

|        |                                      | Monday   | Tuesday   | Wednesday | Thursday   | Friday   |
|--------|--------------------------------------|--|---|-----------|--|--|
| Week 1 | Readings - Self Learning             | <b>Arioneo textbooks:</b> <ul style="list-style-type: none"> <li>- Heart rate and performance</li> <li>- Locomotion and acceleration</li> </ul>  |   |           |  |  |
|        | Live class                           | <b>Welcoming session (1h)</b> <ul style="list-style-type: none"> <li>- Presentation of everyone</li> <li>- Presentation of the program</li> <li>- Presentation of the elearning platform</li> <li>- Presentation of the tutoring classes</li> <li>- Group Q&amp;A shared sheet</li> </ul> <b>Introductory guest speaker videos (2x 1h)</b> |   |           |  |  |
|        | E-learning : on-demand virtual class | <b>Speed - Cardiorespiratory system - Locomotion: the basics (20 min)</b> <ul style="list-style-type: none"> <li>- General anatomy</li> <li>- Gait mechanism</li> <li>- Performance indicators</li> <li>- Key figures</li> </ul>   | <b>How to read a data report? Diving into parameters (90 min)</b> <ul style="list-style-type: none"> <li>- Interpreting the graphs</li> <li>- Recovery parameters</li> <li>- Workout intensity &amp; effort zones</li> <li>- Locomotor profiles &amp; acceleration strategies</li> <li>- Comparison tool</li> <li>- Different types of parameters and their calculations</li> </ul> |           | <b>Equine physiology applied to athlete horse training (55 min)</b> <ul style="list-style-type: none"> <li>- Cardiovascular &amp; respiratory system and how they interact</li> <li>- Energy production mechanism</li> </ul> | <b>Data analysis in practice: How to write the perfect Flash Analysis? (50 min)</b> <ul style="list-style-type: none"> <li>- What parameters to highlight for an efficient analysis</li> <li>- How to adapt your analysis to your audience</li> <li>- Synthesizing the data</li> </ul> |
|        | Quiz                                 | Quiz   |   |           | Quiz   | Quiz   |
|        | Assignments                          | Choose the right parameters for each trainer type considering their constraints  |   |           |  |  |
|        |                                      |  |   |           |  |  |

Note that quizzes and readings can be done anytime of the week. Live classes recordings will be available on the e-learning platform.

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| Week 2 | Readings - Self Learning             | <b>Arioneo textbooks:</b> <ul style="list-style-type: none"> <li>- Speed analysis in training and racing</li> </ul> <b>Videos:</b> <ul style="list-style-type: none"> <li>- Data &amp; future performers</li> <li>- How to set up a data science unit in a horse racing stable</li> </ul> |   |   |  |   |
|        | Live class                           |   | <b>Optional Tutoring class</b><br>Live session with an instructor to: <ul style="list-style-type: none"> <li>- Ask all of your questions</li> <li>- Review the assignments</li> <li>- Review the notebook</li> <li>- Discuss all together!</li> </ul> |   |  |   |
|        | E-learning : on-demand virtual class | <b>(Optional but highly recommended) Excel for beginners (30 min)</b>   | <b>Longitudinal analysis (30 min)</b> <ul style="list-style-type: none"> <li>- What to look for when building a report for a horse?</li> <li>- How to leverage a database</li> </ul> <b>Guest speaker video (2 x 1h)</b>                              | <b>Excel and mathematics basics (50 min)</b> <ul style="list-style-type: none"> <li>- The mathematics behind Arioneo parameters (recovery models, stride calculations, automatic adjustments)</li> <li>- Building an Excel dashboard for visual and automated reports</li> <li>- Big data analysis</li> </ul> | <b>Common pathologies of the athlete horse and how to detect them in the data (100 min)</b> <ul style="list-style-type: none"> <li>- The most common pathologies of the athlete horse</li> <li>- Using data to prevent injuries</li> </ul> |   |
|        | Quiz                                 |   |   | Quiz  | Quiz   |   |
|        | Assignments                          | 5 Flash Analysis  |   |   |  | Make a presentation for a horse longitudinal followup |
|        |                                      |   |   |   |  |   |

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| Week 3 | Readings - Self Learning             | <b>Arioneo textbooks:</b><br>- Pathology analysis<br><br><b>Videos:</b><br>- Understanding and investigating a poor performance<br>- Horse injuries, how do they occur?<br>- How to avoid horse injuries? |   |           |  |   |
|        | Live class                           |   |   |           | <b>Optional Tutoring class</b><br>Live session with an instructor to:<br>- Ask all of your questions<br>- Review the assignments<br>- Review the notebook<br>- Discuss all together!       |   |
|        | E-learning : on-demand virtual class | <b>Horse anatomy and the effect of training on the horse's tissues (35 min)</b><br>- Type of muscles<br>- How to develop specific muscle fibers for a racehorse<br>- Improving metabolism with training   | <b>Advanced sports science (30 min)</b><br>- How to detect track preferences for your horses<br>- Advanced sports science calculations<br>- Effort tests<br><br><b>Guest speaker video (1h)</b> |           | <b>Training for performance - Theory vs Reality (35 min)</b><br>- Best theoretical training plans (managing workload, effort tests)<br>- Why is it not always suited and how to best adapt |   |
|        | Quiz                                 | Quiz  |   |           | Quiz   |   |
|        | Assignments                          |   | Bonus: Additional practical case  |           |  | Build your ideal monthly dashboard for performance and health monitoring of a stable on Excel |

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| Week 4 | Readings - Self Learning             | <b>Arioneo textbooks:</b><br>Communicating in the racehorse industry<br><br><b>Videos:</b><br>How do horses create energy?<br>How to get the most of each horse?                     |   |   |  |  |
|        | Live class                           | <b>Optional Tutoring class</b><br>Live session with an instructor to:<br>- Ask all of your questions<br>- Review the assignments<br>- Review the notebook<br>- Discuss all together! |   |   |  | <b>Assignment presentation "My role in equine performance innovation" and goodbye session (1h)</b> |
|        | E-learning : on-demand virtual class |  | <b>Everything we cannot control, why horse data science will never be a predictive science (30 min)</b><br>- External parameters impacting horse training<br>- How to integrate them into your analysis<br>- Communicating uncertainty with a racing team | <b>The ECG during effort: why looking at it and basic interpretation pre-vet exam (30 min)</b><br>- ECG basic knowledge<br>- Alert signs of cardiac pathologies<br>- Arrhythmias, signal correction and noise detection | <b>How to embark a racing team on a data journey? (35 min)</b><br>- Developing data-driven and individualized training plans<br>- Getting accomplices on the field and training them<br>- Adapting your communication and analysis formats |  |
|        | Quiz                                 |  | Quiz  | Quiz  | Quiz   | Feedback Survey  |
|        | Assignments                          |  |   |   |  | Assignment presentation "My role in equine performance innovation"                                 |

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