



# SYLLABUS

## CERTIFIED CANINE REHABILITATION PRACTITIONER (CCRP)

The University of Tennessee Canine Rehabilitation Certificate Program (CCRP) is the only RACE approved, university-based credential program for canine rehabilitation education.

The high standards for admission and rigorous but (yet) fun curriculum assure graduates that the CCRP credential is recognized as the premiere program in canine rehabilitation.

Depending upon country restrictions the CCRP may be available to a variety of professionals, mainly Veterinarians, Veterinary Technicians, human Physical Therapists, and Students in one of the accepted professions. In Germany and Austria attendees need

to be Veterinarians to attend the course in Munich or Vienna, as these locations are ATF accredited. For the nurse we offer the VMPT (Veterinärmedizinische/r Physiotherapeut/in – [www.tier-physiotherapeuten.de](http://www.tier-physiotherapeuten.de))

The CCRP is developed using the same strict guidelines typically associated with university accredited programs. Therefore, it is taught by a faculty that includes active university instructors, expert clinicians, researchers, and recognized industry experts. The curriculum draws from ongoing research, evidence based case studies, clinical experience, and leading companies in the fields of veterinary medicine.



## PART I

### DETAILS

Part I reviews the regulatory issues involved in this field of practice from the perspective of physical therapists and veterinarians. The response of tissues to disuse and remobilization will be covered and clinically applied to the science of veterinary rehabilitation. An overview of basic comparative anatomy will be reviewed, as well as commonly seen orthopedic and neuro-

logical conditions and commonly used therapeutic interventions. Collaboration between the veterinary and physical therapy professions will be emphasized to enhance the learning experience. How to get started in the field and protocol development will be reviewed.

### ADDITIONAL INFORMATION

**PREREQUISITES** This course is mandatory for Veterinarians, Physical Therapists, Physical Therapist Assistants, Veterinary Technicians, Occupational Therapists and actively enrolled students in these fields.

**DETAILS** Seminar Contact Hours: 12.0

### LEARNING OBJECTIVES

After successful completion of the Part I - Course, the participant should be able to:

- Describe the common clinical conditions that may benefit from physical therapy in dogs as well as its limitations.
- Have an overview of the chronological structure of the CCRP formation program
- Have an evidence based knowledge of adaptive responses of musculoskeletal tissues to disuse, emobilization and the application of certain medications.
- Have a basic knowledge of canine osteology and arthrology, as well as its principal differences between humans and dogs.
- Know the topography, innervation and main function of most implicated muscles in dogs.
- Describe the functional anatomy of the different parts of the vertebral spine, the topographical location of the vertebrae in relation to the spinal cords components, localize both spinal intumescences and most implicated spinal nerves.
- Describe most common neurologic conditions and recognize clinical signs resting upon lesion localization.
- Have a main understanding of the common orthopedic disorders of dogs and neurologic disorders of dogs.
- Know how to handle a dog during its clinical examination and treatment.
- Perform a structured common orthopedic examination on dogs.
- Perform a neurologic examination on dogs for most implicated neurologic conditions referred to veterinary physical rehabilitation.
- Describe the team members in a veterinary physical therapy as well as basic know how to start up a rehabilitation unit (in the USA).

### LECTURE BREAKDOWN PART I

Unit	Title	Instructor	Time
	<b>1. Why Physical Rehabilitation?</b>	Millis	00:54 h
Unit 1: .....	Introduction to Physical Rehabilitation		
Unit 2: .....	Conditions That Can Benefit from Rehab		
Unit 3: .....	Additional Conditions That Can Benefit from Rehab		
Unit 4: .....	Question & Answer Session		
Class 1: .....	Quiz		

