Postgraduate Certificate
Diagnostic Techniques in Avian Patients

tec**h** global university

tech global university

Postgraduate Certificate
Diagnostic Techniques in Avian Patients

- » Modality: **online**
- » Duration: **12 weeks**
- » Certificate: **TECH Global University**
- » Credits: **12 ECTS**
- » Schedule: **at your own pace**
- » Exams: **online**

Website: **www.techtitute.com/us/veterinary-medicine/postgraduate-certificate/diagnostic-techniques-avian-patients**

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01
Introduction

Avian medicine has experienced great advances in recent years with the emergence of new diagnostic techniques that favor the detection of different diseases and, therefore, an improvement in the health of patients. In this TECH program, we wanted to bring together the most relevant information in the field so students can specialize in a sector of remarkable growth.

Our comprehensive study will allow you to practice in the field of veterinary medicine by treating sick birds and reaching early diagnoses to improve their health"

This Postgraduate Certificate focuses on veterinarian work in reaching a diagnosis based on scientific evidence, while optimizing economic resources and the time spent to reach early treatment. In routine clinical practice, complementary diagnostic techniques are usually used, many of them based on image diagnosis, such as radiology, endoscopy and ultrasound, without going further into the rest of the diagnoses available and necessary tests.

Thanks to this Postgraduate Certificate, students will receive the fullest training in all laboratory diagnostic tests, so veterinarians specialized in birds can use fundamental techniques such as biopsies, hematology, cytology, blood biochemistry or protein electrophoresis (proteinograms), and reach peak excellence in their professional practice.

This Postgraduate Certificate also offers specialized knowledge to analyze and interpret each of the diagnostic imaging techniques available, such as radiographs. One must remember that birds are small patients with a high respiratory frequency, which inevitably leads to the loss of details and information in these tests due to the patient's movements.

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

In addition, as it is an online Postgraduate Certificate, the student is not constrained by fixed timetables or the need to move to another physical location, but can access the contents at any time of the day, balancing his or her work or personal life with their academic life.

This **Postgraduate Certificate in Diagnostic Techniques in Avian Patients** offers students the characteristics of a high-level scientific, teaching, and technological course. These are some of its most notable features:

- 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 carried out 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 Postgraduate Certificate with us. It's the perfect opportunity to advance your career"

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

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

This 100% online course will allow you to combine your studies with your professional work while increasing your knowledge in this field.

Its teaching staff includes professionals from the veterinary field, who bring the experience of their work to this training, as well as recognised 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 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.

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Objectives

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

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

General Objectives

* Compile the most commonly used diagnostic techniques: radiology, endoscopy and ultrasound
* Develop specialized knowledge in all laboratory diagnostic tests
* Establish the protocols to interrupt biochemical analysis and proteinograms
* Demonstrate the correct necropsy technique in avian patients
* Generate protocols for coprology in birds
* Examine radiology techniques in avian patients
* Anticipate diagnostic difficulties in ultrasound in avian patients
* Propose endoscopy as the diagnostic technique of choice.

Join one of the largest online universities in the world"

Specific Objectives

- Analyze diagnostic evidence, information gathering methods, sample preparation for referral and transport purposes to anatomic pathology laboratories

- Examine hematology in birds with the different morphological changes they present

- Identify the results of biochemical analyses in birds

- Develop the latest cytological techniques

- Demonstrate the correct technique for sending samples to anatomic pathology services

- Examine the external and internal lesions that birds may present in the postmortem technique and their diagnostic interpretation

- Obtain the necessary samples from the postmortem examination for study by histopathology, microbiology and polymerase chain reaction (PCR)

- Specify the sedation and anesthesia techniques necessary to perform diagnostic imaging techniques

- Study existing radiology equipment and diagnostic options in birds

- Develop management techniques for proper patient positioning, including the most commonly used projections in daily clinical practice

- Analyze the anatomical references in radiography, ultrasound and endoscopy to reach reliable diagnoses

- Justify why a specific type of ultrasound probe is used in avian patients

- Analyze the endoscopy techniques and applications in birds

- Achieve the maximum knowledge in other really important diagnostic techniques such as routine coprological analysis

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

Professors

Dr. Melián Melián, Ayose

- Actions for the development of the Canary Islands wildlife health surveillance network
- Technical support in the preparation of reports for the implementation of actions aimed at minimizing unnatural mortality of wildlife in the Canary Islands
- Veterinarian and curator at Palmitos Park
- Degree in Veterinary Medicine from the ULPGC
- Diploma in Advanced Studies with distinction in the Doctoral Program on Animal Health and Pathology, University of LPGC
- Postgraduate Degree in Exotic Animal Clinics, GPcert (ExAP), European School of Veterinary Postgraduate Studies

Dr. Beltrán, Javier

- Clinical Veterinarian at Privet Veterinary Hospital (2015-Present)
- Degree in Veterinary Medicine, ULE University
- Master's Degree in Medicine and Surgery
- Exotic Animals Forvetex
- Advanced Master's Degree in Exotic Animal Medicine and Surgery Forvetex
- Diploma in Herpetology, UCM
- National and International University Lecturer Management and Clinical Practice: Birds and Reptiles - University of León, 2017

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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.

