

Hybrid Master's Degree

Infectious Diseases in the Emergency
Department for Nursing



Hybrid Master's Degree

Infectious Diseases in the Emergency Department for Nursing

Modality: Hybrid (Online + Clinical Internship)

Duration: 12 months

Certificate: TECH Global University

60 + 5 ECTS Credits

Website: www.techtitude.com/us/nursing/hybrid-master-degree/hybrid-master-degree-infectious-diseases-emergency-department-nursing

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01

Introduction

The performance of emergency nurses is complex in the care of patients with Infectious Diseases, having to respond to numerous variables and clinical challenges. In addition, the international healthcare landscape has become increasingly intricate, as the prevalence of tropical diseases has increased in environments unaccustomed to fighting them. Therefore, it is essential to establish updating tools for these professionals, who must face infectious diseases outside specialized units and services. Thus, TECH offers a great opportunity for nurses to update their knowledge in this area, through an academic program that combines dynamic online learning and a practical stay in a prestigious health center.





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Update yourself in the latest methods of care for patients with Infectious Diseases by combining online learning with a practical stay in a prestigious clinical center"

The care of infectious diseases in the field of hospital emergencies requires a high level of training by nurses, professionals who are increasingly demanded to be better prepared in relation to new infectious diseases that have increased their prevalence in recent years.

For this reason, TECH has designed this Hybrid Master's Degree that includes the classic aspects in the management of infectious pathology by apparatus or organs, taking into account the updates that may have occurred up to the time of the design of this program. But it has also incorporated new and essential items for a correct management of infectious diseases in the current scenario of globalization of health.

The content of this Hybrid Master's Degree is focused on the detailed updating of nursing professionals working in the emergency department attending patients with infectious diseases, whose functions require high levels of qualification, but also on the initiation of their activity as professionals in the field of research. Only with an adequate, focused and specialized refresher program can the knowledge and skills necessary to respond to the needs of these patients be acquired and maintained.

The aim is to respond to the growing need posed by the new challenges of a changing and increasingly demanding society, in order to raise awareness of the importance of incorporating new values, new work systems and new areas of action in this profession. Therefore, it is essential for the nursing professional to be able to respond adequately to people affected by an infectious disease, through adequate training for which they have to overcome personally and professionally.

Faced with this scenario, TECH presents this program that will allow the nurses to catch up with the most updated theory of the moment. In addition, they will be able to work with real patients and in a hospital setting with state-of-the-art resources, which will develop their maximum potential and growth in the area of infectious diseases. Thus, you will approach patients with infectious pathologies from the hand of the best specialists, using the latest techniques based on scientific evidence. All this, throughout 3 weeks of intensive practical stay in 8 consecutive hours days.

This **Hybrid Master's Degree in Infectious Diseases in the Emergency Department for Nursing** contains the most complete and up-to-date scientific program on the market.

Its most outstanding features are:

- ♦ Development of more than 100 clinical cases presented by nursing professionals with expertise in Infectious Diseases
- ♦ The graphic, schematic, and practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice
- ♦ Comprehensive systematized action plans for the main pathologies in the emergency department
- ♦ An algorithm-based interactive learning system for decision-making in the clinical situations presented throughout the course
- ♦ Practical clinical guides on approaching different pathologies
- ♦ Activities oriented to Infectious Diseases Nursing Specialists
- ♦ All of this will be complemented by theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- ♦ Content that is accessible from any fixed or portable device with an Internet connection
- ♦ In addition, you will be able to carry out a clinical internship in one of the best hospitals in the world



In addition to studying in online format, you will perform clinical practices in the emergency department with the highest standards of quality and technological level in an elite hospital center"

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This Hybrid Master's Degree will allow you to incorporate into your daily work the protocols of Nursing action in patients with Infectious Diseases in the Emergency Department"

This Master's program, which has a professionalizing nature and a blended learning modality, is aimed at updating nursing professionals who perform their duties in the Emergency Department, and who require a high level of qualification. The content is based on the latest scientific evidence and is organized in a didactic way to integrate theoretical knowledge into nursing practice. The theoretical-practical elements allow professionals to update their knowledge and help them to make the right decisions in patient care.

Thanks to their multimedia content developed with the latest educational technology, they will allow the nursing professional to obtain situated and contextual learning, i.e., a simulated environment that will provide immersive learning programmed to train in real situations. This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise throughout the program. For this purpose, the students will be assisted by an innovative interactive video system created by renowned experts.

Study from real clinical cases and interactive activities and apply what you learn in a 3-week intensive, face-to-face internship.

At TECH you will find a unique opportunity to improve your skills in the management of infectious diseases and provide more personalized care to your patients.



02

Why Study this Hybrid Master's Degree?

This academic program offers a unique opportunity for those who wish to acquire specialized practical skills in the Emergency Department. By completing this program, students will benefit from a complete and updated preparation in the management of patients with infectious diseases in the Emergency Department. All this, with learning divided into two stages: a theoretical-practical phase where the nurse will be able to get up to date, and a fully practical phase in a prestigious hospital center.



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Take advantage of this opportunity and place yourself at the forefront of nursing with this Hybrid Master's Degree, with which you will not only be updated in the care of patients with Infectious Diseases but you will be able to perform an intensive internship in a reference hospital"

1. Updating from the latest technology available

The area of Infectious Diseases in the Emergency Department has been revolutionized in recent years thanks to the improvement of protocols driven by recent pandemic situations. For this reason, and with the aim of bringing the nurse closer to these advances, TECH presents this Hybrid Master's Degree with which the professional will enter a cutting-edge clinical environment, accessing the latest technology in this field.

2. Gaining In-Depth Knowledge from the Experience of Top Specialists

The large team of professionals that will accompany the nurse throughout the entire practical period is a first class endorsement and a guarantee of unprecedented updating. With a specifically designated tutor, the students will be able to see real patients in a state-of-the-art environment, which will allow them to incorporate the most effective procedures and approaches in Infectious Diseases in the Emergency Department into their daily practice.

3. Entering First-Class Clinical Environments

TECH carefully selects all the centers available for clinical internships. Thanks to this, the specialists will have guaranteed access to a prestigious healthcare environment in the area of Emergency Medicine. In this way, you will be able to see the day-to-day work of a demanding, rigorous and exhaustive sector, always applying the latest theses and scientific postulates in its work methodology.



4. Combining the Best Theory with State-of-the-Art Practice

The academic market is plagued by teaching programs that are poorly adapted to the daily work of the specialist and that require long teaching hours, often not very compatible with personal and professional life. TECH offers a new learning model, 100% practical, that allows you to get in front of state-of-the-art procedures in the field of Infectious Diseases and, best of all, to put it into professional practice in just 3 weeks.

5. Expanding the Boundaries of Knowledge

TECH offers the possibility of pursuing this program not only in centers of national importance, but also internationally. This way, the specialist will be able to expand their frontiers and catch up with the best professionals, who practice in first class centers and in different continents. A unique opportunity that only TECH, the largest online university in the world, could offer.

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*You will have full practical immersion
at the center of your choice"*

03 Objectives

This Hybrid Master's Degree has been designed to meet the latest advances in the protocols for nurses to act with patients with Infectious Diseases in the Emergency Department. Therefore, it incorporates the latest techniques in this area, dividing learning into two distinct stages: a theoretical-practical and online, and a face-to-face and intensive in a clinical center of great prestige.



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Update your knowledge in a real scenario, with the maximum scientific rigor of an institution at the forefront of technology. Raise your level of training with a unique program in the market"

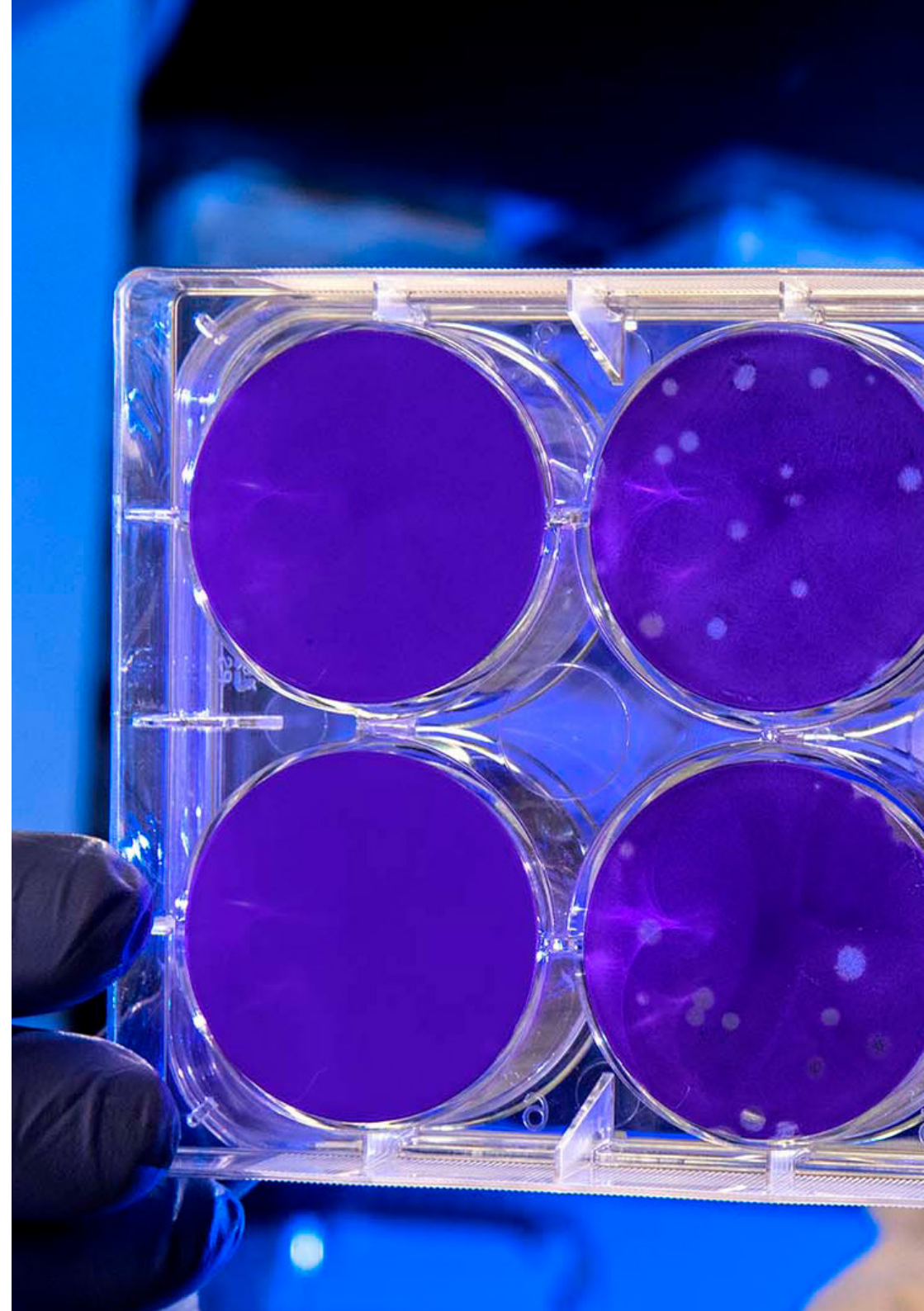


General Objective

- ♦ The general objective of the Hybrid Master's Degree in Infectious Diseases in the Emergency Department for Nursing is to ensure that the professional updates the diagnostic and therapeutic procedures of the specialty in a theoretical and practical way, through a hospital stay designed with clinical and academic rigor, under the guidance of renowned professionals, in a hospital center of the highest scientific quality and technological innovation. Thanks to this Hybrid Master's Degree, the professionals will address the main interventions of the specialist that will allow them to improve and enhance their skills in the nursing care of their patients



