

Postgraduate Certificate

The Operating Room and the Assisted Reproduction Laboratory for Nursing





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The Operating Room and the Assisted Reproduction Laboratory for Nursing

Course Modality: **Online**

Duration: **6 weeks**

Certificate: **TECH Technological University**

Official N° of hours: **150 h.**

Website: www.techtute.com/us/nursing/postgraduate-certificate/operating-room-assisted-reproduction-laboratory-nursing

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01

Introduction

Through this comprehensive program, nursing professionals will acquire all the skills they need to work efficiently in the Assisted Reproduction clinic and in the Assisted Reproduction Donor Bank environment. This program will provide you with the qualifications you need to compete among the best in today's job market.





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A high-intensity Postgraduate Certificate that prepares the nursing professional in all tasks related to the work in The Operating Room and the Assisted Reproduction Laboratory for Nursing”

This Postgraduate Certificate will review the areas of the surgical field and the necessary clothing in the operating room, focusing the study on the most important fields of work of nursing staff in the assisted reproduction unit. You will learn about follicular puncture, how oocyte extraction is performed and which are the most commonly used techniques. It will be explained how the nursing staff intervenes in the intraoperative and postoperative period of follicular puncture, what specific activities are performed and what are the recommended discharge instructions.

In addition, it will be developed how embryo transfer is performed and what are the nursing activities performed during this process. We will study in depth the methods that exist to obtain spermatozoa in patients with azoospermia and which are the most commonly used.

Finally, the techniques used in the operating room and types of treatment such as laparoscopy and hysteroscopy will be studied. The second part of the module will explain what an AR laboratory is like, its design and environmental conditions, discovering what treatments are performed in the different areas of the laboratory, and the equipment used on a daily basis. AR laboratories have to pass a series of quality controls, which require maximum cleanliness and hygiene, in order to ensure optimal conditions and achieve good results with patients.

And of course you will learn that in an AR clinic it has to be a teamwork between several disciplines, medicine, nursing and embryology, where communication and companionship are the priority.

This **Postgraduate Certificate in The Operating Room and the Assisted Reproduction Laboratory for Nursing** contains the most complete and up-to-date scientific program on the market. The most important features include:

- ◆ The latest technology in online teaching software
- ◆ A highly visual teaching system, supported by graphic and schematic contents that are easy to assimilate and understand
- ◆ Practical cases presented by practising experts
- ◆ State-of-the-art interactive video systems
- ◆ Teaching supported by telepractice
- ◆ Continuous updating and recycling systems
- ◆ Autonomous learning: full compatibility with other occupations
- ◆ Practical exercises for self-evaluation and learning verification
- ◆ Support groups and educational synergies: questions to the expert, debate and knowledge forums
- ◆ Communication with the teacher and individual reflection work
- ◆ Content that is accessible from any fixed or portable device with an Internet connection
- ◆ Complementary documentation banks permanently available, even after the Postgraduate Certificate



With this Postgraduate Certificate you will be able to balance a high-intensity educational program with your professional and personal life, achieving your goals in a simple and real way"

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Learn the intervention protocols and techniques in The Operating Room and the Assisted Reproduction Laboratory for Nursing, and act with the solvency of a high level nursing professional"

Our teaching staff is made up of professionals from different fields related to this specialty. In this way, TECH ensures that it delivers the targeted capacitive update it intends. A multidisciplinary staff, made up of educated and experienced professionals in different environments, who will develop the theoretical knowledge in an efficient way, but, above all, will put at the service of the Postgraduate Certificate the practical knowledge derived from their own experience: one of the differential qualities of this program.

This mastery of the subject is complemented by the effectiveness of the methodological design of this Postgraduate Certificate in The Operating Room and the Assisted Reproduction Laboratory for Nursing. Developed by a multidisciplinary team of experts, it integrates the latest advances in educational technology. In this way, you will be able to study with a range of comfortable and versatile multimedia tools that will give you the operability you need in your education.

The design of this program is based on Problem-Based Learning: an approach that conceives learning as a highly practical process. To achieve this remotely, TECH will use telepractice: with the help of an innovative interactive video system and Learning from an Expert, the student will be able to acquire the knowledge as if they were facing the scenario they are learning at that moment. A concept that will allow you to integrate and fix learning in a more realistic and permanent way.

The content of this Postgraduate Certificate is covered through the most developed educational methods in online teaching to guarantee that your efforts produce the best results possible.

Our innovative telepractice concept will give you the opportunity to learn through an immersive experience, which will provide you with a faster integration and a much more realistic view of the contents: "Learning from an expert".



02 Objectives

The objective of this program is to provide nursing professionals with the necessary knowledge and skills to perform their activity in the field of Assisted Reproduction. Through a study plan totally adapted to the student, this Postgraduate Certificate will progressively allow you to acquire the skills that will push you towards a much higher professional level.





