

Updated On	2024/02/05																																
Curricular Year / Period	2022/23 / S1																																
Course	CTeSP - Agricultural Production																																
Curricular Unit	Biosecurity in Animal Production																																
Language(s) of Instruction	Portuguese English																																
ECTS/tempo de trabalho (horas)	<table border="1"> <thead> <tr> <th>ECTS</th><th>Total</th><th colspan="8">Horas de contacto semestral</th></tr> <tr> <th>3</th><th>80</th><th>T</th><th>TP</th><th>PL</th><th>S</th><th>TC</th><th>E</th><th>O</th><th>OT</th><th>EC</th></tr> </thead> <tbody> <tr> <td></td><td></td><td>0</td><td>48</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></tr> </tbody> </table> <p>T - Theoretical; TP - Theoretical and practical; LP - Laboratory Practice; S - Seminar; TG - Tutorial guidance; FW - Fieldwork; T - Training; ; EC - Clinical teaching; O* - Other hours typified as Clinical Training under the Directive 77/453/EEC of June 27, adapted by Directive 2005/36/EC.</p>	ECTS	Total	Horas de contacto semestral								3	80	T	TP	PL	S	TC	E	O	OT	EC			0	48	0	0	0	0	0	0	0
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		0	48	0	0	0	0	0	0	0																							
Teacher in charge (GDPR consent) [complete name, email]	Miguel Mardel Correia Parreira / miguel.parreira@ipportalegre.pt																																
Prerequisites [Curricular Units that must precede and specific entry competences]	N/A																																
Learning outcomes [Description of the overall and specific objectives] [Knowledge, skills and competences to be developed by students]	<p>Animal health ultimately depends on various veterinary sciences and on the constancy of internal organic homeostasis, only maintained by a symbiosis between various areas of veterinary medicine. The objective of biosecurity at the level of livestock farming is to establish a prevention barrier for agents that cause disease in animals and other threats, minimizing the movement of biological organisms and other external hazards, to and within operations carried out at the level of animal production. The concept of biological risk management recognizes that it is practically impossible to eliminate animal diseases, but agricultural producers can manage the disease through effective control measures. In this sense, and with this curricular unit (CU), it is intended to teach students the basics of biosecurity at the level of primary production, providing them with tools that enable to put into practice preventive measures to protect animal health and, indirectly, maximizing the income of the agricultural company. In this way, after attending this CU, students should be able to formulate and execute an animal biosecurity plan for a given farm and should focus on forms of animal handling and handling, access of vehicles and personnel to the farm, animal health , animal operations, namely control of animal movement, early detection of disease, animal purchase policy, treatment of waste and animal carcasses, handling of sick animals, definition and delimitation of different risk areas where levels of protection and control vary , cleaning and sanitizing facilities, pest control, etc. By following these principles, and working as a team, students will be able to play a significant role in maximizing and maintaining the health status of animals, and of the livestock company itself.</p>																																
Sustainable Development Goals																																	
Syllabus	<p>THEORETICAL-PRACTICAL CLASSES: 1. Introduction to biosecurity. Basic principles of biosecurity 2. Basic concepts of hygiene and sanitary prophylaxis 3. Disease determinants 4. The kinetics of collective disease 5. Understanding infectious diseases 6. Buying animals: how to reduce the risk of disease 7. Bioexclusion: keeping infectious diseases away from your herd 8. Biosecurity at the level of the cattle farm 9. Biosecurity at the level of small ruminant farms 10. Biosecurity measures in case of an epidemic outbreak 11. Biosecurity: practical approach.</p> <p>PRACTICES: Study visits to cattle, sheep and swine farms and on-site visualization of biosecurity measures and their implementation in the field. Seminars with biosecurity experts in beef, sheep and swine production.</p>																																
Teaching methodologies (including assessment) [Specify the types of assessment and the weights and evaluation criteria]	<p>1 - Teaching methodologies</p> <p>Theoretical-practical classes in which the concepts are introduced and the fundamentals of the topics to be covered are explained with the required level of detail; practical classes and/or study visits in which the theoretical concepts are applied and demonstrated. These will be organized into groups, by dividing the students into different shifts, in a number pre-defined by the CU teacher.</p>																																

	<p>On-site teaching in a classroom environment and/or real setting on livestock farms, and, if required by health constraints, online teaching.</p> <p>2 - Period assessment</p> <p>Continuous assessment with one written test during the semester based on the material taught during that period. Execution of a practical group work about the implementation of a biosecurity plan in a real livestock.</p> <p>The weight of each component in the final grade will be distributed as follows: theoretical component 70%, practical component (includes continuous assessment during the semester) 10%, group work 20%.</p> <p>3 - Examination assesement</p> <p>Global assessment, in the form of a final exam, with a theoretical and a practical component (exclusive to students who have not passed the practical component), encompassing all the material covered at CU.</p> <p>In the final exam, the grade will be calculated according to the following contribution of each assessment component: 70% of the exam and 30% of the practical component (includes the grade of the practical component in a continuous assessment system, or the practical exam given to students in a special situation, and the grade obtained in the group work).</p> <p>Constraints: unjustified absences from the practical component send the student to an oral exam; minimum grade to be obtained in each interim test to waive the final exam 9.5/20; the non-approval/execution of tasks in the practical component implies non-compliance with minimum criteria for the CU approval.</p>
Bibliography	<p>1 - Main Bibliography</p> <p>Notes provided by the teacher during the semester.</p> <p>OMAFRA Factsheet 01-043, Biosecurity: Health Protection and Sanitation Strategies for Cattle and General Guidelines for Other Livestock.</p> <p>www.animalhealthireland.ie</p> <p>2 - Complementary Bibliography</p> <p>Farm Biosecurity for Livestock Producers: secure your farm, secure your future. 2012. Animal Health Australia.</p> <p>HERSOM M, IRSIK M, THRIFT T. 2014. Biosecurity and Biological Risk Management for Livestock Enterprises. Department of Scienses. University of Florida, IFAS Extension.</p> <p>National Farm Biosecurity Reference Manual Grazing Livestock Production, 2012. Animal Health Australia.</p> <p>SMITH, BP (2002). Large Animal Internal Medicine. 3rd Edition. Mosby. St. Louis. Missouri.</p>
Special Situations [Students with special status]	<p>1 - Period assessment - Students with special status</p> <p>2 - Examination assesement - Students with special status</p>