammatory and infectious pathology.	<ul style="list-style-type: none"> <li>Identifies the clinical data of the case to be solved.</li> <li>Interprets the morphological and diagnostic test findings described in the case.</li> <li>Correlates the clinical data and findings with the reviewed contents.</li> <li>Performs a bibliographic review of the disease.</li> <li>Demonstrates mastery of the subject.</li> <li>Makes an oral and written presentation with didactic support.</li> <li>Fulfills in time and form the assigned tasks.</li> </ul>	<ul style="list-style-type: none"> <li>The professor will direct the performance of the students in work teams.</li> <li>Students will analyze two clinical cases in which the following phases will be included: <ul style="list-style-type: none"> <li>Discussion of the topics coordinated by the professor.</li> <li>Students perform a bibliographic review of the assigned topics, which will be discussed in session with the professor.</li> <li>Each team makes an oral presentation of the clinical case in a plenary session.</li> <li>Integration session where the most important points of the topics are established.</li> </ul> </li> </ul>	<b>Conceptual</b> <ul style="list-style-type: none"> <li>Inflammatory and infectious pathology.</li> </ul> <b>Procedural</b> <ul style="list-style-type: none"> <li>Study and analysis of clinical cases</li> <li>Correlating clinical data with morphological changes and diagnostic methods</li> <li>Analysis of the physiopathology</li> </ul> <b>Attitudinal</b> <ul style="list-style-type: none"> <li>Correct and appropriate use of language.</li> <li>Proper presentation.</li> </ul>	<ul style="list-style-type: none"> <li>Projector</li> <li>Power point presentation</li> <li>Textbooks</li> <li>Supporting books</li> <li>Databases and websites</li> <li>Classroom</li> </ul>

Phase 2: Immunological diseases.				
Component(s) of the competence:				
Establish the anatomo-clinical correlation of immunological diseases, from clinical, morphological and laboratory data in order to identify the main characteristics of the diseases, with emphasis on physiopathology.				
Evidence of student learning	Performance Criteria	Learning activities	Content	Resources
<b>Evidence 2:</b> Resolution of clinical cases of immune system diseases.	<ul style="list-style-type: none"> <li>Identifies the clinical data of the case to be solved.</li> <li>Interprets the morphological and diagnostic test findings described in the case.</li> <li>Correlates the clinical data and findings with the reviewed contents.</li> <li>Performs a bibliographic review of the disease.</li> <li>Demonstrates mastery of the subject.</li> <li>Makes an oral and written presentation with didactic support.</li> <li>Fulfills in time and form the assigned tasks.</li> </ul>	<ul style="list-style-type: none"> <li>The professor will direct the performance of the students in work teams.</li> <li>Students will analyze two clinical cases in which the following phases will be included:               <ul style="list-style-type: none"> <li>Discussion of the topics coordinated by the professor.</li> <li>Students perform a bibliographic review of the assigned topics, which will be discussed in session with the professor.</li> <li>Each team makes an oral presentation of the clinical case in a plenary session.</li> <li>Integration session where the most important points of the topics are established.</li> </ul> </li> </ul>	<b>Conceptual</b> -Immunological diseases  <b>Procedural</b> <ul style="list-style-type: none"> <li>Study and analysis of clinical cases</li> <li>Correlating clinical data with morphological changes and diagnostic methods</li> <li>Analysis of the physiopathology</li> </ul> <b>Attitudinal</b> <ul style="list-style-type: none"> <li>Correct use of language.</li> <li>Proper presentation.</li> </ul>	<ul style="list-style-type: none"> <li>Projector</li> <li>Power point presentation</li> <li>Textbooks</li> <li>Supporting books</li> <li>Databases and websites</li> <li>Classroom</li> </ul>

