

COURSE OUTLINE Financial Management / Agriculture

Course Description:

AG 215. Financial Management Agriculture. 3 hours credit. This course will enable the student to apply financial management principles and practices to the field of agriculture.

Course Relevance: The principles learned in this course will allow the student to understand the financial management principles and practices needed to succeed in an agriculture career.

Required Materials:

Kay, R. & Edwards, W., *Farm Management*. Dubuque, Iowa: MCB/McGraw-Hill, Inc.

* - For complete textbook information, refer to <http://www.butlercc.bkstr.com>

Learning Outcomes:

The intention is for the student to be able to:

1. Explain production and financial management with the prudent use of credit
2. Use innovative business structures for acquiring resources and managing risks, including leasing, contracting, and various types of joint ventures
3. Identify long term sustainable agricultural resources and their environmental effects on production management.
4. Describe and use a system for collecting and analyzing production and financial data, and the need for more efficient and consistent organization and interpretation.
5. Describe the dual nature of farming, and ranching both as a way of life and as a business which must compete with other businesses for resources and market

Learning PACT

Through the student involvement in this course, the student will develop and document his/her achievement of the following PACT skills:

Primary skills (developed and documented):

1. Critical Thinking
 - Through the use of agriculture economic principles, make well founded agricultural business decisions.
2. Problem Solving
 - Through the understanding of agriculture economics, solve problems using well founded decisions and actions.

Secondary skills (developed but not documented):

- Computer literacy
- Time management
- Coping with change

Assessment Tasks:

These learning outcomes and primary Learning PACT skills will be demonstrated by:

1. Complete assignments of actual farms and ranches dealing with concepts and principles covered in class
2. Complete case studies of actual farms and ranches dealing with concepts and principles covered in class

Course Content:

- I. Themes - Key recurring concepts that run throughout this course:
 - A. Structures and organization of agricultural finance, analysis, taxes, and management.
 - B. Basic farm and ranch business structures forms of record keeping and analysis associated with management
- II. Issues - Key issues that will be addressed in this course: areas of conflict that must be understood in order to achieve the intended outcome:
 - A. Role of financial management in profitable crop and animal production
 - B. Adopting new technology impact on financial success
- III. Concepts – Key concepts that must be understood to address the issues:
 - A. Decision making using basic agricultural economic principles and concepts
 - B. Record analysis
 - C. Federal and State income tax law and filing of tax returns
- IV. Skills / Competencies - Actions that are essential to achieve the course outcomes:
 - A. Farm and Ranch Management
 1. Understand management and its importance
 2. Identify and discuss the more important functions of management
 3. Identify some of the characteristics of farm and ranch management problems
 4. List factors affecting farm and ranch management decision making
 5. Discuss common goals of farm and ranch management and how they affect decision making
 6. Analyze the steps in the decision making process
 7. Show how different types of decisions affect the management of farms and ranches
 - D. Accounting System
 1. Measure the importance and value of establishing a good farm or ranch accounting system

2. Review the purposes of an accounting system
 3. Identify the differing accounting systems
 4. Outline some of the financial records that can be obtained from a good accounting system
 5. Illustrate the different methods that can be used to value farm and ranch property for accounting purposes
 6. Define depreciation and show how to use it
- E. Balance Sheet Preparation
1. Discuss the purpose of a balance sheet
 2. Illustrate the format and structure of a balanced sheet
 3. Outline the problems of valuing assets
 4. Define owner's equity or net worth
 5. Analyze a farm's solvency and liquidity
 6. Use financial ratios derived from balance sheet
- F. Income Statement Preparation
1. Discuss the purpose of an income statement
 2. Illustrate the format and structure of an income statement
 3. Define the sources and types of revenue and expenses that should be included on an income statement
 4. Show how a profit or net farm income is computed from an income statement
 5. Analyze farm profitability by computing returns to assets and equity
- G. Cost/Profit Principles
1. Illustrate the law of diminishing returns and its importance
 2. Show how to find the profit-maximizing amount of output to produce
 3. Explain the importance of opportunity cost and its use in managerial decision making
 4. Discuss the difference between fixed and variable cost
 5. Explore economies of size and how they help explain changes in farm size and profitability
- H. Enterprise Budgeting
1. Define an enterprise budget and discuss its purpose
 2. Illustrate the different sections of an enterprise budget
 3. Learn how to construct a crop enterprise budget
 4. Outline steps to consider when constructing a livestock enterprise budget
 5. Show how data from an enterprise budget can be analyzed and used for computing cost of production and breakeven prices and yields
- I. Cash Flow Budgeting
1. Identify cash flow budgeting as a tool for financial decision making

