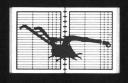
EXECUTIVE SUMMARY STATE CURRICULUM GUIDE FIRST EDITION 1990



FARM BUSINESS MANAGEMENT



Minnesota Technical College System STATE BOARD OF TECHNICAL COLLEGES

FARM BUSINESS MANAGEMENT STATE CURRICULUM GUIDE

Prepared By
James C. Warner
Farm Business Management Instructors
Area Ag Coordinators
Agricultural Education Division, U of M
and
Farm Industry Personnel

Under the direction of

John Murray, Manager Agriculture Occupations State Board of Technical Colleges St. Paul, Minnesota

Minnesota State Board of Technical Colleges
Craig N. Froke, Vice Chancellor
Deena B. Allen, Curriculum Development Director
Instructional Services Section
Minnesota Technical College System
Capitol Square Building
550 Cedar Street
St. Paul, MN 55101

September 1990

Farm Business Management State Curriculum Guide

CONTENTS

Foreword	1	
Other Curriculum Guides	3	
Introduction Purpose of this Curriculum Guide Farm Business Management Program Background Criteria of a Modern Adult Education Program Goals of the Farm Business Management Program Developmental process Revision process	4 4 6 17 25 27 29	
Program Design Program/course Matrix Program Specifications Developmental Courses Farm Business Management Courses Elective Courses		
Program Implementation Recommendations Type of Credit Enrollment Requirements Tuition Curriculum Program Design Needs Assessment Program Delivery Accountability Annual Curriculum Review/revision Process Definitions	41 41 42 42 42 42 50 50 51	
Course Syllabi	52	
Appendices: A. Advisory Committees B. Research Results C. Task Listing D. Task Analysis		

Bibliography

Foreword

The development of state curriculum guides emerged out of the need to provide consistency for similar programs offered in the Minnesota Technical College System. This system is comprised of thirty post-secondary technical colleges which collectively offer 700 individual programs. While some programs, like Farm Business Management, had curriculum guides in existence for more than 30 years, it became increasingly apparent that there was a need to organize these 700 programs into related groups and develop standards for program titles, length, and content which could be applied consistently across the state. The development of state curriculum guides represents the system's plan to clearly identify the repertoire of programs that exist within each occupational category and to establish corresponding program standards. A partial list of management curriculum guides follows this foreword.

Each state curriculum guide is developed with comprehensive involvement of education and industry representatives. The first two state curriculum guides developed through this system-wide effort -- Administrative Support Career Programs and Accounting Career Programs -- are in their second and third years of implementation and have been voluntarily adopted by 90 percent of the technical colleges. It is important to note that implementation of each state curriculum guide is a voluntary decision to be made by an individual technical college. Since the quality of any curriculum product is dependent on meeting the evolving needs of industry, yearly review is mandatory for all state curriculum guides.

The structure of the state curriculum guides is based on some important elements which represent significant change for the system. These new elements are:

- Related programs organized into one comprehensive state curriculum guide
- 2. A program structure which is based on a career ladder approach to occupational training with each program serving as a foundation for the next level in the hierarchy
- A core of courses common to all programs in each state curriculum guide
- A multi-discipline approach to designing the content of occupational training programs
- A set of general studies courses which may be applicable to any occupational program.

The state curriculum guides represent the ideal program structure and content for each occupational area and are not confined to a compilation of what presently exists in the system. In most cases, the final program structure and content represent major reorganizations of existing programs, additions of new content, deletions of unnecessary or outdated content, changes in length and title, and may include entirely new programs. Both the education and industry representatives who have participated in state curriculum guide development have taken an impartial, futuristic look at developing the best programs possible. They are to be commended for their willingness to question the status quo and strive for a quality curriculum guide.

Other Curriculum Guides

Administrative Support Career Programs, 1986. Revised 1989.

Accounting Career Programs, 1987. Revised 1989.

Computer Career Programs, 1988.

Wholesale/Retail/Marketing Career Programs, 1989.

Machine Tool Career Program, 1990.

Electrician Career Program, 1990.

Electronics Career Programs: Microcomputer Technician, 1990.

Financial Services Career, 1990.

Natural Resources, 1990.

Small Business Management, 1990.

Horticulture Careers, 1990.

Culinary Arts Careers, 1990.

For additional information on the development or implementation of any state curriculum guide, please contact:

Deena B. Allen
Curriculum Development Director
Instructional Services Section
Minnesota Technical College System
Capital Square Building - 3rd Floor
550 Cedar Street
St. Paul, MN 55101
Telephone: (612) 296 0669

Telephone: (612) 296-0668

Introduction

To understand the value of this curriculum guide, its purpose must be examined in light of the background and purpose of the Farm Business Management program. The sections that follow describe this information in more detail.

Purpose of this Curriculum Guide

A curriculum guide for the Farm Business Management program has existed for many years. It was based upon the adult learning principles espoused by Ralph Tyler, Malcolm Knowles, and Cyril Houle. The guide consisted of a series of objectives and detailed lesson plans for classroom and on-farm instruction in a number of important farm management topics. Lessons were sequenced around farming and business activities farmers engage in on an annual basis. Lessons complemented the chronicling, analyzing, interpreting, and decision making necessary to complete adjustments and changes to a farm's business structure over a period of three or more years.

A new curriculum guide has been developed for a number of reasons. The increasing complexity of farm business management problems, the development of new principles of adult learning and changes in the state system for delivery of vocational education are just a few of these reasons.

In addition, information is available today to farm operators from sources not in existence or readily available in past years. Through advances in transportation, telecommunication and data processing, program participants are more aware of management information than ever before. They want specific instruction in how management information can be applied to benefit their business. The new curriculum guide for Farm Business Management recognizes that farmers today obtain

information faster than their counterparts of only a decade ago and that they need to develop skills in evaluating and using new information sources.

Like the original guide, the new curriculum guide was developed to insure adherence to adult learning principles. Enrollees in adult education programs -- like students just entering the job market and enrolled in continuous, full-time programs -- want the program to be relevant, to make them feel responsible for their own learning and to have a strong relationship with their own needs for learning.

To insure the new curriculum guide describes a program meeting adult learning requirements, theories for structuring and implementing adult learning activities played an important role in its development. These theories were adapted to build upon the past success of the Farm Business Management program. This success was attained through adherence to the sequence and structure provided by the previous curriculum guide as well as the flexible delivery approach it encouraged.

This curriculum guide has been designed to provide the flexibility required to meet the diverse needs of the farming population while providing a structure showing the relationship of the components -- levels, modules and courses -- of the program. This enables the farm operator to recognize the broad range of knowledge and skills possessed by competent farm managers in today's business environment. Recognition of these knowledge and skills establishes a guide against which farm operators can measure their own skill development as they progress through the program.

Farm Business Management Program Background

To understand the purpose of the Farm Business Management program and how this curriculum guide assists its implementation, it is useful to first examine current theories and practices of farm management and then to review the history of the Farm Business Management program. From this examination, conclusions can be drawn about the purpose and goals of the present Farm Business Management program and the needs it will address.

Farm Business Management Today

Education in farm business management is concerned with developing the farm operator's ability to organize resources in order to meet family and business goals. These abilities include the management functions of planning, implementing and controlling the farm system and its component sub-systems.

Management can be defined as the utilization of the resources of land, labor and capital in such a way as to maximize the return to the scarcest resource, consistent with family and business goals. It is a decision-making process that is continuous. Many important decisions are under consideration at one time: some problems are just being discovered, some are being analyzed, and others are nearly solved.

As problems become more complex, the importance of management skills also increases. In a relatively simple business it may be easy to identify, isolate, study, evaluate and solve a business management problem. Most farm businesses, however, are more complex. Although many factors are independent, they are interrelated and cannot be treated as isolated variables.

Good management ties all aspects of the farm business together. It provides a perspective showing the relationship of parts to one another and to the farm business as a whole. In addition to viewing each aspect of the business as a separate sub-system, good management requires a chronological perspective of the entire business through a series of interrelated planning--implementing--controlling cycles.

These planning-implementing-controlling cycles range from short duration to annual duration (often considered long term). An example of a short cycle is the necessity to plan, implement, and control the breeding and farrowing of a individual group of sows. This single cycle of production is a sub-cycle, or constituent cycle, in the more encompassing cycle of planning, implementing and controlling the entire farrowing operation. The short term cycles for a number of sub-systems are included in the annual cycle of the business entity.

The annual cycle is the most common means of evaluating the overall production efficiencies and financial success. Successive annual cycles combine to create longer term cycles, often coinciding with stages in the life of the farm business, five year plans, or other milestone selected for measuring business progress. Longer term cycles are often measured in terms of achievement of family and business goals. They are typically related to financial progress and levels of consumption.

