

# Postgraduate Certificate Arthroscopy in Large Animals





## Postgraduate Certificate Arthroscopy in Large Animals

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Global University
- » Credits: 6 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtute.com/us/veterinary-medicine/postgraduate-certificate/arthroscopy-large-animals](http://www.techtute.com/us/veterinary-medicine/postgraduate-certificate/arthroscopy-large-animals)

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# 01

# Introduction

Arthroscopy is a minimally invasive technique commonly used in veterinary hospitals. Thanks to its beneficial properties, the prognosis of certain pathologies affecting the synovial cavities has improved. These procedures allow accurate evaluation of joints, bursae and sheaths. They are the treatment of choice for lesions such as osteochondrosis dissecans, excision of osteochondromas and synovial infections.

The student, after completing this program, will have developed specialized knowledge in the indications, approaches and techniques to perform osteoscopy-bursoscopy arthroscopy in any of the anatomical regions that need it. Likewise, they will be able to elaborate a postoperative treatment protocol for each of the pathologies evaluated and diagnosed by means of these surgical techniques.





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*Veterinarians must continue with their learning to adapt to new developments in this field”*

Veterinarians face new challenges every day in treating their patients.

The Postgraduate Certificate in Arthroscopy in Large Animals comprises a complete and up-to-date educational program including the latest advances in traumatology and orthopedic surgery in ruminants (cattle, sheep), camelids (camels, alpacas and llamas), swine (pigs, wild boars) and equidae (horses, donkeys and mules).

The theoretical and practical content has been chosen taking into account its potential practical application in daily clinical practice. Furthermore, the audiovisual material collects scientific and practical information on the essential disciplines for professional practice.

In each topic, practical cases presented by experts in Traumatology and Orthopedic Surgery in Large Animals have been developed, with the objective of the practically applying the knowledge acquired. In addition, students will participate in a self-evaluation process to improve their learning and knowledge during their practical activities.

The teaching team of the Postgraduate Certificate in Arthroscopy in Large Animals has programmed a careful selection of techniques used in the diagnosis and treatment of ruminants (cattle, sheep), camelids (camels, alpacas, llamas), swine (pigs, wild boars) and equidae (horses, donkeys and mules), including the description of musculoskeletal surgery and rehabilitation in those species to which they are applied.

The teaching surgeons of this Postgraduate Certificate are graduates of the European or American College of Veterinary Surgeons and have extensive experience both in the university field and in private practice. In both areas, they are responsible for large animal surgery services in leading veterinary centers and most of them direct residency programs, master's degree programs and research projects.

All of these elements mentioned above make this Postgraduate Certificate a unique specialization program, exclusive and different to all the courses offered in other universities.

This **Postgraduate Certificate in Arthroscopy in Large Animals** contains the most complete and up-to-date educational program on the market. The most important features of the program include:

- ◆ Practical cases presented by experts in Diagnosis and Treatment of Lameness in Large Animals: Equidae, Ruminants and Swine
- ◆ 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 innovations on Arthroscopy in Large Animals
- ◆ Practical exercises where the self-assessment process can be carried out to improve learning
- ◆ Special emphasis on innovative methodologies in Arthroscopy in Large Animals
- ◆ 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



*Don't miss the opportunity to study this Postgraduate Certificate with us. It's the perfect opportunity to advance in your veterinary career"*

