AGRICULTURE COURSE DESCRIPTIONS

AGB 502 Advanced Rural Electrification - Three semester hours. Advanced wiring with emphasis on planning, designing the wiring system; building service entrance; wiring the home and utility buildings; appliance wiring and trouble shooting.

AGB 505 Teaching Vocational Education to the Disadvantaged and Handicapped - Three semester hours. Special methods and techniques of teaching vocational education to the disadvantaged with emphasis on the sociological, psychological and physiological factors that influence learning.


AGB 509 Advanced Studies - One to three semester hours. Individual field study in partial fulfillment of needs for research experience.

AGB 510 Vocational Guidance - Three semester hours. Need for and the nature of vocational guidance; their duties and relations; programs and evaluation of results.

AGB 512 Small Gasoline Engines - Three semester hours. This course deals with the maintenance, overhauling and trouble shooting of 2 and 4 cycle gasoline engines.

AGB 515 Agricultural Surveying - Three semester hours. This course provides practical application in the use of the transit and land measuring devices. The student will gain experience in land measurement, profile and topographical mapping, and the use of the transit in soil and water conservation.

AGB 520 Advanced Welding and Metalwork Technology - Three semester hours. This course covers basic gas and arch welding principles, procedures, and application in maintenance and construction; selection of machines, equipment, materials for welding and safe operation of metal-joining machines.

AGB 521 Vocational Education Program Planning, Development and Evaluation - Three semester hours. Principles, theories and practices in planning, developing and evaluating state and local programs in vocational education. 33 Last Updated September 2009

AGB 522 Adult Vocational Education - Three semester hours. The characteristics of adults as learners and the history, philosophy and nature of adult education. Emphasis will be placed on planning, developing and implementing a comprehensive adult vocational education program.

AGB 523 Advance Farm Power and Field Machinery - Three semester hours. Advanced study of power units, designs, principles of operation, economic applications and adaptation of field machines.
AGB 524 Advanced Wood and Machine Technology - Three semester hours. This course is designed for those who have a need for knowing about the several related factors involved in the fabrication of wood and wood major power woodworking machines and hand tools as related to wood fabrication.

AGB 525 Advanced Wood Design and Assembly - Three semester hours. This course is designed specifically for teachers of specialized secondary and post-secondary woodworking programs. Attention will be given to design and assembly of wood products that are used in the Agricultural industry.

AGB 531 Agricultural Economics - Three semester hours. This course is designed for graduate students who have had no previous training in agricultural economics. It emphasizes the application of basic economic concepts such as profit maximization, cost minimization, resource substitution, demand and supply to the production and distribution of agricultural commodities. The focus is on management and decision making but attention is also given to persistent policy issues and international trade.

AGB 532 Advanced Farm Management - Three semester hours. The analysis of farm business records and the application of economic concepts in decision making in farm planning, farm organization and farm management. Emphasis will be on enterpriser selection and combination; resource combination, substitution and valuation; the relationship between the production function and supply; cost minimization and profit maximization.

AGB 533 Advanced Agricultural Marketing - Three semester hours. A study of the marketing system and the market for farm products. Methods of reducing cost and improving marketing processes; a review of the activities of government agencies and their effects on the marketing system; the role and problems of cooperatives in agricultural marketing.

AGB 540 Vocational Education for Special Needs Students - Three semester hours. Analysis of educational procedures and practices appropriate for teaching individuals with special needs. Attention is focused on characteristics and learning styles, curriculum modification, evaluation, IEP and student placement.

AGB 550 Personal Financial Management - Three semester hours. This course deals with short term as well as long term planning and management of personal financial resources. It provides students with a working knowledge of personal finance from a managerial perspective with emphasis on the application of financial management to personal or family financial problems. Focus is on budgeting, purchasing, borrowing, saving and investing but attention is also given to other topics such as the financial aspects of weddings, divorce, retirement, funerals and insurance, as well as the effects of tax on investment decision.

AGB 590 Research Methods in Agribusiness - Three semester hours. Principles and techniques appropriate for planning, designing, conducting and reporting research in Agribusiness.

AGB 599 Research in Agribusiness Education - Six semester hours. Thesis credit only.
AGB 600 Computer Applications in Agribusiness - Two semester hours. Theory and practice in computer applications and equipment as it relates to the secondary and technical school level. Emphasis is placed on word processors and spreadsheets in the DOS and Windows environment.

AGB 601 Continuing Education in Agriculture - Three semester hours. Principles and practices involved in developing vocational and technical programs in agriculture for out-of-school youths and adults, with emphasis on the disadvantaged.

