



RESOLUÇÃO Nº 123/2025-CI/CCA

CERTIDÃO

Certifico que a presente resolução foi afixada em local de costume, neste Centro e disponibilizada na página: www.cca.uem.br, no dia 16/12/2025.

Aprova a alteração curricular do Programa de Pós-Graduação em Zootecnia (PPZ), referente a criação de disciplina.

Marcelo Lyouithi Omori
Secretário

Considerando o **e-protocolo nº 24.766.435-1**;
considerando a reunião do Conselho Interdepartamental do Centro de Ciências Agrárias, realizada em 03 de dezembro de 2025;

O CONSELHO INTERDEPARTAMENTAL DO CENTRO DE CIÊNCIAS AGRÁRIAS E EU, DIRETOR, SANCIONO A SEGUINTE RESOLUÇÃO:

Art. 1º- Aprova a alteração curricular do Programa de Pós-Graduação em Zootecnia (PPZ), referente a alteração de disciplina, conforme segue:

Disciplina	Animal Welfare Assessment Methods				
Nível	Mestrado/Doutorado				
Carga horária	45 horas/aula				
Departamento	Departamento de Zootecnia.				
Número de créditos	Teórico:	02	Prático:	01	Total: 03

Ementa	“Introduction to Animal Welfare Science; Frameworks and Approaches to Welfare Assessment; Behavioral Indicators; Physiological and Health Indicators; Environmental and Management Indicators; Practical Welfare Assessment; Communication, Certification, and Policy”.
HEADING	The general objective is to provide students with theoretical and practical knowledge to evaluate animal welfare scientifically, using behavioral, physiological, and environmental indicators across different species and production systems. The specific objectives are: to understand the main concepts and frameworks in animal welfare science, to identify key indicators used to assess animal welfare, to develop practical skills in the use of welfare assessment protocols, to interpret welfare data in the context of management and ethics, to critically analyze and compare existing welfare standards and certification schemes.



<p>Programa</p>	<p>1. Introduction to Animal Welfare Science: Historical evolution and concepts of animal welfare, the "Five Freedoms" and "Five Domains" models, Ethical and societal bases for animal welfare assessment, relationship between welfare, health, and productivity.</p> <p>2. Frameworks and Approaches to Welfare Assessment: animal-based vs. resource-based indicators, Welfare Quality® and AWIN (Animal Welfare Indicators Network) protocols, Qualitative Behavioral Assessment (QBA), validity, reliability, and feasibility in welfare indicators.</p> <p>3. Behavioral Indicators: behavior as an indicator of welfare: normal vs. abnormal behaviors, preference and motivation testing, behavioral sampling and ethogram development, tools for automatic behavior recording (precision livestock).</p> <p>4. Physiological and Health Indicators: stress physiology and its measurement (cortisol, HRV, etc.), immune, metabolic, and reproductive indicators, welfare and health interactions: morbidity, injury, lameness, mortality, sampling, biosafety, and ethical considerations.</p> <p>5. Environmental and Management Indicators: thermal comfort and microclimate assessment, space allowance, hygiene, and resource access, stockmanship and human- animal interactions, environmental enrichment and housing design.</p> <p>6. Practical Welfare Assessment: application of Welfare Quality® and AWIN protocols in field settings (e.g., dairy, beef, swine, poultry), data collection and scoring exercises; observation and recording methods (direct, video, or app-based), data analysis and welfare interpretation.</p> <p>7. Communication, Certification, and Policy: welfare certification and auditing systems, national and international legislation, communicating welfare results to producers and the public, welfare as a component of sustainability and One Welfare.</p>
<p>Referência Bibliográfica</p>	<p>Broom, D.M. & Fraser, A.F. (2015). Domestic Animal Behaviour and Welfare. 5th Ed. CABI.</p>



	<p>Appleby, M.C., Olsson, I.A.S., & Galindo, F. (2018). Animal Welfare. 3rd Ed. CABI.</p> <p>Welfare Quality® Network (2009). Assessment Protocols for Cattle, Pigs, and Poultry.</p> <p>Mellor, D. (2017). Operational Details of the Five Domains Model. Animals 7(8): 60.</p> <p>OIE (World Organisation for Animal Health). Terrestrial Animal Health Code: Animal Welfare Section.</p> <p>Additional scientific papers and case studies will be provided throughout the course to reflect current advances in animal welfare science.</p>
Avaliação	<p>Student performance will be evaluated through a combination of theoretical and practical activities:</p> <p>Written exam - 30%, Seminar presentation - 20%, Practical report - 30%, Participation and engagement - 20%.</p>

Art. 2º- Esta resolução entra em vigor na data de sua publicação.

Dê-se ciência.
Cumpra-se.

Maringá, 16 de dezembro de 2025.

Carlos Alberto de Bastos Andrade
Diretor

ADVERTÊNCIA:

O prazo recursal termina em 22/12/2025. (Art. 95 - § 1º do Regimento Geral da UEM)