Unit	Title	Instructor	Time
<b>2. Introduction to Canine Rehabilitation</b>			
		Levine	01:09 h
Unit 1: .....	Introduction		
Unit 2: .....	Overview of Canine I - VII		
Unit 3: .....	Canine Rehab Background		
Unit 4: .....	Differences Between Human and Canine Rehab		
Unit 5: .....	Questions & Answer Session		
Class 2: .....	Quiz		
<b>3. Responses of Musculoskeletal Tissues to Disuse &amp; Remobilization</b>			
		Millis/Levine	01:59 h
Unit 1: .....	Introduction		
Unit 2: .....	Immobilization and Remobilization		
Unit 3: .....	Effects of Training and Drugs on Cartilage		
Unit 4: .....	Joint Capsule Changes with Immobilization and Remobilization		
Unit 5: .....	Response of Muscle to Reduced Use and Remobilization		
Unit 6: .....	Muscle Measurement & Changes Following Cruciate Ligament Surgery		
Unit 7: .....	Remobilization of Muscle		
Unit 8: .....	Response of Ligaments and Tendons to Reduced Use & Remobilization		
Unit 9: .....	Response of Ligaments & Tendons to Stress, Mobilization, & Drugs		
Unit 10: .....	Response of Bone to Reduced Use and Stress		
Unit 11: .....	Response of Bone to Reduced Use and Stress		
Class 3: .....	Quiz		
<b>4. Canine Osteology &amp; Arthrology</b>			
		Millis	00:55 h
Unit 1: .....	Terminology and Shoulder Region		
Unit 2: .....	Elbow, Antebrachium, and Carpals		
Unit 3: .....	Ilium, Femur & Hip		
Unit 4: .....	Tibia, Fibula, Stifle, and Tarsus		
Class 4: .....	Quiz		
<b>5. Canine Myology</b>			
		Millis	00:29 h
Unit 1: .....	The Forelimb		
Unit 2: .....	The Rear Limb		
Class 5: .....	Quiz		
<b>6. Neuroanatomy</b>			
		Millis	00:36 h
Unit 1: .....	Vertebrae Anatomy & Spinal Nerve Relationships		
Unit 2: .....	Cervical Intumescence & Nerves of the Forelimbs		
Unit 3: .....	Lumbosacral Intumescence & Nerves of the Rea Limb		
Class 6: .....	Quiz		
<b>7. Common Neurologic Conditions</b>			
		Millis	01:37 h
Unit 1: .....	Signs Based on Lesion Localization		
Unit 2: .....	Intervertebral Disc Disease		
Unit 3: .....	Cervical, Thoracolumbar, & Lumbar Disc		
Unit 4: .....	Postoperative Considerations in Spinal		
Unit 5: .....	Wobbler Syndrome		
Unit 6: .....	Degenerative Myelopathy		
Unit 7: .....	Fibrocartilagenous Embolic Myelopathy		
Unit 8: .....	Trauma & Inflammatory Conditions		
Unit 9: .....	Miscellaneous Spinal Conditions		
Class 7: .....	Quiz		

Unit	Title	Instructor	Time
	<b>8. Common Ailments in the Hindlimb</b>	Millis	01:19 h
Unit 1: .....	Canine Hip Dysplasia - Part I		
Unit 2: .....	Canine Hip Dysplasia - Part II		
Unit 3: .....	Patella Luxations		
Unit 4: .....	Cranial Cruciate Injuries		
Unit 5: .....	Cranial Cruciate Injuries - Post-surgical Treatments		
Unit 6: .....	Fracture Mangement		
Class 8: .....	Quiz		
	<b>9. Common Conditions of the Forelimb</b>	Millis	00:48 h
Unit 1: .....	Assessment of the Forelimb		
Unit 2: .....	OCD Shoulder		
Unit 3: .....	Biceps Tenosynovitis & Infraspinatus Contracture		
Unit 4: .....	Elbow Dysplasia & Fractures		
Class 9: .....	Quiz		
	<b>10. Canine Behavior &amp; Handling</b>	Levine	00:23 h
Unit 1: .....	Communication & Behavior		
Unit 2: .....	Aggression and Handling Tips		
Class 10: .....	Quiz		
	<b>11. Canine Examination</b>	Levine	00:31 h
Unit 1: .....	Introduction to Canine Examination		
Unit 2: .....	Diagnosis & Interventions		
Class 11: .....	Quiz		
	<b>12. Orthopedic Evaluation</b>	Millis	00:34 h
Unit 1: .....	Initial evaluation & Lower Hindlimbs		
Unit 2: .....	Stifle and Hip		
Unit 3: .....	The Forelimb		
Class 12: .....	Quiz		
	<b>13. Neurologic Examination</b>	Millis	00:07 h
Unit 1: .....	Neurologic Examination of the Forelimb & Rear Limb		
Class 13: .....	Quiz		
	<b>14. The Team Approach / Getting Started</b>	Levine	00:46 h
Unit 1: .....	The Team Members		
Unit 2: .....	Getting Started		
Unit 3: .....	Resources, Marketing, and Fee Schedule		
Unit 4: .....	Summary		
Class 14: .....	Quiz		
	<b>15. Additional Resources</b>	Millis	00:09 h
	a) Cranial Drawer Motion		
	b) Olecranon Process		
	c) Coranoid Process		
	d) Ortolani Sign		
	e) Lumbosacral Palpation		
	f) Femoral Antiversion and Angle of Inclination		
	g) Hip Dysplasia		

