



MVTHS--CTE DEPARTMENT



Agriculture Education Course Descriptions 2011 – 2012

1000 Basic Agriculture Mechanics

AG100A/B 800

In this course, theory and hands-on experiences provide opportunities for students to develop basic knowledge and skills in agricultural mechanics. Instructional areas include the basic fundamentals of maintaining and repairing small gasoline engines, basic electricity, welding, construction, cold metal work, and operating agricultural equipment safely. Improving workplace and computer skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

Length of course: 2 Semesters
Credits per semester .5
Grade level: 9, 10, 11 and 12
Prerequisite: None

1050 Introduction to Agriculture Industry A

AG105A 555

This orientation course provides an opportunity for students to learn how the agricultural industry is organized; its major components; the economic influence of agriculture at state, national and international levels; and the scope and types of job opportunities in the agricultural field. Basic concepts in forestry, plant science, wildlife management, natural resources, food science, food science technology, environmental science and parliamentary procedures will be presented. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

Length of course: 1 Semester
Credits per semester .5
Grade level: 9, 10, 11 &12
Prerequisite: None

1050 Introduction to Agriculture Industry B

AG105B 556

This orientation course provides an opportunity for students to learn how the agricultural industry is organized; its major components; the economic influence of agriculture at state, national and international levels; and the scope and types of job opportunities in the agricultural field. Basic concepts in animal science including small and large animal production, animal wellness and management, and aquacultural science and technology will be presented. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

Length of course: 1 Semester
Credits per semester .5
Grade level: 9, 10, 11 &12
Prerequisite: None

1100 Basic Horticultural Science A

AG110A 562

This course is designed to develop knowledge and skills in the following areas: plant identification; floral design; using soil and other plant growing media; propagating horticultural plants; basics of growing horticultural plants in greenhouse and nursery settings; constructing, maintaining and using plant-growing structures; operating, repairing and maintaining equipment used in the horticultural field. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

Length of course: 1 Semester
Credits per semester .5
Grade level: 10, 11 &12

Prerequisite: None

1100 Basic Horticultural Science B AG110B 563

This course is designed to develop knowledge and skills in the following areas: plant identification; floral design; landscape design and maintenance; fruit and nut production; vegetable production; crop science; gardening; basics of growing horticultural plants in greenhouse and nursery settings; constructing, maintaining and using plant-growing structures; operating, repairing and maintaining equipment used in the horticultural field. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

Length of course: 1 Semester
Credits per semester .5
Grade level: 10, 11 &12
Prerequisite: None

2000 Basic Agriculture Science A AG200A 560

This orientation course builds on basic skills and knowledge gained in the Introduction to the Agricultural Industry course. Major units of instruction include agricultural research, soil science, plant science on many plant characteristics, health care and fertilizers to help plants in the fields and gardens also, biotechnology, advanced animal science. Many applied science and math skills and concepts will be stressed throughout the course as they relate to each area of soil and plants. Improving computer and workplace skills will be a focus in this course for many of the 300 agriculture careers. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts to teach careers and pay for college.

Length of course: 1 Semester
Credits per semester .5
Grade level: 10, 11 &12
Prerequisite: None

2000 Basic Agriculture Science B AG200B 561

This orientation course builds on basic skills and knowledge gained in the Introduction to the Agricultural Industry course. Major units of instruction include animal sciences in cattle, swine, sheep, horses, meat science, advanced plant science, biotechnology, advanced animal science. Many applied science and math skills and concepts will be stressed throughout the course as they relate to each area. Improving computer and workplace skills will be a focus in this course. Your participation in the FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts to prepare you for over 300 agriculture careers. The first semester of Agriculture Science is recommended before entering this course unless an agreement is made by the Agriculture Department.

Length of course: 1 Semester
Credits per semester .5
Grade level: 10, 11 &12
Prerequisite: None

Supervised Agriculture Education (SAE) I 595

This course is designed to establish knowledge and skills in various agricultural careers. Students will gain credit by establishing a project at their home, at a local business, or at their school usually after normal school hours. Example projects may include, but are not limited to: salesmanship, turf grass management, recycling and environmental management, landscaping, outdoor recreation, working at a garden center, raising vegetables/grain/livestock, conducting agriscience experiments in a greenhouse, and training horses at a stable. Students will be required to verify their experiences by keeping written or computerized records including: business agreements, budgets, inventories, daily activities, hours worked, income and expenses, total earnings, depreciation, and net worth. Instructor supervision will be conducted to the student's home or place of employment. SAE records should be evaluated at least once per month. In addition, SAE lessons are integrated in each agricultural course. SAE participation can lead to fulltime employment, scholarships, and awards through the FFA. Offered to students who have Ag Departmental approval. 1/4 credit each year (1.0 credit maximum)

