

Fall

ANSC 424

Pet Food and Feed Manufacturing

Instructor:



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Course Overview:

This is a fast-paced 8-week online course which integrates principles of companion animal nutrition with various aspects pertaining to pet food manufacturing. Topics discussed in this course include processing technologies (e.g., extrusion, retorting, baking) involved in the manufacturing of pet foods, principles of diet formulation and nutritional guidelines, and an overview of labeling regulations, and good manufacturing practices. This course includes demonstrative videos of various process and focuses on applied and active learning.



Course Goals and Objectives:

This course is designed for senior undergraduate, entry level graduate students, and professionals in the field of pet nutrition and industry who are interested in integrating knowledge of various aspects pertaining to pet food and feed manufacturing and animal nutritional concepts and requirements. As such, this course will focus on upper categories of the significant learning and Bloom's taxonomies. This teaching approach will challenge students to use their prior foundational knowledge and to evaluate potential biases about topics discussed, to foster the application of interdisciplinary skills and to further inquire about the subject of discussion, and to critically appraise information from the literature.

Course Modules and Learning Goals:

By the end of this course, you will be able to:

- Understand and apply various concepts pertaining to pet food manufacturing.
- Demonstrate good understanding of various food processes and explain the main purpose and critical points of each process.
- Examine different scenarios related to different food processes, regulatory affairs and other topics discussed and develop viable and scientifically sound solutions.
- Demonstrate ability to interleave the concepts and materials taught in this course to critically evaluate and appraise information and apply it using real world examples.
- Feel more educated on topics discussed and develop new interests pertaining to the field and related subjects.

Modules 1 – 4:




Welcome & Career Opportunities

María R. C. de Godoy, Ph.D.
Assistant Professor of Companion Animal and Comparative Nutrition
Department of Animal Sciences and Division of Nutritional Sciences




Following Rules: The Importance of Compliance

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The ABC of Pet Food Manufacturing


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Processing to Do or Not to Do: A Case for Raw and Minimally Processed Foods


María R. C. de Godoy, Ph.D.
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Modules 5 – 8:




Extrusion: A Versatile Process in Pet Food Manufacturing

María R. C. de Godoy, Ph.D.
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Who Canned the Tuna? Principles of Retort Systems

María R. C. de Godoy, Ph.D.
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Baking: Basic Concepts and Applications

María R. C. de Godoy, Ph.D.
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Packaging Technology

María R. C. de Godoy, Ph.D.
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