

# Postgraduate Certificate

## Clinical Criteria for Avian Patients





## Postgraduate Certificate Clinical Criteria for Avian Patients

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

Website: [www.techtitute.com/us/veterinary-medicine/postgraduate-certificate/clinical-criteria-avian-patients](http://www.techtitute.com/us/veterinary-medicine/postgraduate-certificate/clinical-criteria-avian-patients)

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# 01

# Introduction

Veterinarians face multiple challenges in their practice every day, and when it comes to caring for birds, the challenge is even greater. In this case, TECH has designed a very complete program on clinical criteria in avian patients with the objective of offering students updated training in the treatment of these animals.





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*We offer you a complete training in the field of avian medicine so you can obtain greater benefits to your patient care”*



One of the main attractions of working with birds is the fascinating diversity of patients treated. Each of them represents a challenge, such as treating a parrot with sinusitis or a nymph for chronic egg retention. However, before treating these unique species, one must specialize in the essentials: the internal structure and function of birds.

The ability to fly has made it possible for birds to occupy a wide diversity of habitats, consequently developing numerous adaptations to obtain sustenance. This characteristic has resulted in almost 10,000 species in the taxonomic classification of birds. This program covers interspecies variations, avian anatomy and physiology.

Thus, physical examination is a fundamental part in diagnosing avian disorders and it involves handling and holding the bird in order to carry out the necessary explorations to care for it. However, even before taking a bird for handling, information on the patient must be gathered beforehand by means of an anamnesis as complete as possible.

This program develops all the necessary requirements to reach proper diagnoses and treatments for avian patients. It also includes all the necessary requirements to provide a suitable home for birds kept in captivity. Postgraduate Diploma also deals in depth with captive birds depend on the care provided to them for food, shelter and security, hence the importance of program to This understanding the nutritional requirements of each species, existing types of nutrition and developing the appropriate diets for each of them.

In short, this training provides students with specific tools and skills to successfully conduct professional practice in the wide field of avian medicine and surgery. It addresses key competencies such as knowledge of the reality and daily practice of veterinary professionals, and develops responsibility in the monitoring and supervision of their work, as well as communication skills within the essential teamwork.

As it is an online program, students will not be bound by fixed schedules or the need to move to another physical location, but rather, they can access the content at any time of the day, balancing their professional or personal life with their academic life.

This **Postgraduate Certificate in Clinical Criteria for Avian Patients** contains the most complete and up-to-date educational program the market. The most important features include:

- ♦ Practical cases presented by experts in avian medicine
- ♦ The graphic, schematic, and eminently practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice
- ♦ Latest developments avian patient care
- ♦ Practical exercises where the self-assessment process can be used to improve learning.
- ♦ Special emphasis on innovative methodologies in avian medicine
- ♦ 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



*Do not miss the opportunity to study this program with us. It's the perfect opportunity to advance your career"*

“

*This Postgraduate Diploma is the best investment you can make when choosing a refresher program to expand your existing knowledge of the subject matter”*

Its teaching staff includes professionals belonging to the veterinary field, who contribute their expertise to this training, as well as renowned specialists from leading societies and prestigious universities.

The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide immersive training courses programmed to train in real situations.

This program is designed around Problem-Based Learning, whereby the specialist must try to solve the different professional practice situations that arise during the academic year. For this, the professional will have the help of an innovative interactive video system made by recognized experts in patient Medicine, and with great experience.

*This training comes with the best didactic material, providing you with a contextual approach that will facilitate your learning.*

*This 100% online program's degree will allow you to combine your studies with your professional work while increasing your knowledge in this field.*



# 02 Objectives

The Postgraduate Certificate in Clinical Criteria for Avian Patients is designed to facilitate professional veterinary practice with the latest advances and most innovative procedures in the sector.







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*This is the best option to learn about the latest advances in bird medicine and surgery”*



## General Objectives

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- Identify the differences between birds and mammals
- Ascertain the most characteristic property in avian patients: capacity for flight
- Analyze variations between species based on avian anatomy and physiology
- Specify key anatomical points to select diagnostic techniques
- Establish the necessary requirements for keeping birds in captivity
- Examine the key criteria for health, welfare and success in avian
- Determine nutritional guidelines and specific diets for birds
- Generate guidelines for all birds, including birds of prey and others less clinically studied species such as pigeons



*Join one of the largest online universities in the world"*





## Specific Objectives

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- ◆ Substantiate the taxonomic classification according to each order
- ◆ Examine the skeletal system, anatomical memory of each location
- ◆ Identify the common breeds of chickens and hens kept as pets
- ◆ Evaluate blood composition and the circulatory system
- ◆ Develop the basis of respiratory functioning to advance knowledge of anesthesia and emergency treatment
- ◆ Compile all current information on the anatomy and physiology of the digestive system
- ◆ Detail the forgotten areas of the sense organs and their fundamental implication in patient recovery
- ◆ Collect all the information on the lymphoid organs, especially the characteristic bursa of Fabricius and other glands of interest
- ◆ Propose the challenges of keeping poultry and other avian species
- ◆ Examine the difficulty of bird scouting
- ◆ Determine the requirements for keeping birds in captivity
- ◆ Analyze the most relevant clinical characteristics and their importance in physical examination to reach appropriate diagnoses and treatments
- ◆ Develop specialized knowledge on capture and adequate containment of avian patients
- ◆ Establish the main routes of drug administration
- ◆ Exhaustively analyze the nutritional requirements, types of nutrition and elaborate diets for each species kept in captivity

03

# Course Management

The program's teaching staff includes leading experts in Avian Medicine and Surgery, who contribute their vast work experience to this training program. Professionals of recognized prestige have joined forces to offer you this high-level training.







