

Bachelor's Degree in Medicine

Specific competences

SC1.1. - Understand cell structure and function. Biomolecules. Metabolism. Metabolic regulation and integration.

SC1.2. -Understand the basic principles of human nutrition. Cellular communication. Excitable membranes. Cell cycle. Cell differentiation and proliferation. Gene information, expression and regulation. Inheritance. Embryonic development and organogenesis.

SC1.3. Understand the morphology, structure and function of the skin, blood, circulatory, digestive, locomotor, reproductive, excretory and respiratory apparatus and systems; endocrine system, immune system and central and peripheral nervous system. Growth, maturation and ageing of the different apparatus and systems. Homeostasis. Adaptation to the environment

SC1.4. - Handle basic laboratory equipment and techniques. Interpret a normal blood test.

SC1.5. - Recognise the morphology and structure of tissues, organs and systems using macroscopic and microscopic methods and imaging techniques.

SC1.6. - Perform functional tests, determine vital parameters and interpret them. Basic physical examination.

SC2.7. -Understand the legal foundations of the medical profession practice. Informed consent. Confidentiality.

SC2.8. - Recognise, diagnose and guide the management of physical and mental harm. Social and legal implications of death.

SC2.9. - Understand and recognise the normal evolution of the corpse. Postmortem diagnosis. Fundamentals of medical criminology.

SC2.10. - Be able to draft medico-legal documents.

SC2.11. -Understand the fundamentals of medical ethics. Bioethics. Resolve ethical conflicts.

SC2.12. - Apply the professional values of excellence, altruism, sense of duty, responsibility, integrity and honesty to the practice of the profession.

SC2.13. - Recognise the need to maintain professional competence.

SC2.14. - Know how to approach professional practice with respect for the patient's autonomy, beliefs and culture.

SC2.15. - Understand the principles and apply the methods of preventive medicine and public health. Risk factors and disease prevention.

SC2.16. - Recognise the determinants of population health. Health indicators. Planning, programming and evaluation of health programmes. Prevention and protection against illness, injury and accidents.

Assess healthcare quality and patient safety strategies. Vaccinations. Epidemiology. Demography

SC2.17. - Understand health planning and management at the global, European, Spanish and regional levels.

SC2.18. - Understand the economic and social implications of medical action, taking into account effectiveness and efficiency criteria. Health and environment. Food security. Occupational health.

SC2.19. Critically assess and know how to use technologies and sources of information to obtain, organise, interpret and communicate clinical, scientific and health information.

SC2.20. - Understand the basic concepts of biostatistics and its application to medical sciences.

SC2.21. - Be able to design and carry out simple statistical studies using computer programmes and interpret the results. Understand and interpret statistical data in the literature.

SC2.22. – Learn the history of health and illness.

SC2.23. - Understand the existence and principles of alternative medicines.

SC2.24. - Operate a personal computer in an autonomous manner. Use biomedical information search and retrieval systems.

SC2.25. - Understand and manage clinical documentation procedures.

SC2.26. - Understand and critically interpret scientific texts.

SC2.27. - Understand the principles of the scientific method, biomedical research and clinical trials.

SC2.28. - Understand the principles of telemedicine.

SC2.29. - Understand and manage the principles of (best) evidence-based medicine.

SC2.30. - Understand the aspects of communication with patients, relatives and their social environment: Clinical relationship models, interview, verbal, non-verbal communication and interference. Giving bad news.

SC2.31. - Draft medical records, reports, instructions and other records in a way that is understandable to patients, relatives and other professionals.

SC2.32. - Make an oral and written public presentation of scientific work and/or professional reports.

SC3.33. - Recognise, diagnose and guide the management of the main skin pathologies.

SC3.34. - Recognise, diagnose and guide the management of the main blood pathologies. Normal and pathological pregnancy and childbirth. Puerperium. Sexually transmitted diseases.

SC3.35. - Recognise, diagnose and guide the management of the main gynaecological pathologies. Contraception and fertilisation.

SC3.36. - Recognise, diagnose and guide the management of the main ophthalmological pathologies.

SC3.37. - Understand tumour disease, its diagnosis and management.

SC3.38. - Recognise, diagnose and guide the management of the main ear, nose and throat pathologies.

SC3.39. - Recognise, diagnose and guide the management of the main cardiocirculatory pathologies.

SC3.40. - Recognise, diagnose and guide the management of the main pathologies of the digestive system.

SC3.41. - Recognise, diagnose and guide the management of the main nephrourological pathologies.

SC3.42. - Recognise, diagnose and guide the management of the main pathologies of the locomotor system.

SC3.43. - Recognise, diagnose and guide the management of the main pathologies of the respiratory system.

SC3.44. - Recognise, diagnose and guide the management of the main pathologies of the endocrine system. Nutritional pathologies.

SC3.45. - Recognise, diagnose and guide the management of the main pathologies of the central and peripheral nervous system.

SC3.46. - Understand the main infectious agents and their mechanisms of action.

