# Wildlife and Recreation Management Course No. 18501 <-- update in info Credit: 1.0

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| --- | --- | --- | --- |
| **Student name:**  |  | **Graduation Date:** |  |

Pathways and CIP Codes:Natural Resources and Environmental Sustainability (03.0101)

Course Description: Technical Level: Wildlife and Recreation Management courses provide students with the opportunity to understand and appreciate the importance of maintaining the land and ecological systems that enable non-domesticated animals to thrive. These courses emphasize how humans and animals may both take advantage of the same land or how to gain economic benefits from the land while not degrading its natural resources or depleting plant or animal populations. Students may also learn how to manage wildlife and lands for recreational purposes.

Directions:The following competencies are required for full approval of this course. Check the appropriate number to indicate the level of competency reached for learner evaluation.

**RATING SCALE:**

4. Exemplary Achievement: Student possesses outstanding knowledge, skills or professional attitude.

3. Proficient Achievement:Student demonstrates good knowledge, skills or professional attitude. Requires limited supervision.

2. Limited Achievement:Student demonstrates fragmented knowledge, skills or professional attitude. Requires close supervision.

1. Inadequate Achievement:Student lacks knowledge, skills or professional attitude.

0. No Instruction/Training:Student has not received instruction or training in this area.

## Benchmark 1: NATURAL RESOURCE CONSERVATION Competencies

### Competencies

| **#** | **DESCRIPTION** | **RATING** |
| --- | --- | --- |
| 1.1 | Define and describe natural resource conservation.  |  |
| 1.2 | Compare historical fish and wildlife trends and the public’s response. |  |
| 1.3 | Outline the variety of jobs in conservation organizations, educational requirements, employment opportunities, and how to prepare for a professional conservation career. |  |
| 1.4 | Distinguish the difference between basic fish and wildlife legalities and ethics. |  |

## Benchmark 2: FISH AND WILDLIFE VALUES

### Competencies

| **#** | **DESCRIPTION** | **RATING** |
| --- | --- | --- |
| 2.1 | Calculate the commercial value of fish and wildlife resources and how it can benefit the economy and landowners.  |  |
| 2.2 | List the different recreational values of fish and wildlife resources. |  |
| 2.3 | Explain how naturally occurring living organisms benefit humans and the environment. |  |
| 2.4 | Describe the social values and benefits associated with fish and wildlife resources. |  |
| 2.5 | Describe the aesthetic value of fish and wildlife resources.  |  |
| 2.6 | Describe the scientific and educational values of fish and wildlife resources. |  |
| 2.7 | Evaluate the negative impacts wild animals have on humans and the objective of wildlife damage control. |  |

## Benchmark 3: HABITAT MANAGEMENT PRINCIPLES AND TECHNIQUES Competencies

### Competencies

| **#** | **DESCRIPTION** | **RATING** |
| --- | --- | --- |
| 3.1 | Explain ecological principles and how they apply to fish and wildlife management.  |  |
| 3.2 | Design a cropland management plan for wildlife. |  |
| 3.3 | Select grassland management practices that improve livestock forage and wildlife habitat.  |  |
| 3.4 | Assess how forest management can be used to improve wildlife habitat. |  |
| 3.5 | Define and describe wetlands and their importance. |  |
| 3.6 | Describe stream behavior and relate how it affects fish and wildlife habitat. |  |
| 3.7 | Plan a habitat using appropriate construction and management techniques using government conservation assistanceprograms. |  |

## Benchmark 4: IDENTIFYING DIFFERENT SPECIES AND VARIETY OF PLANTS AND HOW THE IMPACT ON THE HEALTH OF THE ECOSYSTEM

### Competencies

| **#** | **DESCRIPTION** | **RATING** |
| --- | --- | --- |
| 4.1 | Research and examine the characteristics used to identify wildlife and insects. |  |
| 4.2 | Apply identification techniques to determine the species of wildlife or insect. |  |
| 4.3 | Evaluate the species of wildlife and insects present to assess the health of an ecosystem. |  |
| 4.4 | Research and examine the characteristics used to identify aquatic species. |  |

## Benchmark 5: ANALYZE THE DIFFERENT ELEMENTS IN AN ECOSYSTEM AND THE RELATIONSHIP OF THOSE INTERACTIONS IN RELATION TO WILDLIFE MANAGEMENT.

