

Agriculture, Food and Natural Resources: Animal Science and Services 6: Grades 9-12

Plan routine management of food-producing animals and facilities. The student will be able to: 1.0

- 1 Schedule feeding and care of animals. 1.1
- 2 Order supplies and animal feeds. 1.2
- 3 Develop training and exercise schedule for animal. 1.3
- 4 Develop a plan for routine maintenance of equipment and facilities. 1.4
- 5 Assist in the planning of a routine animal health and preventative medication program. 1.5
- 6 Implement and maintain sanitary conditions for animals, including young. 1.6
- 7 Separate non-compatible animals. 1.7
- 8 Observe animals on a regular basis for problems or stress. 1.8
- 9 Develop a calendar of operations for a selected animal operation. 1.9

Maintain and analyze records. The student will be able to: 2.0

- 1 Analyze and utilize production, performance and breeding records, using computer applications. 2.1
- 2 Identify major sources of credit. 2.2
- 3 Evaluate leasing and renting agreements. 2.3
- 4 Evaluate need for liability and other insurance. 2.4
- 5 Analyze records to determine efficiency of operation. 2.5
- 6 Maintain machinery, equipment and facilities inventory records. 2.6
- 7 Maintain breeding records. 2.7
- 8 Prepare an annual budget. 2.8

9 Maintain and analyze basic business records (inventory, depreciation, receipts, and expenses) using computer applications. 2.9

10 Plan a work schedule. 2.10

11 Maintain personnel and labor records. 2.11

12 Maintain supervised agricultural experience records. 2.12

13 Discuss the legal requirements of maintaining animal health records, and maintain and analyze health records. 2.13

14 Maintain chemical-use and water-use records, etc. 2.14

15 Prepare and maintain Supervised Agricultural Experience (SAE) records. 2.15

Design animal housing, equipment and handling facilities for animal production. The student will be able to: 3.0

1 Identify facilities needed to house and produce each animal species safely and efficiently. 3.1

2 Critique designs for an animal facility and prescribe alternative layouts and adjustments for the safe and efficient use of the facility. 3.2

3 Design an animal facility, focusing on animal requirements, efficiency, safety, and ease of handling. 3.3

4 Identify equipment and handling facilities used in modern animal production. 3.4

5 Explain how modern equipment and handling facilities enhance the safe and economic production of animals. 3.5

6 Select equipment and implement animal handling procedures and improvements to enhance production efficiency. 3.6

Comply with government regulations and safety standards for facilities used in animal production. The student will be able to: 4.0

1 List the general standards that must be met in facilities for animal production. (e.g., environmental, zoning, construction) 4.1

2 Evaluate an animal facility to determine if standards have been met. 4.2

3 Design a facility that meets standards for the legal, safe, ethical, and efficient production of animals. 4.3

Identify and interpret rules, policy, and regulations affecting the animal industry. The student will be able to: 5.0

1 Maintain a file of current animal rules and regulations. 5.1

2 Secure professional services and information. 5.2

3 Observe EPA pesticide use regulations. 5.3

4 Identify the procedures and requirements for obtaining a restricted use pesticide applicator's license. 5.4

5 Observe regulations regarding the use of medications and growth stimulants. 5.5

6 Observe state and federal regulations regarding disease testing/eradication programs and other programs. 5.6

7 Identify applicable land-use and zoning regulations. 5.7

8 Identify agencies affecting natural resource utilization (e.g., DNR, DEP, EPA). 5.8

9 Identify agencies regulating employee/employer relations (e.g., OSHA). 5.9

10 Investigate opportunities to impact policy making at the local, state, and national level. 5.10

Evaluate the effects of environmental conditions on animals. The student will be able to: 6.0

1 Identify optimal environmental conditions for animals. 6.1

2 Describe the effects of environmental conditions on animal populations and performance. 6.2

3 Establish and maintain favorable environmental conditions for animal growth and performance. 6.3

Identify and interpret environmental issues and regulations pertaining to animal industry. The student will be able to: 7.0

1 Determine environmental issues pertinent to your area. 7.1

2 Calculate the economic impact of environmental regulations on the industry. 7.2

3 Discuss emerging technologies and determine their effectiveness as related to environmental quality. 7.3

4 Evaluate an animal facility to determine if standards have been met. 7.4

5 Design a facility that meets standards for the legal, safe, ethical, and efficient production of animals. 7.5