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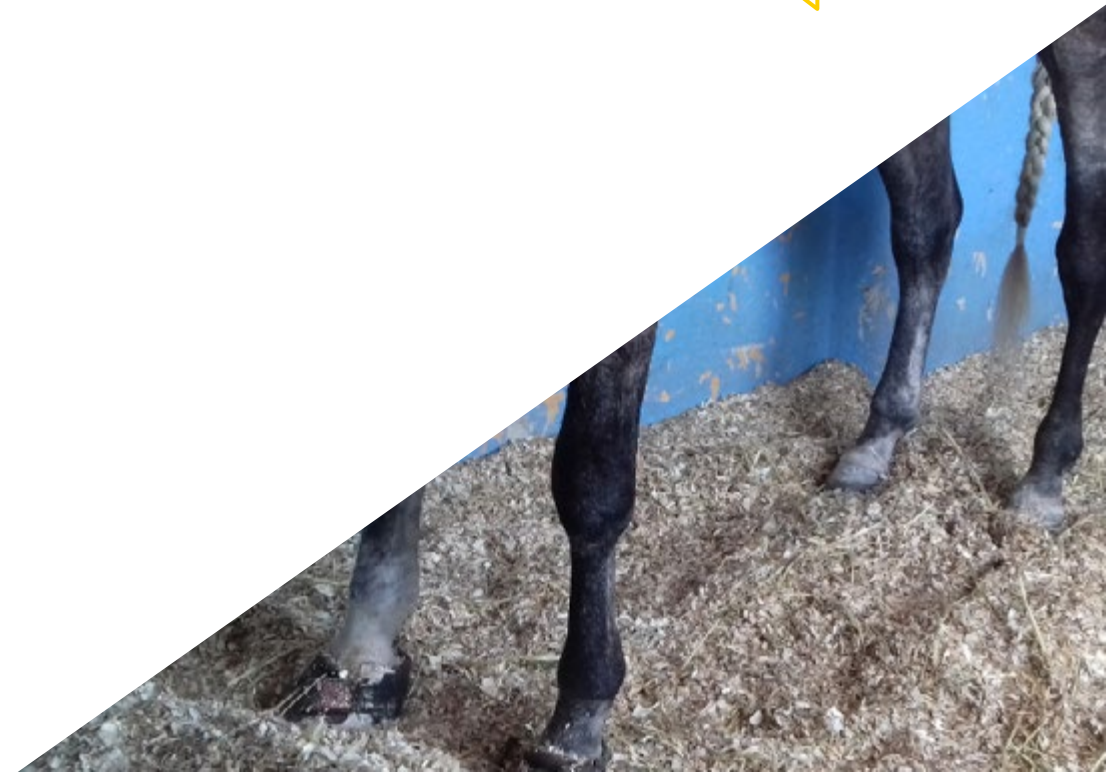
*This course is the best investment you can make when choosing a refresher programme to update your existing knowledge of Large Animal Veterinary Medicine"*

*This program has the best didactic material, which will enable a contextual study that will facilitate your learning.*

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

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 professional must try to solve the different professional practice situations that arise during the academic program. For this, the professional will have the help of an innovative interactive video system made by renowned and experienced experts in Arthroscopy in Large Animals.



# 02 Objectives

The Postgraduate Certificate in Arthroscopy in Large Animals is designed to facilitate the performance of the veterinary professional with the latest advances and most innovative treatments in the sector.







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*This is the best option to learn about the latest advances in Arthroscopy in Large Animals”*



## General Objectives

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- Evaluate the equipment and instruments used in synovial cavity surgery
- Gain fundamental knowledge of arthroscopy, tenoscopy and bursoscopy techniques
- Develop synovial cavity exploration techniques
- Establish endoscopy as a method of surgical treatment of synovial pathologies



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





## Specific Objectives

- ◆ Develop specialized knowledge of materials used in endoscopy surgery of synovial cavities
- ◆ Specify the indications of endoscopy for the treatment of synovial pathologies
- ◆ Specify the techniques of endoscopic surgery in joint cavities, bursae and synovial sheaths
- ◆ Perform correct endoscopic treatment of synovial pathologies
- ◆ Justify the use of endoscopy in the treatment of joint fractures
- ◆ Expose the possible complications associated with the arthroscopy, bursoscopy and tenoscopy techniques
- ◆ Present the different postoperative care and rehabilitation guidelines

03

# Course Management

The program's teaching staff includes leading experts in the arthroscopy in large animals, who bring their work experience to this training program. They are world-renowned doctors from different countries with proven theoretical and practical professional experience.



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*Our team of teachers, with expertise in arthroscopy in large animals, will help you reach success in your profession"*

## Management



### Dr. Muñoz Morán, Juan Alberto

- ♦ PhD in Veterinary Science
- ♦ Degree in Veterinary Medicine from the Complutense University of Madrid
- ♦ Graduate of the European College of Veterinary Surgeons.
- ♦ Professor in Large Animal surgery at the Veterinary University of Pretoria, South Africa.
- ♦ Head of the Equine Surgery Residency Program at the Veterinary University of Pretoria, South Africa.
- ♦ Head of the Large Animal Surgery Department and professor at the Alfonso X el Sabio University, Madrid.
- ♦ Surgeon at the Equine Hospital of Aznalcollar, Seville.

