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Pigs and Poultry

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Small Farm Husbandry: Pigs and Poultry

STOCKSCH 269

3 Credits

Instructor:

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Class Description

This course provides students with a farmer's perspective on the management, production and marketing of poultry and pigs on a small farm. This course will address the advantages of having pigs and poultry and will review basic care, processing options, regulations, marketing and finances. The course will be structured around lectures, farm visits, guest lectures and acquiring hands on skills. We will explore different alternative farming systems that utilize animals to enhance their production. At the end of this course, students will be able to utilize pigs and poultry as an integral part of their small farm plan.

Learning Objectives/ Course Goals

Students will gain the knowledge related to the planning and management of pigs and poultry on a farm. Specifically, students will adopt the following practices

- Identify and utilize sustainable management practices for pigs and poultry
- Comprehension of the complete life cycle management of pigs and poultry for meat and egg production
- Understand basic anatomy and physiology for the purposes of monitoring animal health, estimating meat production volume and best practices for slaughter.
- Understand basic nutritional demands in order to prepare appropriate feed for optimal development and use of animals
- Understand the rules and regulations of running a farm business
- Develop critical thinking skills on designing and implementing systems on a small farm

Textbooks

Homegrown Pork: Humane, Healthful Techniques for Raising a Pig for Food, by Sue Weaver, Storey Publishing 2013, Cost \$18.95

The Small-Scale Poultry Flock: An all-natural approach to raising chickens and other fowl for home and market growers, by Harvey Ussery,
Chelsea Green Publishing 2011, Cost \$39.95

Outline of Topics:

Developing Infrastructure and Understanding the Fixed Costs of Starting a Farm- Students will acquire knowledge of the differences, advantages, and the disadvantages in breed selection, housing and fencing. Students acquire an understanding of where and how to navigate the purchasing in livestock and how to determine if they are making a good selection. Participants learn multiple options for housing that reflects a sustainable approach as well as how the expenses differ. Students will get the opportunity to design and build their own poultry shelter and see how it works in the field. Students will learn how to determine their fencing needs and learn how to set up and take electric fencing. Students will also be able to determine the best needs for their system of choice. All aspects of infrastructure covered at this time will include financial awareness.

Gaining Perspectives on Sustainable Options of Keeping Livestock Healthy- Students will learn about the nutritional requirements of pigs, egg layers and broilers. Students learn the natural behavior of each animal through observation and lessons, and be able to determine how best to provide an environment that promotes health. Students will gain an understanding of alternative diets that can be safely provided to pigs and chickens and be able to complementarily integrate them into their farming system.

Understanding Breeding, Gestation Cycles & Birthing- Students will learn separately about the reproduction cycles of pigs and poultry. They will learn different approaches to breeding, necessities for birthing and raising young piglets and chicks, as well as understanding possible challenges that arise during these cycles. Students will explore developing their own hatching/ breeding program with poultry.

Illness and Disease and Common Problems- Students learn how to navigate resources to support them during their animal's time of illness. Students will develop a plan as to what steps to take when they perceive something to be wrong with an animal. Students learn the importance of their relationship with their vet and will gain confidence in being able to explain

clearly their concerns. Students gain a basic understanding as to the common problems on the farm and how best to deal with the situation.

Learning Rules and Regulations- Students will learn about their options with farm certifications, town and national regulations as well as the importance and different ways to navigate record keeping. This topic will be addressed throughout the semester.

Products & Processing- Students will learn product options for each animal. Students gain an understanding as to how to price each product and what rules and regulations are attached to processing that product. Specifically, students will learn about legally processing birds with USDA exemptions. As a group will learn how to break down a poultry carcass and learn all of the options for available cuts for poultry and pigs. Students will learn how to price and evaluate their products.

Marketing - Each student will learn about different marketing options and what requirements and challenges that are associated with them. Students will explore different media sources to acquire new customers and learn the importance of labeling, the deception of claims, and overall how to determine the best marketing solution for their demographic location.

Structuring Finances- Students will learn options on financial records. Students will learn how to find funding to support their farm. Students also learn about structuring their finances to include taxes, insurance and other expenses that are not always apparent with farming. Students learn how to recognize fixed verses variable costs and how to create a practical enterprise budget.

Course Requirements

Attendance and Participation:

Students will be expected to attend each class period. Because of the nature of the class being focused on hands-on learning attendance is mandatory (see rubric) for adequate learning.

