



UANL

UNIVERSIDAD AUTÓNOMA DE NUEVO LEÓN

FACULTAD
DE MEDICINA



SUMMARY PROGRAM

1. Module Information Code:	
Name of the institution and School	Universidad Autónoma de Nuevo León, Facultad de Medicina
Name of the learning unit	Surgical Sciences I
Total number of clash hours-theory and/or practice.	400
Total extra classroom hours	248
Course modality	Schooled
Type of academic period in which the module is offered	8th Semester
Type of Learning Unit in the Curriculum	Compulsory
Curricular Area (ACFGU, ACFB, ACFP-F, ACFP-I)	ACFP-I. Integrative Professional
UANL Credits (whole numbers)	21
Date of module creation	June, 2016
Date of the last amendment	July 30th, 2019
Person(s) responsible for the design and amendment of the module	Dr. med. Gerardo Enrique Muñoz Maldonado, Dr José Ángel Rodríguez Briseño

2 Proposes(s)

The learning unit Surgical Sciences I covers an essential area in the education and development of a health care professional. For the Curriculum Plan of the Bachelor Degree as Medical Surgeon and Obstetrician at the UANL, this module is part of an educational process in which basic and clinical knowledge are integrated and applied together, using the cognitive processes for the development of thinking skills and psychomotor abilities; through this, we promote the development of an attitude for the affective area, training and enabling the student in medical-surgical procedures for areas such as General Surgery and Traumatology.

Its curricular relationship assumes having knowledge on the structure and functions of the human body through the study of areas such as Anatomy, Physiology, Histology, Embryology, Microbiology, Biochemistry and Molecular Biology, Clinical Pathology and Medical Imaging, in order to use such information and knowledge for evaluating and solving comprehensively surgical-clinical problems through an adequate elaboration of medical records and verification and physical examinations combined with the interpretation of laboratory and imaging studies. It also requires **having** knowledge on Pharmacology and Toxicology to choose correctly a treatment for each case, taking into account the interactions. It is also related to all the Learning Units from the clinical Area, such as Bioethics.

Regarding to the general competences from our University, this Learning Unit contributes in: the usage of formal language, the correct use of language; the use of critical and logical thinking which allows the student to make his decisions according to his influence area or field; management of technological and computer tools; it privileges autonomous learning, which allows the student to consolidate his medical development. Regarding to the specific competences of the professional program, it contributes to acquire scientific knowledge and its application through the clinical field, solving primary health care problems and referring patients opportunely to other specialized health professionals. Likewise, the module promotes effective communication with patients, their families and other professionals, besides being able to work with multidisciplinary teams, always practicing medical ethics, respect, confidentiality and social commitment.

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 to 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 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. 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. 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 Base of Medicine

1. To use the scientific foundations of medicine by considering the economical, psychological, social, cultural and environmental factors which contribute to the development and evolution of diseases in order to make decisions and take medical actions.

Professional Clinical Practice

2. To solve clinical problems through deductive reasoning, interpretation of findings and the definition of their nature in order to make decisions and determine principles of actions of the medical practice to be followed in a responsible way, impacting individual and collective health.
3. To evaluate the development and evolution of diseases through the analysis of biomedical information and related physical, social and cultural factors; promoting health education and boosting preventive medicine.
4. To manage patients affected with the most frequent diseases properly, from a biopsychosocial perspective, through the application of knowledge, technical procedures and basic diagnosis, based on clinical guides and patient care protocols in order to solve main health problems in primary care, in the individual and the community.
5. To manage common medical emergencies by applying primary treatment, procedures and interventions, and to refer patients who require critical care in an appropriate and timely way for the preservation of life.
6. To manage human resources, diagnostic interventions, therapeutic modalities, and health care options according to national standards; promoting a quality culture of patient care and guaranteeing patients' safety.

Critical thinking and research

7. To apply the scientific method in the resolution of medical problems with an innovative, analytical and self-critical attitude toward the prevention, diagnosis and treatment of diseases.

Professional Values and Ethics

8. To integrate professional values and ethics in medical practice, without distinction as to gender, race, political or sexual preference, religious beliefs, activities performed, disabilities or socioeconomic status; promoting social inclusion and contributing to the population's well-being, its quality of life and human development.
9. To respect patient's integrity by keeping his medical information as an essential part of the professional secrecy in order to guard his rights.

Organizational work

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

Communication

11. To apply the principles of effective communication by establishing a respectful and empathetic relationship with the patient, relatives, the community and other health professionals in order to use the information properly.

4. Summative Evaluation

Performance evaluation on a daily practice basis:

- Clinical competences
- Exam
- Course Integrative Product.

5. Course Integrative Product.

Final exam on Clinical Competences

6. References:

- **SABISTON TRATADO DE CIRUGÍA-TEXTO BASE**
Townsend, Beauchamp, Evers, Mattox
Elsevier Saunders, Décimo Octava Edición en Español.
- **CIRUGÍA PARA EL ESTUDIANTE Y EL MEDICO GENERAL**
Luis Martín-Abreu, Méndez Editores, Primera Edición.
- **MANUAL DE PROCEDIMIENTOS PRACTICOS DE CIRUGÍA**
Editado por el Servicio de Cirugía y la Subdirección de Educación Continúa.
- **TRATADO DE PATOLOGIA QUIRURGICA**
Davis-Christopher
Nueva Editorial Interamericana. Décimo Cuarta Edición en Español.
- **DIAGNOSTICO Y TRATAMIENTO QUIRURGICOS**
Lawrence W. Way
El Manual Moderno, Séptima Edición en Español.
- **CIRUGÍA MAMARIA EN EL SIGLO XXI**
Servando Cardona Huerta
Editorial Trillas, Primera Edición.

Clinical Key.