<b>Phase 3: Metabolic diseases and skin pathology.</b>				
<b>Component(s) of the competence:</b>				
Establish the anatomo-clinical correlation of metabolic diseases and common skin pathologies from clinical and morphological data, in order to identify the most frequent injuries in our country, their risk factors and morphological characteristics.				
<b>Evidence of student learning</b>	<b>Performance Criteria</b>	<b>Learning activities</b>	<b>Content</b>	<b>Resources</b>
<b>Evidence 3:</b> Resolution of Clinical Cases of Metabolic and Skin Diseases.	<ul style="list-style-type: none"> <li>Identifies the clinical data of the case to be solved.</li> <li>Interprets the morphological and diagnostic test findings described in the case.</li> <li>Correlates the clinical data and findings with the reviewed contents.</li> <li>Performs a bibliographic review of the disease.</li> <li>Demonstrates mastery of the subject.</li> <li>Makes an oral and written presentation with didactic support.</li> <li>Fulfills in time and form the assigned tasks.</li> </ul>	<ul style="list-style-type: none"> <li>The professor will direct the performance of the students in work teams.</li> <li>Students will analyze two clinical cases in which the following phases will be included: <ul style="list-style-type: none"> <li>Discussion of the topics coordinated by the professor.</li> <li>Students perform a bibliographic review of the assigned topics, which will be discussed in session with the professor.</li> <li>Each team makes an oral presentation of the clinical case in a plenary session.</li> <li>Integration session where the most important points of the topics are established.</li> </ul> </li> </ul>	<b>Conceptual</b> <ul style="list-style-type: none"> <li>Metabolic and skin diseases</li> </ul> <b>Procedural</b> <ul style="list-style-type: none"> <li>Study and analysis of clinical cases</li> <li>Correlating clinical data with morphological changes and diagnostic methods</li> <li>Analysis of the physiopathology</li> </ul> <b>Attitudinal</b> <ul style="list-style-type: none"> <li>Correct use of language.</li> <li>Proper presentation.</li> </ul>	<ul style="list-style-type: none"> <li>Projector</li> <li>Power point presentation</li> <li>Textbooks</li> <li>Supporting books</li> <li>Databases and websites</li> <li>Classroom</li> </ul>

<b>Phase 4: Gynecological Pathology.</b>				
<b>Component(s) of the competence:</b>				
Establish the anatomo-clinical correlation of common diseases of the female genital tract, based on molecular, morphological and clinical data in order to identify their main characteristics.				
<b>Evidence of student learning</b>	<b>Performance Criteria</b>	<b>Learning activities</b>	<b>Content</b>	<b>Resources</b>
<b>Evidence 4:</b> Resolution of clinical cases of gynecological pathology.	<ul style="list-style-type: none"> <li>Identifies the clinical data of the case to be solved.</li> <li>Interprets the morphological and diagnostic test findings described in the case.</li> <li>Correlates the clinical data and findings with the reviewed contents.</li> <li>Performs a bibliographic review of the disease.</li> <li>Demonstrates mastery of the subject.</li> <li>Makes an oral and written presentation with didactic support.</li> <li>Fulfills in time and form the assigned tasks.</li> </ul>	<ul style="list-style-type: none"> <li>The professor will direct the performance of the students in work teams.</li> <li>Students will analyze two clinical cases in which the following phases will be included: <ul style="list-style-type: none"> <li>Discussion of the topics coordinated by the professor.</li> <li>Students perform a bibliographic review of the assigned topics, which will be discussed in session with the professor.</li> <li>Each team makes an oral presentation of the clinical case in a plenary session.</li> <li>Integration session where the most important points of the topics are established.</li> </ul> </li> </ul>	<p><b>Conceptual</b></p> <ul style="list-style-type: none"> <li>-Gynecological pathology</li> </ul> <p><b>Procedural</b></p> <ul style="list-style-type: none"> <li>- Study and analysis of clinical cases</li> <li>- Correlating clinical data with morphological changes and diagnostic methods</li> <li>- Analysis of the physiopathology</li> </ul> <p><b>Attitudinal</b></p> <ul style="list-style-type: none"> <li>- Correct use of language.</li> <li>- Proper presentation</li> </ul>	<ul style="list-style-type: none"> <li>Projector</li> <li>Power point presentation</li> <li>Textbooks</li> <li>Supporting books</li> <li>Databases and websites</li> <li>Classroom</li> </ul>