Length of course: 2 Semesters
Credits per year .25

3000 Agricultural Mechanics and Technology AG300A/B 564

This course will concentrate on expanding student's knowledge and experiences with agricultural mechanics technologies utilized in the agricultural industry. Units of instruction included are: design, construction, fabrication, maintenance, welding, electricity/electronics, internal combustion engines, hydraulics, and employability skills. Careers of agricultural construction engineer, electrician, plumber, welder, equipment designer, parts manager, safety inspector, welder, and other related occupations will be examined. Improving workplace and computer skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

Length of course:	2 Semesters
Credits per semester	.5
Grade level:	11 and 12
Prerequisite:	None

3100 Agricultural Business and Management AG310A/B 580

This course will develop students' understanding of the agricultural industry relating to the United States and World marketplace. Instructional units include: marketing and trading of agricultural products, international agriculture, imports and exports, agricultural law, taxes, governmental regulations and policies, and advanced computerized record keeping. Student skills will be enhanced in math, reading comprehension, and writing through agribusiness applications. Employability skills will be developed with resume writing and interviewing techniques to gain employment. Post-secondary education will be explored at agricultural colleges and universities. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

Length of course:	2 Semesters
Credits per semester	.5
Grade level:	11 and 12
Prerequisite:	None
Dual Credit:	Rend Lake College: AGRI-1141 Agricultural Economics (3 credit hour) —Junior/Senior only

Supervised Agriculture Education (SAE) II 595

This course is designed to improve and expand knowledge and skills in various agricultural careers. Students will gain credit by continuing a project at their home, at a local business, or at their school usually after normal school hours. Students are encouraged to add additional projects, experiences, scope, and growth involving managerial and decision making skills. Students will be required to verify their experiences by keeping written or computerized records including: business agreements, budgets, inventories, daily activities, hours worked, income and expenses, total earnings, depreciation, and net worth. Instructor supervision will be conducted to the student's home or place of employment. SAE records should be evaluated at least once per month. In addition, SAE lessons are integrated into each agricultural course. SAE participation can lead to fulltime employment, scholarships, and awards through the FFA.

Length of course:	2 Semesters
Credits per year	.25
Grade level:	11 and 12

5000 Interrelated Cooperative Education BU500A/BU500B 900 AVC

This course is designed for senior students interested in pursuing careers in occupations related to agricultural education. Students are released from school for their paid cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills, career exploration skills related to the job, as well as improving students' abilities to interact positively with others. For skills related to the job, refer to the skill development course outlines and the task list of the desired occupational program.

A qualified, certified CTE instructor is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student and employer assume compliance with federal, state and local laws and regulations.

The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal development, human relationships, legal protection and responsibilities, economics and the job, organizations, and job termination. Classroom and worksite instruction is based on the tasks in an occupation.

Length of course:	Semesters
Credits per semester	1.5
Grade level:	12
Prerequisite:	Completion of one credit of skill-specific training in an approved CTE program recommended.
Application:	Yes

01.0100 Agricultural Business & Management	01.0200 Agricultural Mechanics & Technology	01.0600 Horticulture	02.0100 Agricultural Science	03.0100 Natural Resources Conservation Management
Orientation Level Courses - (9th and 10th Grade)				
1000 Introduction to the Agricultural Industry	1000 Introduction to the Agricultural Industry	1000 Introduction to the Agricultural Industry	1000 Introduction to the Agricultural Industry	1000 Introduction to the Agricultural Industry
2000 Basic Agricultural Science	2000 Basic Agricultural Science 1000 Basic Agriculture/Industrial Mechanics	2000 Basic Agricultural Science 1100 Basic Horticultural Science	2000 Basic Agricultural Science	2000 Basic Agricultural Science
Supervised Agricultural Experience I	Supervised Agricultural Experience I	Supervised Agricultural Experience I	Supervised Agricultural Experience I	Supervised Agricultural Experience I
Preparation Level Courses - (11th and 12th Grade)				
3000 Agricultural* Mechanics & Technology	3000 Agricultural* Mechanics & Technology			
3100 Agricultural* Business Management	3100 Agricultural Business Management	3100 Agricultural Business Management	3100 Agricultural Business Management	3100 Agricultural Business Management
Supervised Agricultural Experience II	Supervised Agricultural Experience II	Supervised Agricultural Experience II	Supervised Agricultural Experience II	Supervised Agricultural Experience II
Cooperative Education	Cooperative Education	Cooperative Education	Cooperative Education	Cooperative Education

FFA is the Career and Technical Student Organization for Agriculture Students.

*At least one credit at the orientation level and two credits at the preparation level.

At least one preparation level credit must be earned from key agriculture courses (see asterisk "")