## Professors

### Dr. Argüelles Capilla, David

- ♦ PhD in Veterinary Medicine from the Autonomous University of Barcelona (UAB)
- ♦ Equine Surgeon and Distinguished Research Professor- HCV of the University of Cordoba
- ♦ Degree in Veterinary Medicine from the Autonomous University of Barcelona (UAB)
- ♦ Master's Degree in Equine Medicine and Surgery from the UAB
- ♦ Finnish Equine Veterinary Postgraduate Diploma: Hevossairauksien Eirokoiseläinlääkari.
- ♦ Member of RCVS, BEVA and ECVS.  
Speaker at National and International Congresses and Courses on Equine Surgery and Equine Sports Medicine.
- ♦ Resident in Sports Medicine and Rehabilitation for the ACVSMR

### Dr. Quattrocchio, Tomás Manuel

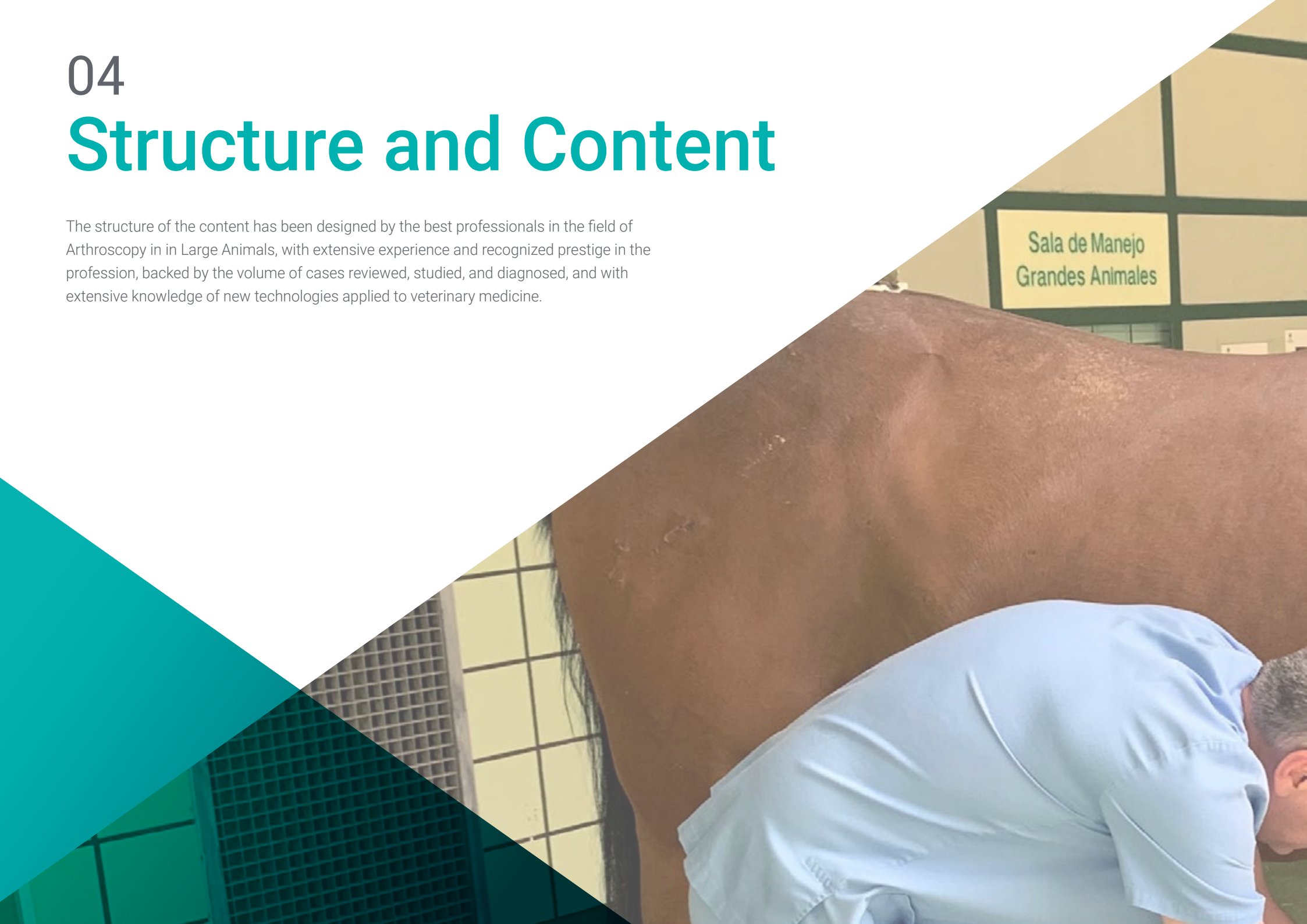
- ♦ Veterinarian, Buenos Aires University Center, Argentina. (UNCPBA)
- ♦ Master's Degree in Equine Sport Medicine from the UCO
- ♦ Veterinarian at Ellerston Onasis Polo Club, Scone, NSW, Australia



