## Russellville High School



Agriscience Education Plant Systems Program

Course Syllabus for Fish & Wildlife Management

Instructor - Mr. Nichols



08/10/16

### **Course Description**

Fish and Wildlife Management is a course that provides students with the opportunity to gain knowledge regarding the management of natural resources. Topics included in the course are career opportunities, outdoor safety, history, issues, classification, fish and wildlife ecology, fish and wildlife management, endangered species, fish and wildlife pest management, and outdoor recreation.

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 <a href="www.alabamaffa.org">www.alabamaffa.org</a> or <a href="www.ffa.org">www.ffa.org</a>.

#### **Prerequisites**

None

#### **Essential Questions**

- 1. What criteria should a student use in selecting a career path?
- 2. What resources are available to students conducting a job search?
- 3. What are some of the hazards faced by individuals working in Fish and Wildlife?
- 4. What is some of the safety equipment used by managers of Fish and Wildlife?
- 5. What are the history and laws of wildlife management?
- 6. What is a functional wildlife habitat?
- 7. What are human activities that effect wildlife?
- 8. What are the effects on the ecosystem of introducing non-native species into an area?
- 9. What is the economic damage to crops caused by wildlife?
- 10. What are some recovery strategies for endangered and threatened fish and wildlife?
- 11. How can I tell game from non-game species?
- 12. What are the classes of wildlife?
- 13. What are some common fish and wildlife species in Alabama?
- 14. What is ecology and what are ecosystems?
- 15. What are natural selection and succession?
- 16. What is homeostasis?
- 17. What communities are found in nature?
- 18. What is population ecology?
- 19. What types of food relationships are found in nature?
- 20. What is ecosystem diversity and what biomes can be found on earth?
- 21. What are the signs of diseases in fish and wildlife species?
- 22. What are the types of fish and wildlife diseases?
- 23. How can fish and wildlife diseases be prevented and treated?
- 24. What are the types of outdoor recreational enterprises?
- 25. What is the difference between consumptive and non-consumptive use of natural resources?
- 26. How is land's income generating potential from wildlife determined?
- 27. What are the types of outdoor recreational leases?
- 28. How was the National and State Park Systems established and what is their purpose?

#### 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. Absence 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. Failure to clean up your work area and leave it neat = -2 points per violation
- 5. Not remaining seated in assigned seat until the bell rings and do not stand at the door =  $\frac{-2 \text{ points}}{2 \text{ per violation}}$
- 6. Any disorderly conduct that interferes with our classwork =  $\frac{2}{2}$  points per violation
- 7. Not wearing all required safety equipment (PPE) = -2 points per violation
- 8. 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)**

- 1. Students will become hirable citizens after gaining the knowledge of careers.
- 2. Students will master shop safety by identifying mock safety hazards in the shop and by passing the safety portion of the lesson with a 100 on the shop safety test.
- 3. Students will understand the history, laws, and habitat requirements for Fish and Wildlife Management.
- 4. Students will understand the important issues of fish and wildlife management.
- 5. Students will understand how game and non-game animals are classified and be able to identify various species in Alabama.
- 6. Students understand ecology and how it affects our everyday lives. Students will understand their own role in ecology and how they can affect it.
- 7. Students will understand diseases and pests and the roles the problems present in managing for fish and wildlife.
- 8. Students will become knowledgeable about some of today's most valued, yet vulnerable, natural resources.

## Available Student Industry Credential(s)

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

Mike Powell Career/Technical Coordinator 256-331-2112

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 <a href="heath.grimes@rcs.k12.al.us">heath.grimes@rcs.k12.al.us</a>, or in writing at 1945 Waterloo Road, Russellville, AL 35653.

Heath Grimes, Title IX Coordinator Russellville City Schools 1945 Waterloo Road Russellville, AL 35653 256-331-2000 heath.grimes@rcs.k12.al.us Claudia Askew, 504 Coordinator Russellville City Schools 1945 Waterloo Road Russellville, AL 35653 256-331-2107 claudia.askew@rcs.k12.al.us

# **Fish and Wildlife 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, and 8 must be included.

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## **Career Opportunities**

Student will:

1. Describe career opportunities in fish and wildlife management.

## **Outdoor Safety**

- 2. Determine principles of hunting, boating, and recreational vehicle safety.
  - Identifying survival and first aid techniques related to outdoor recreation

## Fish and Wildlife Management

- 3. Explain the history of fish and wildlife management.
  - Describing the impact of sport hunting in Alabama Examples: economy, wildlife population
- 4. Describe laws that protect fish and wildlife.
- Compare habitat needs of selected fish and wildlife species native to Alabama.
   Examples: water, shelter, food
  - Designing a wildlife management plan
  - · Explaining methods used to improve fish and wildlife habitats

## **Fish and Wildlife Issues**

- 6. Analyze human activities for positive and negative effects on fish and wildlife.

  Examples: positive—planting sea grass, conserving habitats
  negative—polluting, filling wetlands
  - Explaining environmental effects of introducing nonnative species into an area
  - Describing economic damage to crops caused by wildlife
  - Evaluating issues concerning endangered and threatened species of fish and wildlife Example: recovery strategies

## **Fish and Wildlife Classification**

- 7. Distinguish game from nongame wildlife species.
  - Comparing classes of wildlife, including mammals, birds, reptiles, amphibians, and fish
- 8. Identify common fish and wildlife species indigenous to Alabama.

# **Fish and Wildlife Ecology**

- 9. Compare aquatic and terrestrial ecosystems.
  Examples: wetlands, woodlands, grasslands
  - Identifying methods used to correct an unbalanced ecosystem
  - Describing interdependence between biotic and abiotic components of a wildlife ecosystem

# **Fish and Wildlife Pest Management**

10. Identify pests and diseases affecting fish and wildlife species.

## **Outdoor Recreation**

- 11. Identify outdoor recreational opportunities in Alabama.
  - · Identifying methods of developing and managing outdoor recreational enterprises
- 12. Describe differences among state parks in Alabama.