Submit originals and one copy and electronic copy to Governance/Faculty Senate Office (email electronic copy to fysenat@uaf.edu)

PROGRAM/DEGREE REQUIREMENT CHANGE (MAJOR/MINOR)

SUBMITTED BY:

<table>
<thead>
<tr>
<th>Department</th>
<th>Natural Resources Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prepared by</td>
<td>Martha Westphal</td>
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<tr>
<td>Email Contact</td>
<td><a href="mailto:mmwestphal@alaska.edu">mmwestphal@alaska.edu</a></td>
</tr>
</tbody>
</table>

College/School: School of Natural Resources & Agricultural Sciences

<table>
<thead>
<tr>
<th>Phone</th>
<th>474-5276</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty Contact</td>
<td>Josh Greenberg</td>
</tr>
</tbody>
</table>

See http://www.uaf.edu/uafgov/faculty/od for a complete description of the rules governing curriculum & course changes.

PROGRAM IDENTIFICATION:

<table>
<thead>
<tr>
<th>DEGREE PROGRAM</th>
<th>Natural Resources Sustainability</th>
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</thead>
<tbody>
<tr>
<td>Degree Level:</td>
<td>(i.e., Certificate, A.A., A.A.S., B.A., B.S., M.A., M.S., Ph.D.)</td>
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<tr>
<td></td>
<td>Ph.D</td>
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A. CHANGE IN DEGREE REQUIREMENTS: (Brief statement of program/degree changes and objectives)

Clarify total number of credits required for the PhD program
Inform of further application requirements.

B. CURRENT REQUIREMENTS AS IT APPEARS IN THE CATALOG:

Minimum Requirements for Degree: 18 credits

The joint Ph.D. Program in natural resources and sustainability prepares future leaders as academic researchers, agency professionals and analysts of non-governmental organizations and communities for careers at the frontiers of science in the management of natural resources and environment.

Exploring and understanding natural resource management systems requires both a well-defined skill set and a clear understanding of how specific problems are linked to broader cultural, ecological and geopolitical contexts. Thus, the study of natural resources and sustainability encompasses a spectrum of topics. The Ph.D. builds on the existing strengths of the School of Natural Resources and Agricultural Sciences and School of Management faculty members to educate students in specific areas while training them to be conversant in the broader range of relevant topic areas.

The program objectives and its curriculum center around three thematic areas of study: 1) resource economics, 2) resource policy and sustainability science, and 3) forest and agricultural sciences. Each student draws on a common set of core courses, and with his/her graduate committee, develops a program of course work and research that produces a unique intellectual contribution to the applied field of natural resources and sustainability. Students elect to focus on one of the three thematic areas or they choose to integrate foci to develop their areas of knowledge and dissertation research.

Graduate Program -- Ph.D. Degree

1. Complete the general university requirements.
2. Complete the Ph.D. degree requirements.

3. Complete course work in thematic area(s) as determined by the advisory committee.

4. Required and elective elements of the plan of study:

   1. Complete the following core course requirements:
      NRM 647--Global to Local Sustainability--3 credits
      NRM 649--Integrated Assessment and Adaptive Management--3 credits
      NRM 692--Natural Resources and Sustainability Ph.D. Seminar Complete two 
      semesters--2 credits

   2. Outreach activity of one annual public presentation

   3. Advancement to candidacy occurs when the student demonstrates mastery in 
      understanding sustainability and in-depth knowledge of the student's 
      dissertation research topic area. Requirements for advancement to candidacy 
      are determined by the academic committee of the student, and shall be 
      consistent with the candidacy requirements for Ph.D. studies at UAF. The 
      basis of the evaluation will be written and oral comprehensive exams.