Planning includes describing actions and expected results for each subsystem of the business, as well as for the entire business entity.

Development of plans must assess the impact of each sub-system on the overall business. Plans must also specify the procedures required to successfully achieve the planned results. Executing these procedures is regarded as the implementation function of management. In addition to

implementation procedures, plans must specify the measurement methods and standards by which achievement of and deviations from plans can be measured. Such measurement and standards are part of the control function of management.

For planning to be successful and complete, contingency plans must be created for major alternative events (such as those caused by nature, the government, the state of the economy or markets) which may occur during the production or annual business cycle. Contingency plans must be implemented when events cause occurrence of deviations of a specified level from the original plan. Contingency plans must describe alternative actions to be implemented upon occurrence of these events and the threshold of deviation to be used for implementation of alternative actions.

Implementing is the taking of action to acquire and engage resources to achieve the planned results. It includes obtaining land, labor, and capital resources and organizing these resources to achieve the results stated in the plan. It also includes supervising and directing actions of others in relation to the plan.

Controlling is the monitoring of the results of specific measures against standards specified in the plan and the correction of deviations from the plan. Plans must be implemented with results monitored and evaluated throughout the production and annual business cycle. The results of monitoring activities are used to determine which actions, as indicated in the plan, are to be taken for attainment of long term plans and goals. The effects of deviation from plan in sub-systems must be examined in relation to the business entity. Significant deviations may require modification of the plan for a sub-system or the entire business entity.

These functions comprise the domain of management. To perform these functions requires an understanding of the decision making process. The majority of decisions should be anticipated and described in the plan and should be consistent with overall family and business goals.

Accomplishing the functions of management requires the ability to apply:

- Basic functions of management
- Economic principles
- Financing methods and investment analysis
- Agriculture science and production practices
- Relationships with institutions servicing and influencing farm operations
- Legal regulations
- Marketing of farm products (Boehlje and Eidman, 1984).

Because the functions of management are so intricately interwoven with other skills and abilities, the Farm Business Management Education program is concerned with developing the farm operator's skill in <u>all</u> functions and related areas of knowledge and ability. It is the primary goal of instruction to build these skills through application of knowledge and principles to a farm operator's own business, meeting his/her needs.

History of the Farm Business Management Program

In the 1890's, University of Minnesota personnel began developing the study of farm management economics while conducting agronomic studies. Cost studies were initiated in 1902. Within the next few years, these studies were modified to include livestock as well as crops, earning statements, and assistance in interpretation and planning of the farm business.

Significant Federal intervention into the educational process for farmers and farm youth did not occur until passage of the Smith-Lever (1914) and Smith-Hughes (1917) acts. The significance of the Smith-Hughes Act to Adult/Young Farmer Education is illustrated by the expressed purpose of the act to provide education for "present and prospective farmers."

States attempted to respond to the intent of the Smith-Hughes Act by providing educational opportunities for farmers and young farmers (often referred to as part-time students). However, subsequent attention by Federal authorities to programs for secondary students diminished state's attention to programs for established or about-to-be established farmers. It was not until the passage of the War Adjustment Acts of 1944-1946 that Federal attention was again directed toward education for adult and young farmers. This attention was achieved through implementation of instructional on-farm training for veterans of World War II.

In response to the War Adjustments Act, Minnesota's educational leaders developed a format for educational delivery that proved to be extremely effective. Instruction combined large group, small group and individualized instruction. Not only was the instruction organized to optimize effectiveness by imposing rules on class size and homogeneity of student goals, but it also incorporated use of a uniform business accounting system for all veterans participating in the program.

Accurate farm records and business analysis was considered an ideal tool for sound programs of adult instruction. Through research, the Agricultural Economics Department of the University of Minnesota developed procedures for an excellent farm record summary and business analysis. These procedures generated considerable information

necessary for use in the decision making processes of farm management. However, these analysis tools generated by the University of Minnesota were not widely known to the farming population of the state.

Because all veteran students were required to keep farm accounts and because a system of analysis was available, a number of enterprising teachers combined the record keeping system with the analysis procedures to provide a business analysis for their students. The first accounts were analyzed by the Department of Agricultural Economics as a special service for teachers of veterans classes.

This innovative approach to adult education in the federally subsidized farm training program appeared to have tremendous potential for adult education in public school vocational agriculture programs. Dr. Milo Peterson, Head of the Department of Agricultural Education, elected to demonstrate its use in adult education programs with volunteer adult education students. In 1952 he secured a substantial grant from the Hill Foundation to assist in program development and demonstration. Lauren Granger was employed to develop and test the system, using the work done in Agricultural Economics as a basis for the business analysis system.

Before the program had completed a two year trial phase, the value of the farm management approach to adult education was recognized by the Minnesota State Department of Education. It was concluded that the program would develop more rapidly and be more effective with a good, statewide system of coordination. The state was divided into eight coordinated areas (subsequently reduced to six), each assigned an agricultural area coordinator with responsibilities for development and

promotion of farm management education and for coordination of general vocational agriculture in the high school and post secondary levels.

The Department of Agricultural Education at the University of Minnesota continued to promote the program through undergraduate and graduate education. In 1964 a staff member was added with responsibility for program development and training of undergraduates and graduates in the philosophy and operation of a farm business management education program.

The State Board for Vocational Technical Education (later renamed the State Board of Technical Colleges) was created in 1983 and assumed responsibility for administering implementation of all Farm Business Management programs in the state.

Throughout the history of farm business management education, availability of one analysis procedure for use by all participating farm operators served as the catalyst for building the success of the program. This analysis procedure provides management information to individual farm operators about their own business and also provides area and statewide consolidation and interpretation. It includes benchmarks for a number of key financial and production performance measures. These benchmarks serve as standards against which program participants can compare their own farm business's information. Benefits of the program are easily described and understood by examining measures of performance contained in analysis reports.

Because of the large number of farm operators using one standardized approach to analysis and interpretation of business measures and its

related terminology, the Farm Management Education program developed a substantial base of participants, instructors, and supporters in the agribusiness community. This occurred despite the appearance of alternative methods of keeping records of farm business activity and family spending.

The base of support for the Farm Business Management program has enabled continued funding for the program. This support has also resulted in educational policy and state legislation providing for expansion of the program into additional districts within the state. In addition, updated licensure and educational programs have been established for Farm Business Management instructors.

The process of analysis of farm business records has undergone constant change to remain current with changing accounting and business management practices of farm operators. The first major revision in procedure was in 1965 when Edgar Persons directed the computer programming of the analysis. In 1967 the format of the analysis was revised to incorporate new analysis procedures made possible by the introduction of computerized data processing. Since then, revisions have been made each year to provide a meaningful and relevant business analysis for farm operators.

To maintain the instructional integrity of the program throughout the state, a comprehensive and sequential curriculum was created for the program in 1970. This curriculum incorporated lesson plans for three years of instruction, including classroom, small group, and on-farm activities. The content areas included in the curriculum were directly relevant to all aspects of farm business management. This curriculum has been revised numerous times since its creation and continues to

reflect changing farm business management practices. In addition, instructors have created and shared a number of lessons about specialized farm business management topics. These lessons are deliverable as classroom and/or on-farm instructional activities.

The Minnesota State Legislature, recognizing the value of farm business management education for improving the farm economy, allocated additional funding in 1985 to the State Board of Technical Colleges and the Minnesota Extension Service for provision of additional services to farm operators through the Farm Business Management programs. This funding provided greater assistance to farmers in dealing with economic difficulties. Portable computer hardware and training in use of FINPACK, a computerized farm financial planning and analysis software package, were provided to farm management instructors. The FINPACK software was used as a decision aid to supplement financial planning activity in the management education program. Recognizing the benefits from the initial funding, the state legislature has continued funding for additional staff, expanding the number of Farm Business Management programs between 1986 and 1990.

With strong support from state and local educational agencies, the program has been able to provide education to farm operators for improving the efficiency and profitability of their businesses throughout the state.

The success of the Farm Business Management Education program has spread to other states. Since several states use the same curriculum materials, business analysis format, and record service center for computerized analysis of the records, there is considerable savings of

public moneys through simple economics of size and the principle of spreading fixed costs.

The introduction of a National Invitational Farm Management Education Conference in 1973 provided the medium for exchange of ideas among the teachers in those states which have adopted the Minnesota approach to adult education in agriculture. At the 1989 conference, 20 states were represented.

Program dissemination to other states has been based largely on the initiative of state leaders who, upon examining the results of the programs in operation, have determined that it is a viable alternative for serving their own rural clientele. The University of Minnesota has provided opportunities for short term internships for interested teachers as well as in-service training of larger cadres of prospective farm business management instructors. Through short, intensive workshops most of the participating states have had an opportunity to get an initial start in the development of their own statewide system of farm business management education.

