

**Course Title:** Forest and Wildlife Science

**Board Approval Date:** 05/20/14

**Credit / Hours:** .5 credit

**Course Description:**

This course focuses on mastery of the PA Academic Standards for Science and Technology, Environment and Ecology as well as Career Education and Work. As students progress through this course they will participate in a systematic study of an advanced outlook and understanding of the forest and wildlife science industry. At this point in the student's educational career, they have continued to specialize in their own interest areas. Throughout this course, instruction is provided in these specialty areas that are related to the industry. Material being presented in this course is designed to provide a specialized and diverse amount of information to students who in turn can apply these principles to their own individual situations. Information being presented is: Tree Identification and Growth, Forest Regeneration, Forest Improvement, Conditioning and Management Practices, Forestry Tool Identification, Wildlife Species Identification, Principles of Wildlife Management, Upgrading Habitats, Home Sites and Special Area Management, Legislative Processes, Land Use and Population Dynamics.

**Learning Activities / Modes of Assessment:**

Large group instruction	Tests and Quizzes
Laboratory demonstration	Checklists / Teacher Observation
Small group work	Projects with Rubrics
Outdoor Lab instruction	Lesson Worksheets
Career Pathway Explorations	LFS Worksheets

**Instructional Resources:**

[www.agednet.com](http://www.agednet.com)  
[www.pacareerzone.com](http://www.pacareerzone.com)  
Forestry Videos  
PA Game Commission Videos  
You Tube Videos  
Agri-science 4<sup>th</sup> Edition Text (Burton & Cooper, 2011)

## Course Pacing Guide

**Course: Forest and Wildlife Management**

<b>Course Unit (Topic)</b>	<b>Length of Instruction (Days/Periods)</b>
1. Forest Science	45 days
2. Wildlife Science	<u>45 days</u>
<b>DAYS TOTAL</b>	<b>90 Days</b>

Topic: Forest Science

Days: 45

Subject(s): Science

Grade(s): 10th, 11th, 12th

Know:

**3.4.12.A2. – Essential**  
CORE CONCEPTS OF TECHNOLOGY - Describe how management is the process of planning, organizing, and controlling work.

**13.1.B – Compact**  
Analyze career options based on personal interests, abilities, aptitudes, achievements and goals.

Understand:

Students should understand the importance of forest management practices for a healthy and productive woodlot.

Do:

**3.4.12.A2. – Essential**  
CORE CONCEPTS OF TECHNOLOGY - Describe how management is the process of planning, organizing, and controlling work.

**3.4.12.E2. – Essential**  
AGRICULTURAL AND RELATED BIOTECHNOLOGIES - Compare and contrast the technologies of biotechnology, conservation, bio-fuels, and ecosystems as they relate to managing Earth's resources effectively.

**3.4.12.E3. – Essential**  
ENERGY AND POWER TECHNOLOGIES - Compare and contrast energy and power systems as they relate to pollution, renewable and non-renewable resources, and conservation.

**13.1.A – Essential**  
Relate careers to individual interests, abilities, and aptitudes.

Topic: Wildlife Science

Days: 45

Subject(s): Science

Grade(s): 10th, 11th, 12th

## Know:

**13.1.A – Important**  
Relate careers to individual interests, abilities, and aptitudes.

**13.1.C – Compact**  
Explain how both traditional and nontraditional careers offer or hinder career opportunities.

**13.3.F – Compact**  
Evaluate strategies for career retention and advancement in response to the changing global workplace.

**13.3.G – Important**  
Evaluate the impact of lifelong learning on career retention and advancement.

## Understand:

Students should understand the importance of wildlife management practices for a healthy and diverse wildlife population.

## Do:

**13.1.A – Important**  
Relate careers to individual interests, abilities, and aptitudes.

**13.1.E – Important**  
Analyze the economic factors that impact employment opportunities, such as, but not limited to: Competition, Geographic location, Global influences, Job growth, Job openings, Labor supply, Potential advancement, Potential earnings, Salaries/benefits and Unemployment.

**13.3.F – Compact**  
Evaluate strategies for career retention and advancement in response to the changing global workplace.