   4. Dissertation defense seminar

   5. Dissertation defense examination

   6. Doctoral dissertation

   5. Minimum credits required--26 credits

C. PROPOSED REQUIREMENTS AS IT WILL APPEAR IN THE CATALOG WITH THESE CHANGES:
(Underline new wording strikethrough old wording and use complete catalog format)

Minimum Requirements for Degree: 48 26 credits,

The joint Ph.D. Program in natural resources and sustainability prepares future leaders as 
academic researchers, agency professionals and analysts of non-governmental organizations 
and communities for careers at the frontiers of science in the management of natural 
resources and environment.

Exploring and understanding natural resource management systems requires both a well-
defined skill set and a clear understanding of how specific problems are linked to broader 
cultural, ecological and geopolitical contexts. Thus, the study of natural resources and 
sustainability encompasses a spectrum of topics. The Ph.D. builds on the existing strengths of 
the School of Natural Resources and Agricultural Sciences and School of Management 
faculty members to educate students in specific areas while training them to be conversant in 
the broader range of relevant topic areas.

The program objectives and its curriculum center around three thematic areas of study: 1) 
resource economics, 2) resource policy and sustainability science, and 3) forest and 
aricultural sciences. Each student draws on a common set of core courses, and with his/her 
graduate committee, develops a program of course work and research that produces a unique 
intellectual contribution to the applied field of natural resources and sustainability. Students
elect to focus on one of the three thematic areas or they choose to integrate foci to develop their areas of knowledge and dissertation research.

Additional Application Requirement: Students are required to have a faculty sponsor upon entering the program. A letter of support from a SOM or SNRAS faculty member in addition to three letters of recommendation must be submitted with the graduate application.

Graduate Program -- Ph.D. Degree

1. Complete the general university requirements.

2. Complete the Ph.D. degree requirements.

3. Complete course work in thematic area(s) as determined by the advisory committee.

4. Required and elective elements of the plan of study:

   1. Complete the following core course requirements:
      NRM 647--Global to Local Sustainability--3 credits
      NRM 649--Integrated Assessment and Adaptive Management--3 credits
      NRM 692--Natural Resources and Sustainability Ph.D. Seminar Complete two semesters--2 credits

   2. Outreach activity of one annual public presentation

   3. Advancement to candidacy occurs when the student demonstrates mastery in understanding sustainability and in-depth knowledge of the student's dissertation research topic area. Requirements for advancement to candidacy are determined by the academic committee of the student, and shall be consistent with the candidacy requirements for Ph.D. studies at UAF. The basis of the evaluation will be written and oral comprehensive exams.

   4. Dissertation defense seminar

   5. Dissertation defense examination

   6. Doctoral dissertation

   5. Minimum credits required—18 thesis credits, 26 total credits

D. ESTIMATED IMPACT

WHAT IMPACT, IF ANY, WILL THIS HAVE ON BUDGET, FACILITIES/SPACE, FACULTY, ETC.

none

E. IMPACTS ON PROGRAMS/DEPTS:

What programs/departments will be affected by this proposed action?
Include information on the Programs/Departments contacted (e.g., email, memo)

NONE
F. IF MAJOR CHANGE - ASSESSMENT OF THE PROGRAM:
Description of the student learning outcomes assessment process.

JUSTIFICATION FOR ACTION REQUESTED
The purpose of the department and campus-wide curriculum committees is to scrutinize program/degree change applications to make sure that the quality of UAF education is not lowered as a result of the proposed change. Please address this in your response. This section needs to be self-explanatory. If you drop a course, is it because the material is covered elsewhere? Use as much space as needed to fully justify the proposed change and explain what has been done to ensure that the quality of the program is not compromised as a result.

Clarifies the total number of credit required as well as application requirements.

APPROVALS:

Signature, Chair, Program/Department of: [Signature]
Date 6/14/13

Signature, Chair, College/School Curriculum Council for: [Signature]
Date 6/24/13

Signature, Dean, College/School of: [Signature]
Date 2/25/2013

ALL SIGNATURES MUST BE OBTAINED PRIOR TO SUBMISSION TO THE GOVERNANCE OFFICE

Signature, Chair, UAF Faculty Senate Curriculum Review Committee
Date