## PART II AND III Modalities (e-learning and presence days)

### DETAILS

This course will provide the participant with the didactic material for selected physical agent modalities used in canine physical rehabilitation. Superficial heating and cooling agents, therapeutic ultrasound, extracorporeal shockwave treatment, laser therapy, and electrical stimulation will be covered as well as theoretical clinical applications with cases. This course also provides the participant with the basic skills necessary to prescribe and provide therapeutic exercise programs for dogs. Benefits and risks associated with therapeutic exercise programs will be covered

along with outcome assessment of exercise programs. Topics covered include joint biomechanics, exercise physiology, range of motion and stretching, gait training, strengthening exercises, balance and proprioceptive exercises, aquatic exercises, and exercises for wellness/prevention. Outcome measures (goniometry, circumferential measurements, etc.) will also be covered in this course.

**ONLINE LECTURES - Must be completed prior to attending labs.**

### ADDITIONAL INFORMATION

**PREREQUISITES** Completion of Part I online and participant must be a Veterinarian, Veterinary Technician, Physical Therapist, Physical Therapist Assistant, Occupational Therapist or an actively enrolled student in one of these fields.

**DETAILS** Seminar Contact Hours: 12.0 (II) + 11.0 (III)

#### LEARNING OBJECTIVES

**After successful completion of this course, the participant should be able to:**

- Describe the differences in acute and chronic inflammation and the proper signs of each.
- Understand the basic regulatory issues involved with canine rehabilitation.
- Demonstrate proper understanding of the general guidelines when using physical agents as modalities.
- Understand the principles of heat as therapeutic agent including its biological effects.
- Understand the principles of cold as therapeutic agent including its biological effects.
- Describe the typical parameters used in therapeutic ultrasound in small animal practice.
- Describe safe technique in preparing and applying ultrasound on dogs and understand both the thermal and non-thermal effects of ultrasound.
- Understand the basic principles of electrical stimulation including parameters, electrodes, motor stimulation, sensory stimulation, and edema reduction.
- Understand the basic principles of laser therapy in veterinary practice and demonstrate proper knowledge of parameters for indicated pathologies.
- Understand the basic principles of extracorporeal shockwave therapy in veterinary practice and demonstrate proper knowledge of parameters for indicated pathologies.
- Describe techniques of massage in small animal practice including its benefits, effects and general considerations.
- Acquire skills in various exercise techniques and their effects on the body including treadmilling, stairs and inclines, cavaletti rails, dancing, wheel barrowing, etc.
- Prescribe and provide therapeutic exercise programs for dogs to improve range of motion, strength, balance, endurance, and improved function.
- Understand the principles of proprioception and demonstrate useful proprioceptive exercises during canine rehabilitation.
- Describe various outcome measures used for the assessment of rehabilitation programs.

- Develop basic skills in understanding joint function and demonstrate proper technique with goniometry.
- Describe the benefits and physical properties of water and understand the practical use of aquatic therapy in rehabilitation
- Demonstrate an understanding of how to safely progress a dog in a rehabilitation program.
- Develop a basic understanding of joint mobilizations along with normal and abnormal end feels.
- Understand the normal and abnormal characteristics of canine gait and be able to describe each joint relative to different parts of a gait cycle.
- Describe the basic principles of splinting techniques for dogs

**PLEASE NOTE: ONLINE LECTURES FOR CANINE I AND CANINE II MUST BE COMPLETED BEFORE YOU ATTEND LABS.**

This course is required for Veterinarians and Veterinary Technicians and actively enrolled students in these fields. This course is not required of Physical Therapists, Physical Therapist Assistants and Occupational Therapists or actively enrolled students in one of these fields but it can be used to fulfill the Canine V requirement.

