Category I Proposal Transmittal Sheet
Submit proposals to: Office of Academic Planning and Assessment
110 Kerr Admin -- Oregon State University

For instructions, see http://oregonstate.edu/ap/curriculum/catl.html. Please attach Proposal, Library Evaluation (performed by the library), Liaison Correspondence, Faculty Curriculum Vitae and Budget Sheets, as appropriate.

Check one:

**Full Proposal**
- New degree program
- New certificate program or administrative unit
- Major change in existing program
- Establishment of a new College or Department

**Abbreviated Proposal**
- Rename of an academic program or unit
- Reorganization – moving responsibility for an academic program from one unit to another
- Merging or splitting an academic unit
- Termination of an academic program or unit
- Suspension or reactivation an academic program or unit

For proposals to establish a new center or institute, contact the Research Office (737-3437).

For requests to offer existing certificate and degree programs at new locations, use the New Location Request Form available on the Web: http://www.ous.edu/aca/aca-forms.html

**Title of Proposal:** Proposal for a Change in Academic Program Name Su 13

**Department/Program:** Forest Engineering, Resources, and Management

**College:** Forestry

I certify that the above proposal has been reviewed and approved by the appropriate Department and College committees:

**Sign (Dept Chair/Head; Director)** 10-12-12

**Sign (Dean of College)** 10-12-12

**Print (Department Chair/Head; Director)**

**Print (Dean of College)**
Renaming an Academic Program Proposal
Forestry - BS, HBS

Status: Pending Review - Curriculum Council Chair (Previous Version)

1. Review - College Approver - Forestry

Approved by Edward Jensen Assoc Dean-Academic Affairs / College of Forestry Adm, November 9, 2012 4:32pm

Comments
Edward Jensen (College Approver - Forestry) November 9, 2012 4:32pm
Changes to learning outcomes are referenced several times in the proposal, but the new learning outcomes are not included in the proposal. It seems to me that they should be included, but perhaps the plan is to include them in subsequent CAT II proposals. Regardless, I support the name change.

2. Review - Curriculum Coordinator

Sent Back by Sarah Williams Coord-Curriculum / Acad Prgms/Assess/Accred, December 11, 2012 1:28pm

Comments
Sarah Williams (Curriculum Coordinator) December 11, 2012 1:28pm
Returning to Originator for revisions following Academic Programs Committee meeting.

3. Originator Response

Suzanne Plagmann Office Specialist 2 / Forest Eng/Resources/Mgmt, January 8, 2013 9:03am

Comments
Suzanne Plagmann January 8, 2013 9:03am
Recommended revisions have been incorporated into the proposal documents as discussed in the December committee meeting.

4. Review - Curriculum Coordinator

Approved by Gary Beach Coord-Curriculum / Acad Prgms/Assess/Accred, January 8, 2013 9:25am

Comments
Gary Beach (Curriculum Coordinator) January 8, 2013 9:25am

The BS in Forestry proposal has been revised per comments and recommendations from the Academic Programs Committee and the Office of Academic Programs, Assessment, and Accreditation. The proposal is now ready for review by the Budgets and Fiscal Planning Committee.

--Gary

5. Review - Budgets and Fiscal Planning Committee

Sent Back by Walter Loveland, January 31, 2013 3:48pm

Comments
Walter Loveland (Budgets and Fiscal Planning Committee) January 31, 2013 3:48pm
The BFP group is confused by some details of the proposal. They are: (a) the budget appears to be the total budget of the re-aligned program not the incremental cost of the re-alignment. If this is correct, then the budget needs to be changed to just reflect the incremental costs. (b) the conversion of the program to a PPM model is supposed to be in another Cat I proposal but appears to be the subject of an extensive set of budget notes. Can the proposed changes occur without the PPM model being implemented? If so, we suggest deleting references to this model and presenting this change as a stand-alone change.
6. Originator Response

Suzanne Plagmann Office Specialist 2 / Forest Eng/Resoures/Mgmt, February 4, 2013 3:12pm