Integrate the most advanced techniques and procedures into your daily professional practice. Enroll now in this Hybrid Master's Degree and enjoy a cutting-edge learning"





Specific Objectives

Module 1. Up-to-date Information on Infectious Diseases

- ♦ Define virulence factors and toxins
- ♦ Identify the main human pathogens in our environment
- ♦ Explain the different current scenarios of infection in the Emergency Department
- ♦ Describe the etiopathogenic profiles of bacterial infections
- ♦ Describe the etiopathogenic profiles of viral infections
- ♦ Describe the etiopathogenic profiles of fungal infections
- ♦ Describe the etiopathogenic profiles of microbacterial infections
- ♦ Describe the etiopathogenic profiles of parasitic infections

Module 2. The Microbiology Laboratory in the Emergency Department

- ♦ Describe the process of collecting specimens
- ♦ Define which specimens are most commonly requested in the Emergency Department
- ♦ Explain the collection of specimens in patients with devices
- ♦ Describe the management of specimens in the laboratory
- ♦ Explain the clinical significance of bacterial resistance
- ♦ Define the techniques available for emergency diagnoses
- ♦ Describe the interpretation of preliminary results
- ♦ Explain the analytical interpretation of the different types of samples
- ♦ Define the procedures in hospitals without on-call microbiologists
- ♦ Explain the diagnostic techniques that can possibly be performed in the emergency department laboratory

Module 3. Public Health and Infectious Disease in the Emergency Department

- ♦ Describe the action protocols in cases of specific exposure
- ♦ Describe the established isolation protocols
- ♦ Explain the current indications of exclusion or isolation
- ♦ Describe notifiable diseases
- ♦ Explain the procedure for emergency declaration to Public Health
- ♦ Describe the action protocol for epidemiological outbreaks
- ♦ Describe imported pathology, as well as pathology with high contagious capacity
- ♦ Describe the seasonal epidemiological parameters in the most common infections in the community
- ♦ Explain epidemic outbreaks and common sources with punctual, continuous, propagative and mixed exposure
- ♦ Define the post-exposure prophylaxis that is initiated in the emergency department
- ♦ Describe the process to follow in the case of Bacterial Meningitis
- ♦ Describe the process to follow in the case of HIV Infection
- ♦ Describe the process to follow in the case of Sexual Assault
- ♦ Describe the process to follow in the case of Rabies

Module 4. Systemic Febrile Syndrome. Antimicrobials:

- ♦ Explain the biomarkers used in the clinical diagnosis of infectious disease
- ♦ Define the use of C-reactive protein and procalcitonin in the diagnosis of infectious diseases
- ♦ Define the practical use of non-specific tests for infectious evidence
- ♦ Explain the initial focus in Acute Fever Syndrome
- ♦ Define the action taken in cases of Bacteremia, Sepsis and Septic Shock
- ♦ Explain How to Activate CODE SEPSIS
- ♦ Define the use of different antimicrobials in Fever Syndrome

- ♦ Describe the characteristics of the different types of antimicrobials
- ♦ Define the implications of antimicrobial resistance when selecting treatment
- ♦ Explain the basic steps in the selection of antimicrobials according to the type of host and other extrinsic or environmental factors
- ♦ Explain the concept of empirical antibiotic therapy
- ♦ Describe how to act in the case of beta-lactam allergy
- ♦ Describe the use of antimicrobials and renal function

Module 5. Emergency Diagnostic and Therapeutic Management of Fever in Special Situations

- ♦ Explain the relationship between fever and the presence of exanthema
- ♦ Explain the relationship between fever and the presence of adenopathies
- ♦ Fever and hematological alterations
- ♦ Explain the association of fever with altered level of consciousness
- ♦ Describe fever management in an elderly patient
- ♦ Describe fever management in a patient in a hemodialysis program
- ♦ Describe fever management in a patient with intravascular devices
- ♦ Describe fever management in a patient with a HIV infection
- ♦ Describe fever management in a patient with iatrogenic immunosuppression
- ♦ Describe fever management in a patient with oncohematological pathology
- ♦ Describe fever management in a patient with febrile neutropenia
- ♦ Describe fever management in a patient in the solid organ transplant patient
- ♦ Explain the implications of cytomegalovirus and BK virus infections in transplant recipients
- ♦ Describe fever management in a patient who has recently undergone surgery
- ♦ Describe the current management of infection of surgical wounds
- ♦ Explain the management of other infections in a patient who has recently undergone surgery
- ♦ Describe fever management in a pregnant patient
- ♦ Explain the use of antibiotic therapy in pregnancy



Module 6. Infections of Organs and Apparatus (I): ORL, Head and Neck, Ophthalmological

- ♦ Explain the diagnosis and treatment of Pharyngodonsillitis in the Emergency Department
- ♦ Explain the diagnosis and treatment of Tracheitis, Laryngitis and Epiglottitis in the Emergency Department
- ♦ Explain the diagnosis and treatment of otitis externa, media and mastoiditis in the Emergency Department
- ♦ Explain the diagnosis and treatment of sinusitis in the Emergency Department
- ♦ Explain the diagnosis and treatment of a peritonsillar and para-retropharyngeal abscess in the Emergency Department
- ♦ Explain the diagnosis and treatment of dental infections in the Emergency Department
- ♦ Explain the diagnosis and treatment of mucositis and stomatitis in the Emergency Department
- ♦ Explain the diagnosis and treatment of salivary gland infections in the Emergency Department
- ♦ Explicar el diagnóstico y tratamiento en urgencias de la cervical adenitis. Embryonic cyst infections. Suppurative thyroiditis
- ♦ Explain the diagnosis and treatment of conjunctivitis and keratitis in the Emergency Department
- ♦ Explain the diagnosis and treatment of Uveitis, Endophthalmitis, and Retinitis in the Emergency Department
- ♦ Explain the diagnosis and treatment of periocular infections in the Emergency Department
- ♦ Explain the diagnosis and treatment of eyelid infections in the Emergency Department
- ♦ Explain the diagnosis and treatment of lacrimal apparatus in the Emergency Department
- ♦ Explain the diagnosis and treatment of orbital cellulitis in the Emergency Department

Module 7. Infections of Organs and Apparatus (II): Skin, Soft and Osteoarticular

- ♦ Explain the diagnosis and treatment of cellulitis and superficial infections in the Emergency Department
- ♦ Explain the diagnosis and treatment of myositis in the Emergency Department
- ♦ Explain the diagnosis and treatment of plantar fasciitis in the Emergency Department
- ♦ Explain the diagnosis and treatment of gangrene in the Emergency Department
- ♦ Explain the diagnosis and treatment of diabetic foot in the Emergency Department
- ♦ Explain the diagnosis and treatment of pressure ulcers in the Emergency Department
- ♦ Explain the diagnosis and treatment of septic arthritis in the Emergency Department
- ♦ Explain the diagnosis and treatment of osteomyelitis in the Emergency Department
- ♦ Explain the diagnosis and treatment of spondylodiscitis in the Emergency Department
- ♦ Explain the diagnosis and treatment of infection of joint prostheses and osteosynthesis material in the Emergency Department

Module 8. Infections of Organs and Apparatus (III): Lower Airway, Intra-abdominal

- ♦ Explain the diagnosis and treatment of acute bronchitis in the Emergency Department
- ♦ Explain the diagnosis and treatment of Acute Chronic Obstructive Pulmonary Disease (COPD) in the Emergency Department
- ♦ Explain the diagnosis and treatment of Community-acquired pneumonia (CAP) in the Emergency Department
- ♦ Explain the diagnosis and treatment of Healthcare-associated pneumonia (HAP) in the Emergency Department.)
- ♦ Explain the diagnosis and treatment of Empyema in the Emergency Department
- ♦ Explain the diagnosis and treatment of a Pulmonary Abscess in the Emergency Department
- ♦ Explain the diagnosis and treatment of Pulmonary Tuberculosis in the Emergency Department
- ♦ Explain the diagnosis and treatment of Gastroenteritis in the Emergency Department
- ♦ Explain the diagnosis and treatment of Liver and Biliary Tract infections in the

Emergency Department

- ♦ Explain the diagnosis and treatment of Cholecystitis and Cholangitis in the Emergency Department
- ♦ Explain the diagnosis and treatment of a Liver Abscess in the Emergency Department
- ♦ Explain the diagnosis and treatment of Acute Hepatitis in the Emergency Department
- ♦ Explain the diagnosis and treatment of Pancreatitis in the Emergency Department
- ♦ Explain the diagnosis and treatment of Appendicitis in the Emergency Department
- ♦ Explain the diagnosis and treatment of Diverticulitis and Perirectal abscess in the Emergency Department
- ♦ Explain the diagnosis and treatment of Typhlitis in the Emergency Department
- ♦ Explain the diagnosis and treatment of Peritonitis in the Emergency Department
- ♦ Explain the diagnosis and treatment of an Intraperitoneal Abscess in the Emergency Department

Module 9. Infections of Organs and Apparatus (IV): Cardiovascular, CNS

- ♦ Explain the diagnosis and treatment of Endocarditis and Intravascular Infections in the Emergency Department
- ♦ Explain the diagnosis and treatment of septic thrombophlebitis in the emergency department
- ♦ Explain the diagnosis and treatment of intravascular devices infections in the Emergency Department
- ♦ Explain the diagnosis and treatment of tunneled and non-tunneled catheter infection in the emergency department
- ♦ Explain the diagnosis and treatment of pacemaker infections in the Emergency Department
- ♦ Explain the emergency department diagnosis and treatment of infection of other devices
- ♦ Explain the diagnosis and treatment of pericarditis and myocarditis in the Emergency Department
- ♦ Explain the diagnosis and treatment of mediastinitis in the Emergency Department
- ♦ Explain the diagnosis and treatment of meningitis in the Emergency Department
- ♦ Explain the diagnosis and treatment of encephalitis in the Emergency Department

- ♦ Explain the diagnosis and treatment of myelitis in the Emergency Department
- ♦ Explain the diagnosis and treatment of a cerebral abscess in the Emergency Department
- ♦ Explain the diagnosis and treatment of subdural empyema, epidural abscess and intracranial thrombophlebitis in the Emergency Department
- ♦ Explain the diagnosis and treatment of CSF shunt infections in the Emergency Department