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. Laboratory Tests

1.1. Clinical and Diagnostic Techniques: General Principles Diagnostic Evidence
1.1.1. Accurate Diagnoses
1.1.2. Considerations for Sample Preparation
1.1.3. Sample Transport and Processing
1.2. Hematology: An Essential Tool
1.2.1. Cell Morphology
1.2.1.1. The Red Series in Blood
1.2.1.2. The White Series in Blood
1.2.2. Morphological Changes in Blood Cells
1.2.2.1. Degranulation
1.2.2.2. Immaturity
1.2.2.3. Toxicity
1.2.2.4. Reactivity
1.2.3. Factors to Consider in Hematology
1.2.4. Hematology Protocols in Birds
1.2.4.1. Erythrocyte Count
1.2.4.2. Hemoglobin Estimation
1.2.4.3. Hematocrit Estimation
1.2.4.4. Leukocyte Count
1.2.4.5. Thrombocyte Count
1.2.4.6. Fibrinogen Estimation
1.3. Biochemical Analysis in Birds
1.3.1. Biochemical Reference Ranges
1.3.2. Most Used Profiles
1.3.2.1. Total Protein: Increase and Decrease
1.3.2.2. Glucose: Increase and Decrease
1.3.2.3. Uric Acid, Urea and Creatinine
1.3.2.4. Lactate Dehydrogenase (LDH)
1.3.2.5. Serum Glutamic-Oxaloacetic Transaminase (SGOT)
1.3.2.6. Bile Acids
1.3.2.7. Creatine-Phosphokinase (CPK): Muscle or Heart Failure
1.3.2.8. Calcium: Hypercalcemia Hypocalcemia
1.3.2.9. Phosphorus
1.3.2.10. Cholesterol

1.3.3. Age-Related Biochemical Changes
1.3.3.1. Proteinogram as a Diagnostic Tool
1.3.3.2. The Albumin
1.3.3.3. Alpha-1: Acute Disease Phase Indicator
1.3.3.4. Alpha-2: Acute Disease Phase Proteins
1.3.3.5. The Beta Fraction
1.3.3.6. The Gamma Fraction
1.4. Urinalysis: Suspected Nephropathy
1.4.1. Anatomo-physiological Recap of the Urinary System
1.4.2. Urine Collection Techniques in Birds
1.4.3. Urinalysis
1.4.4. Urinalysis Parameters
1.5. Fundamental Cytological Techniques: Cell Study
1.5.1. Skin and Plumage Scrapings
1.5.1.1. How to Perform Superficial Scrapings
1.5.1.2. How to Perform Deep Scrapings
1.5.2. Biopsy Collection
1.5.2.1. Different Application Techniques
1.5.2.2. Skin Biopsies
1.5.2.3. Skeletal Injury Biopsies
1.5.2.4. Small Biopsies Organs and Masses
1.5.2.5. Chronic Injury Biopsies
1.5.2.6. Biopsies of Small Lesions and Masses
1.5.3. Cytology: Functions
1.5.3.1. Sample Collection and Processing
1.5.3.2. Key Points Cytologic Interpretations
1.6. Advanced Cytologic Techniques
1.6.1. Aspiration
1.6.1.1. Complementary Tests
1.6.1.2. Aspiration Methods
1.6.2. Microbiological Swabs Collection
1.6.2.1. Upper Respiratory Routes
1.6.2.2. Lower Gastrointestinal Tract
1.6.3. Washing Technique

Module 2. Diagnostic Imaging Techniques

This training will allow you to advance in your career comfortably"

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.

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.

"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.

01 learning from evidence

02 relearning from evidence

03 testing

04 learning from an expert

05 neurocognitive context dependent learning

06 Von-Restorff effect

07 case based learning through storytelling

08 competencies testing (retesting)

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.