<b>Phase 5: Pathology of the mammary and urogenital glands.</b>				
<b>Component(s) of the competence:</b>				
Establish the anatomo-clinical correlation of the most common diseases of the mammary and urogenital glands from molecular, morphological and clinical data, in order to know the main characteristics of these diseases.				
<b>Evidence of student learning</b>	<b>Performance Criteria</b>	<b>Learning activities</b>	<b>Content</b>	<b>Resources</b>
<b>Evidence 5:</b> Resolution of clinical cases of mammary and urogenital gland pathology.	<ul style="list-style-type: none"> <li>Identifies the clinical data of the case to be solved.</li> <li>Interprets the morphological and diagnostic test findings described in the case.</li> <li>Correlates the clinical data and findings with the reviewed contents.</li> <li>Performs a bibliographic review of the disease.</li> <li>Demonstrates mastery of the subject.</li> <li>Makes an oral and written presentation with didactic support.</li> <li>Fulfills in time and form the assigned tasks.</li> </ul>	<ul style="list-style-type: none"> <li>The professor will direct the performance of the students in work teams.</li> <li>Students will analyze two clinical cases in which the following phases will be included: <ul style="list-style-type: none"> <li>Discussion of the topics coordinated by the professor.</li> <li>Students perform a bibliographic review of the assigned topics, which will be discussed in session with the professor.</li> <li>Each team makes an oral presentation of the clinical case in a plenary session.</li> <li>Integration session where the most important points of the topics are established.</li> </ul> </li> </ul>	<p><b>Conceptual</b></p> <ul style="list-style-type: none"> <li>-Mammary and urogenital glands pathology.</li> </ul> <p><b>Procedural</b></p> <ul style="list-style-type: none"> <li>- Study and analysis of clinical cases</li> <li>- Correlating clinical data with morphological changes and diagnostic methods</li> <li>- Analysis of the physiopathology</li> </ul> <p><b>Attitudinal</b></p> <ul style="list-style-type: none"> <li>- Correct use of language.</li> <li>- Proper presentation</li> </ul>	<ul style="list-style-type: none"> <li>Projector</li> <li>Power point presentation</li> <li>Textbooks</li> <li>Supporting books</li> <li>Databases and websites</li> <li>Classroom</li> </ul>

<b>Phase 6: Diseases of the digestive tract and adjacent glands.</b>				
<b>Component(s) of the competence:</b>				
Establish anatomo-clinical correlation of the most frequent diseases in our environment that affect the digestive system, in order to know their main characteristics.				
<b>Evidence of student learning</b>	<b>Performance Criteria</b>	<b>Learning activities</b>	<b>Content</b>	<b>Resources</b>
<b>Evidence 6:</b> Resolution of clinical cases of diseases of the digestive system.	<ul style="list-style-type: none"> <li>Identifies the clinical data of the case to be solved.</li> <li>Interprets the morphological and diagnostic test findings described in the case.</li> <li>Correlates the clinical data and findings with the reviewed contents.</li> <li>Performs a bibliographic review of the disease.</li> <li>Demonstrates mastery of the subject.</li> <li>Makes an oral and written presentation with didactic support.</li> <li>Fulfills in time and form the assigned tasks.</li> </ul>	<ul style="list-style-type: none"> <li>The professor will direct the performance of the students in work teams.</li> <li>Students will analyze two clinical cases in which the following phases will be included: <ul style="list-style-type: none"> <li>Discussion of the topics coordinated by the professor.</li> <li>Students perform a bibliographic review of the assigned topics, which will be discussed in session with the professor.</li> <li>Each team makes an oral presentation of the clinical case in a plenary session.</li> <li>Integration session where the most important points of the topics are established.</li> </ul> </li> </ul>	<b>Conceptual</b> - Diseases of the digestive tract and adjacent glands  <b>Procedural</b> - Study and analysis of clinical cases - Correlating clinical data with morphological changes and diagnostic methods - Analysis of the physiopathology  <b>Attitudinal</b> - Correct use of language. - Proper presentation	<ul style="list-style-type: none"> <li>Projector</li> <li>Power point presentation</li> <li>Textbooks</li> <li>Supporting books</li> <li>Databases and websites</li> <li>Classroom</li> </ul>