Module 10. Infections of Urinary Tract, Genitals and Sexual Transmission

- ♦ Explain the diagnosis and treatment of cystitis in the Emergency Department
- ♦ Explain the diagnosis and treatment of asymptomatic bacteriuria in the Emergency Department
- ♦ Explain the diagnosis and treatment of a UTI in patients with bladder catheterization in the Emergency Department
- ♦ Explain the diagnosis and treatment of prostatitis in the Emergency Department
- ♦ Explain the diagnosis and treatment of pyelonephritis in the Emergency Department
- ♦ Explain the diagnosis and treatment of a perinephritic abscess in the Emergency Department
- ♦ Explain the diagnosis and treatment of orchiepididymitis in the Emergency Department
- ♦ Explain the diagnosis and treatment of vulvovaginitis and cervicitis in the Emergency Department
- ♦ Explain the diagnosis and treatment of pelvic infections in the Emergency Department
- ♦ Explain the diagnosis and treatment of intrapartum, postpartum and postabortive infections in the Emergency Department
- ♦ Explain the diagnosis and treatment of inflammatory pelvic disease in the Emergency Department
- ♦ Explain the diagnosis and treatment of urethritis in the Emergency Department
- ♦ Explain the diagnosis and treatment of infections and which cause skin and genital mucosa lesions

Module 11. Infectious Diseases in Pediatric Patients in the Emergency Department

- ♦ Describe the management of fever syndrome and exanthems in a pediatric patient in the Emergency Department
- ♦ Explain the emergency diagnosis and treatment of skin, soft tissue and skeletal system infections in pediatric patients

- ♦ Explain the emergency diagnosis and treatment of ENT and respiratory infections in pediatric patients
- ♦ Explain the emergency diagnosis and treatment of gastrointestinal, genitourinary and STI infections in pediatric patients
- ♦ Explain the diagnosis and treatment of CNS and CV infections in a pediatric patient in the Emergency Department
- ♦ Explain the treatment in pediatric infectious diseases

Module 12. Imported Infectious Diseases in the Emergency Department

- ♦ Define the concept of globalization and emerging pathology
- ♦ Define the geography of the tropical infectious diseases
- ♦ Explain the epidemiology of tropical infectious diseases in travelers, immigrants and VFRs
- ♦ Explain the anamnesis of a traveler with fever in the emergency department
- ♦ Explain the possible causes of fever after staying in a tropical or or subtropical area
- ♦ Perform syndrome classification of imported infectious pathology
- ♦ Define imported tropical infectious diseases of special interest

Module 13. Update on Coronavirus Infections

- ♦ Know the microbiological characteristics of coronaviruses
- ♦ Know how to assess the morbidity and mortality of coronavirus infections
- ♦ Identify the main risk groups and mechanisms of coronaviruses
- ♦ Be able to perform the necessary tests for diagnosing Coronavirus
- ♦ Know how to apply the necessary preventive measures, as well as the most accurate treatments according to the type of patient

04 Skills

After passing the evaluations of the Hybrid Master's Degree in Infectious Diseases in the Emergency Department for Nursing, the professionals will have acquired the necessary professional competencies for an updated nursing care based on the latest scientific evidence. Thus, they will be able to develop in highly demanding clinical environments where cutting-edge tools, protocols and techniques are required.



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Caring for patients with Infectious Diseases requires a high level of training on the part of the nurse, so this program is perfect for them to get up to date with the most advanced and effective techniques"



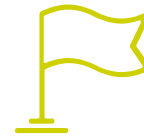
General Skills

- Know how to apply acquired knowledge and problem-solving skills in new or unfamiliar environments within broader (or multidisciplinary) contexts related to infectious diseases
- Create a personalized care plan for patients with infectious diseases who visit the Emergency Department
- Care for patients, whether adult or pediatric, with different types of infections



Delve into the most relevant theory in this field, subsequently applying it in a real work environment"





Specific Skills

- ♦ Describe in depth the handling of microbiological samples, their processing and the interpretation and clinical application of identification and sensitivity results
- ♦ Explain the scope of application of an antibiotic treatment, its pharmacological and pharmacodynamic characteristics and its indications
- ♦ Assess the severity of the infection
- ♦ Explain the management of severe sepsis and the relevance of the existence of the Code Sepsis
- ♦ Characterize the clinical syndromes of community-acquired, nosocomial-acquired or healthcare-associated infections
- ♦ Deepen the knowledge of HIV infection, from its epidemiology and history to its multiple manifestations, its diagnostic and therapeutic management and prevention
- ♦ Characterize clinical syndromes of infection in immunocompromised non-HIV patients, characteristics of chronic HCV infection and emerging, imported and traveler's infectious pathology
- ♦ Define the antibiotic prescription support teams and their practical application
- ♦ Describe the uses of bedside Clinical Ultrasound in the diagnostic support of common infectious pathology
- ♦ Define the concepts of Electronic Clinical Decision Support as applied to infectious pathology
- ♦ Work with patients that have been diagnosed with or present symptoms of Coronavirus, complying with all safety measures
- ♦ Perform diagnostic tests to detect possible cases of Coronavirus

05

Course Management

This Hybrid Master's Degree has the most prestigious teaching staff in the area of Infectious Diseases in the Emergency Department. Thus, the nurses will be able to study and update from the experience and knowledge of professionals of great reputation, and who have made important scientific contributions in this field. It is, therefore, a unique opportunity to get up to date immediately.



“

The most prestigious teaching staff will allow you to update you with the latest advances in Infectious Diseases in the Emergency Department for Nursing"

Management



Dr. García Rodríguez, Magdalena

- Medical Specialist in Internal Medicine and Infectious Diseases
- Assistant Physician in the Infectious Diseases Unit of the Consortium of the General University Hospital of Valencia
- Responsible for the Section of International Health and Travel Advice of the Community of Valencia
- PhD in Medicine and Surgery from the University of Valencia
- Member of the Spanish Society of Tropical Medicine and International Health, Spanish Society of Infectious Diseases and Clinical Microbiology, Spanish Association of Vaccinology, Spanish Interdisciplinary Society of AIDS



Dr. Ricart Olmos, María del Carmen

- Specialist in Internal Medicine and Expert in Infectious Diseases
- Assistant Physician of the Infectious Diseases Unit at the General University Hospital of Valencia
- Assistant Physician of the Internal Medicine Department at the University Hospital Doctor Peset, Valencia
- Lecturer in training courses for physicians and in university postgraduate studies
- Secretary of the Society of Infectious Diseases of the Valencian Community
- Master's Degree in Infectious Diseases in Intensive Care



Dr. García del Toro, Miguel

- Head of the Infectious Diseases Unit at the General University Hospital Consortium of Valencia
- President of the Congress of the National Group for the Study of Hepatitis of the Society of Infectious Diseases and Clinical Microbiology
- PhD in Medicine from the University of Valencia
- Degree in Medicine and Surgery

06

Educational Plan

This Hybrid Master's Degree has the most complete and advanced syllabus in this area. In addition, the program is developed with a cutting-edge study methodology, known as Relearning, which allows nurses to combine their personal life with their studies. This learning system has been designed to take advantage of every minute invested in the TECH programs, making it perfect for working professionals who are short on time.



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Enroll and access the most comprehensive syllabus in Infectious Diseases in the Emergency Department for Nursing. Don't wait any longer and take advantage of this opportunity"

Module 1. Up-to-date Information on Infectious Diseases

- 1.1. Principles of Infection
 - 1.1.1. Virulence Factors and Toxins
 - 1.1.2. Defensive Mechanisms of the Host
- 1.2. Main Human Pathogens in our Environment
 - 1.2.1. Current Epidemiology of the Infection
 - 1.2.2. Data on a Worldwide Level
 - 1.2.3. Data in our Environment
 - 1.2.4. Microbial Resistance
- 1.3. Current Scenarios of Infection in the Emergency Department
 - 1.3.1. Elderly Patients
 - 1.3.2. Oncology Patients
 - 1.3.3. Chronic Renal Patients on Dialysis
 - 1.3.4. Transplant Recipient
 - 1.3.5. HIV Infection
 - 1.3.6. Travelers and Immigrants
- 1.4. Etiopathogenic Profiles of Infection
 - 1.4.1. Bacterial Infections
 - 1.4.2. Viral Infections
 - 1.4.3. Fungal Infections
 - 1.4.4. Microbacterial Infections
 - 1.4.5. Parasitic Infections

Module 2. The Microbiology Laboratory in the Emergency Department

- 2.1. Process of Sample Collection
 - 2.1.1. General Considerations for Taking, Conserving and Transporting the Samples for Microbiological Study
 - 2.1.2. Material for Sample Collection
- 2.2. Management of Samples in the Laboratory
 - 2.2.1. Receiving Samples
 - 2.2.2. Processing
 - 2.2.3. Methods and Techniques used for Microbiological Diagnosis According to the Main Infectious Syndromes

- 2.3. Techniques Available for Emergency Diagnoses
 - 2.3.1. Bacteria
 - 2.3.2. Virus
 - 2.3.3. Fungi
 - 2.3.4. Mycobacteria
 - 2.3.5. Parasites
- 2.4. Interpretation of Preliminary Results
 - 2.4.1. Interpretation of Microbiological Diagnostic Tests
- 2.5. Procedures in Hospitals Without On-call Microbiologists
 - 2.5.1. Disadvantages of Not Having an On-call Microbiologist
 - 2.5.2. Advantages of Having an On-call Microbiologist
 - 2.5.3. On-call Care without a Microbiologist

Module 3. Public Health and Infectious Disease in the Emergency Department

- 3.1. Emergency Department Personnel
 - 3.1.1. Initial Assessment
 - 3.1.2. Vaccines
 - 3.1.3. Action Protocols in Cases of Specific Exposure
- 3.2. Established Protocols of Isolation
 - 3.2.1. Types of Transmission and Methods of Isolation
 - 3.2.2. Special Situations
- 3.3. Notifiable Diseases and Urgent Declaration to Public Health
 - 3.3.1. Concept of Notifiable Diseases
 - 3.3.2. Surveillance of Notifiable Diseases
- 3.4. Special Situations
 - 3.4.1. Annual Flu
 - 3.4.2. Epidemiological Outbreaks
 - 3.4.3. Imported Pathology Possibility of Pathology with High Contagious Capacity
- 3.5. Updates Epidemiological Outbreaks
 - 3.5.1. Seasonal Epidemiological Parameters in the Most Common Infections in the Community
 - 3.5.2. Epidemic Outbreak and Types of Source

3.6. Post-exposure Prophylaxis that is Initiated in the Emergency Department

- 3.6.1. Bacterial Meningitis
- 3.6.2. HIV Infection
- 3.6.3. Sexual Assault
- 3.6.4. Rabies

Module 4. Systemic Febrile Syndrome. Antimicrobials:

- 4.1. Biomarkers in Sepsis
 - 4.1.1. Lactate
 - 4.1.2. Procalcitonin
 - 4.1.3. Proadrenomedulin
 - 4.1.4. Combinations
- 4.2. Initial Focus in Acute Fever Syndrome
 - 4.2.1. Initial Management of a Patient with a Fever in the Emergency Department
 - 4.2.2. Treatment
 - 4.2.3. Special Categories
 - 4.2.4. Fever of Unknown Origin
 - 4.2.5. Attitude and Destiny of the Patient
- 4.3. Bacteremia, Sepsis and Septic Shock
 - 4.3.1. Definitions According to Consensus Conferences
 - 4.3.2. How to Identify a Patient with Sepsis
 - 4.3.3. Controversies and Limitations of the New Definitions
 - 4.3.4. Managing Sepsis
- 4.4. Antimicrobials:
 - 4.4.1. Concept: What is a Microbial?
 - 4.4.2. Antibacterials
 - 4.4.3. Pregnancy and Breastfeeding
 - 4.4.4. Antifungal

Module 5. Emergency Diagnostic and Therapeutic Management of Fever in Special Situations

- 5.1. Fever in Emergencies
 - 5.1.1. General Concepts
 - 5.1.2. Action Protocol
 - 5.1.3. Patient Orientation
- 5.2. Fever in an Elderly Patient
 - 5.2.1. General Concepts
 - 5.2.2. Characteristics of the Specific Clinical Framework
 - 5.2.3. Points to Remember
- 5.3. Fever in a Hemodialysis Patient
 - 5.3.1. Infections Related to Vascular Access in Hemodialysis
 - 5.3.2. Other Considerations in the Infectious Pathology of a Patient on Dialysis
- 5.4. Fever in the Patient with Intravascular Catheters
 - 5.4.1. Clinical Manifestations
 - 5.4.2. Etiology
 - 5.4.3. Diagnosis
 - 5.4.4. Treatment
 - 5.4.5. Prevention
- 5.5. Patient with HIV Infection
 - 5.5.1. Pulmonary Syndromes
 - 5.5.2. Neurological syndromes
 - 5.5.3. Other Fever Syndromes
 - 5.5.4. Immune Reconstitution Syndrome
- 5.6. Patient with Iatrogenic Immunosuppression
 - 5.6.1. Etiology
 - 5.6.2. Diagnostic Approach
 - 5.6.3. Treatment
- 5.7. Patient with Onco-hematologic Pathology
 - 5.7.1. Diagnosis and Therapeutic Management of an Onco-hematologic Patient with a Fever

- 5.8. Transplant Recipient of a Solid Organ
 - 5.8.1. Infections in the First Month Post-Transplant
 - 5.8.2. Infections Between the First and Sixth Month Post-Transplant
 - 5.8.3. Infections After the Sixth Month Post-Transplant
 - 5.8.4. Diagnostic Strategy
 - 5.8.5. Empirical Treatment
- 5.9. Patient who has Recently Undergone Surgery
 - 5.9.1. Infection of Surgical Wounds Current Management
 - 5.9.2. Other Infections in a Patient who has Recently Undergone Surgery
- 5.10. Pregnant Patient
 - 5.10.1. Special Characteristics of a Pregnant Woman
 - 5.10.2. Diagnostic Orientation in the Emergency Department
 - 5.10.3. Treatment and Management in Special Situations
 - 5.10.4. Indications of Admission for Observation and Inpatient Treatment

Module 6. Infections of Organs and Apparatus (I): ORL, Head and Neck, Ophthalmological

- 6.1. Pharyngotonsillitis
 - 6.1.1. General Concept and Classification
- 6.2. Oral Cavity, Head and Neck Infections
 - 6.2.1. Plaque Gingivitis
 - 6.2.2. GUNA
 - 6.2.3. Oral TB
 - 6.2.4. Oral Syphilis
 - 6.2.5. Oral Mycosis
 - 6.2.6. Viral Infections
- 6.3. Otitis Externa, Media and Mastoiditis
 - 6.3.1. Diffuse Otitis Externa and Circumscribed Otitis Externa (boils)
 - 6.3.2. Otomycosis
 - 6.3.3. Malignant Otitis Externa
 - 6.3.4. Optic Herpes
 - 6.3.5. Bullous Myringitis
 - 6.3.6. Acute Otitis Media
 - 6.3.7. Mastoiditis

- 6.4. Sinusitis
 - 6.4.1. Pathophysiology
 - 6.4.2. Classification According to Etiology and Severity
 - 6.4.3. Symptoms
 - 6.4.4. Diagnosis
 - 6.4.5. Complementary Tests
 - 6.4.6. Treatment
 - 6.4.7. Complications
- 6.5. Peritonsillar, Parapharyngeal and Retropharyngeal Abscesses
 - 6.5.1. Peritonsillar Abscess
 - 6.5.2. Parapharyngeal Space Infection
 - 6.5.3. Retropharyngeal Space Infection
- 6.6. Dental Infections
 - 6.6.1. Etiological Factors
 - 6.6.2. Etiopathogenesis
 - 6.6.3. Clinical Symptoms
 - 6.6.4. Diagnosis
 - 6.6.5. Treatment
- 6.7. Mucositis and Stomatitis
 - 6.7.1. Trauma Lesions
 - 6.7.2. Lesions Caused by Chemical Agents
 - 6.7.3. Allergic Stomatitis
 - 6.7.4. Oral Drug Ulcers by Unknown Mechanisms
 - 6.7.5. Gingival Alterations Caused by Drugs
 - 6.7.6. Facial Reaction to Esthetic Fillers
 - 6.7.7. Oral Lesions Caused by Cocaine
 - 6.7.8. Oral Mucosal Dyschromias due to Exogenous Pigmentation
 - 6.7.9. Injuries Caused by Physical Agents
 - 6.7.10. Recurrent Aphthous Stomatitis
 - 6.7.11. Erythema Multiform
- 6.8. Infection of Salivary Glands
 - 6.8.1. General Aspects. Anamnesis and Examination Complementary Methods
 - 6.8.2. Viral Infection
 - 6.8.3. Bacterial Infections
 - 6.8.4. Sialodochitis or Obstructive Pathology of the Salivary Glands

- 6.9. Acute Laryngitis and Epiglottitis
 - 6.9.1. Acute Laryngitis
 - 6.9.2. Tuberculous Laryngitis
 - 6.9.3. Epiglottitis
- 6.10. Conjunctivitis and Keratitis
 - 6.10.1. Infectious Conjunctivitis
 - 6.10.2. Concept and General Considerations
 - 6.10.3. Bacterial Conjunctivitis
 - 6.10.4. Viral Conjunctivitis
 - 6.10.5. Mycotic or Parasitic Conjunctivitis
 - 6.10.6. Infectious Keratitis
 - 6.10.7. Concept and General Considerations
 - 6.10.8. Bacterial Keratitis
 - 6.10.9. Viral Keratitis
 - 6.10.10. Mycotic Keratitis
 - 6.10.11. Acanthamoeba Keratitis
- 6.11. Uveitis, Endophthalmitis, and Retinitis
 - 6.11.1. Uveitis: Concepts and Classification
 - 6.11.2. Parasitic Uveitis
 - 6.11.3. Viral Uveitis
 - 6.11.4. Fungal Uveitis
 - 6.11.5. Bacterial Uveitis
- 6.12. Periocular Infections
 - 6.12.1. Styel
 - 6.12.2. Chronic Canaliculitis
 - 6.12.3. Acute Dacryocystitis
 - 6.12.4. Preseptal Cellulitis
 - 6.12.5. Postseptal (orbital) Celulitis
 - 6.12.6. Acute Dacryoadenitis: Inflammation of the Lacrimal Gland
 - 6.12.7. Viral Infections
 - 6.12.8. Other Periocular Infections

Module 7. Infections of Organs and Apparatus (II): Skin, Soft and Osteoarticular

- 7.1. Cellulitis and Superficial Infections
 - 7.1.1. Clinical Symptoms
 - 7.1.2. Diagnosis
 - 7.1.3. Treatment
- 7.2. Deep Infections
 - 7.2.1. Necrotizing Fasciitis
 - 7.2.2. Fournier's Gangrene
 - 7.2.3. Infectious Myositis
- 7.3. Diabetic Foot
 - 7.3.1. Etiopathogenesis
 - 7.3.2. Clinical Symptoms
 - 7.3.3. Staging Classification of Ulcers of Infected Diabetic Foot
 - 7.3.4. Etiology
 - 7.3.5. Diagnosis. Complementary Evaluations
 - 7.3.6. Treatment
- 7.4. Pressure Ulcers
 - 7.4.1. Etiopathogenesis
 - 7.4.2. Risk Factors
 - 7.4.3. Clinical Assessment
 - 7.4.4. Complications
 - 7.4.5. Treatment
 - 7.4.6. Infection of Pressure Lesions
- 7.5. Septic Arthritis
 - 7.5.1. Epidemiology
 - 7.5.2. Pathophysiology
 - 7.5.3. Etiology
 - 7.5.4. Clinical Symptoms
 - 7.5.5. Diagnosis
 - 7.5.6. Differential Diagnosis
 - 7.5.7. Treatment
 - 7.5.8. Prognosis

- 7.6. Osteomyelitis
 - 7.6.1. Classification
 - 7.6.2. Etiology and Clinical Characteristics
 - 7.6.3. Diagnosis
 - 7.6.4. Treatment
- 7.7. Spondylodiscitis
 - 7.7.1. Etiopathogenesis and Microbiology
 - 7.7.2. Clinical Manifestations
 - 7.7.3. Diagnosis
 - 7.7.4. Treatment
 - 7.7.5. Prognosis
- 7.8. Infection of Joint Prostheses and Osteosynthesis Material
 - 7.8.1. Etiopathogenesis
 - 7.8.2. Diagnostic Approximation
 - 7.8.3. Treatment Management

Module 8. Infections of Organs and Apparatus (III): Lower Airway, Intra-abdominal

- 8.1. Acute Bronchitis
 - 8.1.1. Definition
 - 8.1.2. Clinical Manifestations
 - 8.1.3. Diagnosis
 - 8.1.4. Treatment
- 8.2. Acute Chronic Obstructive Pulmonary Disease (COPD)
 - 8.2.1. Definition
 - 8.2.2. Diagnosis
 - 8.2.3. Treatment
 - 8.2.4. Attitude to Clinical Failure
 - 8.2.5. Key Concepts





- 8.3. Community-Acquired Pneumonia (CAP)
 - 8.3.1. Concept
 - 8.3.2. Pathophysiology
 - 8.3.3. Epidemiology
 - 8.3.4. Etiology
 - 8.3.5. Clinical Manifestations
 - 8.3.6. Diagnostic Attitude
 - 8.3.7. Antibiotic Treatment
- 8.4. Healthcare-Associated Pneumonia (HAP)
 - 8.4.1. Concept
 - 8.4.2. Healthcare-Associated Pneumonia Versus Community-Acquired Pneumonia due to Resistant Pathogens (CAP-PR)
 - 8.4.3. Etiology
 - 8.4.4. Microbiological Diagnosis
 - 8.4.5. Empirical Treatment
 - 8.4.6. Prognosis
- 8.5. Pneumonic Pleural Effusion and Empyema
 - 8.5.1. Clinical Symptoms
 - 8.5.2. Staging
 - 8.5.3. Imaging Tests
 - 8.5.4. Laboratory Studies: Pleural Fluid Analysis
 - 8.5.5. Pathophysiology Staging
 - 8.5.6. Bacteriology
 - 8.5.7. Prognosis
 - 8.5.8. Treatment
- 8.6. Pulmonary Abscess
 - 8.6.1. Definition
 - 8.6.2. Etiology
 - 8.6.3. Pathophysiology
 - 8.6.4. Clinical Manifestations
 - 8.6.5. Diagnosis
 - 8.6.6. Treatment