The curriculum described in the Course Syllibi section of this guide reflects current management practices. Further, it incorporates content based upon current techniques for farm accounting and business analysis as a means of providing management education to farm business operators. To address continuing changes in farm business management practices and maintain the success of this education program, the analysis and the curriculum must both be updated on a regular basis. This updating must be accomplished through collaborative efforts so the management and educational value of the program is maintained. Changes to the analysis must be reflected in changes to the

curriculum; changes to the curriculum reflecting new educational practices and management concepts must be reflected in the analysis.

Criteria of a Modern Adult Education Program

To be successful, a modern adult education program must meet the needs of individuals participating in the program. In order to gauge the success of a program, it can be examined in light of the criteria of its content, its approach to delivery of instruction, and its adherence to adult learning principles in its design. The following sections describe each of these criteria in more detail as they relate to the Farm Business Management program.

The Agricultural Content Perspective

"Adult farmers are becoming increasingly aware of their need for education related to the business of farming." (Department of Rural Education Yearbook) From the standpoint of results, it is by far the most important phase of vocational education in agriculture. "Adult farmers need, want and are in a position to use agricultural instruction." (Phipps and Cook)

Although these ideas were expressed about forty years ago, they are still applicable today. Adult education in agriculture over the past fifty years emphasized approved practices as they were applied to a variety of enterprises. Adult classes in agriculture, often conducted by high school vocational agriculture teachers as a further responsibility to their high school teaching duties, were used to keep interested farm operators upto-date about practices in farming enterprises of interest. Instruction usually focused upon approved practices within enterprises and did not deal with the business as an entity. Under this plan of instruction, there were a series of ten or more meetings, each dealing with a different topic. There was not a sequence of instruction which built upon previous learning.

Some operators attended only a few meetings, while those with more diverse interests attended regularly. Generally, farmers were not officially enrolled in the class and were not likely to attend a meeting unless they were particularly interested in the meeting's topic. Because attendance varied, which resulted in infrequent contact with farmers in the classroom, it was difficult for a teacher to become well acquainted with each operator and to provide relevant on-farm instruction.

While this type of adult instruction met the needs of farmers of almost a half century ago, it is no longer adequate. The tremendous changes in agriculture in the last two decades alone point to the need for an instructional program in farm management that is complete and thorough. The instruction must first aim at the complete system of the business entity and secondly at the sub-systems which comprise the business entity.

The problems and needs of farm operators today have expanded to a greater degree than the physical size of the business unit or the capital investment it represents. Closer margins between costs of production and selling price have made it necessary for operators to know more about their business. Operators must pay more attention to production, market and financial details if they expects to compete with others.

An operator must know how to produce crops and livestock to give a return to capital, land, labor and management. An operator must also know how to combine crop production with livestock production and available labor. Even after an ideal combination has been determined, operators must know how to combine machinery, fertilizer, insecticides, herbicides, varieties and tillage practices for crops. Further, operators must know how to combine feed, disease control, housing and

equipment, and other costs to produce livestock and their products efficiently.

Beyond this, an operator must know how to study markets and interpret market trends. Additionally, farm operators must be skillful in the operation, repair and maintenance of facilities, machinery and equipment used in the farming operation.

Increasingly, farm operators are turning to non-family labor to assist with production activities. Operators must know how to supervise and motivate these employees. Because of strict regulations applying to working conditions, benefits, insurance requirements, and employment taxes, operators must be familiar with laws and regulations affecting these aspects of business.

A modern program of Farm Business Management instruction must include provision for all of these important content areas. While not every content area is appropriate for each farm operator, the program must contain content relevant to the majority of farm operators and typical specialized interests. In addition, it must contain a recommended approach for guiding farm operators in self-directed learning in other, closely related content areas.

The Delivery Perspective

The instructional program can be divided into three distinct methods of delivery: Classroom Instruction, Small Group Instruction, and Individualized Instruction.

CLASSROOM INSTRUCTION:

Classroom Instruction is planned on a regular monthly basis. It is generally informal with a course topic and related content goals presented each time a class session is held. The course topics are listed

in the program/course matrix. These topics are primarily related to those management principles having applicability to all class members. Discussion and exchange of ideas is considered an important part of the meeting. The membership or attendance consists of farmers, spouses, sons, daughters, landlords, or related service personnel.

SMALL GROUP INSTRUCTION:

Small Group Instruction is offered as needed. It typically involves only farm business operators with similar kinds of businesses or enterprises so the instruction can be related to a specific business type. This type of instruction can also be based upon a problem which is common to several class members. The instruction may be conducted in a classroom, at the site of one of the farm operators, at an Experiment Station, demonstration plot or instructional presentation that interests and applies to the group members business. The instructor insures discussion is stimulated and focuses around the management topics and aspects of the information presented. This type of instruction supplements classroom instruction.

INDIVIDUALIZED INSTRUCTION:

Individualized Instruction includes those activities engaged in by the farm operator, under direction of and monitoring by the program instructor, and at-the-farm activities engaged in by the instructor and the program participant together.

The farm operator is encouraged to complete activities that apply course knowledge and improve skills in relation to the operator's own business needs. Progress in these activities is monitored by the instructor on a regular basis.

The instructor and program participants also engage in instructional activities in which information described in course topics and content

goals is discussed as it applies to an operators farm management needs. The focus of this instruction is the application of course content to the participant's business and deals with problems of organization and management unique to a specific business. This instruction typically takes place at the farm but may be provided in the instructor's office or through the use of media such as newsletters, telephone consultation, facsimile machines and other telecommunication devices. It includes the farm operator, spouse, children or other individuals interested in the business. A session is conducted for each course, with a minimum of 10 sessions provided for a farm operator enrolled in the program on a full-time basis.

The Adult Learning Perspective

As previously mentioned, adults want learning to be relevant and related to specific needs. They want to be responsible for their learning.

Knowles (1970) describes androgogy as an educational model, or set of assumptions, for meeting the needs of adults. In this model, Knowles describes adults as more mature, being more self-directed. He states:"It is a normal aspect of the process of maturation for a person to move from dependency toward increasing self-directedness." When planning adult education activities, effort must be taken to make sure the adults have a role in directing the details of the instructional program to meet their needs.

A second assumption in Knowles' model is that adults attach more meaning to learning gained though experience than that which they acquire passively. Experiential learning, such as basing examples and activities on their own farm management problems, increases the effectiveness of learning. In addition, adults have a great deal of experience which serves as a reservoir on which to base future learning.

Knowles' third assumption is that adults have a readiness to learn when it is related to coping with real-life problems. Adults enrolled in the Farm Management Program have real, pressing problems, affecting the future of their business, that need to be solved. They need to learn ways to identify these problems so they can engage in learning to solve them. The instructor has a responsibility to create conditions and provide tools and procedures for helping learners discover their "need to know."

The fourth assumption of Knowles about adult learning is that adults see education as a process of developing increased competence to achieve their full potential in life. The Farm Business Management program focuses on those aspects of management competence that enable farm business operators to achieve their family and farm goals. This approach makes the program educationally relevant to program participants.

Participants in the Farm Business Management program represent a diverse target audience. This diversity is based on a number of dimensions including:

- Education level
- Type of farming operation
- Stage in life of the farm business
- Economic resources available to the farming operation
- External environment factors affecting the farming operation
- Family size, structure and related goals
- Individual's developmental stage and related goals
- Individual's disposition to adoption of innovation

Bender (1972) adds additional criteria to effective adult programs. In addition to those assumptions offered by Knowles, Bender indicates adults learn best when thinking is stimulated and when correct behavior

is reinforced. The Farm Business Management program provides the opportunity, through analysis and interpretation of business records to stimulate thinking. This process further provides an opportunity for adults to check and correct their own behavior by enabling them to compare the result of their actions to those of managers of similar farm operations. They can also compare their current actions to those of previous production cycles.

While it is important for an adult education program to enable participants to meet their own educational needs, it must have a certain level of definition so participants can anticipate benefits they might derive from such a program. It is also necessary for a program to be held accountable in relation to its purpose. For this reason, it is necessary to impose a structure or system of organization on adult education programs. Persons (1972) stated that an effective adult education program should be systematic and possess the following five characteristics:

- 1. Specific enrollees in each course.
- 2. Specific units taught as part of each course.
- 3. A definite and regular sequence of courses.
- 4. Continuity between courses with progression toward the most effective business organization and greatest operating efficiency.
- 5. Individual on-farm instruction as an integral part of the teaching plan.

This State Curriculum Guide for the Farm Business Management program has been designed to provide a definite and regular sequence of courses which achieves its purpose and goals and meets the needs of farm business operators. A review of the Program/course Matrix shows that the program moves from introduction of knowledge about

various management concepts to the levels of analysis, synthesis and evaluation of this information and related procedures in relation to a farm operator's own business.

