Russellville High School



Agriscience Education Plant Systems Program

Course Syllabus for Landscape Design & Management

Instructor - Mr. Nichols



07/24/17

Course Description

The Landscape Design and Management course allows students to become more knowledgeable about and appreciative of landscape design and management. Topics include career opportunities, safety, landscape design, plant selection, landscape growth and the environment, landscape establishment and management, interior plantscaping and xeriscaping, landscape business management, and technology.

Content standards for this course are not intended to serve as the entire curriculum. Teachers are encouraged to expand the curriculum beyond the limits of these content standards to accommodate specific community interests and utilize local resources. This course encourages critical thinking, use of the scientific method, integration of technology, development of student leadership skills, and application of knowledge and skills related to practical questions and problems. Safety concepts are integrated into instruction to the maximum extent possible.

Career and technical student organizations are integral, co-curricular components of each career and technical education course. These organizations serve as a means to enhance classroom instruction while helping students develop leadership abilities, expand workplace-readiness skills, and broaden opportunities for personal and professional growth.

Course Goals

This course encourage critical thinking skills, use of the scientific method, integration of technology, development of student leadership skills, and application of knowledge and skills related to practical questions/problems. Safe field and laboratory investigations should be used in instruction to maximum extent possible to illustrate scientific concepts and principles and to support inquiry instruction.

This course emphasizes SAEP and FFA opportunities that develop students' potential for premier leadership, personal growth, and career success.

Career Technical Student Organization (CTSO): FFA

FFA is a dynamic youth organization that is an intra-curricular component of an agriscience program. FFA offers a variety of opportunities for members to get involved through leadership conferences, scholarship opportunities, and competitive events. The FFA Mission is to make a positive difference in the lives of young people by developing their potential for premier leadership, personal growth, and career success through agriscience education. To find out more about FFA, please visit www.alabamaffa.org or <a href="www.ala

Prerequisites

None

Essential Questions

- 1. How do job characteristics identify what you find essential for a job you are interested in?
- 2. What are some of the opportunities, benefits, and requirements of a career in landscape design and management.
- 3. What is Interiorscaping? What are some of the basic design principles it uses? How is Xeriscaping achieved?
- 4. What forms are necessary in a landscape business?
- 5. How does worker traits rollover to business ethics?

Credit

One Carnegie Unit

Student Fees

\$25.00

Evaluation/Assessment

Student grades will be based on a variety of daily exercises averaged with their test scores on the individual units of instruction. Forty percent of the final grade per grading period (9 weeks) will be based on daily work to insure that students will have ample opportunity to maintain adequate course grades. Fifty percent of the grade will be based on test grades. Daily work will include but not be limited to objective exercises, class participation, group work, shop/lab projects, and other forms of assessment that promote higher order thinking skills. Ten percent of the final grade per grading period will be based on employability skills. Semester grades will be calculated according to the method approved by school administration which will include mid-term and final exam scores.

Grading Method:

Nine Weeks' Grade:

- A. 10% Employability Skills
- B. 40% Daily Work
- C. 50% Tests

10% Employability Skills:

On the job, it is so important for you to be organized, to be able to follow directions, to be at work on time, to have good attendance, to keep neat work areas, and to maintain professional behavior. In an effort to help build these characteristics in each agriscience student, part of every nine weeks' grade will be "Employability Skills". Everyone begins each nine weeks with a grade of 100 for Employability Skills. It is so easy to keep the 100 and let this portion of your total grade help your average; or, you can lose points from this part of your grade and hurt your average for the following reasons:

- 1. <u>Unexcused Absence</u> from class = -2 points per violation
- 2. Tardy to class = -2 points per violation
- 3. Coming to class without proper supplies = -2 points per violation
- 4. <u>Failure to clean up your work area</u> and leave it neat = <u>-2 points</u> per violation (Chair pushed under table, Paper/Trash removed from table, Clean-up from shop projects)
- 5. Not remaining seated in assigned seat until the bell rings and do not stand at the door = $\underline{-5}$ points per violation
- 6. Any disorderly conduct that interferes with our classwork = -2 points per violation
- 7. Not wearing all required safety equipment (PPE) = -3 points per violation
- 8. Returning to classroom from assigned lab area without permission = -5 points per violation
- 9. Repeated misbehavior will result in a zero employability grade

RHS Grading Scale

A = 90-100

B = 80-89

C = 70-79

F = 69 and below

Culminating Product(s)

Students will participate in Career Development Events and Personal S.A.E. portfolio. Safety walk-through.

