

COURSE OVERVIEW

Title	Applied Equine Sport Physiology
ANIVADO Course Code	AESP01-EN
ANIVADO Level	Level 3
Aim/Summary	<p>*for ANIVADO level descriptors click here</p> <p>This course is aimed at BSc & MSc students and equine professionals who want to learn more in-depth about the sport physiology of the horse and how to apply this knowledge in daily training. Proper understanding and application of the training principles is essential. In this course, tools are provided for creating a training program. The course contains over 320 minutes of lectures. The course also contains many practical videos of exercising horses and explains how to interpret the heart rate measurements of these horses, and how these relate to intensity and optimising training programs.</p>

MODULE OVERVIEW

1. Cardiovascular System

This module explains the differences between humans and horses of different physiological systems. You will obtain insight into the cardiovascular system of a horse and its relation to exercise. The theory provided in this module is practical in nature and has a practical and applied approach. The module deals with the basic understanding of the cardiovascular system and how this relates to exercise and training of a sport horse.

2. Respiratory System

This Module explains the respiratory system of a horse. It deals with the question of how the respiratory system responds to exercise and what a rider can do to influence this with training. It also highlights what a rider should not do. How can a rider optimise the respiratory capacity and what should be kept in mind regarding the respiratory system when competing and training sport horses? The theory provided in this module is practical in nature and has a practical and applied approach. The module deals with the basic understanding of the respiratory system and how this relates to exercise and training of a sport horse.

3. Energy Systems of the Exercising Horse

This module explains how the body of the horse uses different energy systems to optimise the energy supply to the muscles during exercise. There will be a more in-depth analysis of which energy systems are used and how this relates to the recovery of exercise. This is done for several disciplines. The module also discusses how to optimise recovery after exercise. The theory provided in this module is practical in nature and has a practical and applied approach. The module deals with energy systems and how this relates to exercise and training of a sport horse.

4. Muscles

This module explains muscle anatomy and physiology. Per discipline, there will be a more in-depth analysis about which type of muscle fibres are mainly used, when, and why. This module also discusses the response and adaptation of muscles to training. Different types of muscle soreness are discussed and a practical translation of how to optimise training of sport horses is given.

5. Training Principles

In this module different training principles are discussed, and practical examples are given. The relation to daily training and optimising training programs are also discussed. When developing a training program these training principles should be considered.

6. Data interpretation

This module deals with the use of hardware devices (wearables) for horses to monitor training sessions. Questions like 'How to perform heart rate measurements with your own horse during training and competition' are discussed. The correct interpretation of data from heart rate measurements is crucial. Per discipline, interpretation of heart rate measurements and other physiological data are clarified. Practical tips to optimise heart rate measurements and the pitfalls of heart rate monitoring during training are also discussed.

7. Applied Exercise Physiology

The effects of a proper warm-up and cool-down period are discussed in this module. The best practical evidence for optimal 'warm-up' is presented. Per Olympic discipline (dressage, show jumping and eventing) the physiological demands at competition are analysed. Per discipline, this module further explains how you can optimise the training of your horse when preparing it for competition. For each discipline, practical guidelines for developing training programs are highlighted.

COURSE DETAILS	
Course Leader	Dr Carolien Munsters
Course Tutors	Dr Carolien Munsters
Pre-requisite Knowledge	No pre-requisite knowledge is needed but the course is given at a higher professional education level (BSc – MSc level; ANIVADO Level 3)
Post-course Expected Outcomes	<p>Following this course, you should be able to understand the basics of equine exercise physiology and understand the differences between the physiological demands of horses competing at the three Olympic disciplines. This knowledge is used to comprehend how to optimise the training of horses of these disciplines. Practical guidelines to develop training programs are given.</p> <p>Key Skills taught:</p> <ul style="list-style-type: none"> • Understanding of the basics of the cardiovascular system of a horse • Understanding of the basics of the respiratory system of a horse • Understanding of the basics of energy system used • Understanding of the basics of muscle anatomy and physiology of a horse • Understanding of the applied training principles • Understanding how to measure heart rate during training and competition • Understanding on how to correctly interpret data of heart rate measurements • Understanding the different physiological demands per discipline of sport horses • Understanding the different guidelines to optimise the training of sport horses of different disciplines
Format	7 Modules; Exercises per Module; Halfway Course Quiz; End of Course Quiz. *for IT requirements click here
Language & Subtitles	Full English course. English and Dutch subtitles are available for the videos.
Specified Limited Access Time	Limited Access Time for the Course is calculated as a maximum 30 Days Access per Module = 210 days after Payment. There is no individual limit on Module time as long as all are completed within the overall Course Time Limit. Each module becomes available as you complete the previous Module and remains live until the specified limited Access time has been used up. *for specifications of terms click here
Learning Resources	Online lectures; Supportive Material; Halfway Course Quiz; End of Course Quiz; Exercises. *for generic course work-flow click here
Study Time	Start any time after Payment. Estimated time: 3-4 months. We recommend a minimum study time of 2 weeks per Module at a rate of 8 hours per week.

Interaction	Self-Study: News Forum; Feedback Questionnaire; Quiz and Results generated online; FAQ section; For problem solving please contact us.
Qualifications:	ANIVADO Course Completion Certificate upon successful completion of all Quizzes; CPD Certificate as per arrangement with relevant Employers/Institutions.
Accreditation*	-
	If you feel your institution should accept this course for CPD please do not hesitate to contact us to discuss this further *see our institutions terms and conditions here
Optional Assessment	Not currently available: Contact us if you wish to discuss tailor-made assessments for your students
	Available under Add-Ons: Not at this moment
Course Cost	€440 (incl. VAT)

PURCHASE