Trainings:

In order to participate in this class and work within the poultry project at the Agricultural Learning Center (ALC) it is mandatory for students to be trained by the instructor as well as in classroom and on-line by IACUC to ensure a safe environment. Students will also obtain a safe-serve certification in order to be a

participant in slaughtering of chicken with the Mobile Poultry Processing Unit (MPPU).

Chores:

Each student is expected to participate in chores for the poultry project at the minimum one time each week until the chickens are processed at the end of October. To ensure that each student is properly trained they will receive a manual explaining details of the project and their responsibilities pertaining to chores as well as being shadowed by a TA until they feel comfortable being alone during chores. This requirement includes, but not limited to, showing up at the correct time, feeding, watering, checking poultry's well-being and the moving poultry tractors. Chores can range from 30minutes to 1 hour of your time outside of classroom hours.

Slaughter:

One day on a specified weekend at the end of October (TBD) students will be using the Mobile Poultry Processing Unit (MPPU) to process our poultry legally to sell to a market. It is not mandatory to be a part of the killing process or evisceration process, but there are a lot of logistics that are required throughout the day that do not pertain to the "hands-on" piece. These roles are available and will be clarified prior to processing.

Written Work:

Assignments: There will be 5 written assignments throughout the semester that further the learning material that will be covered in class.

- Choosing breeds and developing a purchasing plan
- Developing Sustainable Housing Infrastructure
- Developing a Homemade Nutrition Program for Poultry
- Developing an emergency illness plan, learning how to navigate resources, reviewing case studies
- Marketing and Product Plan

Readings:

Before lectures students will have an article or document to read. Students will be responsible for handing in a written reflection on the material and should come to class prepared to discuss.

Farm Visit:

This assignment requires physically visiting a farm that is similar to the student's production of interest. The farm must raise at least one of the animals

of focus in the class. Observe, reflect on class material, participate in activities, help with work and take the information gained to complete this assignment. After the farm visit a 2 page paper on observations, insight and knowledge gained will be submitted. The final step will be to consolidate this paper into a blog reflection stating the farm and your experience/ observations of their systems. The blog post should be around 400 words long and must have at least 1 picture.

Meat Consumption Reflection -Through -out the semester each individual in class will observe their personal consumption of meat on a weekly basis. At the end of the semester a reflection on the observations of consumption over the semester will be due. In this paper students will state any changes or appreciations gained within your personal diet. Awareness of meat consumption is a big step in making the industry sustainable.

Special Topic Project:

Students will choose a topic of interest in the field of poultry or pigs. Topic descriptions are due at the end of the first quarter of the semester and an outline will be submitted at mid-term. At the end of the semester students are responsible on teaching the class through a presentation on the topic of research that they focused on for the semester. Students also have to submit a personal reflection on the major take away points they learned from the research.

Grading Rubric

Written Assignments: 240Points

6 @ 40 points each

Reading Reflections: 150 Points

10 @ 15 points each

Farm Visit Blog Post: 100 points

Chores: 160 Points

8 chores at 20 points each

Special Topic Final: 250 Points

Outline: 25

Presentation: 200

Reflection: 25

Attendance & Participation: 150 Points

Slaughter: 50 Points

Total Points = 1100

Grade Scale

1100-1023 = A

1022- 979= A-

978-946= B+

945-902 = B

901-869= B-

868-836= C+

835-803= C

802-770= C-

769-715= D+

714-660= D

659-0= F

802-770= C-

769-715= D+

714-660= D

659-0= F

Accommodation Statement

The University of Massachusetts Amherst is committed to providing an equal educational opportunity for all students. If you have a documented physical, psychological, or learning disability on file with Disability Services (DS), you may be eligible for reasonable academic accommodations to help you succeed in this course. If you have a documented disability that requires an accommodation, please notify me within the first two weeks of the semester so that we may make appropriate arrangements.

Academic Honesty Statement

Since the integrity of the academic enterprise of any institution of higher education requires honesty in scholarship and research, academic honesty is required of all students at the University of Massachusetts Amherst. Academic dishonesty is prohibited in all programs of the University. Academic dishonesty includes but is not limited to: cheating, fabrication, plagiarism, and facilitating dishonesty. Appropriate sanctions may be imposed on any student who has committed an act of academic dishonesty. Instructors should take reasonable steps to address academic misconduct.

Any person who has reason to believe that a student has committed academic dishonesty should bring such information to the attention of the appropriate course instructor as soon as possible. Instances of academic dishonesty not related to a specific course should be brought to the attention of the appropriate department Head or Chair.

Since students are expected to be familiar with this policy and the commonly accepted standards of academic integrity, ignorance of such standards is not normally sufficient evidence of lack of intent

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