# 04

# Structure and Content

The structure of the content has been designed by the best professionals in the field of Arthroscopy in Large Animals, 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 medicine.







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*This Postgraduate Certificate in Arthroscopy in Large Animals contains the most complete and up-to-date scientific program on the market”*

**Module 1. Arthroscopy, Bursoscopy and Tenoscopy in Large Animals: Ruminants, Swine and Equidae**

- 1.1. Fundamentals and of the Arthroscopy Technique. Arthroscopy Instruments and Equipment
  - 1.1.1. Start of Veterinary Arthroscopy
  - 1.1.2. Arthroscopy Specific Material
  - 1.1.3. Arthroscopy Technique
    - 1.1.3.1. Patient Preparation
    - 1.1.3.2. Insertion and Position of Instruments
    - 1.1.3.3. Triangulation Technique
    - 1.1.3.4. Arthroscopic Diagnosis and Techniques
- 1.2. Arthroscopic Indications and Technique for the the Metacarpo/Metatarsophalangeal Joint
  - 1.2.1. Indications
  - 1.2.2. Arthroscopic Exploration of the Dorsal Recess and Palmar/Patellar Recess
  - 1.2.3. Arthroscopic Surgery of the Distal Dorsal Recess
    - 1.2.3.1. Fragmentation and Osteochondral Fragments
    - 1.2.3.2. Use of Arthroscopy in the Treatment of Condylar Fractures and First Phalangeal Fractures
    - 1.2.3.3. Villonodular Synovitis
  - 1.2.4. Arthroscopic Recessopalmar/Plantar Surgery
    - 1.2.4.1. Removal of Osteochondral Fragments
- 1.3. Indications and Arthroscopic Technique of the Carpus
  - 1.3.1. Indications
  - 1.3.2. Arthroscopic Exploration of the Antebrachiocarpal Joint (Radiocarpal)
  - 1.3.3. Arthroscopic Examination of the Intercarpal Joint
  - 1.3.4. Arthroscopic Surgery of Antebrachiocarpal and Intercarpal Joints
    - 1.3.4.1. Fragmentation and Osteochondral Fragments
    - 1.3.4.2. Ligament Lacerations
    - 1.3.4.3. Biarticular Fractures
  - 1.3.5. Arthroscopic Examination of the Carpal Joint in Ruminants
- 1.4. Arthroscopic Indications and Technique for the the Distal and Proximal Interphalangeal Joint
  - 1.4.1. Indications
  - 1.4.2. Arthroscopic Exploration of the Distal Interphalangeal Joint
  - 1.4.3. Arthroscopic Surgery of the Distal Interphalangeal Joint
    - 1.4.3.1. Removal of Osteochondral Fragments
    - 1.4.3.2. Subchondral Cysts of the Third Phalange
  - 1.4.4. Arthroscopic Examination of the Proximal Interphalangeal Joint
  - 1.4.5. Arthroscopic Surgery of the Proximal Interphalangeal Joint
  - 1.4.6. Arthroscopic Examination of These Joints in Ruminants
- 1.5. Arthroscopic Indications and Technique for the Tarsocrural Joint
  - 1.5.1. Indications
  - 1.5.2. Arthroscopic Examination of the Dorsal Recess and Palmar Recess
  - 1.5.3. Arthroscopic Surgery of the Dorsal Recess and PalmarPatellar Recess
    - 1.5.3.1. Osteochondritis Dissecans
    - 1.5.3.2. Fractures
    - 1.5.3.3. Collateral Ligament Injuries
  - 1.5.4. Arthroscopic Examination of the Tarsocrural Joint in Ruminants
- 1.6. Arthroscopic Indications and Technique for the Patellofemoral Joint and Femorotibial Joints
  - 1.6.1. Indications
  - 1.6.2. Arthroscopic Examination of the Patellofemoral Joint
  - 1.6.3. Arthroscopic Surgery of the Patellofemoral Joint
    - 1.6.3.1. Osteochondritis Dissecans
    - 1.6.3.2. Fragmentation of the Patella
  - 1.6.4. Arthroscopic Examination of the Femorotibial Joints
  - 1.6.5. Arthroscopic Surgery of the Femorotibial Joints
    - 1.6.5.1. Cystic Lesions
    - 1.6.5.2. Articular Cartilage Injuries
    - 1.6.5.3. Fractures
    - 1.6.5.4. Cruciate Ligament Injuries
    - 1.6.5.5. Meniscal Injuries
  - 1.6.6. Arthroscopic Exploration of the Patellofemoral Joint and Femorotibial Joints in Ruminants