- 8.7. Pulmonary Tuberculosis
 - 8.7.1. Etiology
 - 8.7.2. Clinical Manifestations
 - 8.7.3. Diagnosis
 - 8.7.4. Treatment
- 8.8. Gastroenteritis
 - 8.8.1. Etiology
 - 8.8.2. Clinical Manifestations and Physical Examination
 - 8.8.3. Laboratory Data and Imaging Tests
 - 8.8.4. Diagnosis
 - 8.8.5. Treatment
- 8.9. Liver and Biliary Tract Infections
 - 8.9.1. Bacterial Infections which Affect the Liver
 - 8.9.2. Viral Infections which Affect the Liver
 - 8.9.3. Parasitic Infections which Affect the Liver
 - 8.9.4. Fungal Infections which Affect the Liver
- 8.10. Cholecystitis and Cholangitis
 - 8.10.1. Acute Cholecystitis
 - 8.10.2. Acute Cholangitis
- 8.11. Liver Abscesses
 - 8.11.1. Concept and General Characteristics
 - 8.11.2. Classification and Etiopathogenesis
 - 8.11.3. Pyogenic Hepatic Abscesses
 - 8.11.4. Amoebic Liver Abscesses
- 8.12. Acute Hepatitis
 - 8.12.1. Definition
 - 8.12.2. Etiology
 - 8.12.3. Clinical Manifestations and Physical Examination
 - 8.12.4. Laboratory Data
 - 8.12.5. Diagnosis
 - 8.12.6. Severe Acute Hepatitis
 - 8.12.7. Severe Acute Liver Failure
 - 8.12.8. Treatment
- 8.13. Pancreatitis
 - 8.13.1. Etiology
 - 8.13.2. Diagnosis
 - 8.13.3. Classification
 - 8.13.4. Severity Prediction and Prognostic
 - 8.13.5. Treatment
 - 8.13.6. Infectious Complications
- 8.14. Appendicitis
 - 8.14.1. Epidemiology
 - 8.14.2. Etiopathogenesis
 - 8.14.3. Microbiology
 - 8.14.4. Diagnosis
 - 8.14.5. Differential Diagnosis
 - 8.14.6. Treatment
 - 8.14.7. Preoperative Antibiotic Prophylaxis
 - 8.14.8. Postoperative Antibiotic Treatment
 - 8.14.9. Post-surgery Complications
- 8.15. Diverticulitis and Perirectal Abscess
 - 8.15.1. Definition of Diverticulitis
 - 8.15.2. Pathogenesis
 - 8.15.3. Risk Factors
 - 8.15.4. Diverticulitis Diagnosis
 - 8.15.5. Diverticulitis Classification
 - 8.15.6. Treatment for Diverticulitis
 - 8.15.7. Perirectal Abscess
- 8.16. Typhlitis
 - 8.16.1. Epidemiology
 - 8.16.2. Etiology
 - 8.16.3. Pathogenesis
 - 8.16.4. Clinical Manifestations
 - 8.16.5. Diagnosis
 - 8.16.6. Differential Diagnosis
 - 8.16.7. Treatment

- 8.17. Peritonitis
 - 8.17.1. Classification
 - 8.17.2. Pathogenesis
 - 8.17.3. Diagnosis
 - 8.17.4. Assess the Severity of the Infection
 - 8.17.5. Treatment

- 8.18. Spontaneous Bacterial Peritonitis
 - 8.18.1. Concept
 - 8.18.2. Epidemiology
 - 8.18.3. Pathogenesis
 - 8.18.4. Clinical Manifestations
 - 8.18.5. Diagnosis
 - 8.18.6. Prognosis
 - 8.18.7. Treatment
 - 8.18.8. Prophylaxis

- 8.19. Secondary Peritonitis
 - 8.19.1. Definition and Classification
 - 8.19.2. Microbiology
 - 8.19.3. Evaluation of Severity
 - 8.19.4. General Principles for the Management

- 8.20. Intraperitoneal Abscess
 - 8.20.1. Definition
 - 8.20.2. Epidemiology
 - 8.20.3. Etiology and Pathophysiology
 - 8.20.4. Diagnosis
 - 8.20.5. Treatment

Module 9. Infections of Organs and Apparatus (IV): Cardiovascular, CNS

- 9.1. Infectious Endocarditis
 - 9.1.1. Epidemiology
 - 9.1.2. Etiology
 - 9.1.3. Clinical Symptoms
 - 9.1.4. Diagnosis
 - 9.1.5. Treatment
 - 9.1.6. Prevention

- 9.2. Infection of Intravascular Devices
 - 9.2.1. Infections Associated with Intravascular Catheter
 - 9.2.2. Infections Related to Implantable Electronic Cardiovascular Implantable Cardiovascular Devices
- 9.3. Acute Pericarditis
 - 9.3.1. Definition
 - 9.3.2. Incessant and Chronic Pericarditis
 - 9.3.3. Recurrent Pericarditis
 - 9.3.4. Myopericarditis
- 9.4. Mediastinitis
 - 9.4.1. Acute Mediastinitis
 - 9.4.2. Sclerosing Mediastinitis
- 9.5. Meningitis
 - 9.5.1. Epidemiology and Etiopathogenesis
 - 9.5.2. Diagnosis of Meningitis: Clinical and Laboratory
 - 9.5.3. Antimicrobial Treatment
- 9.6. Encephalitis
 - 9.6.1. Epidemiology and Etiopathogenesis
 - 9.6.2. Diagnosis of Encephalitis: Clinical and Complementary Evaluations
 - 9.6.3. Antimicrobial Treatment
- 9.7. Myelitis
 - 9.7.1. Epidemiology and Etiopathogenesis
 - 9.7.2. Clinical Symptoms
 - 9.7.3. Diagnosis
 - 9.7.4. Treatment
- 9.8. Cerebral Abscess
 - 9.8.1. Etiopathogenesis
 - 9.8.2. Clinical Manifestations and Diagnosis
 - 9.8.3. Treatment

- 9.9. Subdural Empyema, Epidural Abscess and Intracranial Thrombophlebitis
 - 9.9.1. Subdural Empyema: Etiopathogenesis, Clinical Manifestations, Diagnosis and Treatment
 - 9.9.2. Epidural Abscess: Etiopathogenesis, Clinical Manifestations, Diagnosis and Treatment
 - 9.9.3. Septic Thrombophlebitis: Etiopathogenesis, Clinical Manifestations, Diagnosis and Treatment
- 9.10. CSF Shunt Infections
 - 9.10.1. Etiopathogenesis
 - 9.10.2. Clinical Manifestations
 - 9.10.3. Diagnosis
 - 9.10.4. Treatment

Module 10. Infections of Urinary Tract, Genitals and Sexual Transmission

- 10.1. Cystitis
 - 10.1.1. Symptoms
 - 10.1.2. Etiology
 - 10.1.3. Diagnosis
 - 10.1.4. Differential Diagnosis
 - 10.1.5. Treatment
- 10.2. Asymptomatic Bacteriuria
 - 10.2.1. Epidemiology
 - 10.2.2. Pathophysiology
 - 10.2.3. Assessment and Treatment
- 10.3. UTI in Patients with Bladder Catheterization
 - 10.3.1. Etiology
 - 10.3.2. Clinical Manifestations
 - 10.3.3. Diagnosis
 - 10.3.4. Prevention
 - 10.3.5. Treatment

- 10.4. Prostatitis
 - 10.4.1. Etiopathogenesis
 - 10.4.2. Diagnosis
 - 10.4.3. Clinical Symptoms
 - 10.4.4. Treatment
 - 10.4.5. Complications
- 10.5. Chronic Nonbacterial or Chronic Idiopathic Prostatitis or Chronic Pelvic Pain Syndrome
 - 10.5.1. Pyelonephritis
 - 10.5.1.1. Etiology
 - 10.5.1.2. Clinical Manifestations
 - 10.5.1.3. Complementary Tests
 - 10.5.1.4. Treatment
 - 10.5.1.5. Admission Criteria
 - 10.5.2. Perinephritic Abscess
 - 10.5.2.1. Pathophysiology
 - 10.5.2.2. Clinical Symptoms
 - 10.5.2.3. Etiology
 - 10.5.2.4. Diagnosis
 - 10.5.2.5. Assessment and Treatment
 - 10.5.3. Infections which Cause Skin and Genital Mucosal Lesions
 - 10.5.3.1. Bacterial Infections
 - 10.5.3.2. Fungal Infections
 - 10.5.3.3. Viral Infections

Module 11. Infectious Diseases in Pediatric Patients in the Emergency Department

- 11.1. Fever Without Focus
 - 11.1.1. Child With a Fever Without Focus and Poor Appearance
 - 11.1.2. Fever Without Focus and Good General Appearance
 - 11.1.3. Children from 3-36 Months Old With a Fever Without Focus and Good General Appearance
 - 11.1.4. Breastfeeding Infant less than 3 Months Old With a Fever Without Focus and Good General Appearance

- 11.2. Sepsis and Septic Shock
 - 11.2.1. Concept
 - 11.2.2. Current Definition of Shock and Septic Shock
 - 11.2.3. Etiology and Epidemiology
 - 11.2.4. Pathophysiology
 - 11.2.5. Risk Factors
 - 11.2.6. Differential Diagnosis
 - 11.2.7. Clinical Symptoms
 - 11.2.8. Complementary Tests
 - 11.2.9. Treatment
- 11.3. Fever in a Traveling Child
 - 11.3.1. Medical History
 - 11.3.2. Physical Examination
 - 11.3.3. Complementary Tests
 - 11.3.4. Treatment
 - 11.3.5. Malaria
 - 11.3.6. Dengue
- 11.4. Exanthem
 - 11.4.1. Etiology
 - 11.4.2. Diagnosis
 - 11.4.3. Differential Diagnosis
- 11.5. Skin and Soft Tissue Infections
 - 11.5.1. Etiopathogenesis
 - 11.5.2. Diagnosis
 - 11.5.3. Main Clinical Framework
 - 11.5.4. Treatment
 - 11.5.5. Community-acquired Methicillin-Resistant S. Aureus
- 11.6. Cervical Adenitis
 - 11.6.1. Etiology
 - 11.6.2. Clinical Assessment
 - 11.6.3. Diagnosis and Treatment
 - 11.6.4. Differential Diagnosis
- 11.7. Osteoarticular Infections: Acute Osteomyelitis and Septic Arthritis
 - 11.7.1. Epidemiology
 - 11.7.2. Etiopathogenesis
 - 11.7.3. Clinical Symptoms
 - 11.7.4. Diagnosis
 - 11.7.5. Differential Diagnosis
 - 11.7.6. Treatment
- 11.8. Pharyngotonsillitis and Its Complications
 - 11.8.1. Concept
 - 11.8.2. Epidemiology and Etiology
 - 11.8.3. Clinical Symptoms
 - 11.8.4. Diagnosis
 - 11.8.5. Treatment
- 11.9. Otitis Media and External Sinusitis
 - 11.9.1. Concept of Otitis Media and External
 - 11.9.1.1. Epidemiology and Etiology
 - 11.9.1.2. Clinical Symptoms
 - 11.9.1.3. Complications
 - 11.9.1.4. Diagnosis
 - 11.9.1.5. Treatment
 - 11.9.2. Concept of Acute Sinusitis
 - 11.9.2.1. Epidemiology and Etiology
 - 11.9.2.2. Clinical Symptoms
 - 11.9.2.3. Diagnosis
 - 11.9.2.4. Treatment
- 11.10. Acute Mumps
 - 11.10.1. Epidemic Mumps
 - 11.10.2. Vaccines
 - 11.10.3. Prevention of Epidemic Outbreaks