- 20 question quiz (Completion required prior to attending labs)
- downloadable handout
- print certificate of completion for lecture only after completing quiz

## OUTLINE

### **PART II AND III ONLINE LECTURE** Physical Agent Modalities and Therapeutic Exercises

#### LECTURE BREAKDOWN, PART II

Unit	Title	Instructor	Time
Unit 01 .....	Acute and Chronic Inflammation	Levine	0:48:57 h
Unit 02 .....	Regulatory Issues	Levine	0:12:24 h
Unit 03 .....	Physical Agents: Modalities	Levine	0:41:45 h
Unit 04 .....	Principles of Heat as Therapeutic Modalities	Levine	0:32:21 h
Unit 05 .....	Principles of Cold as Therapeutic Agent	Levine	0:44:01 h
Unit 06 .....	Therapeutic Ultrasound in Small Animal Practice	Levine	1:16:15 h
Unit 07 .....	Electrotherapy	Levine	1:52:39 h
Unit 08 .....	Laser Therapy	Arza/Millis	1:56:47 h
Unit 09 .....	Extracorporeal Shockwave Therapy	Millis/Drum	1:10:13 h
Unit 10 .....	Massage in Small Animal Practice	Levine	0:28:03 h

- 20 question quiz (Completion required prior to attending labs)
- downloadable handout
- print certificate of completion for lecture only after completing quiz

(Note: you will receive your full CE certificate for 40 hours of lab/lecture after completion of lab section of this course which is RACE approved)

#### LECTURE BREAKDOWN, PART III

Unit	Title	Instructor	Time
Unit 01 .....	Range of Motion and Stretching	Millis	1:02:58 h
Unit 02 .....	Exercise to Enhance Proprioception	Millis	0:45:44 h
Unit 03 .....	Assessing Treatment Outcomes	Levine	0:59:16 h

Unit	Title	Instructor	Time
Unit 04 .....	Aquatic Exercises	Millis	0:51:40 h
Unit 05 .....	Therapeutic Exercises	Millis	1:12:19 h
Unit 06 .....	Joint Mobilizations and End Feels	Gross	0:30:45 h
Unit 07 .....	Basic Science of Physical Therapy Anatomy & Biomechanics	Millis	1:26:44 h
Unit 08 .....	Kinematics of Selected Therapeutic Exercises in Dogs	Millis	0:59:08 h
Unit 09 .....	Exercise Physiology & Conditioning	Millis	1:23:09 h

- 20 question quiz (Completion required prior to attending labs)
- downloadable handout
- print certificate of completion for lecture only after completing quiz  
(Note: you will receive your full CE certificate for 40 hours of lab/lecture after completion of lab section of this course which is RACE approved)

**ADDITIONAL INFO** Certificates of Attendance can be printed once testing is complete and passing of an 80% or better. You can then print your certificate from home.

## PART II AND III-LAB DAYS (PRESENCE DAYS): Hands on all modalities

This course will provide the participant with laboratory experiences for selected physical agent modalities used in canine physical rehabilitation. Superficial heating and cooling agents, therapeutic ultrasound, extracorporeal shockwave treatment, laser therapy, and electrical stimulation will be covered. A palpation lab on live dogs is included to review important anatomical structures for rehabilitation. This course also provides the participant with the basic skills necessary to prescribe and provide therapeutic exercise programs for dogs. Benefits and risks

associated with therapeutic exercise programs for dogs will be covered. Topics covered include exercise physiology, range of motion and stretching, gait training, strengthening exercises, balance and proprioceptive exercises, aquatic exercises, and exercises for wellness/prevention. Outcome measures (goniometry, circumferential measurements, etc.) will also be practiced in this course. Orthopedic and neurological evaluation/assessment of the rehabilitation patient will also be reviewed and performed with supervision.

**DETAILS** Seminar Contact Hours: 27.0

### LEARNING OBJECTIVES

After successful completion of this course, the participant should be able to:

- Palpate on live dogs the major muscles, bony landmarks, joints, ligaments, and other anatomical structures important for rehabilitation.
- Recognize differences in acute and chronic inflammation and the proper signs of each in clinical patients.
- Understand the basic regulatory issues involved with canine rehabilitation.
- Demonstrate proper understanding of the general guidelines when using physical agents as modalities.
- Apply superficial heat safely and competently as part of a laboratory experience.
- Apply cryotherapy safely and competently as part of a laboratory experience.
- Describe the typical parameters used in therapeutic ultrasound in small animal practice and demonstrate safe technique in preparing and applying ultrasound on dogs.
- Understand the basic principles of electrical stimulation including parameters, electrodes, motor stimulation, sensory stimulation, and edema reduction and demonstrate proper technique on dogs.
- Understand the basic principles of laser therapy in veterinary practice and demonstrate proper technique during treatment.