### Competencies

| **#** | **DESCRIPTION** | **RATING** |
| --- | --- | --- |
| 5.1 | Summarize and classify the different kinds of natural resources using common classification schemes (e.g., living versus non-living, renewable versus nonrenewable, native versus introduced, etc.). |  |
| 5.2 | Summarize the components that comprise all ecosystems. |  |
| 5.3 | Analyze the interdependence of organisms within an ecosystem (e.g., food webs, niches, impact of keystone species, etc.) and assess the dependence of organisms on nonliving components (climate, geography, energy flow, nutrient cycling, etc.). |  |
| 5.4 | Conduct analyses of ecosystems and document the interactions of living species and non-living resources. |  |
| 5.5 | Analyze how biodiversity develops through evolution, natural selection, and adaptation; explain the importance of biodiversity to ecosystem function and availability of natural resources.  |  |
| 5.6 | Evaluate biodiversity in ecosystems and devise strategies to enhance the function of an ecosystem and the availability of natural resources by increasing the level of biodiversity. |  |

## Benchmark 6: EXPLORING THE RELATIONSHIP BETWEEN GOVERNMENT AGENCIES, HUMAN INTERACTIONS AND WILDLIFE MANAGEMENT.

### Competencies

| **#** | **DESCRIPTION** | **RATING** |
| --- | --- | --- |
| 6.1 | Distinguish between the types of laws associated with natural resources systems. |  |
| 6.2 | Analyze the structure of laws associated with natural resources systems. |  |
| 6.3 | Evaluate the impact of laws associated with natural resources systems (e.g., mitigation, water regulations, carbon emissions, game limits, invasive species, etc.). |  |
| 6.4 | Research and assess how historical figures played a prominent role in shaping how natural resources are viewed and used today (e.g., Aldo Leopold, Teddy Roosevelt, John Muir, Rachel Carson, Gaylord Nelson, etc.). NRS.02.03.02.b. Examine and describe the relationship between current trends in natural resource systems and historical figures that played a prominent role in shaping how natural resources are viewed and used today. |  |
| 6.5 | Anticipate and predict how society’s views and use of natural resources will continue to change as a result of historical figures and trends in modern society. |  |

## Benchmark 7: ANALYZING THE ECONOMIC IMPACT OF WILDLIFE MANAGEMENT

### Competencies

| **#** | **Description** | **RATING** |
| --- | --- | --- |
| 7.1 | Analyze the interrelationships between natural resources and humans. |  |
| 7.2 | Assess whether economic value increases or decreases the conservation, protection, improvement and enhancement of natural resources. |  |
| 7.3 | Develop plans to ensure sustainable production and processing of natural resources. |  |
| 7.4 | Develop a method for the sustainable harvest of wildlife species. |  |
| 7.5 | Develop recommendations for the sustainable harvest of aquatic species. |  |

## Benchmark 8: ANALYZE THE HARMS TO WILDLIFE WITH THE INTRODUCTION OF INVASIVE SPECIES AND DISEASE.

### Competencies

| **#** | **Description** | **RATING** |
| --- | --- | --- |
| 8.1 | Demonstrate natural resource protection, maintenance, enhancement and improvement techniques. |  |
| 8.2 | Diagnose plant and wildlife diseases and follow protocols to prevent their spread. |  |
| 8.3 | Prevent or manage introduction of ecologically harmful species in a particular region. |  |

## Benchmark 9: RECREATION MANAGEMENT

### Competencies

| **#** | **Description** | **Rating** |
| --- | --- | --- |
| 9.1 | Distinguish between the types of laws associated with hosting natural resources recreation management sites (i.e. guided hunts, guided fishing, outdoor recreation, etc.). |  |
| 9.2 | Develop a plan to create a wildlife/natural resources recreation experience following local, state and federal laws while also ensuring a sustainable environment. |  |
| 9.3 | Identify local opportunities for internships in recreation management.  |  |

I certify that the student has received training in the areas indicated.

Instructor Signature:

For more information, contact:

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