“

*Our teaching team will help you achieve professional success”*

## Management



### Ms. Trigo García, María Soledad

- ♦ Veterinarian in charge of the Internal Medicine and Exotic Animal Surgery Service at the Clinical Veterinary Hospital of the Alfonso X El Sabio University in Madrid
- ♦ Degree in Veterinary Medicine from the Alfonso X el Sabio University (2012)
- ♦ Postgraduate degree in General Practitioner Certificate Programme in Exotic Animals, Improve International
- ♦ Postgraduate degree in Food Safety from the Complutense University of Madrid
- ♦ Veterinary consultant at the José Peña Wildlife Center, and various veterinary clinics in Madrid
- ♦ Director of the Exotic Animal Service at the Prado BOADILLA veterinarian center





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# Structure and Content

The content structure has been designed by the best professionals in the Exotic Animal Medicine and Surgery sector, with extensive experience and recognized prestige in the profession, backed by the volume of cases reviewed, studied, and diagnosed, and with extensive knowledge of new technologies applied to veterinary studies.







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*We have the most complete and up-to-date academic program in the market. We strive for excellence and for you to achieve it too”*

## Module 1. Avian Taxonomy, Anatomy and Physiology

- 1.1. Taxonomic Classification of Psittaciformes
  - 1.1.1. Taxonomic Classification
  - 1.1.2. Global Spread
  - 1.1.3. Anatomic Differences
- 1.2. Taxonomic Classification of Passerine Birds: Wild Birds
  - 1.2.1. Taxonomic Classification
  - 1.2.2. Global Spread
  - 1.2.3. Anatomic Differences
- 1.3. Taxonomic Classification of Falconiformes and Other Orders
  - 1.3.1. Taxonomic Classification
  - 1.3.2. Global Spread
  - 1.3.3. Anatomic Differences
- 1.4. The Skeletal System
  - 1.4.1. Bone Ossification
  - 1.4.2. The Skull
    - 1.4.2.1. The Premaxillary Area
    - 1.4.2.2. The Jaw
  - 1.4.3. The Axillary Skeleton: The Epiaxial Hypoaxial Muscles
    - 1.4.3.1. Cervical Vertebrae
    - 1.4.3.2. Thoracic Vertebrae
    - 1.4.3.3. The Synsacrum: Special Anatomy
    - 1.4.3.4. Caudal Vertebrae
    - 1.4.3.5. Sternum
    - 1.4.3.6. Wings: Complete Anatomy and Flight Muscles
  - 1.4.4. Pelvic Limbs
    - 1.4.4.1. Femur and Tibiotarsus
    - 1.4.4.2. Phalanges: Finger Placement in Different Species
- 1.5. The Circulatory System
  - 1.5.1. Arterial Anatomy
  - 1.5.2. Venous Return
  - 1.5.3. The Renal Carrier System
  - 1.5.4. Blood Composition: Nucleated Red Blood Cells
- 1.6. The Respiratory System
  - 1.6.1. The Nasal Cavity
  - 1.6.2. Larynx and Trachea
  - 1.6.3. The Syrinx: The Phonatory Organ in Birds
  - 1.6.4. The Lungs
    - 1.6.4.1. Gas Exchange
  - 1.6.5. Air Sacs
- 1.7. The Digestive System
  - 1.7.1. Beaks: Substitute for Lips and Teeth in Mammals
    - 1.7.1.1. Wax Localization
    - 1.7.1.2. Beak Functions
  - 1.7.2. The Oropharynx
    - 1.7.2.1. Solid Food Intake
    - 1.7.2.2. Liquid Foods
  - 1.7.3. The Esophagus
  - 1.7.4. The Stomach
    - 1.7.4.1. Proventricles
    - 1.7.4.2. Ventricles
  - 1.7.5. The Liver
  - 1.7.6. The Pancreas
  - 1.7.7. The Intestinal Package
- 1.8. The Urinary and Reproductive Systems
  - 1.8.1. The Kidneys
  - 1.8.2. The Ureters
  - 1.8.3. Particularities in the Urinary System: The Salt Gland
  - 1.8.4. Bird Sexing
  - 1.8.5. Male Reproductive System
  - 1.8.6. Female Reproductive System
- 1.9. The Nervous System
  - 1.9.1. Sense Organs
  - 1.9.2. Sight: Avian Eye Anatomy
  - 1.9.3. Hearing
  - 1.9.4. Smell and Taste
  - 1.9.5. Touch: The Tegument