- Perform techniques of massage in small animal practice including its benefits, effects and general considerations.
- Demonstrate various exercise techniques on dogs in safe and proficient manner.
- Prescribe and provide therapeutic exercise programs for dogs to improve range of motion, strength, balance, endurance, and improved function.
- Understand the principles of proprioception and demonstrate useful proprioceptive exercises during canine rehabilitation.
- Proficiently demonstrate the use of various outcome measures used for the assessment of rehabilitation programs in dogs.
- Develop basic skills in understanding joint function and demonstrate proper technique with goniometry on dogs.
- Describe the use of aquatic therapy in rehabilitation and demonstrate proficiency in basic aquatic therapy with dogs.
- Demonstrate an understanding of how to safely progress a dog in a rehabilitation program.
- Develop a basic understanding of joint mobilizations along with normal and abnormal end feels in dogs.
- Understand the normal and abnormal characteristics of canine gait and be able to describe each joint relative to different parts of a gait cycle.
- Competently perform selected orthopedic/neurological evaluation/assessment techniques on live dogs with and without pathology.

## PART IV – Interaction Case Discussion (presence days)

### DETAILS

This course will provide the participant with the skills necessary to design and implement a comprehensive rehabilitation program for commonly seen orthopedic and neurologic conditions in the dog. A case study approach will be utilized teaming stu-

dents from different professions together during this course to design and implement the rehabilitation programs. If possible, participants should bring a case or two for discussion in these group learning activities.

### ADDITIONAL INFORMATION

#### DETAILS

Seminar Contact Hours: 11.0 in lecture room 6.0 homework

#### LEARNING OBJECTIVES

After successful completion of this course, the participant should be able to:

- Design and implement a comprehensive rehabilitation program for commonly seen orthopedic conditions in the dog
- Design and implement a comprehensive rehabilitation program for commonly seen Neurologic conditions in the dog
- Correlate the rehabilitation program with the physiologic processes that the patient is undergoing during its rehabilitation
- Discuss reasonable time frames for treatment including when to begin treatment, frequency of treatment, and duration of treatment
- Discuss the need for and the methods of referral and communication between the referring veterinarian and the rehabilitation provider
- Document the rehabilitation programs using standardized forms

This course is required for all participants.



## PART V – OA case management

### DETAILS

The purpose of the University of Tennessee Arthritis Case Manager Course is to improve the care and quality of life of dogs with osteoarthritis by having a designated case manager to help guide treatment and communicate with the owner. Osteoarthritis is a common and significant condition; approximately 20% of all adult dogs are afflicted. This course is designed to help identify dogs with this debilitating disease earlier to allow treatment designed to improve clinical function and extend quality of life. This program embraces the multimodal treatment of arthritis and provides an evidence-based approach to treatment options. Further, this course embraces the team approach to osteoarthritis, recognizing the valuable roles of the veterinarian, veterinary

technician, and owner in managing each case. In particular, veterinary technicians play a major role in managing these chronic patients for their lifetime. They interact with veterinarians and owners to be certain that patients are receiving optimal treatment and owners are informed and educated about the treatment options for their pets and receive appropriate follow-up care. Treatment compliance and appropriate care of patients are most effective when clients receive appropriate education and regular communication from their pet's case manager. Veterinary technicians will be uniquely equipped to perform these functions upon successful completion of this course.

- Build your business
- Improve the quality of life for your patients
- Earn a certificate for your practice in osteoarthritis case management
- Additional Information

### LEARNING OBJECTIVES

After completion of this program, participants will understand the basic pathophysiology of osteoarthritis, common conditions causing osteoarthritis, examination of the arthritic patient, and various treatment options for osteoarthritis and their application to clinical patients.

Part V will help you and your staff to recognize OA early and to effectively provide pre-emptive care and treatment for dogs in all stages of OA. The course will cover the entire spectrum of OA Case Management from maximizing the effectiveness of business practices, correct utilization of the veterinary technician in case management applications, and exploration and application of the most common treatment modalities using the multimodal approach.

### DETAILS

This program offers the following advantages:

- Emphasis on evidence based medicine and best practices.
- Access to the latest clinical and laboratory research results presented by an instructor who has performed research directly applicable to OA case management
- Demonstration of numerous treatment modalities and evaluation of their effectiveness, based upon research and experience at the world renown University of Tennessee Veterinary Science Department.
- Commitment to presenting a comprehensive curriculum to provide information, training, and support to the Veterinarian and the Vet Tech. This program provides a solid foundation upon which to build an OA treatment practice.
- Upon completion of this course your clinic will receive a certificate of completion

### OUTLINE

Our objective is to educate the entire staff in this comprehensive program to help animals maintain activity throughout the entire cycle of their lives. Graduates of the course will strengthen this new approach to canine OA care by sharing their knowledge of comprehensive canine OA treatment with their colleagues and the animal's owners.