Comments

Suzanne Plagmann February 4, 2013 3:12pm
We want to demonstrate that we fully understand the magnitude of what we are taking on. At your suggestion, we have added an explanation to the leading comments in the proposal stating that the budget reflects the incremental cost of the full realignment and why we are doing it this way. Thanks very much for you feedback. Claire

7. Review - Budgets and Fiscal Planning Committee

Approved by Walter Loveland, February 14, 2013 6:48pm

8. Review - Graduate Council Chair

Approved by Gary Beach Coord-Curriculum / Acad Prgms/Assess/Accred, February 15, 2013 9:41am

Comments

Gary Beach (Graduate Council Chair) February 15, 2013 9:41am
This is an undergraduate curriculum proposal. It is therefore being moved to the Curriculum Council for their review. --Gary

9. Review - Curriculum Council Chair

Pending Review

More Queued Reviews (4)

Faculty Senate Exec Committee; Provost /Academic Affairs; Academic Programs; Catalog Coordinator

Proposal

Proposal ID:85162
Type:Renaming an Academic Program
Submission Date:February 4, 2013 3:12pm

Comments:
This name change reflects a broadening of the program focus. Along with the name change, we are proposing a restructuring of this program into a Professional Program Model (PPM). This will involve several curricular changes in order to streamline and enhance our programs. The PPM and accompanying curricular changes are being processed via Category II proposals. Options will support the curriculum core in areas of Forest Management and Forest Operations Management. A third Option will be added to expand the area of Forest Conservation Management. The Forestry PPM has been submitted separately as Category II proposal #85411. Links to Category II proposals for individual course changes are listed therein. The budget submitted here reflects the incremental cost of implementing all of our proposed changes, including implementing a PPM for our existing Forest Engineering degree and our Forest Engineering / Civil Engineering double degree (see Category II proposals #85412 and # 85509). We were encouraged to proceed in this fashion in the interest of transparency so that the review committees and the Curriculum Council will understand the full extent of the changes we propose to implement and know that we understand the costs involved.

Review Process:
Academic Programs Committee: December 10, 2012
College of Forestry -- APPROVED: October 12, 2012
Budgets and Fiscal Planning Committee -- APPROVED: February 14, 2013
Curriculum Council --
Executive Committee:
Faculty Senate --
OSU Provost --
OUS Provosts’ Council --
**Proposal Details**

**Program Type:** Undergraduate Major  
**Current Program Name:** Forest Management - BS, CRED, HBS  
**New Program Name:** Forestry - BS, HBS
Executive Summary

Institution: Oregon State University
College/School: College of Forestry
Department: Forest Engineering, Resources, and Management (FERM)

This proposal will change the title of the B.S. in Forest Management to the B.S. in Forestry. Within the renamed major, we will offer options in Forest Management and Forest Operations Management. The existing set of seven options in the Forest Management major will no longer be offered, but selected courses from them will be designated as preferred electives in the proposed B.S. in Forestry professional program model. The Forest Operations Management degree will no longer exist as a separate degree program.

A separate Category I proposals is being submitted to establish a Professional Program Model (PPM) for the B.S. in Forestry degree. Curriculum changes are being processed through the Category II process, which are necessary to restructure the existing program into a professional program model, streamline course offerings, add a two-week Forestry Field School, and an optional Cooperative Education program. The department intends to develop and propose a third option in Forest Conservation Management in the near future.

The proposed changes are driven specifically by an increased need for:

- Efficiency in curriculum delivery to bring the teaching portion of the budget more in line with the available allocation from the University;
- Closer relationships with Ecampus and community colleges, which are educating more and more of our students before their “professional” schooling at OSU;
- A higher, targeted number of graduates per year (~35), who have achieved the learning outcomes and who will compete successfully for desired forestry positions upon completion of their program.