AGB 602 Occupational Experience in Vocational Education in Agriculture - Three semester hours. Approved principles and procedures used by the vocational agribusiness teachers in selecting, planning, conducting and evaluating occupational work experience programs for students in vocational agribusiness. Emphasis will be placed on the transition from school to work.

AGB 603 Organization and Implementation of Vocational Education Programs for Disadvantaged and Handicapped - Three semester hours. Methods and techniques of developing and implementing vocational job training programs for the disadvantaged and handicapped. Emphasis will be placed on locating and securing state and federal funds for educating and training the disadvantaged. This course will also stress writing proposals.

AGB 604 Seminar in Agricultural Education - Three semester hours. This course is designed to investigate and analyze the current problems, issues and developments in Agribusiness Education.

AGB 605 Supervision of Student-Teacher in Agribusiness Education - Three semester hours. Principles and techniques for directing the laboratory experience of student-teachers in Agribusiness Education.

AGB 606 Methods and Techniques of Rural Development - Three semester hours. This course will deal with approved methods of developing human and natural resources in rural areas, with emphasis on conducting feasibility studies to determine needs. Last Updated September 2009

AGB 608 Vocational Youth Organizations - Three semester hours. Methods and techniques of developing, implementing and conducting vocational youth organizational youth organization activities will be examined in this course. Emphasis will be placed on how vocational youth organizations contribute to the total educational program.

AGB 609 Instructional Media in Vocational Education - Three semester hours. Theory and practice in developing and using instructional media and equipment at the secondary and technical school level is the focus of this course.

AGB 610 Advanced Teaching Methods in Agribusiness Education - Three semester hours. This course examines theory, principles and procedures associated with effective instruction in agriculture at secondary and technical levels. Emphasis is placed on what research says about effective teaching.
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AGB 611 Internship in Agribusiness - Two to six semester hours. Guided participation in selected areas to further enhance professional and/or technical competency needed by Agribusiness teachers.

AGB 612 Farm Structure Planning and Construction - Two semester hours. This course is designed to keep Agribusiness and Cooperative Extension personnel abreast of new innovations in planning and construction of farm structures.

AGB 613 Modern Plumbing - Two semester hours. This course is designed to keep Agribusiness and Cooperative Extension Personnel abreast of new developments in planning and installing a rural plumbing and sanitation system.

AGB 614 Metrics in Agriculture - One semester hour. This course is designed to introduce students to basic metric units and show how these are applied to various phases of Agriculture. A deliberate effort will be made to get the students to use metric units so that they can apply them with ease and confidence.

AGB 617 Advanced Woodwork - Two semester hours. This course is designed to keep in-service agriculture personnel abreast of the latest developments in woodworking.

AGB 618 Small Gasoline Engine Theory and Practice - Two semester hours. Specific attention will be given to trouble shooting, adjusting and repairing new systems as they are installed on new four cycle models.

AGB 619 Applied Techniques in Electric Energy Utilization - Two semester hours. This course is designed to provide knowledge and technical skills in the operation, maintenance and efficient use of electrically operated agricultural machines and tools. Special emphasis will be placed on the safe and energy efficient operation of these items.

AGB 620 Advanced Electric Motors and Controls - Two semester hours. This course is designed to develop an appreciation and gain knowledge of the electrical machines used in our electrical industries; how to connect electrical machines into electrical circuits; develop and appreciation in planning circuits and procedures of jobs in electrical machine wiring problems; and to develop a safety-first attitude in the students.

AGB 621 Advanced Metal Fabrication - Two semester hours. This course covers advanced metal fabrication techniques. It includes advanced welding processes. Metallurgy of welding, strength of materials and design of weldments.

AGB 622 2 Cycle Engines - Two semester hours. Specific attention will be given to trouble shooting, adjusting and repairing new systems as they are installed on new 2 cycle models.

AGB 623 Advanced Agribusiness Management - Three semester hours. The application of managerial methodology in decision making in an agribusiness firm and computer application in management are emphasized. Financial strategies, capital budgeting, long range planning for growth and profit and the evaluation of the agribusiness industry will be covered.
AGB 624 Agricultural Financial Analysis - Three semester hours. An economic study of the acquisition and use of capital in agriculture with focus on the use of financial statements to analyze risks, returns and repayment capacity. Emphasis will also be given to risk management strategies, capital budgeting and capital allocation over time, financial markets and institutions serving agriculture.

AGB 625 Agricultural Policy - Three semester hours. A solid foundation in economic principles and theory is important and assumed. Agricultural policy is dynamic and constantly evolving, particularly at this time. The economic, scientific and political basis of the policy process is examined by reviewing the current methods and prescriptions of the contrasting positions and how they finally converge in new policy that is both actionable and appropriate. Case studies of how this is achieved will be the subject of individual graduate student research papers.