Forestry is an interdisciplinary profession, embracing the sustainable management of forest ecosystems for productivity, biodiversity, and health. The Forestry Program's goals are to provide a solid professional preparation with a strong field component, founded in a broad general education, and with the flexibility to allow students to pursue special abilities and interests. The Bachelor of Science in Forestry (B.S.F.) degree is accredited by the Society of American Foresters.

Forestry graduates help manage and conserve public and private forests, addressing major environmental challenges including climate change, biodiversity protection, and sustainable resource management. They use science, planning, and geospatial technology to protect and restore forest ecosystems, ensure a sustainable forest product industry, provide wildlife habitat and recreational opportunities, and conserve soils and watersheds.

**Program Mission, Goals and Objectives**

The mission of UNH's Department of Natural Resources and the Environment, of which the Forestry Program is an integral part, is to serve as an educational center for the scholarly study of environmental and social sciences, and their application to the policy and management of natural resources from local to global scales. This is accomplished through education, research and outreach. This mission reflects UNH's larger mission to provide comprehensive, high-quality undergraduate programs and graduate programs of distinction, including a strong commitment to serving the public good and promoting the excitement of discovery among faculty and students.

The goal of the Forestry Program is to train natural resource professionals to sustainably manage forested landscapes for diverse objectives and in ways that balance changing social, cultural, economic, and environmental interests and priorities.

Our educational objectives are to:

1. Develop a strong knowledge base about the ecology and dynamics of forest ecosystems, including interactions between trees, wildlife, insects, soils, water, humans, and other ecosystem components.
2. Understand how different policies and management decisions affect forest dynamics over short to long time scales, and on different spatial scales.
3. Cultivate the necessary skills to manage forests for diverse objectives and to assess, respect, and balance the interests of different groups to achieve societal benefits.
4. Be able to critically evaluate scientific information and integrate this with professional experience and changing societal values to support adaptive management of forest resources.

**Requirements**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 528</td>
<td>Applied Biostatistics I</td>
<td>4</td>
</tr>
</tbody>
</table>

1. NR 745 Forest Management may be used to satisfy the University's Capstone requirement. The Capstone may also be satisfied through created work or product, or some form of experiential learning (e.g., honors thesis, mentor research project, and other special student activity). Departments are responsible for certifying that graduating seniors have met the capstone requirement for their majors.

**Degree Plan**

**Sample Course Sequence for Forestry**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 528</td>
<td>Applied Biostatistics I</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 401</td>
<td>First-Year Writing</td>
<td>4</td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 424B</td>
<td>Calculus for Life Sciences</td>
<td>4</td>
</tr>
<tr>
<td>MATH 420</td>
<td>Finite Mathematics</td>
<td>4</td>
</tr>
<tr>
<td>MATH 425</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>NR 415</td>
<td>Natural Resources Field Methods</td>
<td>2</td>
</tr>
<tr>
<td>NR 425</td>
<td>Field Dendrology</td>
<td>4</td>
</tr>
<tr>
<td>NR 433</td>
<td>Wildlife Ecology</td>
<td>4</td>
</tr>
</tbody>
</table>

Total Credits: 82-90
The goal of the Forestry Program is to train natural resource professionals to sustainably manage forested landscapes for diverse opportunities and in ways that balance changing social, cultural, economic, and environmental interests and priorities.

Our educational objectives are to:

- Identify the major species of plants and wildlife and their distribution and habitat requirements.
- Understand the ecological concepts related to the structure, composition, and dynamics of forest ecosystems, including succession, competition, productivity, nutrient cycling, stand development, and wildlife populations.
- Understand soil properties, hydrology, water resources, and watershed functions.
- Understand how forest health and dynamics are impacted by different human and natural disturbances, including pests and diseases, climate change, pollutants, extreme climate events, management interventions.
- Design and conduct forest inventories using appropriate sampling methods and units of measurement.
- Analyze and interpret forest inventory data, and to use the information to project future forest stand development processes and tree conditions.
- Ability to use a variety of spatial analysis tools to assess landscape scale characteristics and produce maps of forest resources distribution.
- Explain forest development trajectories in both written and oral form and apply appropriate computer models and assessment techniques.
- Understand forest policy and the processes that influence policy development.
- Understand and apply economic principles to assessing the financial opportunities and risks of forestry operations.
- Understand how federal, state, and local laws and regulations govern the practice of forestry.
• Understand the administration, ownership, and organization of forest management enterprises.
• Integrate and effectively communicate the technical, financial, human resources, and legal aspects of administering public and private enterprises.
• Develop management plans that effectively integrate and balance multiple landowner (or stakeholder/societal) objectives and the ecological conditions and constraints of the biophysical system.
• Analyze the economic, environmental and social consequences of forest resource management strategies and decisions, and to evaluate their tradeoffs.
• Apply appropriate decision-making tools and techniques to evaluate alternative forest management practices and plans.
• Demonstrate effective problem-solving and teamwork skills, professional and ethical conduct, and respect for diverse values and interests.
• Describe and explain to different audiences in both written and oral form alternative options for managing forest resources to achieve multiple objectives.