20%

15%

15%

3%

20%

17%

7%

3%
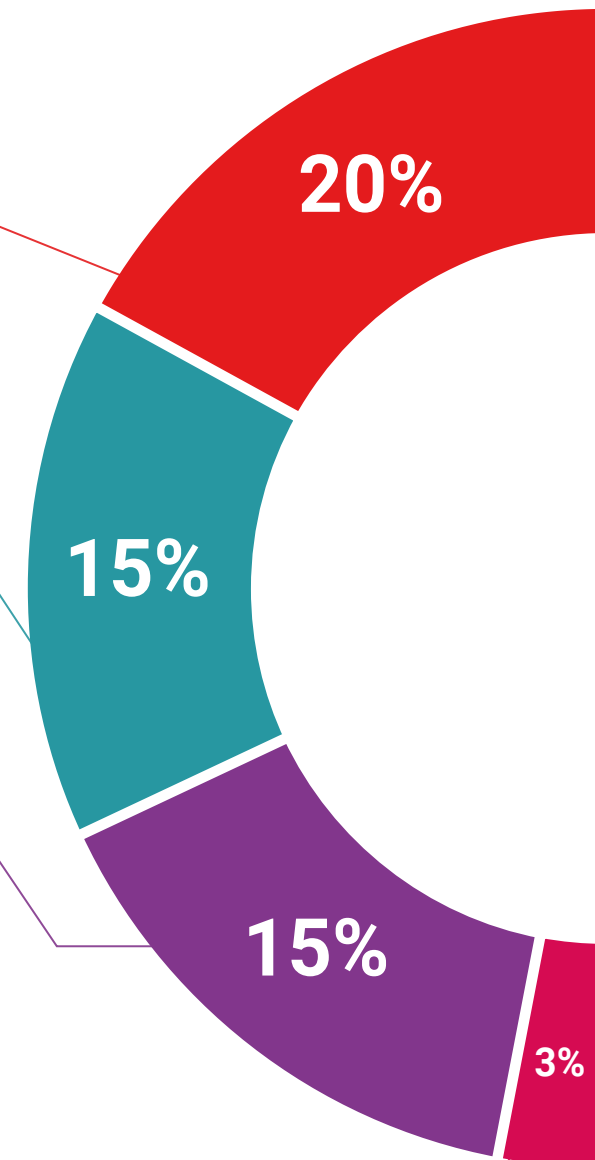
Expert-Led Case Studies and Case Analysis

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

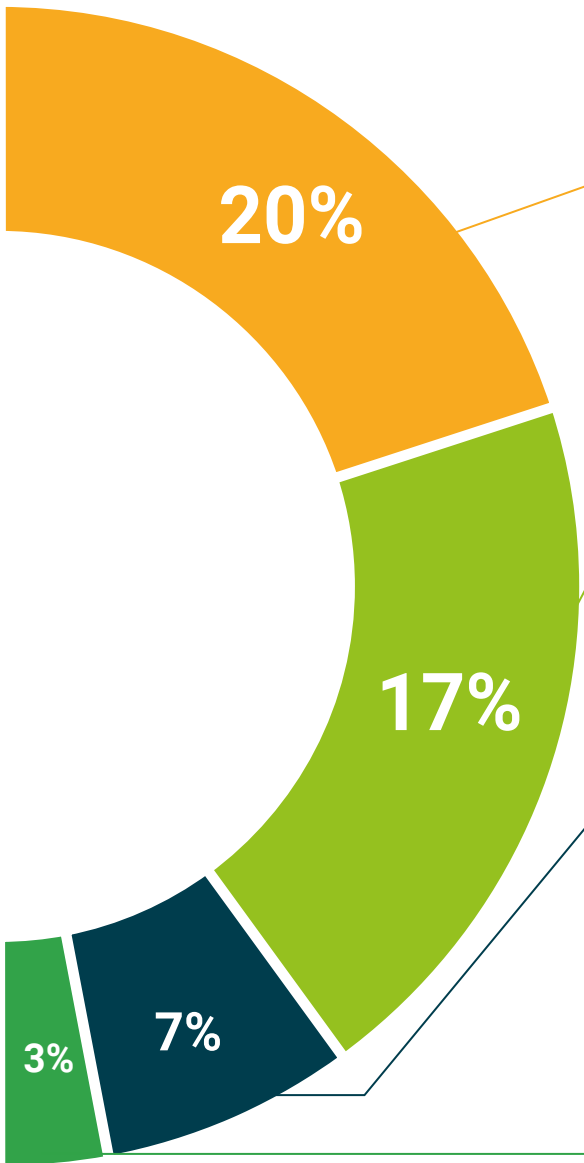We periodically evaluate and re-evaluate students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are achieving their goals.

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 Diagnostic Techniques in Avian Patients guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Global University.

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 **Postgraduate Certificate in Diagnostic Techniques in Avian Patients** 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: **Postgraduate Certificate in Diagnostic Techniques in Avian Patients**

Modality: **online**

Duration: **12 weeks**

Accreditation: **12 ECTS**

tech global university

Mr./Ms. _____ with identification document _____
has successfully passed and obtained the title of:

Postgraduate Certificate in Diagnostic Techniques in Avian Patients

This is a program of 360 hours of duration equivalent to 12 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024

Dr. Pedro Navarro Illana
Rector

This qualification must always be accompanied by the university degree issued by the competent authority to practice professionally in each country.   Unique TECH Code: AFWORD23S   techtitute.com/certificates

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

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