

# Postgraduate Certificate

## Animal Welfare in Livestock Establishments. Swine, Beef Cattle and Poultry





## Postgraduate Certificate Animal Welfare in Livestock Establishments. Swine, Beef Cattle and Poultry

- » Modality: online
- » Duration: 12 weeks
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtute.com/in/veterinary-medicine/postgraduate-certificate/animal-welfare-livestock-establishments-swine-beef-cattle-poultry](http://www.techtute.com/in/veterinary-medicine/postgraduate-certificate/animal-welfare-livestock-establishments-swine-beef-cattle-poultry)

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# 01

# Introduction

There has been an increase of late in society's requirements regarding animal welfare for all livestock production, making it necessary to update new guidelines in the livestock sector.

This program addresses the main animal welfare problems in the main species of livestock production, which are highly intensified production systems.





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*A complete and total update on animal welfare with the most complete and effective online program on the market”*

The Postgraduate Certificate in Animal Welfare in Livestock Establishments. Swine, Beef Cattle and Poultry is a new and up-to-date program that arises from the growing demand among veterinary professionals for specialized knowledge in animal welfare to minimize animal suffering, since, nowadays, consumers demand not only healthier and safer food, but also food obtained through practices that ensure animal protection and welfare.

It addresses the concept of Animal Welfare, its evolution and applied ethology, one of the main welfare problems in all animal facilities.

It also covers animal ethics or bioethics as a differentiating element with respect to other similar training courses. Since this topic is usually included in philosophy programs, it is usually addressed very superficially in health sciences. This highly relevant ethical aspect today will be extensively discussed in depth throughout this Postgraduate Certificate in Animal Welfare in Livestock Establishments. Swine, Beef Cattle and Poultry.

The program will help veterinary professionals acquire specialized and up-to-date knowledge in the field of animal welfare, which is increasingly in demand in society, as conflicts between animal advocates and food producers are the order of the day.

The **Postgraduate Certificate in Animal Welfare in Livestock Establishments. Swine, Beef Cattle and Poultry** 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 available from any fixed or portable device with an Internet connection
- ◆ Supplementary documentation databases are permanently available, even after finishing the course



*Join the elite, with this highly effective program and open new paths to help you advance in your professional progress"*

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*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”*

Our teaching staff is made up of professionals from different fields related to this specialty. That way we are sure to offer the training update we intend to provide. A multidisciplinary team of professionals trained and experienced in different environments, who will efficiently impart the theoretical knowledge, but above all, who will bring the practical knowledge from their own experience to the course: one of the differential qualities of this program.

The efficiency of the methodological design of this Postgraduate Certificate enhances the student's understanding of the subject. Developed by a multidisciplinary team of e-learning experts, it integrates the latest advances in educational technology. 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 training.

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, we will use telepractice learning: with the help of an innovative interactive video system, and learning from an expert, you will be able to acquire the knowledge as if you were actually dealing with the scenario you are learning about. A concept that will allow you to integrate and fix learning in a more realistic and permanent way.

*With a methodological design based on proven teaching techniques, this innovative program will take you through different teaching approaches to allow you to learn in a dynamic and effective way.*

*A complete training program that will allow you to acquire the most advanced knowledge in all the areas of intervention of a specialized veterinarian.*



# 02 Objectives

Our objective is to train highly qualified professionals for the working An objective that is complemented, moreover, in a global manner, by promoting human development that lays the foundations for a better society. This objective is materialized in helping professionals to reach a much higher level of competence and control. A goal that, in just a few months, you will be able to achieve, with a high intensity and effective training program.







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*If your goal is to broaden your skill set to include new paths of success and development, this is your Professional Master's Degree: A training program that aspires to excellence”*



## General Objectives

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- Analyze the concept of animal welfare
- Examine human involvement in animal welfare
- Establish animal welfare assessment systems
- Analyze and compile all information regarding welfare on pig farms
- Identify animal welfare issues in dairy and beef cattle production
- Examine poultry establishments for both egg and meat production from an animal welfare standpoint



*A path to achieve training and professional growth that will propel you towards a greater level of competitiveness in the employment market”*