The B.S. in Forestry major will continue to be a professional degree accredited by the Society of American Foresters (SAF) and will be administered by the FERM Department. The FERM Department Head will serve as Director of the Faculty of Professional Forestry. Professional forestry degrees emphasize active management of forests to achieve a wide array of social, economic, biological and ecological objectives. Participating faculty within the FERM, Forest Ecosystems and Society (FES), and the Wood Science and Engineering (WSE) departments in the College of Forestry comprise groups of scientists with overlapping disciplines and interests which are necessary for designing solutions to research or policy challenges.

Active management that meets multiple objectives for forests and natural resources is increasingly important to prospective students, employers and the public. The proposed B.S. in Forestry program will reflect, respond to, and help shape forest land management into the future.
Abbreviated Category I Proposal

Change Degree Program Title:

B.S. in Forest Management to B.S. in Forestry
with
Forest Management Option
Forest Operations Management Option

and

Terminate Degree Program:

B.S. in Forest Operations Management

Oregon State University
College of Forestry
Department of Forest Engineering, Resources and Management

December 2012

Proposed Effective Term: Summer 2013 (201400)

CPS Tracking #85162
1. Program Description

a. Proposed Classification of Instructional Programs (CIP) number:

<table>
<thead>
<tr>
<th>CIP #: 03.0506</th>
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<tbody>
<tr>
<td>Title: Forest Management/Forest Resources Management</td>
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<td>Definition: A program that prepares individuals to apply principles of forestry and natural resources management to the administration of forest lands and related resources. Includes instruction in silviculture, forest mensuration, forest protection, inventorying, biometrics, geographic information systems, remote sensing, photogrammetry, forest policy and economics, forest land use planning, fire protection and management, and related administrative skills.</td>
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b. Brief overview (1-2 paragraphs) of the proposed program, including its disciplinary foundations and connections; program objectives; programmatic focus; degree, certificate, minor, and concentrations offered.

This proposal will change the title of the B.S. in Forest Management to the B.S. in Forestry. This change is designed to reflect a broadening of the program focus such that classical Forest Management will be an option, accompanied by integration of the current Forest Operations Management program as an option, and a Forest Conservation Management option that is still under development. These changes are expected to make the overall degree program more attractive for student recruitment. Curriculum changes are being proposed through the Category II process, and reflect a restructuring of the program into a professional program model (PPM), a streamlining of the course offerings, the additional of a two-week field school, and the addition of a Cooperative Education program. This name change, coupled with the two options now being proposed and the third option to follow, will respond to the changing desires of prospective students and to the changing needs of state and federal agency and non-governmental organization employers, as well as forest industry employers.

Professional B.S. degrees in the College of Forestry at Oregon State University that are accredited by the Society of American Foresters (SAF) include B.S. degrees in Forest Management, Forest Operations Management, Forest Engineering, and Forest Engineering/Civil Engineering (dual degree). These degrees are not offered at other campuses in OUS. The Forest Management degree is offered by the College, but is administered by the Department of Forest Engineering, Resources and Management (FERM). The FERM Department Head serves as Director of the Faculty of Forest Management which comprises faculty members within the FERM Department and the Forest Ecosystems and Society (FES) department so that both departments share in the intellectual management of the curriculum and the teaching effort. The Forest Operations Management and Forest Engineering degrees are
offered and supported by the FERM department. The Forest Engineering degree is also a part of the Forest Engineering/Civil Engineering double degree program, jointly offered and supported by the FERM department and the School of Civil and Construction Engineering.

These Professional Forestry degrees emphasize active management of forests to achieve a wide array of social, economic, biological and ecological objectives. Participating faculty members within the FERM and FES departments comprise groups of scientists with overlapping disciplines and interests necessary for designing solutions to research or policy challenges. Those solutions in the form of active management meet multiple objectives for forests and natural resources. Such active management is increasingly important to prospective students, employers and the public. The proposed Forestry program will reflect, respond to, and help to shape forest land management into the future.

The B.S. in Forestry major will continue to be a professional degree accredited by the Society of American Foresters and will be administered by the FERM department. The FERM Department Head will serve as Director of the Faculty of Professional Forestry, which will comprise faculty members from the Departments of FERM, FES, and Wood Science and Engineering (WSE) who participate in the delivery of courses or who express an interest in participating in curricular matters. The Forest Operations Management degree will no longer exist as a separate degree program. As at present, students will be required to complete an option within the major to earn their degree. Within the renamed major, we will offer options in Forest Management and Forest Operations Management. The department intends to develop and propose a third option in Forest Conservation Management in the near future.