- 11.11. Laryngitis and Epiglottitis
 - 11.11.1. Concept
 - 11.11.2. Epidemiology and Etiology
 - 11.11.3. Clinical Symptoms
 - 11.11.4. Diagnosis
 - 11.11.5. Treatment
 - 11.11.6. Admission Criteria
- 11.12. Syndrome Pertusoids
 - 11.12.1. Concept
 - 11.12.2. Epidemiology and Etiology
 - 11.12.3. Clinical Symptoms
 - 11.12.4. Complications
 - 11.12.5. Diagnosis
 - 11.12.6. Treatment
 - 11.12.7. Prevention
- 11.13. Bronchiolitis and Recurrent Wheezing Episodes
 - 11.13.1. Acute Bronchiolitis
 - 11.13.2. Recurrent Wheezing
- 11.14. Pneumonia and Complications
 - 11.14.1. Epidemiology
 - 11.14.2. Etiology
 - 11.14.3. Clinical Characteristics
 - 11.14.4. Diagnosis
 - 11.14.5. Treatment
 - 11.14.6. Prevention
 - 11.14.7. Complications
- 11.15. Tuberculosis
 - 11.15.1. Manifestations
 - 11.15.2. Diagnosis
 - 11.15.3. Treatment
- 11.16. Acute Gastroenteritis
 - 11.16.1. Etiopathogenesis
 - 11.16.2. Clinical Symptoms
 - 11.16.3. Diagnosis
 - 11.16.4. Treatment
- 11.17. Viral Hepatitis
 - 11.17.1. Evaluation and Initial Management of Hepatitis in the Emergency Department
 - 11.17.2. Classic Viral Hepatitis
- 11.18. Appendicitis (Need for Antibiotic or Not) and Perirectal Abscesses
 - 11.18.1. Acute Appendicitis
 - 11.18.2. Perirectal Abscess
- 11.19. Urinary Infection
 - 11.19.1. Definition
 - 11.19.2. Etiopathogenesis
 - 11.19.3. Clinical. When to suspect a urinary tract infection in the pediatric age?
 - 11.19.4. Diagnosis
 - 11.19.5. Management
- 11.20. CNS Infections in Pediatrics: Acute Meningitis
 - 11.20.1. Etiology
 - 11.20.2. Clinical Symptoms
 - 11.20.3. Diagnosis
 - 11.20.4. Treatment
 - 11.20.5. Chemoprophylaxis
 - 11.20.6. Complications and Prognosis
- 11.21. Endocarditis, Myocarditis and Pericarditis
 - 11.21.1. Infectious Endocarditis
 - 11.21.2. Myocarditis
 - 11.21.3. Pericarditis

- 11.22. Treatment in Pediatric Infectious Diseases
 - 11.22.1. Bacterial Infections in the Pediatric Emergency Department: Diagnosis and Antibiotic Treatment of Choice, Depending on the Resistance of the Pathogens Responsible for the Disease
 - 11.22.2. Delayed Antibiotic Prescribing Strategy
 - 11.22.3. When is the Association of Amoxicillin with Clavulanic Acid and Macrolides Indicated in Pediatrics?
 - 11.22.4. Do I Also Have to be Careful with Topical Antibiotherapy to Avoid Bacterial Resistance?

Module 12. Imported Infectious Diseases in the Emergency Department

- 12.1. Introduction to Imported Pathology
 - 12.1.1. Imported Pathology of Special Interest
 - 12.1.1.1. Chagas Disease
 - 12.1.1.2. Dengue
 - 12.1.1.3. Chikungunya
 - 12.1.1.4. Malaria
- 12.2. Globalization and Emerging Pathology
 - 12.2.1. Emerging and Re-emerging Diseases
 - 12.2.2. Main Causes of Emergency in Infectious Diseases
 - 12.2.3. Transmission
 - 12.2.4. Zoonotic
 - 12.2.5. Future Previsions
- 12.3. Geography of Tropical Infectious Diseases
 - 12.3.1. Subspecialties of Medical Geography
 - 12.3.2. Relevance and Relationship to Tropical Diseases
 - 12.3.3. Main Infectious Diseases According to Area
- 12.4. Epidemiology of Tropical Infectious Diseases in Travelers, Immigrants and VFRs
 - 12.4.1. Importance
 - 12.4.2. Epidemiological Characteristics of Immigrants
 - 12.4.3. Epidemiological Characteristics of People Traveling to the Tropics
 - 12.4.4. Epidemiological Characteristics of VFRs
 - 12.4.5. Data on Imported Pathology in Spain
- 12.5. Anamnesis of a Traveler with Fever in the Emergency Department
 - 12.5.1. Initial Approximation of a Traveler with Fever
 - 12.5.2. Differential Diagnosis
 - 12.5.3. Treatment of a Traveler with Fever
- 12.6. Fever After Staying in a Tropical and / or Subtropical Area
 - 12.6.1. Importance of Good Anamnesis
 - 12.6.2. Investigation of Possible Vectors
 - 12.6.3. Fever of Parasitic Origin
 - 12.6.4. Fever of Viral Origin
 - 12.6.5. Fever of Bacterial Origin
 - 12.6.6. Other Causes of Fever
- 12.7. Imported Infectious Pathology Syndrome Classification
 - 12.7.1. Fever and Cutaneous Lesion
 - 12.7.2. Fever and Altered Level of Consciousness
 - 12.7.3. Fever and Liver Problems
 - 12.7.4. Fever and Respiratory Semiology
 - 12.7.5. Fever and Digestive Semiology
- 12.8. Imported Tropical Infectious Diseases of Special Interest
 - 12.8.1. Malaria
 - 12.8.2. Arbovirus: Dengue, Zika, Chikungunya
 - 12.8.3. MERS Coronavirus (MERS CoV)
 - 12.8.4. Schistosomiasis
 - 12.8.5. Invasive Enteritis (Salmonella, Shigella, E.coli, Campylobacter)
 - 12.8.6. Hemorrhagic Fevers (Ebola, Lassa, Marburg, Yellow Fever, Crimean-Congo)

Module 13. Update on Coronavirus Infections

- 13.1. Discovery and Evolution of Coronaviruses
 - 13.1.1. Discovery of Coronaviruses
 - 13.1.2. Global Trends in Coronavirus Infections
- 13.2. Main Microbiological Characteristics and Members of the Coronavirus Family
 - 13.2.1. General Microbiological Characteristics of Coronaviruses
 - 13.2.2. Viral Genome
 - 13.2.3. Principal Virulence Factors
- 13.3. Epidemiological Changes in Coronavirus Infections from its Discovery to the Present
 - 13.3.1. Morbidity and Mortality of Coronavirus Infections from their Emergence to the Present
- 13.4. The Immune System and Coronavirus Infections
 - 13.4.1. Immunological Mechanisms Involved in the Immune Response to Coronaviruses
 - 13.4.2. Cytokine Storm in Coronavirus Infections and Immunopathology
 - 13.4.3. Modulation of the Immune System in Coronavirus Infections
- 13.5. Pathogenesis and Pathophysiology of Coronavirus Infections
 - 13.5.1. Pathophysiological and Pathogenic Alterations in Coronavirus Infections
 - 13.5.2. Clinical Implications of the Main Pathophysiological Alterations
- 13.6. Risk Groups and Transmission Mechanisms of Coronaviruses
 - 13.6.1. Main Sociodemographic and Epidemiological Characteristics of Risk Groups Affected by Coronavirus
 - 13.6.2. Coronavirus Mechanisms of Transmission
- 13.7. Natural History of Coronavirus Infections
 - 13.7.1. Stages of Coronavirus Infection
- 13.8. Latest Information on Microbiological Diagnosis of Coronavirus Infections
 - 13.8.1. Sample Collection and Shipment
 - 13.8.2. PCR and Sequencing
 - 13.8.3. Serology Testing
 - 13.8.4. Virus Isolation



- 13.9. Current Biosafety Measures in Microbiology Laboratories for Coronavirus Sample Handling
 - 13.9.1. Biosafety Measures for Coronavirus Sample Handling
- 13.10. Up-to-Date Management of Coronavirus Infections
 - 13.10.1. Prevention Measures
 - 13.10.2. Symptomatic Treatment
 - 13.10.3. Antiviral and Antimicrobial Treatment in Coronavirus Infections
 - 13.10.4. Treatment of Severe Clinical Forms
- 13.11. Future Challenges in the Prevention, Diagnosis, and Treatment of Coronavirus
 - 13.11.1. Global Challenges for the Development of Prevention, Diagnostic, and Treatment Strategies for Coronavirus Infections

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Enroll now and advance in your field of work with a comprehensive program that will allow you to put into practice everything you have learned”

07

Clinical Internship

After passing the online study period, the program includes a practical training period in a reference clinical center. The student will have at their disposal the support of a tutor who will accompany them during the whole process, both in the preparation and in the development of the clinical practice. This will ensure a decisive professional updating experience for the students.



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Do your clinical internship in a prestigious clinical center and develop yourself in a real healthcare environment"

The practical period of this Hybrid Master's Degree in Infectious Diseases in the Emergency Department for Nursing consists of a practical clinical stay of 3 weeks duration, from Monday to Friday, with 8 consecutive hours of practical training with a reputed professional of the center itself. This stay will allow to see real patients next to a team of reference professionals in the emergency area, applying the most innovative diagnostic procedures and planning the latest generation therapy in each pathology.

In this training proposal, completely practical in nature, the activities are aimed at developing and perfecting the skills necessary for the provision of health care in areas and conditions that require a high level of qualification, and which are oriented to the specific training for the exercise of the activity, in an environment of safety for the patient and with high professional performance.

The practical teaching will be carried out with the active participation of the student performing the activities and procedures of each area of competence (learning to learn and learning to do), with the accompaniment and guidance of teachers and other training partners that facilitate teamwork and multidisciplinary integration as transversal competencies for the For Nursing practice (learning to be and learning to relate).