However, it is recognized that not all program participants will be at the same level of need at the same time. For this reason, the program is designed with a "needs analysis" approach. This approach is used to identify the existing level of knowledge and needs of program participants and to customize instruction to meet individual needs.

Participants will find the Farm Business Management program for adults uniquely different from the traditional educational curriculum. The farm business operator's own business becomes his/her textbook and laboratory. Achievement of family and business goals is the assignment for the course. Instruction begins in the classroom with the study and discussion of management and business principles. These principles are then coupled with problems and issues addressed during on-going individualized instruction. The cycle is completed and begun anew with the analysis and evaluation of the year's business activity.

Farmers have a ready learning laboratory in which to apply what they learn about management -- their own business. Management training which is tailored to an individual's business enhances his/her understanding of and ability to apply basic economic and management principles.

Goals of the Farm Business Management Program

Tyler (1952) describes a number of ways of identifying the purpose or goals of a program. He indicates the purpose or goals should be based upon the needs of program participants and the educational philosophy of the state. The previous section identified areas in which managers of farming operations must be proficient to be successful. It is evident, because of the number of farms failing on an annual basis, that not all farm operators possess these skills at a satisfactory level.

Hence, the purpose of the farm management program is to provide education to farm operators which improves their knowledge and skills for managing a farm business operation. To achieve this purpose, the goals of the farm management program describe how the program can help close the gap between the current and desired level of management performance. The following goals are to be attained through operation of local Farm Business Management Education programs:

- 1. To develop the farm operator's understanding of the functions of management.
- 2. To stimulate individuals and families to establish their own short, intermediate and long-term goals and priorities.
- To create awareness of the need for and to develop skills for keeping an accurate and complete system of family and business records.
- 4. To develop the farm operator's skills in analyzing and interpreting farm business records.
- To develop the ability of farm operators to apply economic principles to the management and operation of the business.

- 6. To develop the farm operator's skills in analyzing data to improve the organization and efficiency of the farm business and to make other adjustments consistent with family and farm goals.
- 7. To develop the farm operator's appreciation for the long-range effects of current and future decisions they make.
- 8. To develop an understanding of fundamentals of human resource management.
- To develop an appreciation of the relationship between an individual business entity and local, regional, national and worldwide economic, social, political and physical environments impacting agricultural inputs, outputs and processes.

Developmental process

The development of this curriculum guide followed the process of curriculum development prescribed by the State Board of Technical Colleges. The steps listed below were followed in preparing this curriculum guide.

- Analysis of Minnesota Technical College program data.
 Information about the Farm Business Management program as delivered in schools throughout the Technical College System was gathered and analyzed.
- Analysis of curriculum resources from other states. Curriculum
 resources from other states were analyzed for suitability of content
 for inclusion in the Farm Business Management curriculum guide.
- 3. Development of a task list for each job in the proposed program.

 Because the position of farm operator was the only occupation to be analyzed, a task listing was developed for this occupation. This task list was reviewed and revised by industry and education advisory committee members.
- 4. <u>Verification of tasks for each proposed occupation</u>. The task listing was verified through interviews with industry and education advisory committees and a statewide survey of farm business operators.
- Determination of common program tasks. Verified task listings and data analysis reports for each management program were reviewed and tasks determined common to all programs were identified. While there are similarities between management tasks for the Farm Business Management and the Lamb and Wool Management programs, the goals of these programs are distinctly different. As a result, the advisory committee recommended only one program be considered under the category of Farm Business Management.

- 6. Revision of draft program structure charts to reflect verified task lists. The Farm Business Management program is directed at an adult population with diverse needs. As a result, the program structure chart for this program is simply a listing of the courses by content area, without prerequisites.
- 7. Determination of curriculum content through task analysis procedures. Tasks were analyzed by industry experts to identify knowledge, skills, and attitudes required to perform the tasks.

 Based upon this analysis, task analysis listings were prepared to be used as the basis of course content. This task analysis listing includes tools, equipment, and other resources required to perform the task.
- 8. <u>Development of course syllabi.</u> The curriculum content was seperated into courses and a course syllabus prepared for each course in the program. These syllabi were developed with input from industry and education leaders in farm management.
- Development of draft program specifications. The education advisory committee provided guidance for the preparation of draft program specifications.
- 10. Compilation of complete State Curriculum Guide first draft. The first draft of the complete State Curriculum Guide for the Farm Business Management program was completed and submitted for review by the Education Advisory Committee and State Technical College System staff. Recommended changes were noted. A cover design was selected.
- 11. Revision of State Curriculum Guide contents following review.

 Following the review of the draft State Curriculum Guide for Farm Business Management, revisions were made to the State Curriculum Guide.

12. <u>Preparation of State Curriculum Guide final copy for printing.</u> The final copy of State Curriculum Guide was prepared for printing.

Revision Process

A specific plan for annual review of the State Curriculum Guide will be developed by the State Board of Technical Colleges and reviewed with Farm Business Management instructors, advisory committee members, staff. This annual review process will include Farm Business Management instructors, business advisory committee members, state staff and others as appropriate.

Program Design

The course of study emphasizes the alternative goals a farm business can establish. Such goals will be within the limitations of available resources of land, labor, capital and management, and will be congruent with those established by the family. The concept of family involvement in instruction is heavily emphasized. The family orientation is extended through individualized instruction carried out in on-site visits to the farm business. The year-round program assures instructional continuity.

Persons participating in the Farm Business Management program are farm business owner/operators at the start of the program and at the end of the program. The program provides instruction oriented toward upgrading of existing skills related to business management.

The program design is structured to provide a sequence of instruction taking the most novice farm business manager from the lowest level of knowledge and skills about business management to application of high level business management skills. However, because of the diverse level of expertise of farm business operators, the program does not grant interim certificates related to mastery of any content area of business management. Instead, a certificate is granted annually for credits completed. This approach enables program participants to complete courses most relevant to their needs.

Participants can continue to enroll in the program and register for courses that are of special interest or which reflect changes in management practices since previous registration.

