

## ***PhD-courses organised through GS-VMAS 2022 – 2025***

Yearly courses (2022-2025)			
<ul style="list-style-type: none"> <li>• Advanced use in Excel, 2 ECTS</li> <li>• Presentation techniques and current research in veterinary medicine and animal science, 4 ECTS                             <ul style="list-style-type: none"> <li>• Introduction to programming in R, 2 ECTS</li> <li>• How to write your first grant application, 1 ECTS</li> </ul> </li> <li>• Genome Analysis, 10 ECTS/2023 changed to Analysis of Genomes 7.5 ECTS and Biology of Genomes 7.5 ECTS                             <ul style="list-style-type: none"> <li>• Introduction to bioinformatics, 10 ECTS</li> </ul> </li> </ul>			
<b>2022</b> <ul style="list-style-type: none"> <li>• Animal ethics, 3/4.5 ECTS</li> <li>• Animal Welfare and the UN Sustainable Development Goals, 3 ECTS</li> </ul>	<b>2023</b> <ul style="list-style-type: none"> <li>• Quality assurance for laboratory work in PhD-projects, 2 ECTS</li> <li>• Environmental impact from animal production, 2 ECTS</li> </ul>	<b>2024</b> <ul style="list-style-type: none"> <li>• Animal ethics, 3/4.5 ECTS</li> <li>• Animal Welfare and the UN Sustainable Development Goals, 3 ECTS</li> </ul>	<b>2025</b> <ul style="list-style-type: none"> <li>• Quality assurance for laboratory work in PhD-projects, 2 ECTS</li> <li>• Environmental impact from animal production, 2 ECTS</li> </ul>
<b>2022 Ad hoc courses</b> <ul style="list-style-type: none"> <li>• Digital tools and objective methods for motion research in animals, 3 ECTS</li> <li>• How to read and write a scientific paper, 1 ECTS</li> <li>• Questionnaire Design and Management, 3 ECTS</li> <li>• Reproducibility in Research with a focus on data analysis using the program R, 2 ECTS</li> <li>• Ruminant Nutrition-Digestion and forage chemistry, 7 ECTS</li> <li>• Sperm Quality Evaluation, 2 ECTS</li> <li>• One health: concept, cases and methodology, 3 ECTS</li> <li>• Introduction to Python for data science, 2 ECTS</li> <li>• Multi-level modelling, 5 ECTS</li> </ul>	<b>2023 Ad hoc courses</b> <ul style="list-style-type: none"> <li>• Primary production of animal source food 3 ECTS</li> <li>• Survey methodology for questionnaire-based surveys 4 ECTS</li> <li>• Introduction to Python for data science 2 ECTS</li> <li>• Equitation Science 4 ECTS</li> <li>• Understanding cognition and emotions to improve animal welfare 3 ECTS</li> <li>• Understanding infectious diseases by fusing epidemiology, genetics and modelling ECTS</li> <li>• Computer science methods, digital tools and objective methods for motion research in animals 3 ECTS</li> <li>• Machine Learning in Agricultural Bioinformatics 3/5 ECTS</li> </ul>	<b>2024 Ad hoc courses</b> <ul style="list-style-type: none"> <li>• Animal personalities 2 ECTS</li> <li>• Comparative reproductive biotechnologie 2 ECTS</li> <li>• Introduction to Python for data science 2 ECTS</li> <li>• One Health: concept, cases and methodology 4 ECTS</li> <li>• Reproducibility in Research with a focus on data analysis using the program R 4 ECTS</li> <li>• Epigenetics and Sustainable Animal Production 8 ECTS</li> <li>• Host-microbe interactions in the gut 3 ECTS</li> <li>• Introduction to Julia for natural sciences 2 ECTS</li> <li>• Grazing and herbivory with focus on domestic ruminants and semi wild herbivores 3 ECTS</li> <li>• Introduction to programming in Matlab 3 ECTS</li> </ul>	<b>2025 Ad hoc courses</b> <ul style="list-style-type: none"> <li>• Data handling and high-quality illustrations for publications 3 ECTS</li> <li>• Comparative Animal Physiology - How animals work and why the work the way they do 3 ECTS</li> <li>• Machine Learning for Agriculture and Natural Sciences 5/7.5 ECTS</li> <li>• Survey methodology for questionnaire surveys 4 ECTS</li> <li>• Animal movements - from free ranging to restricted indoor environments 3 ECTS</li> <li>• Primary production of animal source food - systems perspective and sustainability assessment 3 ECTS</li> </ul>

*“Ad hoc courses are those subject specific courses that apply in our yearly calls”*