Learning outcomes will be modified to reflect the evolving priorities detailed above and to allow regular assessment of this curriculum. Verbal, written and interpersonal communication skills will be emphasized throughout, as will the development of critical thinking, quantitative reasoning and problem-solving skills. Students will be expected to gain an awareness and understanding of differing viewpoints, and to demonstrate knowledge of broad ecosystems services from forests, global forestry issues, sustainable forest management practices, and professional certification processes.

A summary of proposed course changes is provided in the table below:

<table>
<thead>
<tr>
<th>NEW</th>
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<tbody>
<tr>
<td>B.S. in Forestry</td>
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<tr>
<td>• Degree Type: <strong>Bachelor of Science (B.S.)</strong></td>
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<tr>
<td>• Program Type: <strong>Undergraduate</strong></td>
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<tr>
<td>• Academic Home: <strong>College of Forestry, Department of Forest Engineering, Resources and Management</strong></td>
</tr>
<tr>
<td>• Contact: <strong>Claire Montgomery</strong>, <a href="mailto:claire.montgomery@oregonstate.edu">claire.montgomery@oregonstate.edu</a></td>
</tr>
</tbody>
</table>
- Undergraduate Options:
  - Forest Management
  - Forest Operations Management
- CPS #: 85162, [https://secure.oregonstate.edu/ap/cps/proposals/view/85162](https://secure.oregonstate.edu/ap/cps/proposals/view/85162)
- CIP #: 03.0506
- SIS #: XXX – To be assigned by the Registrars’ Office
- College Code: 05
- Course Designator: FOR (existing); FE (existing)
- Courses: Several new courses, and modifications to existing courses, will result due to these proposed changes (via separate Category II proposals).
- Delivery Mode and Location: On-campus / OSU-Main (some skills courses and lower division courses will be offered at community colleges and through Ecampus)
- Enrollment Limitations: None
- Accreditation: Society of American Foresters. The next accreditation site visit is scheduled for 2021.
- Program Unique Within the Oregon University System: Yes
- Proposed Effective Term: Summer 2013 (Banner: 201400)

**TERMINATE**

**Degree**
- B.S. in Forest Management (CIP # 03.0506)
- B.S. in Forest Operations Management (CIP # 14.3401)

**Options**
- Forest Ecosystem Science Option
- Forest Environmental Consultation Option
- Human-Forest Interactions Option
- International Forestry Option
- Plantation Silviculture Option
- Restoration of Forested Landscapes Option
- Wildland Fire Management Option

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c. Course of study – proposed curriculum, including course numbers, titles, and credit hours.

Please see Appendix document for a detailed course listing.

Curriculum changes are being proposed through the Category II process, and reflect a restructuring of the program into a professional program model (PPM), a streamlining of the course offerings, the addition of a two-week field school, and an optional Cooperative Education program.

Learning outcomes will be modified as detailed in 1b.
d. Manner in which the program will be delivered, including program location (if offered outside of the main campus), course scheduling, and the use of technology (for both on-campus and off-campus delivery).

The program will continue to be offered in its entirety on the Corvallis campus. In addition, we will be moving skill-based courses that are or can be offered by the community colleges to the lower-division level, with a plan for a larger percentage of COF students to pursue a community college and/or Ecampus pathway to the B.S. in Forestry degree. The higher prevalence of students entering the Forestry degree program via a community college pathway will result in lower costs to students while reducing our teaching obligation in high-cost skill courses. All lower division courses in the degree program not commonly available at Oregon community colleges will be offered through Ecampus so that students can complete the Pre-Forestry program through a hybrid community college/Ecampus model. (See additional documents for current status of articulation agreements.)

e. Ways in which the program will seek to assure quality, access, and diversity.