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Become one of the most sought after professionals of the moment, with this Postgraduate Certificate in The Operating Room and the Assisted Reproduction Laboratory for Nursing"



General objectives

- ◆ Broaden specific knowledge of each of the fields of work in assisted reproduction
- ◆ Enable students to be interdependent and problem solvers
- ◆ Facilitate good performance of nursing professionals in order to provide the best care throughout the process



A boost to your professional profile that will give you the competitiveness of the best prepared professionals in the labor market"





Specific objectives

- ◆ Be able to perform all operating room nursing duties
- ◆ Act at the time of intervention: follicular puncture, embryo transfer, sperm collection in cases of azoospermia and other surgical interventions in the field of infertility
- ◆ Know all aspects of the laboratory in Assisted Reproduction: structure, conditions, etc.

03

Course Management

For our course to be of the highest quality, we are proud to work with a teaching staff of the highest level, chosen for their proven track record. Professionals from different areas and fields of expertise that make up a complete, multidisciplinary team. A unique opportunity to learn from the best.





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An impressive teaching staff, made up of professionals from different fields of expertise, will be your teachers during the program: a unique opportunity not to be missed”

Management



Ms. Agra Bao, Vanesa

- Operating room supervisor at EVA FERTILITY-DORSIA
- Degree in Nursing University of La Coruña
- Postgraduate Diploma in Legal Nursing. UNED
- Official Master's Degree in Occupational Risk Prevention. USP-CEU
- Master's Degree in Physical Activity and Health. Miguel de Cervantes University
- Instructor of Basic Life Support and DESA. SEMICYUC
- Postgraduate Diploma in Surgical Anesthesiology for Nursing. CEU Cardenal Herrera University
- Biosafety and Occupational Risk Prevention in Microbiology Laboratories. SEM
- The male in Assisted Reproduction EVA FERTILITY CLINICS
- Biosafety Laboratories and Research Animal Facilities with Biocontainment Level 3. SEGLA
- Nursing action in traumatic emergencies, poisoning and other urgent situations. DAE



Ms. Boyano Rodríguez, Beatriz

- Embryologist at Clínicas EVA, Madrid
- Postgraduate Diploma in Clinical Genetics, Universidad de Alcalá de Henares, Madrid
- Master's Degree in Assisted Human Reproduction Biotechnology, IVI and University of Valencia
- Postgraduate in Medical Genetics, University of Valencia, Spain
- Degree in Biology, Universidad de Salamanca
- Member of the Association for the Study of Reproductive Biology
- Member of the Spanish Association of Human Genetics



Professors

Ms. Fernández Rubio, Marta

- ◆ Diploma in Nursing. San Pablo CEU University
- ◆ Professional Master's Degree in Emergency and Intrahospital Critical Care. San Pablo CEU University
- ◆ More than 30 FUNDEN Postgraduate Certificate courses in nursing care
- ◆ Postgraduate Certificate in chronic wounds. Madrid Hospital
- ◆ Postgraduate Certificate in Umbilical Cord Stem Cells and Regenerative Medicine. Madrid Hospital

Ms. Fernández, Sara

- ◆ ICU, Hospitalization and Dialysis Ward. General surgery, specialties, internal medicine, oncology and Medical Surgical Day Hospital. HM Norte Sanchinarro
- ◆ Degree in Nursing. San Pablo CEU University
- ◆ Expert in the care of adult patients in life-threatening situations. CODEM
- ◆ Postgraduate Certificate in chronic wounds. Madrid Hospital
- ◆ Nursing guidance for emergency use of intravenous pharmaceutical products. LOGGOS
- ◆ More than twenty FUNDEN Postgraduate Certificate courses in nursing care

Ms. De Riva, María

- ◆ Embryologist. Laboratory management, orders, shipments, protocol development, database control, administrative tasks. EVA CLINICS
- ◆ Degree in Biological Sciences. Alcalá de Henares University
- ◆ Research work on gene expression in mouse embryos. Brussels Free University
- ◆ Assisted Reproduction Postgraduate basic degree: Alcalá de Henares Hospital
- ◆ Assisted Reproduction Advanced postgraduate course: Alcalá de Henares Hospital
- ◆ Master on Theoretical Basis and Laboratory Procedures of Assisted Reproduction. IVI

04

Structure and Content

The contents of this Postgraduate Certificate have been developed by the different experts who teach it, with a clear purpose: to ensure that our students acquire each and every one of the skills necessary to become true experts in this field.

A complete and well-structured program that will take you to the highest standards of quality and success.



