

	Society of American Foresters Committee on Accreditation 5400 Grosvenor Lane Bethesda, Maryland 20814-2198 (301) 897-8720	<p style="text-align: center;"><b>Committee on Accreditation Summary Findings and Action</b></p>
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**Northern Arizona University  
2013**

**Initial Accreditation:** 1968

**Currently Accredited Degree Programs:**

*Forestry: Forestry major leading to the Bachelor of Science degree.*

**Current Accreditation-Period Reviews:**

***Onsite Visit:*** 2003

***Interim Review:***

***Substantive Change:*** 2007, 2008, 2011

***Progress Report:*** 2009, 2011

**Accreditation Expires:**

Forestry: 2013

**2013 Review:**

Forestry: Forestry major leading to the Bachelor of Science degree.

**INTRODUCTION**

A Society of American Foresters (SAF) Visiting Team was invited to Northern Arizona University on April 2-4, 2013 to review the undergraduate Forestry degree program in the School of Forestry, College of Engineering, Forestry, and Natural Sciences.

The previous site visit and accreditation review occurred in 2003. Substantive Change reports were filed in 2007, 2008, and 2011. Progress reports were filed as requested in 2009 and 2011. In each instance the reports were accepted and accreditation continued through 2013.

The following summary findings and action by the SAF Committee on Accreditation (COA) are based upon a review of the NAU self-evaluation report, the visiting team’s May 2013 report, the NAU written response to that report, and oral comments provided to the COA by Dr. Jim Allen, School of Forestry Director, and Dr. Keith Owens, chair of the visiting team.

## SUMMARY FINDINGS

### STANDARD I: FORESTRY PROGRAM MISSION, GOALS, AND OBJECTIVES

The stated mission of the NAU School of Forestry reflects the scholarship, ethics, and interdisciplinary approach necessary to manage natural resources. The School mission is clearly delineated in the self-evaluation and on the School website.

The interdisciplinary nature of forestry degree programs in the School of Forestry is reflected in the core curriculum as well as the certificate programs of the School. The School serves a diverse range of constituents including students, employers, alumni, faculty, and staff. Members of the School Advisory Council represent a wide spectrum of disciplinary and geographic perspectives. Ethical training and professionalism in the profession of forestry is instilled in the students beginning with their first class in the School, and reinforced throughout the curriculum.

All academic programs, including the forestry degree program, are reviewed regularly to improve performance and promote collaborative learning. On-line exit surveys and course evaluations are used to gain student input, and surveys have been used to gain alumni input. This input has been used to change focus areas into certificates, and to change the emphasis areas of the certificates.

The standard is met.

### STANDARD II: CURRICULUM

Reaccreditation is sought for the Bachelor of Science in Forestry (BSF) degree program offered in the School of Forestry, College of Engineering, Forestry, and Natural Sciences at Northern Arizona University. The degree program requires 120 semester credit hours.

#### *General Education*

Northern Arizona University requires 35 credits of liberal studies to satisfy Arizona general education requirements. Twenty of these 35 hours consist of specific courses required as part of the pre-professional program and the remainder is restricted electives. All Forestry students must fulfill these Liberal Studies requirements. Upon completing the pre-professional program, forestry majors are accepted into the professional program with a 2.75 minimum GPA requirement. Each of the general education components is covered and distribution of communications, science and mathematics and the social sciences and humanities credit hours is summarized in Table 1.

Table 1. General Education Requirements: (semester hours)

	<b>Communications</b>	<b>Science and Mathematics</b>	<b>Social Sciences and Humanities</b>	<b>Total</b>
	Credit Hours for Courses Required in All Curricular Options			
	7	22	3	32

*Professional Education*

Table 2 reflects the distribution of credit hours across the four professional forestry areas for courses that are required of all forestry majors. In addition to these credit hours, restricted electives and certificate hours provide students with added depth and breadth across these four broad competency areas.

Table 2: Professional Forest Resource Education: (semester hours)

	<b>Ecology and Biology</b>	<b>Measurement of Forest Resources</b>	<b>Management of Forest Resources</b>	<b>Policy, Economics, and Administration</b>	<b>Total</b>
	Credit Hours for Courses Required in All Curricular Options				
	22	10	17.5	6.5	56
	Credit Hours for Additional Courses by Certificate Option				
Fire Ecology and Management	3	3	9	0	15
Forest Health and Ecological Restoration	6	3	6	0	15
International Forestry and Conservation	3	0	6	6	15
Human Dimensions of Forest Management	0	0	9	6	15
Wildlife Ecology and Management	17	0	3	0	20
<b>Total</b>	<i>22-39</i>	<i>10-13</i>	<i>20.5-26.5</i>	<i>6.5-12.5</i>	<i>71-76</i>

The NAU forestry faculty continuously strives to improve the quality of the forestry curriculum. In part in response to student and employer concerns, a pending curricular revision will add additional coursework and field training in the areas of quantitative analysis, computer assisted planning and management, and GIS skills. These competencies will be integrated across the curriculum. The curricular revision will be phased in gradually beginning in the fall semester of 2014.

The NAU forestry degree program is recognized nationally for their unique approach to integrated ecosystem management. Students progress through the professional program in integrated student crews. The degree of fieldwork required as part of the forestry degree program is a significant strength of the program and gives NAU forestry graduates a significant advantage in competing for forestry jobs. NAU forestry students are exposed to professional ethics issues across the curriculum. In addition, students are also exposed to ethical situations, cases, and problems in a number of other required forestry courses. Writing and oral presentation expectations grow as students progress through the professional program. Significant writing and oral presentation expectations are required in the Policy and Capstone classes.