The procedures described below will form the basis of the practical part of the training, and their implementation is subject to both the suitability of the patients and the availability of the center and its workload, with the proposed activities being as follows:





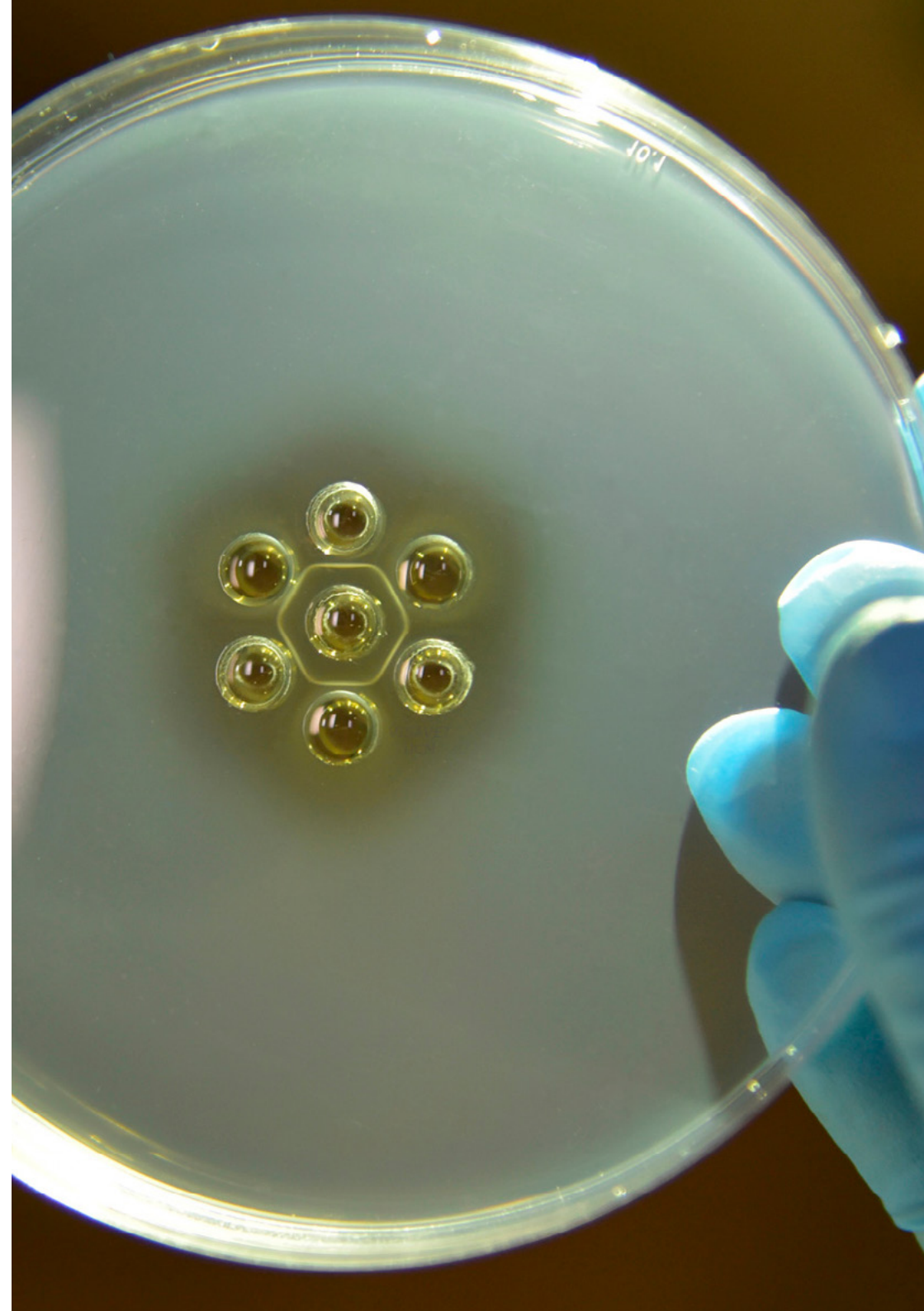
Module	Practical Activity
Laboratory of microbiology in the Emergency Room	Carry out the correct collection, preservation and transport of samples for microbiological studies
	Perform sample processing in the laboratory and use different microbiological diagnostic methods and techniques
	Practice the interpretation of preliminary results
Protocols for Infectious Diseases in Emergencies	Participate in the development of action protocols for specific exposures in the Emergency Department
	Apply the relevant action protocols for notifiable diseases, following up the epidemiological surveillance
	Establish and activate the isolation protocols established in cases that require it
	Apply post-exposure prophylaxis to be initiated in the Emergency Department
Systemic Febrile Syndrome and Antimicrobials	Evaluate and apply different biomarkers in sepsis, such as lactate and procalcitonin
	Participate in the development of antimicrobial treatment strategies for patients with bacteremia, sepsis and septic shock
	Put into practice the general principles of antimicrobial use
Specific care techniques for organ and device infections.	Apply the procedures for the care of patients with diabetic foot
	Put into practice the protocols for the prevention and treatment of pressure ulcers
	Implement the protocol for the management of parapneumonic pleural effusion and empyema, as well as work with the instruments for drainage techniques of the same
	Apply the procedures for care and isolation of cases of pulmonary tuberculosis in the emergency department
	Establish nursing protocols for the care of patients with different types of urinary tract infections

Civil Liability Insurance

This institution's main concern is to guarantee the safety of the trainees and other collaborating agents involved in the internship process at the company. Among the measures dedicated to achieve this is the response to any incident that may occur during the entire teaching-learning process.

To this end, this educational entity undertakes to take out civil liability insurance to cover any eventuality that may arise during the internship during the stay at the internship center.

This liability policy for interns will have broad coverage and will be taken out prior to the start of the practical training period. That way professionals will not have to worry in case of having to face an unexpected situation and will be covered until the end of the internship program at the center.



General Conditions for Practical Training

The general terms and conditions of the internship program agreement shall be as follows:

1. TUTOR: During the Hybrid Master's Degree, students will be assigned with two tutors who will accompany them throughout the process, answering any doubts and questions that may arise. On the one hand, there will be a professional tutor belonging to the internship center who will have the purpose of guiding and supporting the student at all times. On the other hand, they will also be assigned with an academic tutor whose mission will be to coordinate and help the students during the whole process, solving doubts and facilitating everything they may need. In this way, the student will be accompanied and will be able to discuss any doubts that may arise, both clinical and academic.

2. DURATION: The internship program will have a duration of three continuous weeks, in 8-hour days, 5 days a week. The days of attendance and the schedule will be the responsibility of the center and the professional will be informed well in advance so that they can make the appropriate arrangements.

3. ABSENCE: If the students does not show up on the start date of the Hybrid Master's Degree, they will lose the right to it, without the possibility of reimbursement or change of dates. Absence for more than two days from the internship, without justification or a medical reason, will result in the professional's withdrawal from the internship, therefore, automatic termination of the internship. Any problems that may arise during the course of the internship must be urgently reported to the academic tutor.

4. CERTIFICATION: Professionals who pass the Hybrid Master's Degree will receive a certificate accrediting their stay at the center.

5. EMPLOYMENT RELATIONSHIP: the Hybrid Master's Degree shall not constitute an employment relationship of any kind.

6. PRIOR EDUCATION: Some centers may require a certificate of prior education for the Hybrid Master's Degree. In these cases, it will be necessary to submit it to the TECH internship department so that the assignment of the chosen center can be confirmed.

7. DOS NOT INCLUDE: The Hybrid Master's Degree will not include any element not described in the present conditions. Therefore, it does not include accommodation, transportation to the city where the internship takes place, visas or any other items not listed

However, students may consult with their academic tutor for any questions or recommendations in this regard. The academic tutor will provide the student with all the necessary information to facilitate the procedures in any case.

08

Where Can I Do the Clinical Internship?

TECH has selected a group of prestigious clinical centers so that the nurse can perform a high-level internship. Thus, the students will be able to work alongside highly experienced professionals and using the most advanced technological equipment for the care of patients with Infectious Diseases in the Emergency Department. All this will guarantee an immediate health update.



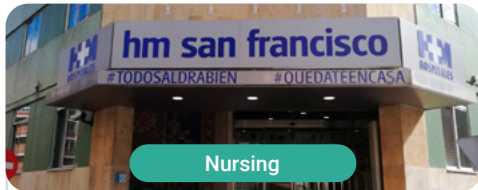
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Enroll and enjoy the opportunity of a practical and intensive internship in a prestigious clinical center thanks to TECH”

tech 52 | Where Can I Do the Clinical Internship?



Students will be able to take the practical part of this Hybrid Master's Degree in the following centers:



Nursing

Hospital HM San Francisco

Country	City
Spain	León

Address: C. Marqueses de San Isidro, 11,
24004, León

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

Related internship programs:

- Update in Anesthesiology and Resuscitation
- Nursing in the Traumatology Service





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Boost your career path with holistic teaching, allowing you to advance both theoretically and practically"

09

Methodology

This academic program offers students a different way of learning. Our methodology uses a cyclical learning approach: **Relearning**.

This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.



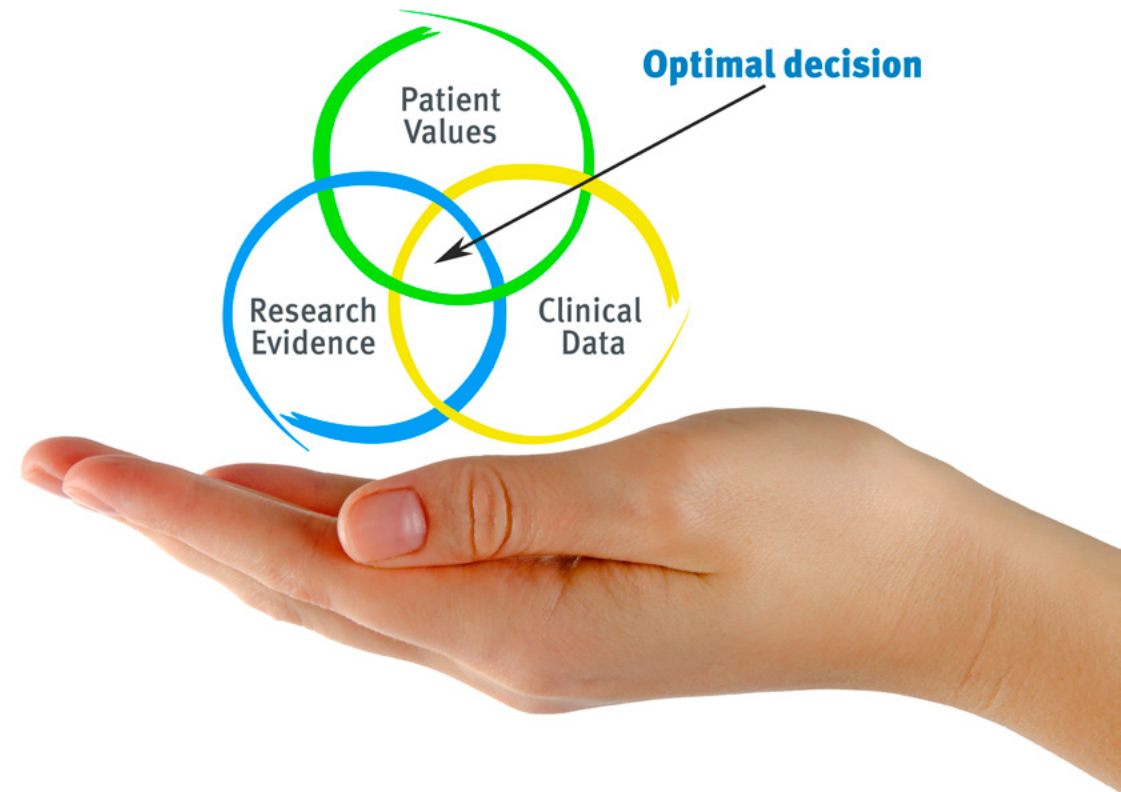
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Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"

At TECH Nursing School we use the Case Method

In a given situation, what should a professional do? Throughout the program, students will face multiple simulated clinical cases, based on real patients, in which they will have to do research, establish hypotheses, and ultimately resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method. Nurses learn better, faster, and more sustainably over time.