SC3.47. - Recognise, diagnose and guide the management of the main infectious pathologies in the different organs and apparatus.

SC3.48. - Recognise, diagnose and guide the management of the main pathologies of the immune system.

SC3.49. - Understand the morphofunctional characteristics of the neonate, child and adolescent. Growth. Preterm newborn.

SC3.50. - Recognise, diagnose and guide the management of the main paediatric pathologies. Child nutrition. Genetic diagnosis and counselling. Cognitive, emotional and psychosocial development in childhood and adolescence.

SC3.51. - Understand the biological, psychological and social foundations of personality and behaviour.

SC3.52. - Recognise, diagnose and guide the management of the main nephrourological pathologies. Psychotherapy.

- SC3.53. - Recognise, diagnose and guide the management of the main types of poisoning. Palliative medicine.
- SC3.54. - Recognise the characteristics of prevalent pathology in the elderly. Family and community medicine: the living environment of the sick person, health promotion in the family and the community.
- SC3.55. - Recognise, diagnose and guide the management of the main pathologies of the immune system.
- SC3.56. - Know how to take a patient's medical history, centred on the patient and oriented towards the various pathologies, interpreting their meaning.
- SC3.57. - Know how to make a physical examination by apparatus and system, as well as a psychopathological examination, interpreting its meaning.
- SC3.58. - Know how to assess changes in clinical parameters at different ages. Pregnancy examination and monitoring.
- SC3.59. - Establish an action plan, focused on the needs of the patient, family and social environment, consistent with the patient's symptoms and signs.
- SC3.60. - Know how to perform basic and advanced life support manoeuvres.
- SC4.61. - Assess the risk/benefit ratio of diagnostic and therapeutic procedures.
- SC4.62. - Understand the indications for biochemical, haematological, immunological, microbiological, anatomopathological and imaging tests.
- SC4.63. - Understand the characteristics of tissues in different situations of injury, cell injury, adaptation and death. Inflammation. Alterations in cell growth. Pathological anatomy of the different apparatus and systems. Biochemical, cytogenetic and molecular biological markers applied to clinical diagnosis.
- SC4.64. - Learn the basics of microbiology and parasitology.
- SC4.65. - Understand the main microbiological and parasitological diagnostic techniques and interpret the results.
- SC4.66. - Understand the fundamentals of the interaction of radiation with the human organism. Radiological imaging. Basic radiological semiology of the different apparatus and systems.
- SC4.67. - Learn other diagnostic imaging techniques.
- SC4.68. - Assess the indications and contraindications of radiological studies.
- SC4.69. - Have the ability to apply radiological protection criteria in diagnostic and therapeutic procedures with ionising radiation.
- SC4.70. - Understand the main groups of drugs, doses, administration routes and pharmacokinetics. Interactions and adverse effects. Prescription and pharmacovigilance. Pharmacology of the different apparatus and systems. Analgesic, antineoplastic, antimicrobial and anti-inflammatory drugs.

SC4.71. - Understand the general principles of anaesthesia and resuscitation, nutrition and diet therapy.

SC4.72. - Understand the main indications of electrophysiological techniques (ECG, EEG, EMG, and others).

SC4.73. - Understand the pathophysiology of wounds (including burns, frostbite and other types of injuries). Healing. Surgical bleeding and thromboembolic prophylaxis.

SC4.74. - Understand the general surgical indications, preoperative risk and postoperative complications. Transfusions and transplants.

SC4.75. - Understand the principles and indications of radiotherapy.

SC4.76. - Understand the fundamentals of rehabilitation, the promotion of personal autonomy, the functional adaptation of/to the environment, and other physical procedures in morbidity in order to improve quality of life.

SC4.77. - Know how to obtain and process a biological sample for study using the different diagnostic procedures.

SC4.78. - Know how to interpret the results of laboratory diagnostic tests.

SC4.79. - Handle disinfection and sterilisation techniques.

SC4.80. - Know how to interpret a radiological image using a systematic approach.

SC4.81. - Know how to use the various drugs appropriately. SC4.82. - Know how to perform and interpret an electrocardiogram and an electroencephalogram.

SC4.83. - Correctly write medical prescriptions, adapted to each patient's situation and legal requirements.

SC4.84. - Assess nutritional status and develop an appropriate diet for different circumstances.

SC4.85. - Perform basic surgical procedures: cleaning, haemostasis and suturing of wounds.

SC5.86. -Pre-professional practices, consisting of independent clinical rotations and a final competence assessment, in Health Centres, Hospitals and other care centres. This will enable students to acquire professional values, healthcare communication skills, clinical reasoning, clinical management and critical judgement skills, and to focus on to the most prevalent health problems in the areas of Medicine, Surgery, Obstetrics and Gynaecology, Paediatrics, Psychiatry and other clinical areas. SC5.87. -Undergraduate Final Year Project A cross-cutting subject whose project work will be carried out jointly with other subjects.