The NAU professional forestry curriculum follows a logical and reinforcing progression. The faculty employs both immersion and integrated sequential teaching to provide a coherent educational experience for the forestry students. Students in the forestry degree program employ critical reasoning skills across the curriculum as well as being exposed to historical perspectives and current issues. A number of undergraduate forestry majors take advantage of opportunities to pursue undergraduate research working with graduate students, faculty, and USDA Forest Service Rocky Mountain Research Station scientists. There are a number of programs that financially support undergraduate research.

The standard is met.

### **STANDARD III: FORESTRY PROGRAM ORGANIZATION AND ADMINISTRATION**

Administration of the School of Forestry and the forestry degree program is executed in a manner consistent with other comparable units at NAU and other universities. The Executive Director of the School reports directly to the Dean of the College. The Executive Director is responsible for administering School budgets including McIntire-Stennis funds, over-seeing the curriculum, overseeing appointment of faculty members, and making teaching assignments. He is ultimately responsible for allocating state appropriated funds within the School.

Faculty governance is important in the School. The Curriculum Committee reviews and recommends changes in the undergraduate curriculum, the Annual Review Committee uses teaching evaluations as part of the annual performance rating, and the Faculty Status Committee conducts tenure and promotion discussion and makes recommendations.

Admission standards for incoming freshmen and transfer students are clearly delineated on the NAU Undergraduate Admissions website and on the international admissions website. These standards are applied across the university. Enrollment in the program has been growing over the last 5 years.

The administrative support staff is funded through state allocations and grants. There are 5 key staff positions funded by “hard” dollars and 4 supported by grant dollars. Funds for administrative support staff have decreased at most universities and NAU is no exception. This is of concern because the staff is not cross-trained so illness or vacation can delay processes.

The School’s Assessment Plan has been filed with the University on a regular basis and the School was awarded the “Seal of Academic Achievement” for using their plan to enhance the program. In addition to the Assessment Plan, the School uses a structured course evaluation form for every course and an on-line exit survey to gain information about sources and curriculum. The results are discussed at faculty and curriculum meetings.

The standard is met.

#### **STANDARD IV: FACULTY**

The School of Forestry has 20 tenured or tenure track faculty members, three non-tenure track research faculty, and hires temporary instructors as needed for the pre-professional program. These faculty members received terminal degrees from 14 different institutions across North America. The expertise in the faculty is great and faculty members teach in their area of specialty. The tenure or tenure-track faculty is 39% female. The School also has 32 adjunct faculty members who collaborate mostly on research projects with graduate students. This provides a much larger faculty group who contributes to the School.

Most faculty have majority teaching appointments and also have recognized time allocations to service. Many of the faculty have vigorous research programs that support graduate teaching. The extramural funding supports a graduate student population (n=45) that attracts students from multiple institutions across the US. The faculty members are active with undergraduate research and with the various student organizations on campus.

Despite budget restrictions the School has been able to add several faculty members in recent years to strengthen faculty expertise in biometrics and forest soils/ecosystem ecology.

The standard is met.

#### **STANDARD V: STUDENTS**

The School of Forestry provides a broad range of academic and extracurricular offerings extending from recruitment to placement activities, reflecting a learning environment

consistent with the program mission, goals and objectives. There are multiple clubs, professional societies, outside lecture series and international study opportunities.

The School of Forestry has two positions focused on recruitment. Recruitment of Native Americans and Hispanics has long been a concern and priority for the School of Forestry and the University. Enrollment in the forestry program increased from 174 in 2008 to 256 in the fall of 2011. The program is at capacity given facility, faculty, and equipment constraints. The program has implemented strategies to deal with growth by raising the GPA for entry into the professional program and adapting teaching and exam techniques.

The forestry program has well developed programs and activities for retention. The Student Services and Diversity Coordinators deliver key elements of the program, including academic counseling, internships, job opportunities and mentoring activities. In addition, the University offers a number of programs to support targeted groups such as Native Americans, Veterans or persons with disabilities. It offers financial-aid, scholarships, and Student Learning Centers. Transition and Bridge courses are available to assist first generation college students and to make the transition from communities to college life.

The standard is met.

#### **STANDARD VI: PARENT INSTITUTION SUPPORT**

There is a long term commitment at all levels both within the University and in State government for the School of Forestry in recognition of forestry issues facing the State. The Forestry program is seen as a key asset to serve the public and elected officials by demonstrating forest management practices.

The Forestry program has an excellent building dedicated to its program. Labs are effectively used and assigned based on task needs. The close relationship with the USDA Forest Service Rocky Mountain Research Station provides access to additional lab and greenhouse space. Good computer and information technology support is available to the forestry program.

The Centennial Forest is an excellent resource for field study given its close location to campus. There is an opportunity to continue to work on the relationship with the State to expand capacity there. Consider utilizing the Advisory Council to sort through issues.

Overall the campus environment is safe, well maintained and conducive to learning. The physical environment at the campus is good. Campus housing is good and has recently been expanded. There is a well-organized safety and alert system on campus.

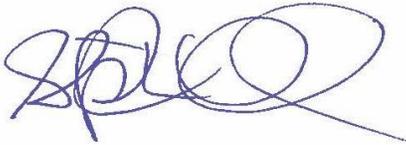
The standard is met.

## COMMITTEE ACTION

The SAF Committee on Accreditation continues accreditation, under the forestry standard, of the Forestry degree program leading to a Bachelor of Science in Forestry degree as administered by the School of Forestry, College of Engineering, Forestry, and Natural Sciences at Northern Arizona University, effective January 1, 2014 through December 31, 2023.

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By: \_\_\_\_\_  
Steve Daniels, Chair  
SAF Committee on Accreditation

Date: 10 December 2013