Program/course matrix

Level 1		Introduction to Farm System Management
Module		Setting Farm System Goals
FMPL	1811	System Approach to Farm Business Management
FMGO	1811	System Goal Setting
FMGO	1911	Directed Study - Goals
Module	2:	Managers Role in Systems Management
FMDM	1812	Introduction to Data Management Systems
FMPL	1812	Manager's Role in Decision Making
FMPP	1812	Understanding Public and Private Agricultural Agencies
Module	3:	Introduction to Farm System Planning
FMPL	1813	Elements of Farm Business Planning
FMDM	1813	Accounting for System and Enterprise Planning
FMCM	1813	Elements of Commodity Market Planning
Module	4:	Managing a Farm System in the World Context
FMMS	1814	Elements of Risk Management in World Agriculture
FMMS	1914	World Agriculture Update
FMMS	1915	Global Issues
Level 2	- Farm	System Analysis and Evaluation
Level 2 Module		System Analysis and Evaluation Preparation for Farm System Evaluation
Module	1:	Preparation for Farm System Evaluation
Module FMTM	1: 1821	Preparation for Farm System Evaluation Tax Management Principles
Module FMTM FMAP	1: 1821 1821 1821	Preparation for Farm System Evaluation Tax Management Principles Preparation for Farm Business Analysis
Module FMTM FMAP FMPL	1: 1821 1821 1821	Preparation for Farm System Evaluation Tax Management Principles Preparation for Farm Business Analysis Using Systems in Total Farm Planning
Module FMTM FMAP FMPL Module	1: 1821 1821 1821 2:	Preparation for Farm System Evaluation Tax Management Principles Preparation for Farm Business Analysis Using Systems in Total Farm Planning Summarizing and Improving Farm System Data
Module FMTM FMAP FMPL Module FMAP	1: 1821 1821 1821 2: 1822	Preparation for Farm System Evaluation Tax Management Principles Preparation for Farm Business Analysis Using Systems in Total Farm Planning Summarizing and Improving Farm System Data Closing the Farm Business Year
Module FMTM FMAP FMPL Module FMAP FMDM	1: 1821 1821 1821 2: 1822 1822 1922	Preparation for Farm System Evaluation Tax Management Principles Preparation for Farm Business Analysis Using Systems in Total Farm Planning Summarizing and Improving Farm System Data Closing the Farm Business Year Reviewing Generally Accepted Accounting Principles
Module FMTM FMAP FMPL Module FMAP FMDM FMDM	1: 1821 1821 1821 2: 1822 1822 1922	Preparation for Farm System Evaluation Tax Management Principles Preparation for Farm Business Analysis Using Systems in Total Farm Planning Summarizing and Improving Farm System Data Closing the Farm Business Year Reviewing Generally Accepted Accounting Principles Maintaining Data Management Procedures
Module FMTM FMAP FMPL Module FMAP FMDM FMDM Module	1: 1821 1821 1821 2: 1822 1822 1922 3:	Preparation for Farm System Evaluation Tax Management Principles Preparation for Farm Business Analysis Using Systems in Total Farm Planning Summarizing and Improving Farm System Data Closing the Farm Business Year Reviewing Generally Accepted Accounting Principles Maintaining Data Management Procedures Implementing the System Management Plan
Module FMTM FMAP FMPL Module FMAP FMDM FMDM Module FMAI	1: 1821 1821 2: 1822 1822 1922 3: 1823	Preparation for Farm System Evaluation Tax Management Principles Preparation for Farm Business Analysis Using Systems in Total Farm Planning Summarizing and Improving Farm System Data Closing the Farm Business Year Reviewing Generally Accepted Accounting Principles Maintaining Data Management Procedures Implementing the System Management Plan Farm Business Analysis Interpretation
Module FMTM FMAP FMPL Module FMAP FMDM FMDM Module FMAI FMEV	1: 1821 1821 2: 1822 1822 1922 3: 1823 1823	Preparation for Farm System Evaluation Tax Management Principles Preparation for Farm Business Analysis Using Systems in Total Farm Planning Summarizing and Improving Farm System Data Closing the Farm Business Year Reviewing Generally Accepted Accounting Principles Maintaining Data Management Procedures Implementing the System Management Plan Farm Business Analysis Interpretation Farm System Evaluation for Budget Planning
Module FMTM FMAP FMPL Module FMAP FMDM FMDM Module FMAI FMEV FMPP	1: 1821 1821 2: 1822 1822 1922 3: 1823 1823	Preparation for Farm System Evaluation Tax Management Principles Preparation for Farm Business Analysis Using Systems in Total Farm Planning Summarizing and Improving Farm System Data Closing the Farm Business Year Reviewing Generally Accepted Accounting Principles Maintaining Data Management Procedures Implementing the System Management Plan Farm Business Analysis Interpretation Farm System Evaluation for Budget Planning Analyzing and Applying Public and Private Agricultural Programs
Module FMTM FMAP FMPL Module FMAP FMDM FMDM Module FMAI FMEV FMPP Module	1: 1821 1821 2: 1822 1822 1922 3: 1823 1823 4:	Preparation for Farm System Evaluation Tax Management Principles Preparation for Farm Business Analysis Using Systems in Total Farm Planning Summarizing and Improving Farm System Data Closing the Farm Business Year Reviewing Generally Accepted Accounting Principles Maintaining Data Management Procedures Implementing the System Management Plan Farm Business Analysis Interpretation Farm System Evaluation for Budget Planning Analyzing and Applying Public and Private Agricultural Programs Analyzing Production Components of the Farm System
Module FMTM FMAP FMPL Module FMAP FMDM FMDM Module FMAI FMEV FMPP Module FMAI	1: 1821 1821 2: 1822 1822 1922 3: 1823 1823 1823 4: 1824	Preparation for Farm System Evaluation Tax Management Principles Preparation for Farm Business Analysis Using Systems in Total Farm Planning Summarizing and Improving Farm System Data Closing the Farm Business Year Reviewing Generally Accepted Accounting Principles Maintaining Data Management Procedures Implementing the System Management Plan Farm Business Analysis Interpretation Farm System Evaluation for Budget Planning Analyzing and Applying Public and Private Agricultural Programs Analyzing Production Components of the Farm System Enterprise Analysis Information Interpretation

Level 3 Module	-	reting and Modifying Farm System Management Plans Managing Farm System Income	
FMFM	2831	Income Projections Using Commodity Market Trends	
FMTM	1831	Tax Planning	
FMCM	1831	Futures Strategies in Commodity Marketing	
Module 2:		Modifying Farm System Data Management	
FMAP	1832	Applying Current Procedures for Closing Farm Business Accounts	
FMDM	1832	Selecting Alternative Systems for Data Management	
FMDM	1930	Special Topics - Data Management	
FMDM	1932	Selecting Production Enterprise Control Systems	
Module	3:	Interpreting and Using Farm System Data	
FMAI	1833	Detailed Annual Farm Business Analysis Interpretation	
FMPP	1833	·	
FMAI	1933	Special Topics - Data Interpretation	
Module	4:	Using Farm System Data for Farm Business Modification	
FMCM	1834	Options Strategies in Commodity Marketing	
FMPL	1834	Planning for Enterprise Changes	
FMAI	1834	Detailed Farm Business Enterprise Analyses Interpretation	
Level 4	- Farm	System Trends and Projections	
Module	1;	Interpreting Financial Data	
FMFM	2841	Elements of Farm Business Analysis Measures	
FMFM	2941	Evaluating Farm Business Financial Ratios	
FMFM	2950	Special Topics - System Trends and Projections	
FMTM	2841	Special Topics - Tax Management	
Module	2:	Evaluating Data for Goal Modification	
FMAP	1842	Preparing Data for Trend Analysis	
FMDM	1842	Refining Record Systems for Accuracy	
FMGO	2842	Relating Farm System Goals to Trends	
Module	3:	Interpreting Farm System Data for Structural Adjustments	
FMAI	1843	Advanced Annual Farm Business Trend Analysis	
FMEV	1843	Comparative Farm Business Organizational Structures	
FMPP	1843	Relationship of Public and Private Agricultural Agency Programs to	
		Farm Business Structure	
FMMS	2843	Managing Stress During Farm System Change	
Module 4:		Using Trends in Analysis and Planning	
FMPL	2844	Elements of Trend Analysis	
FMPL	2944	Using Trend Analysis for Farm Business Planning	
FMCM	1844	Using Trend Analysis to Plan Commodity Marketing Strategies	

Level 5	- Integr	rating Current Information into Farm System Plans
Module	1:	Farm System Plans and Projections
FMTM	2851	Tax Management Implications for Estate Planning
FMPL	2851	System Projections and Investment Planning
FMPL	2951	Special Topics - System Plans and Projections
Module	2:	Evaluating and Using Farm System Data in Financial Planning
FMAP	2852	Data Preparation for Long-Range Farm Business Planning
FMFM	2852	Examining Alternatives for Farm Business Financing
FMDM	1852	Refining Data Management System for Use in Farm Business Planning
FMAP	2952	Special Topics - Preparation for Computerized Business Analysis
Module	3:	Interpreting System Information for Cash Flow Projections
FMAI	1853	Advanced Farm Business Financial Planning Analysis
FMPL	2853	Planning Cash Flow Needs
FMPP	2853	Incorporating Agricultural Agency Program Data for Cash Flow Planning
FMPP	2953	Special Topics - Public and Private Agency Programs
Module	4:	Information and Instruments in Commodity Marketing Management
FMFM	2854	Using Financial Instruments in Farm System Management
FMCM	2854	Advanced Commodity Marketing Strategies
FMCM	2954	Applying Farm Business Analysis Data to Marketing Strategies
FMCM	2950	Special Topics - Commodity Marketing Plans
l mol 6	Evam	ining the Context of Farm System Management Plans
Module		Farm System Management Issues
FMTM		Current Issues in Tax Management
FMMS		Personnel Management in the Farm System
FMLG	2861	
Module	2:	Managing a Farm System in the Historical Context
FMDM	1862	
FMEV	2862	Evaluating Significant Farm Financial Progress Trends
FMEV	2962	Special Topics - Farm Business Evaluation
Module		Managing a Farm System in the Context of Law and Government
FMAI	1863	
FMLG	2863	Methods of Farm Business Property Transfer
FMPP	2863	Impact of Agricultural Agency Programs on Farm System Management
FMGO	2863	Special Topics - Impact of Agricultural Agency Programs on Setting System
		Goals
Module	4:	Managing a Farm System in the Community Context
FMPL	2864	
FMMS	2864	Impact of Public and Social Issues on Farm System Management
FMMS	2964	Applying Farm Business Analysis in the Community Context
		117 0

PROGRAM SPECIFICATIONS

Program Name: Farm Business Management

Program Length: Typical commitment is:

1. Fifteen credits per year of enrollment

2. No maximum number of years of enrollment

Program Type: Certificate

Program

Description:

This program enrolls only farm business operators and is designed to increase farm business operators' knowledge and understanding of the economic and business principles upon which sound farm business management is based. The program is delivered with a unique blend of individualized at-the-farm business and classroom instruction.

Program Level: Post-Secondary

Program Focus: Skill Upgrading

Relationship to Other Programs:

This program has credits common with the other management programs in the Technical College System. These management programs are Lamb and Wool Management, Specialty Crops Management, and Small Business Management. The Farm Business Management program also has credits in common with agriculture career pre-employment continuous programs offered in the Technical College System. If an enrollee wishes to access training offered through other programs, this should be coordinated with the Farm Business Management Instructor.