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A program created and directed by professional experts in Assisted Reproduction that make this Postgraduate Certificate a unique opportunity for professional growth"

Module 1. The Operating Room and the Assisted Reproduction Laboratory

- 1.1. The Surgical Unit
 - 1.1.1. Surgical Area Zones
 - 1.1.2. Surgical Clothing
 - 1.1.3. The Role of Nurses in the Assisted Reproduction Unit
 - 1.1.4. Waste Management and Environmental Control
- 1.2. Follicular Puncture for Oocyte Collection
 - 1.2.1. Definition
 - 1.2.2. Features
 - 1.2.3. Procedure and Material Required
 - 1.2.4. Nursing Activities: Intraoperative
 - 1.2.5. Nursing Activities: Postoperative
 - 1.2.6. Discharge Recommendations
 - 1.2.7. Complications
- 1.3. Embryo Transfer
 - 1.3.1. Definition
 - 1.3.2. Features
 - 1.3.3. Procedure and Material Required
 - 1.3.4. Endometrial Preparation: Estrogens and Progesterone
 - 1.3.5. Nursing Role during Embryo Transfer
 - 1.3.6. Nursing Role after Embryo Transfer
 - 1.3.7. Discharge Instructions
 - 1.3.8. Complications
- 1.4. Sperm Collection in Patients with Azoospermia (Testicular Biopsy)
 - 1.4.1. Sperm Introduction and Recovery
 - 1.4.2. Methods
 - 1.4.2.1. MESA
 - 1.4.2.2. PESA
 - 1.4.2.3. TESE
 - 1.4.2.4. TESE
 - 1.4.2.5. TEFNA
 - 1.4.3. Conclusion
- 1.5. Surgical Treatments for Infertility
 - 1.5.1. Laparoscopy in Infertility
 - 1.5.1.1. Objectives
 - 1.5.1.2. Techniques and Instrumentation
 - 1.5.1.3. Indications
 - 1.5.2. Hysteroscopy
 - 1.5.2.1. Introduction
 - 1.5.2.2. Diagnostic Techniques
 - 1.5.2.3. Hysteroscopic Distention Devices
 - 1.5.2.4. Operative Technique
- 1.6. The Laboratory as a Clean Room: Definition
- 1.7. Laboratory Structure
 - 1.7.1. Andrology Laboratory
 - 1.7.2. Embryology Laboratory
 - 1.7.3. Cryobiology Laboratory
 - 1.7.4. PGD Laboratory



- 1.8. Laboratory Conditions
 - 1.8.1. Design
 - 1.8.2. Pressure
 - 1.8.3. Gas Control (CO₂, O₂, N₂)
 - 1.8.4. Temperature Control
 - 1.8.5. Air Control (VOCs)
 - 1.8.6. Lighting
- 1.9. Cleaning, Maintenance and Safety
 - 1.9.1. Personnel Clothing and Hygiene
 - 1.9.2. Laboratory Cleaning
 - 1.9.3. Biosecurity
 - 1.9.4. Quality Control
- 1.10. Laboratory Equipment
 - 1.10.1. Bells
 - 1.10.2. Incubators
 - 1.10.3. Microinjectors
 - 1.10.4. Refrigerators
 - 1.10.5. Nitrogen Tanks
 - 1.10.6. Time-Lapse Equipment
 - 1.10.7. Control of Equipment, Breakdowns and Repairs
- 1.11. Laboratory Working Times

“ A comprehensive teaching program, structured in well-developed teaching units, oriented towards learning that is compatible with your personal and professional life”

05

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.





Expert-Led Case Studies and Case Analysis

Effective learning ought to be contextual. Therefore, TECH presents real cases in which the expert will guide students, focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.



Testing & Retesting

We periodically evaluate and re-evaluate students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are achieving their goals.



Classes

There is scientific evidence suggesting that observing third-party experts can be useful.

Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.



Quick Action Guides

TECH offers the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help students progress in their learning.



06

Certificate

The Postgraduate Certificate in The Operating Room and the Assisted Reproduction Laboratory for Nursing guarantees you, in addition to the most rigorous and up-to-date training, access to a Postgraduate Certificate issued by TECH Technological University.





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*Successfully complete this program
and receive your university degree
without travel or laborious paperwork”*

This **Postgraduate Certificate in The Operating Room and the Assisted Reproduction Laboratory for Nursing** contains the most complete and up-to-date scientific program on the market.

After the student has passed the assessments, they will receive their corresponding **Postgraduate Certificate** issued by **TECH Technological University** via tracked delivery*.

The diploma issued by **TECH Technological University** will reflect the qualification obtained in the Postgraduate Certificate, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees.

Title: **Postgraduate Certificate in The Operating Room and the Assisted Reproduction Laboratory for Nurses**

Official N° of hours: **150 h.**



*Apostille Convention. In the event that the student wishes to have their paper diploma issued with an apostille, TECH EDUCATION will make the necessary arrangements to obtain it, at an additional cost.

future
health confidence people
education information tutors
guarantee accreditation teaching
institutions technology learning
community commitment
personalized service innovation
knowledge present
development languages
virtual classroom



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