- 1.10. Anatomical and Physiological Particularities in Birds
  - 1.10.1. The Thymus Gland
  - 1.10.2. The Fabricious Bursa
  - 1.10.3. The Spleen
  - 1.10.4. The Pituitary Gland Hypophysis
  - 1.10.5. Thyroid and Parathyroid Gland
  - 1.10.6. Other Particularities

## Module 2. Clinical Criteria for Avian Patients

- 2.1. Bird Maintenance
  - 2.1.1. Special Furniture: Types of Cages
  - 2.1.2. Stress
  - 2.1.3. Physical Exercise
  - 2.1.4. Bird Maintenance in Captivity
  - 2.1.5. Ultraviolet Light
  - 2.1.6. Feathers Coloring
  - 2.1.7. Water Availability
  - 2.1.8. Medication Added to the Water
  - 2.1.9. Water Baths and Sprays
- 2.2. Capture: Proper Physical Examination
  - 2.2.1. Physical Capture
    - 2.2.1.1. Capture Techniques
    - 2.2.1.2. Related Injuries
  - 2.2.2. Chemical Capture
    - 2.2.2.1. Capture Techniques
    - 2.2.2.2. Drugs Used
  - 2.2.3. Bird Containment
- 2.3. Clinical Management and Preventive Medicine
  - 2.3.1. Complete and Orderly Physical Examination
  - 2.3.2. Vaccination
  - 2.3.3. Deworming
  - 2.3.4. Sterilization



- 2.4. Sampling and Drug Administration
  - 2.4.1. Intravenous Route
  - 2.4.2. Intraosseous Route
  - 2.4.3. Oral Posology
  - 2.4.4. Intramuscular Route
  - 2.4.5. Subcutaneous Route
  - 2.4.6. Topical Route
  - 2.4.7. Other Entry Routes in Avian Patients
- 2.5. Poultry as Patients
  - 2.5.1. The Challenges of Keeping Hens as Pets
  - 2.5.2. Hens as Patients
  - 2.5.3. The Most Common Chicken and Hen Races
- 2.6. Nutritional Requirements: Diet
  - 2.6.1. Feeding Guidelines
  - 2.6.2. Nutritional Composition Feed
    - 2.6.2.1. Carbohydrates
    - 2.6.2.2. Proteins
    - 2.6.2.3. Fats
    - 2.6.2.4. Vitamins.
      - 2.6.2.4.1. Liposoluble Vitamins
      - 2.6.2.4.2. Hydrosoluble Vitamins
      - 2.6.2.4.3. Antivitamins
    - 2.6.2.5. Minerals
- 2.7. Type of Nutrition in Psittacine Birds
  - 2.7.1. Seed Mixture
  - 2.7.2. Feed
    - 2.7.2.1. Differences Between Granulated and Extruded
  - 2.7.3. Fruits and Vegetables
  - 2.7.4. Germinated Seeds
  - 2.7.5. Cooked Legumes
  - 2.7.6. Breeding Paste
    - 2.7.6.1. Desired Undesired Effects
  - 2.7.7. Other Products





- 2.7.8. Calculating Energy Needs
  - 2.7.8.1. Basal Metabolic Rate (BMR)
  - 2.7.8.2. Maintenance Energy Requirements (MER)
- 2.8. Generalized Diet for the Most Common Psittacines in Clinics
  - 2.8.1. Australian Parakeet (*Melopsittacus Undulattus*)
  - 2.8.2. Nymph, Cocotilla or Carolina (*Nymphicus Hollandicus*)
  - 2.8.3. Lovebirds (*Agapornis Spp*)
  - 2.8.4. African Grey Parrot, Yaco (*Psithacus Erithacus*)
- 2.9. Generalized Diet for the Least Common Psittacines in Clinics
  - 2.9.1. Amazon Parrot (*Amazona Sp*)
  - 2.9.2. Macaw (*Ara Sp*)
  - 2.9.3. Cockatoo (*Cacatua Sp*)
  - 2.9.4. Eclectus Parrot (*Eclectus Roratus*)
  - 2.9.5. Loris
  - 2.9.6. Psittacine Diet Conversion
- 2.10. Other Dietary Aspects
  - 2.10.1. Diet in Passerine Birds
  - 2.10.2. Diet in Other Birds
  - 2.10.3. Diet in Hospitalized Patients



*This training 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. The feeling that the effort invested is effective becomes a very important motivation for veterinarians, which translates into a greater interest in learning and an increase in the 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 the study of clinical cases with a 100% online learning system based on repetition, combining a minimum of 8 different elements in each lesson, a real revolution with respect to the mere study and analysis of cases.



*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.

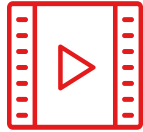
*Relearning will allow you to learn with less effort and better performance, involving you more in your training, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation for success.*

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 Clinical Criteria for Avian Patients 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"*

This **Postgraduate Certificate in Clinical Criteria for Avian Patients** 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 Clinical Criteria for Avian Patients**

Official Number of Hours: **300 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 language  
virtual classroom



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