Job Titles: Farm Business Operator

<u>Program Goals:</u> Individuals completing this program should be able to:

- 1. Understand the functions of management
- 2. Establish business and personal goals
- 3. Keep accurate and complete business records
- 4. Analyze and interpret business records
- 5. Apply economic principles to management of a business
- 6. Improve business organization and efficiency
- 7. Appreciate effects of decisions on the business
- 8. Understand human resource management fundamentals
- Appreciate the relationship between the individual business entity and local, regional, national and worldwide economic, social, political and physical environments impacting agricultural inputs, outputs and processes.

Developmental Courses

To be a successful farm business manager, an individual must possess reading, writing and math skills at a sufficient level that management tasks can be performed. There may be, from time-to-time, participants enrolled in the program who may have compensated for deficiencies in developmental skills. Because they are adults with widely varying backgrounds and desire to participate in developmental courses, specific development courses are not included in this curriculum guide.

Should a Farm Business Management instructor or program participant identify a need for improving a participant's developmental skills, the instructor should contact the General Studies department of the nearest Technical College to identify dates and times for developmental course offerings.

Farm Business Management Courses

			credits
Busines	s Analy	sis Preparation	
FMAP ,	1821	Preparation for Farm Business Analysis	1
FMAP	1822	Closing the Farm Business Year	1
FMAP	1832	Applying Current Procedures for Closing Farm Business	
		Accounts	1
FMAP	1842	Preparing Data for Trend Analysis	1
FMAP	2852	Data Preparation for Long-Range Farm Business	
		Planning	1
FMAP	2952	Special Topics - Preparation for Computerized	
		Business Analysis	1-3
Farm B	usiness	Analysis Interpretation	
FMAI	1823	Farm Business Analysis Interpretation	1
FMAI	1824	Enterprise Analysis Information Interpretation	1
FMAI	1924	Special Topics - Farm System Analysis	1-3
FMAI	1833	Detailed Annual Farm Business Analysis Interpretation	1
FMAI	1933	Special Topics - Data Interpretation	1-3
FMAI	1834	Detailed Farm Business Enterprise Analyses	
		Interpretation	1
FMAI	1843	Advanced Annual Farm Business Trend Analysis	1
FMAI	1853	Advanced Farm Business Financial Planning Analysis	1
FMAI	1863	Advanced Farm Business Organizational Structure	
		Analysis	.1
Commo	odity Ma	arketing	
FMCM	1813	Elements of Commodity Market Planning	1
FMCM	1831	Futures Strategies in Commodity Marketing	1
FMCM	1834	Options Strategies in Commodity Marketing	1
FMCM	1844	Using Trend Analyses to Plan Commodity Marketing	
		Strategies	1
FMCM	2854	Advanced Commodity Marketing Strategies	1
FMCM	2954	Applying Farm Business Analysis Data to Marketing	
		Strategies	1
FMCM	2950	Special Topics - Commodity Marketing Plans	1-3

			Credits
Data Ma	anagem	nent	
FMDM	1812	Introduction to Data Management Systems	1
FMDM	1813	Accounting for System and Enterprise Planning	1
FMDM	1822	Reviewing Generally Accepted Accounting Principles	1
FMDM	1922	Maintaining Data Management Procedures	1
FMDM	1832	Selecting Alternative Systems for Data Management	1
FMDM	1930	Special Topics - Data Management	1-3
FMDM	1932	Selecting Production Enterprise Control Systems	1
FMDM	1842	Refining Record Systems for Accuracy	1
FMDM	1852	Refining Data Management System for Use in Farm	
		Business Planning	1
FMDM	1862	Refining Data Management System for Trend Review	1
Farm Bu	usiness	<u>Evaluation</u>	
FMEV	1823	Farm System Evaluation for Budget Planning	1
FMEV	1824	Evaluating Productive Enterprises	1
FMEV	1843	Comparative Farm Business Organizational Structures	1 **
FMEV	2862	Evaluating Significant Farm Financial Progress Trends	1
FMEV	2962	Special Topics - Farm Business Evaluation	1-3
Financia	al Mana	agement	
FMFM	2831	Income Projections Using Commodity Market Trends	1
FMFM	2841	Elements of Farm Business Analysis Measures	1
FMFM	2941	Evaluating Farm Business Financial Ratios	1
FMFM	2950	Special Topics - System Trends and Projections	1-3
FMFM	2852	Examining Alternatives for Farm Business Financing	1
FMFM	2854	Using Financial Instruments in System Management	, 1
Goals			
FMGO	1811	System Goal Setting	1
FMGO	1911	Directed Study - Goals	1-3
FMGO	2842	Relating Farm System Goals to Trends	1
FMGO	2863	Special Topics - Impact of Agricultural Agency Programs on	
		Setting System Goals	1-3

			<u>Credits</u>
Plannin	9		
FMPL	1811	System Approach to Farm Business Management	1
FMPL	1812	Manager's Role in Decision Making	1
FMPL	1813	Elements of Farm Business Planning	1
FMPL	1821	Using Systems in Total Farm Planning	1
FMPL	1834	Planning for Enterprise Changes	1
FMPL	2844	Elements of Trend Analysis	1
FMPL	2944	Using Trends Analysis for Farm Business Planning	1
FMPL	2851	System Projections and Investment Planning	1
FMPL	2951	Special Topics - System Plans and Projections	1-3
FMPL	2853	Planning Cash Flow Needs	1
FMPL	2864	Utilizing Community Expertise in Farm System	
		Management	1
Legal			
FMLG	2861	Legal Issues in Farm System Management	1
FMLG	2863	Methods of Farm Business Property Transfer	1 -
Public a	and Priv	ate Agency Programs	
FMPP	1812	Understanding Public and Private Agricultural Agencies	1
FMPP	1823	Analyzing and Applying Public and Private Agricultural	
		Programs	1
FMPP	1833	Public and Private Agency Role in Modifying	
		Management Plans	1
FMPP	1843	Relationship of Public and Private Agricultural	
		Agency Programs to Farm Business Structure	1
FMPP	2853	Incorporating Agricultural Agency Program's Data for	
		Cash Flow Planning	1
FMPP	2953	Special Topics - Public and Private Agency Programs	1-3
FMPP	2863	Impact of Agricultural Agency Programs on Farm	
		System Management	1

			Credits
Miscella	neous		
FMMS	1814	Elements of Risk Management in World Agriculture	1
FMMS	1914	World Agriculture Update	1
FMMS	1915	Global Issues	1
FMMS	2843	Managing Stress During Farm System Change	1
FMMS	2861	Personnel Management in the Farm System	1
FMMS	2864	Impact of Public and Social Issues on Farm System	
		Management	4.
FMMS	2964	Applying Farm Business Analysis in the Community	
		Context	1
Tax Mar	падете	ent .	
FMTM	1821	Tax Management Principles	1
FMTM	1831	Tax Planning	1
FMTM	2841	Special Topics - Tax Management	1-3
FMTM	2851	Tax Management Implications for Estate Planning	1
FMTM	2861	Current Issues in Tax Management	1

Elective	Course	<u>.</u>	<u>Cr</u>	Lect	<u>Lab</u>	<u>on</u>
AGRI	1800	Applied Agriculture Mathematics	1	1	0	0
AGRI	1810	Introduction to Microcomputers	2	0	2	0
AGRI	1811	Microcomputer Applications in Agriculture	2	0	2	0
AGRI	1812	Spreadsheet Applications in Agriculture	1	0	1	0
AGRI	1813	Database Applications in Agriculture	1	0	1	0
AGRI	1820	Rural Leadership and Communication	3	3	0	0
AGRI	1830	CPR/First Aid	2	1	1	0
AGRI	1840	Pesticides and Environmental Quality	2	2	0	0
AGRI	1841	Pesticide Applicator License	1	1	0	0
AGRI	1842	Rural Ground Water Quality	1	. 1	0	0
AGRI	2950	Farm Product Selling	1	1	0	0
AGRI	2985	Biotechnology Applications in Agriculture	1	1	0	0
AGBS	2833	Fundamentals of Supervision	2	1	1	0
AGEC	1800	Principles of Agricultural Economics	3	3	0	0
AGEC	1805	Agriculture Business Agreements	2	2	0	0
MEAG	1800	Shop Skills	1	0	1	0
MEAG	1810	Arc and Oxyacetylene Welding	3	_ 1	2	0
MEAG	1820	Small Gas Engines	2	0	2	0
MEAG	1834	Principles of Hydraulics	1	0	1	0
MEAG	1840	Agriculture Machinery Management	2	1	1	0
MEAG	1870	Soil Conservation and Tillage Systems	2	2	0	0
MEAG	2820	Principles of Agriculture Power	2	2	0	0
MEAG	2860	Farm Electricity	3	1	2	0
MEAG	2871	Land Survey and Measurement	2	1	1	0
SOIL	2808	Soil Maps: Interpretation and Analysis	1	1	0	0

^{*}Courses listed in other State Curriculum Guides.

