ADVANCED
Train as an equine performance analyst by ARIONEO

Week 1

		Monday	Tuesday	Wednesday	Thursday	Friday
	Readings - Self Learning	**Arioneo textbooks:** - Heart rate and performance - Locomoton and acceleration				
	Video Class	**Welcoming session** - Presentation of everyone - Presentation of the program - Presentation of the elearning platform - Presentation of Assignments - Group Q&A shared sheet				
Week 1	E-learning : on-demand virtual class		**Speed - Cardiorespiratory system - Locomotion: the basics** - General anatomy - Gait mechanism - Performance indicators - Key figures	**How to read a data report? Diving into parameters** - Interpreting the graphs - Recovery parameters - Workout intensity & effort zones - Locomotor profiles & acceleration strategies - Comparison tool - Different types of parameters and their calculations		**Equine physiology applied to athlete horse training** - Cardiovascular & respiratory system and how they interact - Energy production mechanism
	Quiz		Quiz	Quiz		Quiz
	Assignments				Choose the right parameters for each trainer type considering their constraints	

Week 2

		Monday	Tuesday	Wednesday	Thursday	Friday
	Readings - Self Learning	**Arioneo textbooks:** - Speed analysis in training and racing **Videos:** - Data & future performers - How to set up a data science unit in a horse racing stable				
	Video Class			**Longitudinal analysis** - What to look for when building a report for a horse? - How to leverage a database **Guest speakers**		
Week 2	E-learning : on-demand virtual class	**Data analysis in practice: How to write the perfect Flash Analysis?** - What parameters to highlight for an efficient analysis - How to adapt your analysis to your audience - Synthesizing the data	**(Optional) Excel for beginners**		**Excel and mathematics basics** - The mathematics behind Arioneo parameters (recovery models, stride calculations, automatic adjustments) - Building an Excel dashboard for visual and automated reports - Big data analysis	**Horse anatomy and the effect of training on the horse's tissues** - Type of muscles - How to develop specific muscle fibers for a racehorse - Improving metabolism with training
	Quiz	Quiz			Quiz	Quiz
	Assignments		5 Flash Analysis			

Note that quizzes and readings can be done anytime of the week. Live class are not mandatory and recording is availlable on the e-learning platform.

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Week 3

		Monday	Tuesday	Wednesday	Thursday	Friday
Week 3	Readings - Self Learning			**Arioneo textbooks:** - Pathology analysis **Videos:** - Understanding and investigating a poor performance - Horse injuries, how do they occur? - How to avoid horse injuries?		
	Video Class		**Advanced sports science**: - Identifying track preference - V200 and V4 calculations - Future developments **Guest speakers**			
	E-learning : on-demand virtual class	**Common pathologies of the athlete horse and how to detect them in the data** - The most common pathologies of the athlete horse - Using data to prevent injuries			**Training for performance - Theory vs Reality** - Best theoretical training plans (managing workload, effort tests) - Why is it not always suited and how to best adapt	**Everything we cannot control, why horse data science will never be a predictive science** - External parameters impacting horse training - How to integrate them into your analysis - Communicating uncertainty with a racing team
	Quiz	Quiz			Quiz	Quiz
	Assignments			Make a presentation for a horse longitudinal followup		Bonus: Additional practical case

Week 4

		Monday	Tuesday	Wednesday	Thursday	Friday
Week 4	Readings - Self Learning			**Arioneo textbooks:** Communicating in the racehorse industry **Videos:** How do horses create energy? How to get the most of each horse?		
	Video Class			**Tutoring Live Class:** optional Live session to come back on previous assignments and clarify some topics. Brief assignments W4		**Tutoring & Assignment presentation "My role in equine performance innovation" and goodbye session**
	E-learning : on-demand virtual class		**The ECG during effort: why looking at it and basic interpretation pre-vet exam** - ECG basic knowledge - Alert signs of cardiac pathologies - Arrhythmias, signal correction and noice detection		**How to embark a racing team on a data journey?** - Developing data-driven and individualized training plans - Getting accomplices on the field and training them - Adapting your communication and analysis formats	
	Quiz		Quiz		Quiz	Survey
	Assignments	Build your ideal monthly dashboard for performance and health monitoring of a stable on Excel				

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