

Jordan University of Science and Technology
Department of Animal Production
Summer Training (AP 396)

Course Outline and Requirements

Students should become familiar with the practices listed below:

Poultry management

- Poultry house preparation for chicks arrival
 1. Cleaning
 2. Disinfecting
 3. Setting up and testing brooders and drinkers
- Feed formulation and mixing (the market price for each ingredient will be provided)
- Methods of vaccination and medication (the market price for each vaccine and/or medication will be provided)
- Litter management
- Following up a complete production cycle in broilers:
 1. Students will be assigned into groups of two.
 2. Each group will have a pen to raise-up 40 – 60 chicks from day one through marketing age.
 3. Each group will be fully responsible to do the required daily work in the farm.
 4. The daily work includes brooding, watering, feeding, cleaning and any other activity that might be needed such as vaccination and/or medication.
 5. A daily activity sheet is expected from each group to record all necessary information needed for broiler production.
 6. At the end of the 5th week of chicks' age, each group will be required to submit a report that summarizes the weekly and cumulative body weight, growth rate, feed consumption and feed conversion ratio and the production cost is expected to be included also.

Cattle, Sheep, and Goat Management

I. Nutrition

1. Ingredient identification and feed analysis.
2. Ration formulation and feed mixing.
3. Sampling and quality control.
4. Feeding systems.

II. Reproduction

1. Breeding soundness examination and mating.
2. Semen collection, evaluation and handling.
3. Estrus synchronization of cattle, sheep and goats.
4. Artificial insemination (methods, applications).
5. Pregnancy diagnosis.
6. Lambing and calving
7. Neonatal care

III. Field practices:

A. Sheep and Goat

1. Record keeping
2. Catching, handling, moving, and weighing
3. Age determination
4. Shearing
5. Hoof trimming
6. Internal and external parasite control
7. Castration
8. Milking
9. Weaning
10. Blood sampling

B. Cattle

1. Barn care
2. Record keeping
3. Animal handling
4. Body condition score
5. Milking
6. Heat detection
7. Hoof trimming
8. Dehorning
9. Internal and external parasite control
10. Bloat treatment

Proposed Field trips

- Dairy cattle farm.
- The sheep unit at the Center for Training, Research and Extension at Sikhra/Ajloun.
- Feed-mill operation.
- Poultry farms (broiler, layer and parent flocks).
- Hatcheries.
- Royal Horse Stable.
- Amman Slaughter House (Cattle, sheep and goats).
- Fish farm

Student Evaluation

Item	Points
• Biweekly Reports	10
• Field Trip Report	5
• Final Report	10
• Attendance & Proficiency of Practical Demonstration	20
• Presentation	15
• Final Examination	40

Teaching Requirements

- Availability of some limited cash funds for immediate purchases.
- Working area for sheep and cattle practices.
- TV, VCR and video tapes
- Egg candling system

- Haugh unit measure
- Small hatchery
- Dissection kits (12)
- Brooders
- Poultry cages
- Providing at least 3-5 culled cows for rectal palpation and artificial insemination
- Assigning 50-100 heads of the sheep flock for training (in order to have them lamb during the summer training course)

Training location and accommodation at JUST campus

- The Agricultural Center for Research and Production
- The sheep and dairy cattle unit
- The poultry house.
- Farm visits

Students are responsible for providing the following requirements, according to their personal needs:

1. Working boots.
2. Dust masks.
3. Overall clothing.
4. Lab-coat.
5. Detergents, Shampoos, soaps ...etc.
6. Towels.
7. Sun protection aids (caps, creams ...etc).