- 1.7. Indications and Arthroscopic Technique of the Elbow, Scapulohumeral and Coccyxfemoral Joints
  - 1.7.1. Indications
  - 1.7.2. Exploration
  - 1.7.3. Scapulohumeral Osteochondrosis
  - 1.7.4. Fractures and Osteochondrosis Dissecans of the Elbow
  - 1.7.5. Soft Tissue and Osteocartilaginous Lesions of the Coxofemoral Joint
- 1.8. Indications and Arthroscopic Technique of the Flexor Digital Sheath, Carpal and Tarsal Canal
  - 1.8.1. Indications
  - 1.8.2. Exploration
  - 1.8.3. Tenoscopic Surgery
    - 1.8.3.1. Diagnosis and Debridement of Tendon Lacerations
    - 1.8.3.2. Demotomy of Palmar/Plantar Annular Ligament
    - 1.8.3.3. Excision of Osteochondromas and Exostoses
    - 1.8.3.4. Removal of the Accessory Ligament of the SDFT
- 1.9. Indications and Arthroscopic Technique of the Navicular, Calcaneal, and Bicipital Bursae
  - 1.9.1. Indications
  - 1.9.2. Examinations
  - 1.9.3. Bursoscopic Surgery
    - 1.9.3.1. Laceration at the Calcaneal Insertion of SDFT
    - 1.9.3.2. Fragmentation of the Calcaneal Tuberosity
    - 1.9.3.3. Traumatic Bicipital Bursitis
    - 1.9.3.4. Penetrating Injuries of the Podotrochlear Bursa
    - 1.9.3.5. Lacerations of the SDFT in the Podotrochlear Bursa
- 1.10. Post-Operative Care, Complications and Rehabilitation Plans
  - 1.10.1. Post-Operative Care
  - 1.10.2. Complications Associated with Synovial Endoscopy Techniques
  - 1.10.3. Postoperative Rehabilitation Plans

# 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. Gervas, 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 Arthroscopy in Large Animals guarantees, in addition to the most rigorous and up-to-date training, access to a Postgraduate Certificate issued by TECH Global University.



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*Successfully complete this training and receive your university qualification without travel or laborious paperwork”*

This program will allow you to obtain your **Postgraduate Certificate in Arthroscopy in Large Animals** 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 Arthroscopy in Large Animals**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**



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



## Postgraduate Certificate Arthroscopy in Large Animals

- › Modality: online
- › Duration: 6 weeks
- › Certificate: TECH Global University
- › Credits: 6 ECTS
- › Schedule: at your own pace
- › Exams: online

# Postgraduate Certificate

## Arthroscopy in Large Animals