## Specific Objectives

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- ◆ Examine the concept of animal welfare in all its implications
- ◆ Analyze the physiological stress response in animals and its quantification
- ◆ Develop the concepts of stress and acute and chronic stress responses
- ◆ Fundamentalize the concepts of "eustress" and "distress"
- ◆ Determine the animal welfare implications in this stress response
- ◆ Develop the concept of freedoms and needs to understand animal welfare
- ◆ Examine the concept of animal welfare assessment
- ◆ Specify current animal welfare assessment systems
- ◆ Analyze welfare problems in swine breeding establishments
- ◆ Examine welfare problems in the management of sows and piglets during lactation and rearing
- ◆ Analyze welfare during the fattening of pigs
- ◆ Examine cattle facilities from a welfare standpoint
- ◆ Determine welfare in dairy cattle facilities and during calf fattening
- ◆ Analyze welfare in laying hen establishments and in broiler establishments

03

# Course Management

Within the concept of total quality of our program, we are proud to put at your disposal a Teaching Staff of the highest level, chosen for their proven experience. 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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*Our teaching team will help you  
achieve professional success”*

## Management



### Dr. De la Fuente Vázquez, Jesús

- ♦ Doctor in Veterinary Medicine, Complutense University, Madrid, 2003
- ♦ Master's Degree in Science in Pig Production, Aberdeen University, 1998
- ♦ Graduated in Veterinary Medicine, Complutense University, Madrid, 1997
- ♦ Assistant Professor in the Department of Animal Production, Faculty of Veterinary Medicine, UCM, since 2005
- ♦ Collaboration grant holder in teaching and research tasks, Department of Animal Production, Faculty of Veterinary Medicine, UCM, 1997
- ♦ European Social Fund predoctoral training fellow, Department of Agriculture, University of Aberdeen, 1998
- ♦ FPU predoctoral training grant, Universidad Complutense de Madrid, 1999-2002
- ♦ Three-month stay in the Department of Animal Science, Texas A&M University, 2001
- ♦ Contract Researcher in the Department of Food Technology, National Institute of Agricultural and Food Research and Technology, INIA, 2004
- ♦ Participation as a collaborating professor in more than 40 national and international courses on animal welfare
- ♦ Participated in more of 35 research articles in journals indexed in the Journal Citation Report
- ♦ Participation in more than 14 publicly and privately funded research projects
- ♦ Participation in ten book chapters and complete books
- ♦ Contribution in more than 60 communications to national and international congresses

## Professors

### Dr. Cabezas Albéniz, Almudena

- ♦ Doctor in Veterinary Medicine, Madrid Complutense University, 2017
- ♦ Master's Degree in Veterinary Science Research, Complutense University of Madrid, 2012
- ♦ Technical Agricultural Engineer, University School of Agricultural Engineering, Polytechnic University of Madrid, 2010
- ♦ Assistant Professor in the Department of Animal Production, Faculty of Veterinary Medicine, UCM, since 2016

### Dr. González de Chavarri Echaniz, Elisabeth

- ♦ Doctor in Veterinary Medicine, Madrid Complutense University, 1991
- ♦ Graduated in Veterinary Medicine, Complutense University of Madrid, 1987
- ♦ Assistant Professor in the Department of Animal Production, Faculty of Veterinary Medicine, UCM, since 2004

### Dr. Díaz Díaz-Chirón, María Teresa

- ♦ Doctor in Veterinary Medicine, Madrid Complutense University, 2002
- ♦ Graduated in Veterinary Medicine, Complutense University of Madrid, 1997
- ♦ Assistant Professor in the Department of Animal Production, Faculty of Veterinary Medicine, UCM, 2019-2020



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

# 04

# Structure and Content

The contents have been developed by different experts, 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 comprehensive teaching program,  
structured in well-developed teaching units,  
oriented towards learning that is compatible  
with your personal and professional life"*