<b>Phase 7: Endocrine and pulmonary pathology.</b>				
<b>Component(s) of the competence:</b>				
Establish anatomo-clinical correlation of common and important diseases in our environment, of the endocrine system of the lung, through clinical, morphological, immunological, laboratory and image data, in order to know the physiopathology and the main characteristics of these diseases.				
<b>Evidence of student learning</b>	<b>Performance Criteria</b>	<b>Learning activities</b>	<b>Content</b>	<b>Resources</b>
<b>Evidence 7:</b> Resolution of clinical cases of endocrine and pulmonary pathology.	<ul style="list-style-type: none"> <li>Identifies the clinical data of the case to be solved.</li> <li>Interprets the morphological and diagnostic test findings described in the case.</li> <li>Correlates the clinical data and findings with the reviewed contents.</li> <li>Performs a bibliographic review of the disease.</li> <li>Demonstrates mastery of the subject.</li> <li>Makes an oral and written presentation with didactic support.</li> <li>Fulfills in time and form the assigned tasks.</li> </ul>	<ul style="list-style-type: none"> <li>The professor will direct the performance of the students in work teams.</li> <li>Students will analyze two clinical cases in which the following phases will be included: <ul style="list-style-type: none"> <li>Discussion of the topics coordinated by the professor.</li> <li>Students perform a bibliographic review of the assigned topics, which will be discussed in session with the professor.</li> <li>Each team makes an oral presentation of the clinical case in a plenary session.</li> <li>Integration session where the most important points of the topics are established.</li> </ul> </li> </ul>	<p><b>Conceptual</b></p> <ul style="list-style-type: none"> <li>-Endocrine and pulmonary pathology.</li> </ul> <p><b>Procedural</b></p> <ul style="list-style-type: none"> <li>- Study and analysis of clinical cases</li> <li>- Correlating clinical data with morphological changes and diagnostic methods</li> <li>- Analysis of the physiopathology</li> </ul> <p><b>Attitudinal</b></p> <ul style="list-style-type: none"> <li>- Correct use of language.</li> <li>- Proper presentation</li> </ul>	<ul style="list-style-type: none"> <li>Projector</li> <li>Power point presentation</li> <li>Textbooks</li> <li>Supporting books</li> <li>Databases and websites</li> <li>Classroom</li> </ul>

## 7. Summative Evaluation

Evidence No. 1: Resolution of clinical cases of inflammatory and infectious pathology .....	6%
Evidence No. 2: Resolution of clinical cases of immunological diseases .....	6%
Evidence No. 3: Resolution of clinical cases of metabolic diseases and skin pathology .....	6%
Evidence No. 4: Resolution of clinical cases of gynecological pathology .....	6%
Evidence No. 5: Resolution of clinical cases of mammary and urogenital gland pathology .....	6%
Evidence No. 6: Resolution of clinical cases of diseases of the digestive tract and attached glands .....	6%
Evidence No. 7: Resolution of clinical cases of endocrine and pulmonary pathology .....	6%
Written Evaluation .....	55%
PIA.....	3%
Total.....	100%

## 8. Course Integrative Product

Documentation of the analysis and discussion of clinical cases of the main inflammatory, infectious, immunological, preneoplastic and neoplastic pathologies in our country.

## 9. References

### Textbook:

- Kumar V. Abbas A, Aster JC (2015) *Robins y Cotran Patología Estructural y Funcional*. España. Elsevier Saunders.

### Electronic sources:

- Base de datos: CLINICAL KEY: <https://www.clinicalkey.com/>
- Base de datos PUBMED: <http://www.ncbi.nlm.nih.gov/pubmed>
- Pathology outlines.com: <http://www.pathologyoutlines.com>
- The pathology Guy: <http://www.pathguy.com>
- PATHMAX: <http://www.pathmax.com>

## APPENDIX.

### ASSESSMENT AND WORKLOAD

Module workload		Number of hours	Percentage
Contact hours	Class-based instruction	23h (51.11%)	50%= 45 horas
	Analysis of clinical case, discussion of topics, assignments and quizzes.	21h (46.66%)	
	Exam taking	1h (2.22%)	
Independent study	Study	41h (91.11%)	50%= 45 horas
	Exam preparation	1h (2.22%)	
	Course integrative product (CIP)	3h (6.66%)	
Total hours of the workload: 30 hours X 3 credits UANL/ECTS*		90 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”.