## LECTURE BREAKDOWN PART V

Title	Instructor	Time
<b>INTRODUCTORY MODULE:</b> <ul style="list-style-type: none"> <li>• Concept of the Osteoarthritis Case Manager</li> <li>• The Economics of Osteoarthritis</li> <li>• Description of the Course Modules</li> <li>• <b>Upon completing this module you will be able to:</b></li> <li>• Describe how an osteoarthritis case manager can help your patients and your practice and identify the roles of the treatment team.</li> <li>• Calculate the potential increase in business by implementing a team approach to OA case management</li> </ul>	Millis	01:00 h
<b>MODULE I - BASICS OF OSTEOARTHRITIS:</b> <ul style="list-style-type: none"> <li>• Normal Cartilage Structure and Function</li> <li>• Pathophysiology of Osteoarthritis</li> <li>• Common Conditions Leading to Osteoarthritis</li> </ul> <p>In this module you will learn about the structure of cartilage and the effects of OA on the cartilage. You will learn the common conditions and activities that may lead to OA.</p>	Millis	03:00 h
<b>MODULE II - ASSESSMENT AND DIAGNOSIS OF THE ARTHRITIC PATIENT:</b> <ul style="list-style-type: none"> <li>• History &amp; Gait Evaluation</li> <li>• Physical Examination</li> <li>• Outcome Assessment, including Range of Motion, Lameness Scoring, Muscle Mass Evaluation, Activities of Daily Living</li> </ul> <p>In this module you will learn to identify the early indicators of canine OA, as well as increase your ability to track improvement in your patient's condition.</p>	Millis	03:00 h
<b>MODULE III - MEDICAL MANAGEMENT OF OSTEOARTHRITIS:</b> <ul style="list-style-type: none"> <li>• NSAIDS</li> <li>• Other Analgesic Agents</li> <li>• Disease Modifying Osteoarthritis Drugs</li> </ul> <p>In this module you will experience an in-depth discussion of the medical management of OA. Your patients will greatly benefit from the wealth and depth of outcome based research presented in this module.</p>	Millis	03:30 h
<b>MODULE IV - NUTRITIONAL MANAGEMENT OF OSTEOARTHRITIS:</b> <ul style="list-style-type: none"> <li>• Nutritional Management of OA</li> <li>• Nutritional Supplements and Nutraceuticals</li> </ul> <p>Evidence-based presentation of weight management products. Learn how to effectively employ your Vet Tech in assisting your patient's owners with advice and support in the weight management of their animals.</p>	Millis	02:30 h
<b>MODULE V - EXERCISE AND MANUAL THERAPY FOR THE PATIENT WITH OSTEOARTHRITIS:</b> <ul style="list-style-type: none"> <li>• Range of Motion, Stretching, Massage, Joint Mobilization</li> <li>• Proprioceptive and Therapeutic Exercises</li> <li>• Aquatic exercises</li> </ul> <p>Explore the use of popular and little known therapies that can be provided by the Veterinarian or the Vet Tech.</p>	Millis	01:30 h

Title	Instructor	Time
<p><b>MODULE VI - PHYSICAL MODALITIES TO TREAT OSTEOARTHRITIS:</b></p> <ul style="list-style-type: none"> <li>• Heat and Cold</li> <li>• Therapeutic Laser Treatment</li> <li>• Extracorporeal Shockwave Treatment</li> <li>• Transcutaneous Electrical Nerve Stimulation (TENS)</li> <li>• Therapeutic Ultrasound</li> <li>• Pulsed Electromagnetic Fields</li> </ul> <p>Both low and high tech modalities are discussed. Learn how both modern and traditional techniques can be employed to improve your patient's quality of life.</p>	Millis	03:30 h
<p><b>MODULE VII - OTHER TREATMENTS FOR OSTEOARTHRITIS AND PUTTING IT ALL TOGETHER - CASE MANAGEMENT:</b></p> <ul style="list-style-type: none"> <li>• Surgical Management of Osteoarthritis</li> <li>• Additional Medical Treatments</li> <li>• Acupuncture</li> <li>• Future Treatments</li> </ul>	Millis	04:00 h
<b>PART VI: CLINICAL PRACTICUM (Externship – 40 hours)</b>		
<b>PART VII: CASE DOCUMENTATION AND EXAMS</b>		