

VM 577P Herd Production Medicine - Spring 2011
Thursday 2-4 PM Bustad 210

Syllabus as of 2/16/2011

Dr's. CS Schneider and JM Gay, Course Directors
Credits: 2-3 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:

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| Focus 1 - Introduction and Issues in Food Animal Medicine | 5 weeks |
| Resource review –
print, Internet and computer software | |
| Beef Production Medicine –
beef quality assurance , national animal ID, vaccine protocols, feed lot medicine. | |
| Cow calf Theriogenology | |
| Animal Welfare | |
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| Focus 2 – Economics in Food Animal Veterinary Medicine/Herd Investigation– | 5 weeks |
| Applied Economics and Decision making for Veterinarians in the “For Profit” animal industries. | |
| SWOT Analysis – Planning for your future | |
| Introduction to herd investigation. | |
| Other (?) | |
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| Focus 3 – Optional and ancillary topics (time dependent) | 5 weeks |
| Guest speakers and presentation, topics TBD but may include:
Epidemiology 101, AMDUCA and ELDU in food animals, large herd reproductive technologies, small ruminant (Sheep/Goat) production medicine, swine 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, lab and farm visit participation	100 points
b. <u>Class assignments</u>	<u>100 points</u>
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. <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 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 with links to some course materials is at <http://www.vetmed.wsu.edu/courses-jmgay/>. Midway down this index page is a section "VM 577P Herd Production Medicine" with a bullet for your 2011 Class that will be "populated" as we go. Some of the resources are:

[Introduction to Herd Production Medicine](#)

[In-Print & On-Line Production Medicine Information Resources](#)

[Epidemiology Concepts for Disease in Animal Groups](#)

[Guide for Herd Problem Investigations](#)

[Basic Concepts for Cow-Calf Herd Health Programs](#)

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.

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 10	01.13.10	1. Introduction 2. Getting connected for lifelong learning	CS Schneider JM Gay	Review web resources
2	Jan 17	01.20.10	1. Cow-calf herd reproductive evaluation.	CS Schneider	Herd Repro Analysis Assigned
3	Jan 24	01.27.10	1. Cow calf practice 2. Discuss Assignment	CS Schneider	Reading for next lecture assigned
4	Jan 31	02.03.10	1. Animal Welfare in Food Animal Practice 2. FARM Program	CS Schneider	1. Herd Repro Evaluation Due 2. Reading for next lecture assigned.
5	Feb 7	02.10.10			Assigned Pre reading
6	Feb 14	02.17.10	1. The Perfect Storm 2. Personal Strategic Planning	JM Gay	1. Personal Plan 2. Professional Service Fee Exercise
7	Feb 21	02.24.10	Economics of animal agriculture	JM Gay	3. Enterprise budget spreadsheet
8	Feb 28	03.03.10	1. Dairy Epidemiology 101: Practical application of epidemiologic principles	R Pillars	TBD
9	March 7	03.10.10	An approach to Herd Problem Investigation Strategies: How to avoid that "deer in the headlights feeling"	J Wenz/Pfizer	TBD
March 14		03.17.10	Spring Break		
10	March 21	03.24.10	Marketing of niche products – History of American Wagyu cattle	Tom Geary (?)	SAVMA Symposium
11	March 28	03.31.10	Dairy Production Med 1. Calf Rearing/Young stock 2. Scheduvac Discussion: and Scheduvac	JM Gay/CS Schneider	TBD
12	April 4	04.07.10	Issues in Ag Animal Sustainability	Jude Capper?	TBD
13	April 11	04.14.10	Large herd production med 1. Using technology in practice (U/S, chemical preg tests etc)	CS Schneider	Biotracking visit?
14	April 18	04.21.10	Invited Speaker	Open	TBD
15	April 25	04.28.10	Feedlot Production Medicine – Grad Student presentation	S MacGregor	TBD
	May 2	Finals Week			