Students will develop a career portfolio.

The student will be able to read fertilizer label and calculate ratios, along with developing a fertilizer schedule.

The student will be able to design a given landscape.

Utilizing plant wheel create an interior plantscape design for a given location.

Students will fill out forms related to a landscape business and create and develop business cards and advertisements.

Research project on technology available to landscape design and management business owners.

The Landscape Design & Management class will also work in the greenhouse from time to time completing hands on work related to their plant science unit. They will help grow tomatoes, peppers, and many types of annual flowers.

Available Student Industry Credential(s)

- 1. Landscape Management = CRI
- 2. Urban Forestry = CRI
- 3. Alabama Hunter Education Certification = Stackable credential

For More Information on the Agriscience Program at Russellville High School Contact:

Donnie Nichols Agriscience Instructor 256-331-2110

Natalie Bendall Career/Technical Coordinator 256-331-2112 or EXT. 1302

No person shall be denied employment, be excluded from participation, be denied the benefits of, or subjected to discrimination in any program or activity on the basis of race, color, disability, sex, religion, national origin, or age by the Russellville City School System. Equal access shall be available to the Boy Scouts and other designated youth groups. The Superintendent, Heath Grimes, has been designated as the person coordinating the Russellville City Schools' effort to implement this non-discriminatory policy. If there are questions or concerns, contact him by phone at 331-2000, by e-mail at heath.grimes@arcs.kl2.al.us, or in writing at 1945 Waterloo Road, Russellville, AL 35653.

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Landscape Design and Management

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This course may be taught as a one-credit or half-credit course. For a half-credit course, content standards 1, 2, 3, 4, 5, 6, 8, and 9 must be included.

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Career Opportunities

Students will:

1. Compare job characteristics for various careers in landscape design and management.

Safety

2. Identify safe use of pesticides, power equipment, and hand tools in the landscaping industry.

Design

- Apply principles of landscape design, including simplicity, balance, focalization of interest, rhythm and line, scale and proportion, and unity.
 - Describing computer programs used in landscape planning
 - Designing a landscape plan, including enhancement features
 Examples: fencing, birdbath, gazebo, walkway, driveway

Landscape Plant Selection

4. Identify common plants used in landscape design.

Examples: trees, shrubs, ground covers, vines, flowers, turfgrass

 Describing physical and cultural characteristics of common plants used in landscape design

Examples: physical—color, flowering, foliage, fruiting cultural—cold or heat hardiness, sun or shade tolerance

Landscape Growth and the Environment

- 5. Describe environmental factors that affect plant growth.
 - Explaining the importance of specific plant processes
 Examples: photosynthesis, respiration, transpiration
- 6. Analyze landscape plants for symptoms of nutrient deficiencies.

 Examples: primary nutrients—nitrogen, phosphorus, potassium secondary nutrients—calcium, sulfur, magnesium trace nutrients—boron, manganese, chlorine, zinc, molybdenum, iron, copper, aluminum
- 7. Explain environmental issues related to landscape design and management.

Landscape Establishment and Management

- 8. Demonstrate methods for planting shrubs, trees, annuals, bulbs, groundcovers, and vines.
- Describe techniques used for establishing and maintaining landscapes, including pruning, fertilizing, irrigating, mulching, and controlling pests.
 - Identifying insects, diseases, and weeds that pose a problem in the landscape
 - Describing types of selective and nonselective pesticides used in the landscaping industry
- Identify criteria for the selection of hand tools, power tools, power equipment, and machinery for a specific landscape task.
 - Describing basic maintenance procedures required for tools and equipment used in landscaping
- 11. Describe the purpose of various sprinklers within an irrigation system. Examples: impulse, oscillating, automatic, pop-up
 - Describing methods of drainage in a landscape Examples: tiling, sloping

Interior Plantscaping and Xeriscaping

- Identify common needs for indoor plants used in interior plantscaping.
 Examples: light, media, watering and drainage, fertilization, temperature, humidity
 - Explaining principles of interior design
 - Selecting techniques used to achieve xeriscaping concepts

Business Management

13. Demonstrate business-related work ethics and managerial skills for the successful operation of a landscape business.

Examples: work ethics—following instructions, being on time, cooperating with others managerial skills—record keeping, budgeting, pricing, scheduling work, inventorying, purchasing, advertising, handling customer complaints, communicating in oral and written form

Technology

14. Identify advancements in technology that enhance the landscaping industry.