VM 577P Herd Production Medicine - Spring 2012
Thursday 2-4 PM
Bustad 210

Dr's. CS Schneider and JM Gay, Course Directors

Credits: 2-3 Hours

Instructional Goals and Learning Objectives:

Students will begin developing the skills to identify livestock producer needs and begin accumulating the specialized knowledge, skills and resources to deliver Herd Production Medicine (HPM) services to meet those needs, focusing on their species of their interest. Industry and academic professionals will make presentations in their areas of expertise.

The course objectives are to:

a) Orient students to HPM
b) Have students appreciate the differences between the B2C and B2B clientele segments
c) Acquaint students with HPM resource materials and the diverse opportunities available in HPM.
d) Empower students to begin acquiring the skills for marketing to livestock producers and for providing HPM services that meet their needs.

Course Organization:

Focus 1 - Intro and Economics in Food Animal Veterinary Medicine/Herd Investigation 5 weeks

HPM Resource review –
print, Internet and computer software
Applied Marketing, Agricultural Economics, and Decision Making for
Veterinarians serving the "For Profit" animal industries.
SWOT Analysis – Planning for your future
Excel enterprise budgeting skills

Focus 2 - Issues in Food Animal Medicine - Dairy and Beef Production Medicine 5 weeks

Beef Production Medicine –
- Cow calf reproduction, Beef reproduction and disease benchmarking, vaccine protocols, feed lot medicine.

Dairy Production Medicine
- Use of records on modern dairy farms, basic record interpretation, dairy epidemiology 101, young stock programs on modern dairies

Focus 3 – Optional and ancillary topics (time dependent) 5 weeks

Guest speakers and presentation, topics TBD but may include:
Swine production medicine 101, AMDUCA and ELDU in food animals, large herd reproductive technologies, small ruminant (Sheep/Goat) production medicine.
Young stock management, advanced reproductive management, sexed semen technology, DC-305 and dairy records, practical biosecurity and vaccine programs.

Course Grading:

This course will be graded S/M/F in accordance with WSU Vet med's grading policy. The specific grading for the variable credit option is outlined below.

Grading Requirements by Credit Hour:
Points will be assigned in the following manner:

Two Credit Hours (2 credits):

a.	Lecture and participation	100 points
b.	Class assignments	100 points
c.	Total	200 points

Pass > 140 points
Marginal Pass = 120-140 points
Fail < 120 points

Three Credit Hours (3 credits):

a.	Lecture and farm visit participation	100 points
b.	Class assignments	100 points
c.	Special Project (see explanation)	100 points
d.	Total	300 points

Pass > 210 points
Marginal Pass = 180 - 207 points
Fail < 180 points
*Letter grades are assigned on traditional scale: A (>90%), B (>80%).

Course Assignments:

During the course of the semester several class assignments will be completed. Work on these assignments may be done in small groups, may occur during class time (excel spread sheets, computer software) or outside of class (reading and evaluation). These assignments are due two stages, a draft that is shared with classmates and instructor for feedback and the final that is due at a later date. An outline of the topics, assignment date and due date will be distributed in class. Each of the assignments will have an associated point value used in the final grade computation.

Note: Dr. Gay's website is at **http://www.vetmed.wsu.edu/courses-jmgay/** and his course materials for this class are under the heading "VM 577P Herd Production Medicine"

2012 Links and Materials - **http://www.vetmed.wsu.edu/courses-jmgay/PM12Materials.htm**

In-Print & On-Line Production Medicine Information Resources
http://www.vetmed.wsu.edu/courses-jmgay/PMCurrentProdMedRefs.htm

Special Project Option:

The **"Special Project"** option is designed to allow interested students to explore the discipline of HPM in a practical fashion on the farm for an additional credit. These projects are to be arranged between the student and Dr. Schneider. They will include a HPM-related assignment on a local production animal unit (dairy, beef, sheep, research center, swine center etc.). The student will design and execute the investigation, prepare a 10-15 page report and a 30 - 40 minute oral presentation. The students are encouraged to develop areas of their own personal species interest and apply HPM principles in an investigative or consultative fashion.

Example project topics include:

Dairy

a. Monitoring body condition changes in production groups. Changes in management factors or animal performance related to BCS.
b. Analyzing responses to rBST using computer models.
c. Determining and evaluating young stock growth curves.
d. Herd vaccination programs and implementation.

Beef

a. Tracking weaning weights in calves related to breed.
b. Herd vaccination strategies.
c. Trace mineral supplementation to pregnant animals.

Swine

a. Farrowing crates, sow comfort and animal health/welfare.
b. Neonatal mortality related to scours. Management techniques.
c. Vaccination strategies to control respiratory disease.

Other

a. Herd health issues related to local wildlife research animals.
b. Herd analysis of family livestock operations.
c. Externship opportunities with other veterinarians or veterinary organizations (CDC, Monsanto etc.)
d. Application of "organic" principles to livestock production.

The goal of the special project will be to allow the student the opportunity to develop and utilize the Production Medicine principles taught in the lectures in actual field situations. The student will be required to spend at least 20 hours working on this project and developing the written and oral report. The oral presentation will be given in an open seminar forum during the last week of the semester. The course coordinator will be available to assist and mentor the student with the special project throughout the course of the semester.