## Module 1. Animal Welfare. Concepts and Evolution

- 1.1. Evolution of the Concept of Animal Welfare, from Antiquity to Present Day
  - 1.1.1. Animal Welfare in Antiquity
  - 1.1.2. Introduction to the Concept of Welfare
  - 1.1.3. Animal Welfare Today
- 1.2. Vision of the Concept of Animal Welfare from Different Cultures
  - 1.2.1. Buddhism
  - 1.2.2. Catholicism
  - 1.2.3. Islam
  - 1.2.4. Judaism
  - 1.2.5. Orthodox Church
  - 1.2.6. Protestantism
- 1.3. Concept of Animal Welfare, Approaches to Understanding It
  - 1.3.1. Definitions of Animal Welfare
  - 1.3.2. Emotion-Based Approach
  - 1.3.3. Function-Based Approach
  - 1.3.4. Ethology-Based Approach
- 1.4. Physiological Responses to Stress
  - 1.4.1. Hypothalamus-Pituitary-Adrenal-Glands Axis
- 1.5. Acute and Chronic Stress Response
  - 1.5.1. Physiological Responses to Chronic Stress
  - 1.5.2. Physiological Responses to Acute Stress
- 1.6. Concepts of "Eustress" and "Distress"
  - 1.6.1. Eustress: Optimal Stress
  - 1.6.2. Distress: Negative Stress
- 1.7. The Role of Stress Response in Welfare
- 1.8. Freedoms and Needs
  - 1.8.1. Concept of Freedoms
  - 1.8.2. The Role of Freedoms in Animal Welfare
  - 1.8.3. Concept of Needs



- 1.9. Animal Welfare Assessment Systems
  - 1.9.1. Direct Indicators
  - 1.9.2. Indirect Indicators
- 1.10. Developing Animal Welfare Assessment Protocols
  - 1.10.1. TGI 35 L
  - 1.10.2. WelfareQuality ®
  - 1.10.3. AWIN (Animal Welfare Indicators)

## Module 2. Livestock Establishments. Welfare in Swine, Beef Cattle and Poultry

- 2.1. Welfare in Swine Establishments: Facilities and Equipment
  - 2.1.1. Accommodation
  - 2.1.2. Environmental Needs
  - 2.1.3. Management
- 2.2. Breeding Swine Welfare
  - 2.2.1. Breeding Sow Welfare
  - 2.2.2. Boar Welfare
- 2.3. Welfare in Swine Breeding
  - 2.3.1. Nursing
  - 2.3.2. Transition
- 2.4. Welfare in Fattening Pigs
  - 2.4.1. Accommodation and Facilities
  - 2.4.2. Management
- 2.5. Welfare in Beef Cattle Establishments: Facilities and Equipment
  - 2.5.1. Accommodation
  - 2.5.2. Environmental Needs
  - 2.5.3. Management
- 2.6. Dairy Cow Welfare
  - 2.6.1. Cow Comfort
- 2.7. Calf Welfare
  - 2.7.1. Accommodation and Facilities
  - 2.7.2. Management

- 2.8. Welfare in Poultry Establishments: Facilities and Equipment
  - 2.8.1. Accommodation
  - 2.8.2. Environmental Needs
  - 2.8.3. Management
- 2.9. Laying Hen Welfare
  - 2.9.1. Alternative Egg Production Systems
- 2.10. Welfare in Broiler Fattening
  - 2.10.1. Accommodation and Facilities
  - 2.10.2. Management



*This program will allow you to  
advance in your career comfortably"*

# 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, we use the Case Method

What should a professional do in a given situation? Throughout the program you will be presented with multiple simulated clinical cases based on real patients, where you will have to investigate, establish hypotheses and, finally, resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method. Specialists learn better, faster, and more sustainably over time.

*With TECH you will experience a way of learning 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 actual conditions in a veterinarian's professional 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. Veterinarians who follow this method not only manage to assimilate concepts, but also develop their mental capacity through exercises to evaluate real situations and knowledge application
2. Learning is solidly translated into practical skills that allow the student to better integrate into the real world.
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 program.



## Relearning Methodology

TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines 8 different teaching elements in each lesson.

We enhance the Case Study with the best 100% online teaching method: Relearning.

*Veterinarians will learn through real cases and by resolving 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 more than 65,000 veterinarians have been trained with unprecedented success in all clinical specialties, regardless of the surgical load. Our teaching method is developed in a highly demanding environment, where the students have a high socio-economic profile and an average age of 43.5 years.

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



### Latest Techniques and Procedures on Video

TECH introduces students to the latest techniques, the latest educational advances and to the forefront of current and procedures of veterinary 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 the videos as many times as you like.



### 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 Animal Welfare in Livestock Establishments. Swine, Beef Cattle and Poultry guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological University.



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

The **Postgraduate Certificate in Animal Welfare in Livestock Establishments. Swine, Beef Cattle and Poultry** contains the most complete and up-to-date 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 certificate 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 Animal Welfare in Livestock Establishments. Swine, Beef Cattle and Poultry**

Official N° of hours: **300 h.**



\*Apostille Convention. In the event that the student wishes to have their paper certificate 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 language  
virtual classroom



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