With TECH, nurses can experience a learning methodology that is shaking the foundations of traditional universities around the world.



According to Dr. Gérvas, the clinical case is the annotated presentation of a patient, or group of patients, which becomes a "case", an example or model that illustrates some peculiar clinical component, either because of its teaching power or because of its uniqueness or rarity. It is essential that the case is based on current professional life, in an attempt to recreate the real conditions in professional nursing practice.

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Did you know that this method was developed in 1912, at Harvard, for law students? The case method consisted of presenting students with real-life, complex situations for them to make decisions and justify their decisions on how to solve them. In 1924, Harvard adopted it as a standard teaching method”

The effectiveness of the method is justified by four fundamental achievements:

1. Nurses who follow this method not only grasp concepts, but also develop their mental capacity, by evaluating real situations and applying their knowledge.
2. The learning process has a clear focus on practical skills that allow the nursing professional to better integrate knowledge acquisition into the hospital setting or primary care.
3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
4. Students like to feel that the effort they put into their studies is worthwhile. This then translates into a greater interest in learning and more time dedicated to working on the course.



Relearning Methodology

At TECH we enhance the case method with the best 100% online teaching methodology available: Relearning.

This university is the first in the world to combine case studies with a 100% online learning system based on repetition combining a minimum of 8 different elements in each lesson, which is a real revolution compared to the simple study and analysis of cases.

The nurse will learn through real cases and by solving complex situations in simulated learning environments. These simulations are developed using state-of-the-art software to facilitate immersive learning.



At the forefront of world teaching, the Relearning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best online university (Columbia University).

With this methodology we have trained more than 175,000 nurses with unprecedented success in all specialities regardless of practical workload. Our pedagogical methodology is developed in a highly competitive environment, with a university student body with a strong socioeconomic profile and an average age of 43.5 years old.

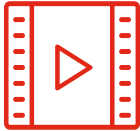
Relearning will allow you to learn with less effort and better performance, involving you more in your specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to success.

In our program, learning is not a linear process, but rather a spiral (learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

The overall score obtained by TECH's learning system is 8.01, according to the highest international standards.



This program offers the best educational material, prepared with professionals in mind:



Study Material

All teaching material is produced by the specialists who teach the course, specifically for the course, so that the teaching content is really specific and precise.

These contents are then applied to the audiovisual format, to create the TECH online working method. All this, with the latest techniques that offer high quality pieces in each and every one of the materials that are made available to the student.



Nursing Techniques and Procedures on Video

We introduce you to the latest techniques, to the latest educational advances, to the forefront of current medical techniques. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch them as many times as you want.



Interactive Summaries

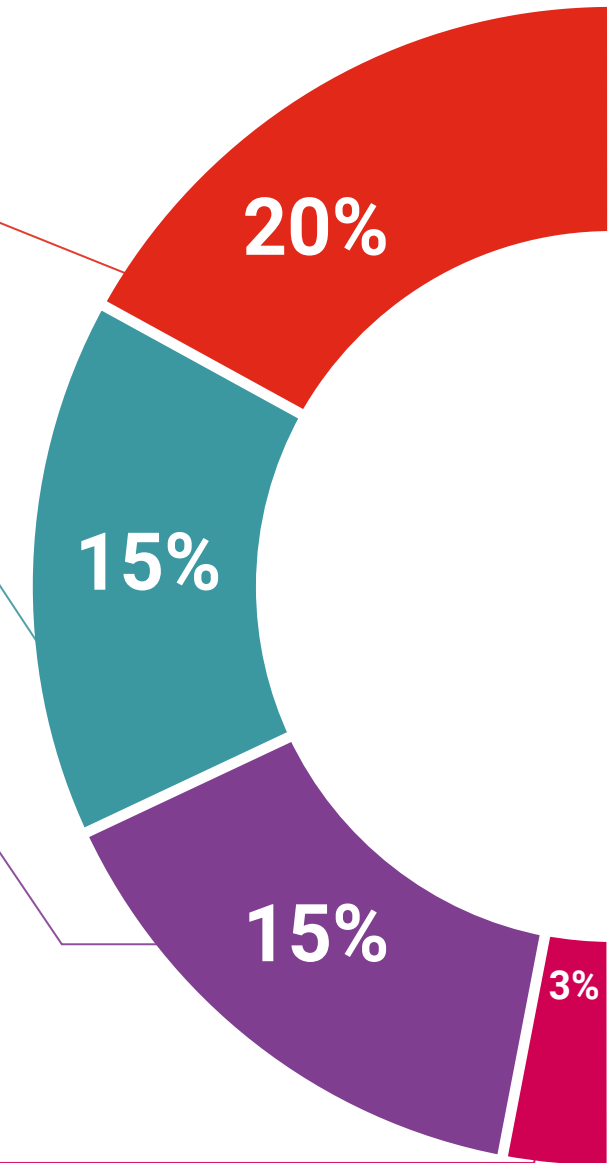
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

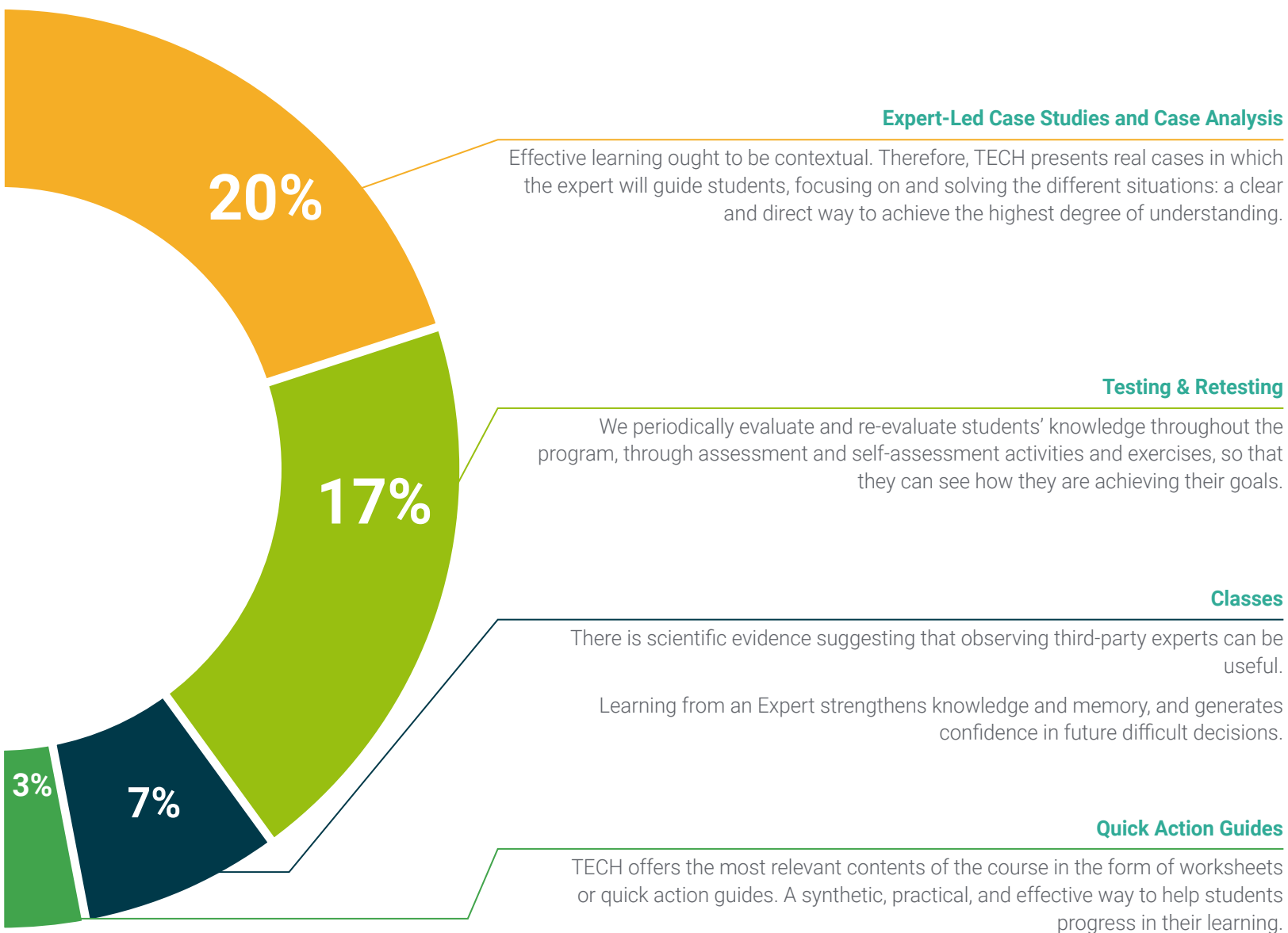
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



Additional Reading

Recent articles, consensus documents and international guidelines, among others. In TECH's virtual library, students will have access to everything they need to complete their course.





10 Certificate

The Hybrid Master's Degree in Infectious Diseases in the Emergency Department for Nursing guarantees students, in addition to the most rigorous and up-to-date education, access to a Master's Degree diploma issued by TECH Global University.



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Successfully complete this program and receive your university qualification without having to travel or fill out laborious paperwork"

This program will allow you to obtain your **Hybrid Master's Degree diploma in Infectious Diseases in the Emergency Department for Nursing** endorsed by **TECH Global University**, the world's largest online university.

TECH Global University is an official European University publicly recognized by the Government of Andorra ([official bulletin](#)). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

This **TECH Global University** title is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Hybrid Master's Degree in Infectious Diseases in the Emergency Department for Nursing**

Course Modality: **Hybrid (Online + Clinical Internship)**

Duration: **12 months**

Certificate: **TECH Global University**

Recognition: **60 + 5 ECTS Credits**





Hybrid Master's Degree
Infectious Diseases in the
Emergency Department
for Nursing

Modality: Hybrid (Online + Clinical Internship)

Duration: 12 months

Certificate: TECH Global University

60 + 5 ECTS Credits

Hybrid Master's Degree

Infectious Diseases in the Emergency
Department for Nursing