Program Implementation Recommendations

The following recommendations have been developed for implementation of the Farm Business Management program in Minnesota. These recommendations were developed with input from the Education Advisory Committee and staff at the State Board of Technical Colleges. The intent of these recommendations is to provide a flexible structure -- one which continues to encourage a format of instruction which has been extremely successful -- while increasing standardization of the program across the state. It should be noted that standardization is obtainable only in a general sense because detailed course content is variable due to differing agricultural practices in different regions of the state. However, the level of standardization obtainable through adherence to this curriculum guide by all local programs will greatly improve the marketability of the program to future program participants and to individuals likely to support a program of business management for farm operators.

Type of Credit

1. Management credit. A management credit, used as the basis for implementing all adult management programs throughout the Technical College system, consists of thirty-six hours of student effort with a minimum of three hours of formalized instruction delivered via classroom, group, or on-site, or a combination of these; and thirty-three hours of application by the student to their business.

Enrollment Requirements

- As specified by the State Board of Technical Colleges, all Farm
 Business Management enrollees are considered part-time students or
 .33 of a full-time enrolled student.
- 2. All regular enrollees (15 credits or more on an annualized basis) must be enrolled for a minimum of 2 credits per quarter.
- 3. Certificates will be issued for number of credits completed each year.

Tuition

- 1. Credit cost. For Fiscal Year 1991, the cost per management credit is \$33.25.
 - (a) A tuition buydown of \$9.00 per credit will be applied to the first 15 credits per year.
 - (b) Cost for each additional credit above 15 credits will be \$33.25.

Curriculum .

The curriculum will consist of courses from the Farm Business
 Management State Guide.

Program Design

- The delivery of the curriculum for the Farm Business Management program must meet the needs of enrollees and the area the school district/technical college serves.
- 2. A needs assessment/instructional plan is required for each enrollee.
 - (a) Standardized needs assessment.
 - (b) Develop a plan of instruction for each enrollee based on needs assessment.

Needs Assessment

The Needs Assessment form provided on the following pages should be used in combination with the Course Registration Checklist to design a detailed program on an annual basis best fitting the farm operator's educational needs. These two forms, along with a signed copy of the Enrollment Agreement should be maintained on file for each program participant.

FARM BUSINESS MANAGEMEN	NT EDUCATIO	N ANNUAL	L EVALUATION	OF POSITION
DATE:/		ANAI	LYSIS CODE: _	
General Information				
Last Name	First Name		Spouse	
Address	City		_ Zip Code	
Telephone	County	Scho	ool District	
Township	Section	Age:	: <u>-</u>	
Directions to Farm				
Number of Family Members?		Number at H	Home?	
How many years have you farmed?		Years on this	s Farm?	<u> </u>
How would you rate your manageme Crop Production Livestock Production Financial Management Planning and Goal Information Do you have a written set of goals: Number of acres you will operate next List your crop and livestock enterpris	Excellent Excellent Excellent For the farm For personal/	Good Fair Good Fair Good Fair business? family? Acre	Yes No Yes No es you will rent?	
What changes did you make in your What changes are you planning for n				
How will you finance these changes?				
What specific interests or concerns s	hould be addres	ssed?		

Records and Accounting Inf	ormation					
What is the name of your ac	counting system?					
How would you rate this sys	stem?	Exceller	nt	Good	Fair	Poor
Rate your level of confidence	e in last year's reco	ords?	High	Modera	te Low	
Which of the following items	should be emphas	sized for your op	eratio	n this yea	ar?	
Income and expense				Yes	No	
Inventory records				Yes	No	
Crop production rec				Yes	No	
Livestock production				Yes	No	
Household and pers				Yes	No	
Non-farm business r				Yes	No	
Using commercial re	ecoras to suppleme	ent your records		Yes	No	
What specific interests or co	oncerns should be	addressed?	-			
Financial Assessment Inform	nation					
mancial Assessment inform	<u>iation</u>					
What do you consider your	level of debt to be?	?	High	Modera	te Low	
Compared to last year, how	manageable is you	ur debt load?	Mana	geable	Unma	anageable
What are your sources of cr	edit at this time?					-
What information is your len	der requesting? Cash flow	Balance sheet Reconciliation of				
What other sources of incon	ne do you have?					
What specific interests or co	oncerns should be a	addressed?				
Other Resource Information						
What outside resources are	you currently usinç	g? (Ext. consulta	nts)			
Have you updated your:	Partnership agr	reement?	Yes	No	*	
,	Retirement plan		Yes	No		
	Non-farm inves		Yes	No		
Describe any changes you a	are planning in thes	se items:				
What specific interests or co	oncerns should be	addressed?				

Other Information

Rate your level of knowledge and understanding of the following:

	Hi	gh		A١	ver	ag	е	1	Vo	ne	
Crop production efficiencies	9	8	7	6	5	4	3	2	1	0	N/A
Livestock efficiencies	9	8	7	6	5	4	3	2	1	0	N/A
Farm financial statements	9	8	7	6	5	4	3	2	1	0	N/A
Public and private agency programs	9	8	7	6	5	4	3	2	1	0	N/A
Use of computerized business analysis information	. 9	8	7	6	5	4	3	2	1	0	N/A
Marketing of farm products	9	8	7	6	5	4	3	2	1	0	N/A
Hired labor needs and management	9	8	7	6	5	4	3	2	1	0	N/A
Tax preparation information	9	8	7	6	5	4	3	2	1	0	N/A
operation over the past year which you attribute to inform Management program.	atio	on	lea	arn	ed	fr	ron	n t	he	F	arm Business
What expectations do you have of the program for the coming	yea	ar?									

Farm Business Management State Curriculum Guide Page - 45 -

	Farm	Technical Business Management Enrol	College/School District Iment Agreement
This as		· ·	e /ig/ce/e
IIIIS aç	greement is entered into by	(afm Operator's Name)	
whose	address is		
	City	Zip Code	School District
and	· · · · · · · · · · · · · · · · · · ·		e/School District,,
Minnes	sota, for a period of		, beginning
	(specify quarter.	half year, one year)	
thirty (agreen basis a	30) day written notice. nent, indicates the numbe and become part of this ag	The Course Registration C r of credits of enrollment and	term unless terminated by either party upon hecklist, attached as Addendum A to this d shall be completed on an used upon a credit basis and billed quarterly. It is not for a quarter.
			time upon giving thirty (30) days prior written fter the first day of instruction for the quarter.
As an	enrollee in the Farm Busin	ess Management program,	agree to:
1.	Allow time for schedule	d at-the-farm instruction.	
2.	Use and maintain busin	ness records in a timely fashi	on.
3.	Prepare business recor	ds for computerized analysis	S.
4.	Attend scheduled class	sessions.	
5.	Complete individualized	I work for each course indica	ated on the Course Registration Checklist.
6.			d not less than credits annually.
7.	Make tuition and fee pa amount of		e first day of instruction of each quarter in the
Other_			
As inst	ructor for Te	echnical College/School Dist	rict Lagree to:
1.	Provide instruction for e	each course checked on the	Course Registration Checklist either in class
_	sessions or at-the-farm		
2.			ogress in relation to Course Goals for those
_		Course Registration Checkl	
3.		osing farm accounts for con	nputerized analysis.
4.		or computerized analysis.	
5.			ontaining information analyzed from his/her
			s for teaching and research purposes.
6.	Keep all information co	nveyed by enrollee in a conf	idential manner.
Other_			
X	9	X	(9)
	ee's Signature)	(Instructor' s Si	gnature)
Date	-	Date	_

