Instructional Staff

Course instructors are drawn from Michigan State University's Department of Animal Sciences and Large Animal Clinical Sciences. In addition, dairy industry professionals in private and public sector institutions and regulatory authority will be invited as resource persons.

Our training team has strong expertise in all aspects of dairy production systems. Members of our team have conducted a number of training programs in both local and international settings.

Organized by

WorldTAP

World Technology Access Program
(World TAP)
https://www.canr.msu.edu/worldtap/

Cooperating departments and units

- Department of Animal Science
- Department of Large Animal Clinical Sciences
- Department of Agriculture Food and Resource Economics
- Department of Food Science and Human Nutrition

Application Deadline
May 15, 2021

Course Fees per Participant

Registration and course fee
$4,000
(Course fee in non-refundable after June 1, 2021)

Course fee includes:
Instruction fee, course materials and information packages, local transportation, meals and lodging in East Lansing—USA

Please make check payable to:
Michigan State University

For Registration and Information Please Contact

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MICHIGAN STATE UNIVERSITY

Animal Agriculture

Best Practices in Dairy and Livestock Operations

June 24 - July 3, 2021

Course Rational >>>

A team of multidisciplinary faculty is organizing a week-long course focusing on the best practices for dairy and livestock production. This course provides an opportunity for the participants to observe and learn the latest technological advances and best practices in dairy cattle management, nutrition, genetics, reproduction and breeding, herd health management, consumer and industry linkages, and environmental issues related to dairy production systems. This course will help the participants in their research and outreach program to incorporate emerging technologies in bovine herd fertility management. The program offers sessions on semen qualities required to improve the level of genetics, fertility management practices, bovine herd insemination and reproductive issues, selection of cows for improved reproductive fertility, development of new methods for managing reproduction.

>>> Course Description

Among developing countries, there is steady increase in the demand for milk and milk products due to favorable changes in income levels and living standards. Because of the perishable nature of milk, this increased demand creates an opportunity for local production in smallholder operations, or expanding operations within local economies.

In order to take maximum advantage of this opportunity, knowledgeable individuals are needed in both technology transfer and policy making positions. It is toward these individuals that this course is aimed. Training addresses animal health and production, reproduction, fertility management, artificial insemination including semen processing, sire selection, and animal nutrition. The aim is toward the transfer of technology that is applicable under the local conditions of the participants. Consideration is given to both very small family farms and expanding production operations within the agricultural framework of developing economies. Importantly, this course is all about bovine/dairy genetics, semen selection, embryo transfer, artificial insemination, inbreeding management, and fertility management in bovine/dairy operations.

Course Components

- Principles of bovine/dairy genetics
- Bovine traits under genetic control (heritable)
- Setting up a bovine genetics improvement plan to improve herd performance
- In-depth understanding of semen selection
- Embryo transfer
- Artificial insemination
- Inbreeding management
- Fertility management in bovine/dairy operations
- Reproductive issues
- Causes of subfertility: management, nutrition, environment, genetics, and herd health
- Pregnancy detection
- Collecting and analyzing herd fertility data
- Herd health, biosecurity, disease epidemiology, vaccination strategy
- Strategic management of reproductive performance management through animal examination, lab results, and data interpretation
- Nutrition management in bovine/dairy operations
- Rations for maintenance, lactation, growth, and reproduction