

VM 577P Herd Production Medicine - Spring 2010 – Revised 3/23/10
Wednesday 2-4 PM
2018 ADBF
Dr's. CS Schneider and JM Gay, Course Directors
Credits: 1-3 Hours

Instructional Goals and Learning Objectives:

Students will begin identifying and accumulating the specialized knowledge, skills and resources needed for veterinary Herd Production Medicine (HPM) in their species of interest. Industry and academic professionals will make presentations in their areas of expertise.

The course objectives are to:

- a) Orient students to HPM
- b) Acquaint students with HPM resource materials.
- c) Acquaint students with the diverse opportunities available in HPM.
- d) Enable students to begin identifying and acquiring the skills for providing HPM services to clients in animal agriculture.

Course Organization:

Focus 1 - Introduction and Beef Production Medicine **5 weeks**

Resource review – print, Internet and computer software
Applied Economics and Decision making for Veterinarians in the “For Profit” animal industries
Beef Production Medicine – beef quality assurance, national animal ID, vaccine protocols, feed lot medicine.
Cow calf Theriogenology

Focus 2 - Dairy Production Medicine/Herd Investigation– **5 weeks**

Young stock management, advanced reproductive management, sexed semen technology, DC-305 and dairy records, practical biosecurity and vaccine programs.
Mastitis, transition programs and fresh cows.
Introduction to herd investigation.

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

Guest speakers and presentation, topics TBD but may include: Agriculture animal welfare, AMDUCA and ELDU in food animals, large herd reproductive technologies, small ruminant (Sheep/Goat) production medicine, swine production medicine.

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:

One Credit Hour (1 credit)

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| a. Lecture, lab and farm visit participation | 100 points |
| b. Total | 100 points |

Pass > 80 points
Marginal Pass = 60-80 points
Fail < 60 points

Two Credit Hours (2 credits):

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| c. Lecture, lab and farm visit participation | 100 points |
| d. <u>Class assignments</u> | <u>100 points</u> |
| e. Total | 200 points |

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

Three Credit Hours (3 credits):

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|---|-------------------|
| a. Lecture and farm visit participation | 100 points |
| b. Class assignments | 100 points |
| c. <u>Special Project (see explanation)</u> | <u>100 points</u> |
| d. Total | 300 points |

Pass > 210 points
Marginal Pass = 180 - 207 points
Fail < 180 points

*Letter grades are assigned on traditional A (>90%), B (>80%) table.

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 to class members on the first day of class. Each of the assignments will have an associated point value used in the final grade computation.

Note: Dr. Gay's website with links to some course materials is at <http://www.vetmed.wsu.edu/courses-jmgay/>

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 20 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.

Student Disability Policy

"Students with Disabilities: Reasonable accommodations are available for students with a documented disability. If you have a disability and may need accommodations to fully participate in this class, please visit the Disability Resource Center (DRC). All accommodations MUST be approved through the DRC (Washington Building, Room 217). Please stop by or call 509-335-3417 to make an appointment with a disability specialist."

Week #	Week of:	Date	Topic	Coordinator	Assignment
1	Jan 11	01.13.10	1. Introduction 2. Getting connected for lifelong learning	CS Schneider	Attend Michael Pollan lecture
2	Jan 18	01.20.10	1. Cow calf practice 2. Cow calf vaccines	MW Ayers	Vaccine Exercise Assigned
3	Jan 25	01.27.10	1. Economics of animal agriculture 2. The Perfect Storm	JM Gay	Enterprise Budget Exercise Assigned
4	Feb 1	02.03.10	1. Personal strategic planning 2. Concepts in cow calf herd health I	JM Gay	1. Vaccine Exercise Draft 1 due
5	Feb 8	02.10.10	1. Concepts in cow-calf herd health II	JM Gay	Strategic Planning Exercise Assigned
6	Feb 15	02.17.10	1. Cow-calf herd reproductive evaluation	CS Schneider	1. Enterprise Budget Draft 1 Due. 2. Vaccine Exercise Final Draft due
7	Feb 22	02.24.10	Dairy Production Med 1. Young stock production 2. Scheduvac	CS Schneider	1. Scheduvac Assigned
8	March 1	03.03.10	1. Dairy Epi 101 2. Transition and fresh cow programs and analysis	R Pillars	1. Strategic Planning Exercise Draft 1 due.
9	March 8	03.10.10	Dairy Production Med Herd investigation strategies	J Wenz/Pfizer	1. Scheduvac assignment due SAVMA Symposium
10	March 15	03.17.10	Spring Break		
11	March 22	03.24.10	Discussion: Strategic Planning and Scheduvac Dairy Production Med 1. Calf Rearing/Young stock	JM Gay/CS Schneider	Sceduvac Draft One Due
12	March 29	03.31.10	Dairy Production Med 1. DC-305 2. HDC program analysis	J Wenz	Strategic Planning Exercise Draft 2 due.
13	April 5	04.07.10	Feedlot Production Medicine	S Macgregor	
14	April 12	04.14.10	Large herd prod med 1. Use of technology in practice (U/S, chemical preg tests etc)	CS Schneider	
15	April 19	04.22.10	"Making Worker Training More Effective : Consideration of Cultural Differences and Needs of Adult Learners"	Noa Roman – CSU Vetmed	
		04.24.10	Beef Short Course	Mark Hilton	WSU Ag Animal Club sponsored event
16	April 26	04.28.10	Discussion/Student Presentations	C Blaha K Perry	Strategic Planning Exercise Final due.
17	May 3	TBA	Finals Week		