

DAIRY BUSINESS ECONOMICS AND FINANCIAL DECISION MAKING



FLORIDA INTERNATIONAL
DAIRY ACADEMY

DEPARTMENT OF ANIMAL SCIENCES

Instructor:

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Course Description

This is a 4-week course which consists of three 50 min lectures and a single 1-hour one-on-one zoom interaction per week. The lectures can be viewed at the student's convenience during the week, but all material should be covered prior to weekly one-on-one zoom session. Students are expected to complete a financial decision making project of their own choice. The course uses Excel spreadsheets and students are expected to have access to Excel.

Course Objectives

After completion of the course, the student should be able to 1) interpret financial statements and financial performance, 2) do financial forecasting, 3) know how to evaluate investment opportunities, 4) apply marginal decision making, 5) recognize risk and evaluate risky decisions, 6) use spreadsheets to evaluate decision alternatives, 7) apply optimization methods in financial analyses such as (non)linear programming and dynamic programming, 8) propose a framework for solving new dairy decision making problems. The principles in this course are illustrated with many case studies of practical decision-making problems in dairy production. Examples include: Culling cows, improving reproduction, use of sexed and beef semen, value of genetic improvement, optimal stocking density, how many rations to feed, how much weigh-back feed is optimal, how much to pay for heifers, the cost of animal disease and their control, taking out loans to renovate a barn, etc.. Students will work on a small decision making project of their own.

Course Schedule

Week 1: Topic / Lecturer / Corresponding Book Chapters

Introduction to business analysis

How well is the business doing? Income statement, balance sheet, financial ratios

Benchmarking, Economies of scale

Student project introduction, Excel examples

Week 2: Topic / Lecturer / Corresponding Book Chapters, Assessment 1

Theory of production economics

Investment analysis: FV, PV, loans, Excel

Investment analysis: profitability measures, dairy examples

Week 3: Topic / Lecturer / Corresponding Book Chapters, Assessment 2

Marginal decision making, partial budgets

Marginal decision making: dairy examples

Risk analysis, type 1 vs type 2 risks, sensitivity analysis

Week 4: Topic / Lecturer / Corresponding Book Chapters, Assessment 3

Linear programming, dairy examples

Dynamic programming, dairy examples

More dairy examples of financial decision making

Class Expectations, and Make-Up Policy

Lectures can be viewed at their convenience during the week, but all material should be covered prior to weekly one-on-one zoom session. Conflicts that prevent students from taking an exam as scheduled should be discussed with the instructor.

Grading Policy

Pass/Fail

University Honesty Policy

UF students are bound by The Honor Pledge which states, “We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: “On my honor, I have neither given nor received unauthorized aid in doing this assignment.” The Honor Code (<https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

Software Use

All faculty, staff, and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.