Adde	endum A			
Enrol	llment Agr	eement	: (Date)	
	se Registr			
	oo moglotii			Credits
l. Bus	iness Analys	is Prepar	anion	
	FMAP	1821	Preparation for Farm Business Analysis	1
	FMAP	1822	Closing the Farm Business Year	1
8	FMAP	1832	Applying Current Procedures for Closing Farm Business Accounts	1
	FMAP	1842	Preparing Data for Trend Analysis	1
	FMAP	2852	Data Preparation for Long-Range Farm Business Planning	1
	FMAP	2852	Special Topics - Preparation for Computerized Business Analysis	1-3
_	-	LOGE	opedia replies reparation to computerized business randiffus	, -
II. Far	m Business	Analysis I	Interpretation	
	FMAI	1823	Farm Business Analysis Interpretation	10
	FMAI	1824	Enterprise Analysis Information Interpretation	1
	FMAI	1924	Special Topics - Farm System Analysis	1-3
	FMAI	1833	Detailed Annual Farm Business Analysis Interpretation	1
	-	1933	Special Topics - Data Interpretation	1-3
		1834	Detailed Farm Business Enterprise Analyses Interpretation	1
	FMAI	1843	Advanced Annual Farm Business Trend Analysis	1.1
	FMAI	1853	Advanced Farm Business Financial Planning Analysis	1
-	FMAI	1863	Advanced Farm Business Organizational Structure Analysis	1
	- 1 1001	1000	Advanced Farm Dusiness Organizational directore Analysis	
III Co	ommodity Ma	rketino		
	FMCM	1813	Elements of Commodity Market Planning	1
	FMCM	1831	Futures Strategies in Commodity Marketing	1
	FMCM	1834	Options Strategies in Commodity Marketing	1
		1844	Using Trend Analyses to Plan Commodity Marketing Strategies	1
	_	2854	Advanced Commodity Marketing Strategies	1
	FMCM	2954	Applying Farm Business Analysis Data to Marketing Strategies	1
	FMCM	2950	Special Topics - Commodity Marketing Plans	1-3
	- 11010101	2330	Special Topics - Commodity Warketing Flans	
IV. De	nta Managem	ent	€	
	FMDM	1812	Introduction to Data Management Systems	1
	FMDM	1813	Accounting for System and Enterprise Planning	1
	FMDM	1822	Reviewing Generally Accepted Accounting Principles	1
	FMDM	1922	Maintaining Data Management Procedures	1
	FMDM	1832	Selecting Alternative Systems for Data Management	1
		1930	Special Topics - Data Management	1-3
	FMDM	1932	Selecting Production Enterprise Control Systems	1
	FMDM	1842	Refining Record Systems for Accuracy	1
	FMDM	1852	Refining Data Management System for Use In Farm	
· -	- I WOW	1032	Business Planning	, at
	FMDM	1862	Refining Data Management System for Trend Review	1
	PIVIDIVI	1002	herring Data Management System for Trend heview	
V Fa	rm Business	Evaluation	0	
J. 1 G	FMEV	1823	Farm System Evaluation for Budget Planning	1
	FMEV	1824	Evaluating Productive Enterprises	1
	FMEV	1843	Comparative Farm Business Organizational Structures	3
	FMEV	2862	Evaluating Significant Farm Financial Progress Trends	1

2962 Special Topics - Farm Business Evaluation

FMEV

1-3

FMFM FMFM FMFM FMFM FMFM FMFM FMFM	2831 2841	Income Projections Using Commodity Market Trends	
FMFM FMFM FMFM	2841	Income Projections Using Commodity Market Trends	
FMFM FMFM			
FMFM FMFM		Elements of Farm Business Analysis Measures	
FMFM	2941	Evaluating Farm Business Financial Ratios	
	2950	Special Topics - System Trends and Projections	
FMFM	2852	Examining Alternatives for Farm Business Financing	
	2854	Using Financial Instruments in System Management	
<u>le</u>			
FMGO	1811	System Goal Setting	
FMGO	1911	Directed Study - Goals	
FMGO	2842	Relating Farm System Goals to Trends	
FMGO	2863	Special Topics - Impact of Agricultural Agency	
		Programs on Setting System Goals	
nnino		N .	
<u>nning</u> FMPL	1811	System Approach to Farm Business Management	
FMPL	1812	Manager's Role in Decision Making	
FMPL	1813	Elements of Farm Business Planning	
FMPL	1821	Using Systems in Total Farm Planning	
FMPL		• •	
	1834	Planning for Enterprise Changes Elements of Trend Analysis	
FMPL	2844	·	
FMPL	2944	Using Trends Analysis for Farm Business Planning	
FMPL	2851	System Projections and Investment Planning	
FMPL	2951	Special Topics - System Plans and Projections	
FMPL	2853	Planning Cash Flow Needs	
FMPL	2864	Utilizing Community Expertise in Farm System Management	
<u>⊭</u> FMLG	2861	Legal Issues in Farm System Management	
FMLG	2863	Methods of Farm Business Property Transfer	
FIVILG	2003	Medicos of Faith business Property Hairstel	
		by Programs	
FMPP	1812	Understanding Public and Private Agricultural Agencies	
FMPP	1823	Analyzing and Applying Public and Private Agricultural Programs	
FMPP	1833	Public and Private Agency Role in Modifying Management Plans	
FMPP	1843	Relationship of Public and Private Agricultural Agency Programs to Farm Business Structure	
FMPP	2853	Incorporating Agricultural Agency Program's Data for	
		Cash Flow Planning	
	2953	Special Topics - Public and Private Agency Programs	
FMPP	2863	Impact of Agricultural Agency Programs on Farm	
FMPP		System Menagement	
FMPP			
	1814	Elements of Risk Management in World Agriculture	
FMPP SETENBOLE FMMS	1614 1914	Elements of Risk Management in World Agriculture World Agriculture Update	
FMPP FMMS FMMS	1914	World Agriculture Update	
FMPP FMMS FMMS FMMS	1914 1915	World Agriculture Update Global Issues	
FMPP FMMS FMMS FMMS FMMS FMMS	1914 1915 2643	World Agriculture Update Global Issues Managing Stress During Farm System Change	
FMPP FMMS FMMS FMMS	1914 1915	World Agriculture Update Global Issues	

			Cred
ax Marager		"	
FMTM	1821	Tax Management Principles	Ž.
FMTM	1831	Tax Planning	
FMTM	2841	Special Topics - Tax Management	
FMTM	2851	Tax Management Implications for Estate Planning	
FMTM	2861	Current Issues in Tax Management	
Recommend	ed Electiv	68	
AGRI	1800	Applied Agriculture Mathematics	
AGRI	1810	Introduction to Microcomputers	
AGRI	1811	Microcomputer Applications in Agriculture	
AGRI	1812	Spreadsheet Applications in Agriculture	
AGRI	1813	Database Applications in Agriculture	
AGRI AGRI AGRI	1820	Rural Leadership and Communication	
AGRI	1830	CPR/First Aid	
AGRI	1840	Pesticides and Environmental Quality	
AGRI	1841	Pesticide Applicator License	
AGRI	1842	Rural Ground Water Quality	
	2950	Farm Product Selling	
-	2985	Biotechnology Applications in Agriculture	
AGRI AGBS AGEC	2833	Fundamentals of Supervision	
AGEC	1800	Principles of Agricultural Economics	
AGEC	1805	Agriculture Business Agreements	
AGEC MEAG	1800	Shop Skills	
MEAG	1810	Arc and Oxyacetylene Welding	
-	1820		
	1834	Small Gas Engines	
MEAG		Principles of Hydraulics	
MEAG	1840	Agriculture Machinery Management	
MEAG MEAG	1870	Soil Conservation and Tillage Systems	
MEAG	2820	Principles of Agriculture Power	
MEAG	2860	Farm Electricity	
MEAG	2871	Land Survey and Measurement	
SOIL	2808	Soil Maps: Interpretation and Analysis	
Locally Deve	loped Ele	ctives:	
		-	
	_		
		-	

Program Delivery

1. Number of credits per quarter will be mutually agreed upon by the instructor and business/enrollee.

EXAMPLE

	Quarter				
	<u>Fall</u>	Winter	Spring	Summer	
Enrollee A	3	5	4	3	
Enrollee B	4	4	4	3	
Enrollee C	4	6	3	2	
Enrollee D	3	6	3	3	

- 2. It will be locally decided which courses are best delivered as classroom or small group instruction and which are best delivered as individualized on-site instruction. Program delivery of a course may be a combination of classroom, small group, or individualized on-site instruction.
- 3. The sequence of courses is locally decided as best fits the needs of the individual enrollee or group.

Accountability

- 1. Participants must be enrolled and tuition paid.
- 2. Number of credits are to be determined at time of enrollment.
- 3. A Needs Assessment form is to be completed at enrollment.
- 4. An Enrollment Agreement, including a Course Registration Checklist is to be completed for each program enrollee.
- 5. An approved business analysis will be completed for a minimum of 80% of enrollees eligible for an analysis.
- 6. Enrollment level must meet state/local guidelines.

Annual Curriculum Review/Revision Process

1. A specific plan for annual review of the State Curriculum Guide will be developed by the State Board of Technical Colleges and reviewed with Farm Business Management instructors, advisory committee members, state staff and others as appropriate.

Definitions

- 1. FYE -- Fiscal year enrollment, 45 credits equals 1 FYE.
- 2. <u>FTE</u> -- Full time equivalent.

3. FYE/FTE Ratio

Example:

15 credits/enrollee

- Each FBM enrollee equals 15 credits or .33 FYE
- 4. The Farm Business Management Education program is designed to be delivered as a year-round educational program, to be serviced with at least 220 instructor contract days.

