

BERTHA-HEWITT HIGH SCHOOL
Fall Semester Curriculum Map 2015-16
Steve Pauly – Instructor
Course length: 18 weeks (90 hours)
Program code: 019901
Course code: 85

Academic Standard Area: **Science** *Course Title/Strand:* **Animal Science** *Grade Level:* **10-12**

Textbook & Copyright: **Modern Livestock and Poultry Production 2012**

WEEK #	TIMELINE	CONTENT/UNIT/SUB-STRAND	PROCESS/ACTIVITY/STANDARD	GOALS/BENCHMARK	ASSESSMENT	RESOURCES
1-3	15days	Beef, Dairy, hogs, sheep and horse selection	Content activities – key terms, Selection practice, oral reasons on why animals were selected .	Students will know the criteria needed for the selection of beef, dairy, hogs, sheep and horses.	Judging exercises and oral reasons	Judging manuals in the given areas.
4-5	10 days	Livestock digestive systems	Notes on livestock digestive systems. Key terms of digestion, absorption, metabolism. Notes on ruminant and non-ruminant digestion. Followed by a test on livestock nutrition.	Students will know key terms in digestion, absorption, metabolism. Know the parts and functions and ruminant and non-ruminant digestion.	Test on digestion	Livestock nutrition and feeding
6-7	10days	The food nutrients, selection of feeds	Notes on the six essential nutrients: carbohydrates, fats, minerals, vitamins, minerals and water. The notes will cover the functions of the nutrients to the animal's body and well being. Feed selection for each species of animal	Students will know the six essential nutrients and at least three functions of each. Also students will select the correct feeds.	Test on the 6 essential nutrients and feed selection.	Livestock nutrition and feeding
8-11	20 days	Nutrient requirement tables involving beef, dairy, swine, sheep, and horses. Nutrient composition tables on roughages and concentrates commonly used in feeding rations.	Worksheets on balancing rations for the following species: beef, sheep, swine, dairy, and horses.	Students will formulate feeding rations for any age and weight of animal in the species of beef, sheep, swine, horses, and dairy	Worksheets will be scored on meeting the given animals needs.	Livestock nutrition and feeding
12-13	10 days	Genetics of Animal breeding	Unit 9 – Genetics, heritability estimates, selecting breeding stocks, sire selection problems, pedigree analysis, mitosis, meiosis, genes, 6 basic crosses, incomplete dominance.	Students will complete punnett square problems. Meiosis and mitosis drawings. Discussion questions on heredity	Punnett square problems. Meiosis and mitosis drawings. Discussion questions. Written test. Sire selection problem and	Modern livestock and Poultry production. 2004

					pedigree analysis.	
14	5 days	Animal Reproduction	Topics include: Male reproduction, female production, estrus cycle, signs of estrous in cattle, swine, sheep and horses. Ovulation, fertilization, gestation, parturition, poultry reproduction.	Students will be able to define: Ovulation, fertilization, gestation, parturition. Students will also set up a breeding schedule for cattle, sheep, swine, and horses	Animal reproduction test. Vocabulary notes. Breeding schedule for cattle, sheep, swine and horses.	Modern livestock and poultry production. 2004
15-16	10 days	Diseases and parasites of beef cattle	Topics include: Anthrax, BSE, Bovine Respiratory syncytial Virus, Brucellosis, Blackleg, scours, Foot and mouth disease, foot rot, Red nose, Johne's disease. And more	Students will know: Symptoms, causes and treatments of each disease.	Create a picture portfolio of the diseases	Modern livestock and poultry production. 2004
17-18	10 days	Pet ID in the following areas: Dogs, exotic birds, and exotic fish	Identification of small animal's	Students will be able to identify animals using different characteristics in size, color, color markings, and shape.	Identification test	Minnesota FFA CDE handbooke

Check the MN Dept of Ed website for Academic Standard information