- and business analysis
 - 2. Understand the structure and components of a cash flow budget
 - 3. Illustrate the procedures for completing a cash flow budget
 - 4. Describe both the similarities and differences between a cash flow budget and an income statement
 - 5. Discuss the advantages and potential uses of a cash flow budget
 - 6. Show how to use a cash flow budget when analyzing a possible new investment
- J. Formation of a Business Organization
- 1. Identify the sole proprietorship, partnership, and corporation as the three primary forms of business organization
 - 2. Discuss the organization and characteristics of each form of business organization
 - 3. Analyze the advantages and disadvantages of each form of business organization
 - 4. Show how many income taxes are affected by the form of business organization
 - 5. Summarize the factors to be considered when selecting a form of business organization
 - 6. Compare alternative arrangements for transferring the income, ownership, and management of a farm business
- K. Risk and Uncertainty
- 1. Discuss the importance of risk and uncertainty in decision making
 - 2. Identify the sources of risk and uncertainty which affect farmers and ranchers
 - 3. Illustrate some different methods for forming expectations about uncertain and risky events
 - 4. Discuss the importance of variability and its relationship to risk and uncertainty
 - 5. Demonstrate several methods that can be used to help make decisions under risk
 - 6. Discuss strategies that can be used to reduce risk or control its effect
- L. Tax Management
- 1. Show the importance of income tax management on farms and ranches
 - 2. Identify the objective of tax management
 - 3. Explain how the marginal tax system and social security taxes are applied to taxable income
 - 4. Review a number of tax management strategies that can be used by farmers and ranchers
 - 5. Illustrate how depreciation is computed for tax purposes and how it can be used in tax management
 - 6. Note the difference between ordinary and capital gain income

- M. Present/Future Value of Money
 - 1. Understand the time value of money and its use in decision making and investment analysis
 - 2. Illustrate the process of compounding or determining the future value of a sum of money or series of payments
 - 3. Demonstrate the process of discounting or determining the present value of a sum of money or series of payments
 - 4. Discuss the payback period, simple rate of return, and different methods to analyze investments
 - 5. Learn how to apply these methods to different types of investment alternatives

- N. Financial Analysis
 - 1. Introduce farm business analysis as part of the control function of management
 - 2. Suggest several standards of comparison to use in the analyze investments
 - 3. Review measures which can be used to analyze the financial condition and profitability of the business
 - 4. Identify some measures of business size
 - 5. Show how enterprise analysis can be used to identify strengths and weaknesses in a business
 - 6. Outline procedures for troubleshooting or locating problem areas in the farm business

- O. Capital and Credit
 - 1. Explain the importance of capital in agriculture
 - 2. Illustrate the use of economic principles to determine the optimal use and allocation of capital
 - 3. Compare different types of loans according to their length of repayment, use and collateral
 - 4. Describe different types of loans according to their length of repayment, use and collateral
 - 5. Show how to calculate principal and interest payments for various repayment plans
 - 6. Outline considerations which are important for establishing and developing credit
 - 7. Explain factors that affect the liquidity and solvency of farm business

- P. Land and Machinery Management
 - 1. Explore the unique characteristics of land and its use and management in agriculture
 - 2. Outline advantages and disadvantages of owning land
 - 3. Note factors important in land purchase decisions including methods of land valuation and the legal aspects of a land purchase
 - 4. Present the advantages of owning land

5. Compare characteristics of cash, crop share, livestock share, and other leasing arrangements
6. Discuss planning from the quantity and quality of labor needed for different situations
7. Illustrate methods for measuring and improving labor efficiency
8. Identify the costs associated with owning and operating machinery
9. Calculate machinery costs
10. Discuss some factors important in machinery selection including size, cost, timeliness of operations
11. Compare owning, renting, leasing, and custom hiring
12. Discuss factors that influence when machinery should be replaced
13. Outline methods for increasing the efficiency of machinery use

Learning Units:

- I. Farm and Ranch Management
- III. Accounting System
- IV. Balance Sheet Preparation
- V. Income Statement Preparation
- VI. Cost/Profit Principles
- VII. Enterprise Budgeting
- VIII. Cash Flow Budgeting
- IX. Formation of a Business Organization
- X. Risk and Uncertainty
- XI. Tax Management
- XII. Present/Future Value of Money
- XIII. Financial Analysis
- XIV. Capital and Credit
- XV. Land and Machinery Management

Learning Activities:

Learning activities will be geared towards lectures, practical exercises, and record book entries. Classroom lecture is designed to enable the students to understand the key principles of agricultural financial management.

Grade Determination:

The student will be graded on satisfactory completion of assessment tasks (learning activities), attendance, and written examination.