No change from present. The program will continue to make educational quality, access and diversity a priority via internal review and third-party inspection and accreditation. Ongoing refinement of assessable learning outcomes will aid in this continued effort.

f. Anticipated fall term headcount and FTE enrollment over each of the next five years.

Annual enrollment has been between 25-40 new students per year in the Forest Management program and 4-10 per year in the Forest Operations Management program over the last 5 years for a combined total of 35-50 new students per year. New enrollment numbers have been steadily increasing in both programs since at least 2005. Our goal is to market the renamed program more effectively to potential students and further increase new enrollment over the next five years.

g. Expected degrees/certificates produced over the next five years.

The Forest Management degree program has produced an average of just barely 20 graduates per year. The Forest Operations Management degree program has an average of 6 graduates per year over the last 5 years. The latter program is new and produced its first graduates were in 2008. We expect the combined program will meet current University expectations and that it will do so by an increasing margin over time. We anticipate that graduation numbers will increase further with the implementation of the Forest Conservation Management option that is currently under development.
h. Characteristics of students to be served (resident/nonresident/international; traditional/nontraditional; full-time/part-time; etc.)

We expect that the shift to a broader focus on forestry, coupled with expansion of Ecampus course offerings and better collaboration with community colleges in the region, will lead to increased out-of-state and non-traditional student enrollment.

i. Adequacy and quality of faculty delivering the program.

The current Faculty of Forest Management will be renamed to Faculty of Professional Forestry and expanded to include faculty from Wood Science and Engineering who may deliver courses or participate in curriculum management. This will increase the breadth of expertise in the pool of participating faculty. Please see attached list of current members of the "Faculty of Forest Management" who are engaged in delivering professional undergraduate degree programs.

j. Faculty resources – full-time, part-time, adjunct.

The current Faculty of Forest Management will be renamed to Faculty of Professional Forestry and expanded to include faculty from Wood Science and Engineering who will deliver courses or participate in curriculum management.

k. Other staff.

No change from present.

l. Facilities, library, and other resources.

No change from present.

m. Anticipated start date.

Summer of 2013.

2. Relationship to Mission and Goals

a. Manner in which the proposed program supports the institution’s mission and goals for access; student learning; research, and/or scholarly work; and service.

The proposed B.S. in Forestry will continue to support the Land Grant Mission with specific focus on preparing students for careers in a major economic sector of Oregon. The program creates learning opportunities that will enable students to be leaders in the management of our state’s forests and their associated natural resources, thereby contributing to the overall economic, environmental and social health of the region.
b. Connection of the proposed program to the institution’s strategic priorities and signature areas of focus.

This proposal renames and repackages two current degree programs in forestry. The existing programs have been relatively successful in terms of serving the needs of the constituents of the College of Forestry, but neither the current Forest Management program nor the Forest Operations Management program consistently meet current university expectations for annual graduate numbers. We believe that the updated and revitalized programs that we are proposing will meet the changing demands of students, employers and society, and do so with larger enrollment and graduate numbers. We believe that the name and curricular changes, coupled with an aggressive marketing plan supported by the Dean of the College of Forestry, will yield increased graduate numbers over the next several years, including increased enrollment from out-of-state students. The degree program directly supports university priorities to advance sustainability and promote economic growth.

c. Manner in which the proposed program contributes to Oregon University System goals for access; quality learning; knowledge creation and innovation; and economic and cultural support of Oregon and its communities.

See 2a and 2b.

d. Manner in which the program meets broad statewide needs and enhances the state’s capacity to respond effectively to social, economic, and environmental challenges and opportunities.

In the near term, success with recruiting more students to a revised program will enable us to better meet the needs of Oregon's forestry and natural resource professions. Ultimately, we intend to educate a new generation of leaders for a rapidly-evolving and increasingly complex forestry profession. There are no specific foreseen negative impacts to FERM, the College of Forestry, or to other campus units.

Students in the Forestry major will have the explicit flexibility to explore minors in other OSU departments, as well as options within the major. There are many changes occurring in the profession of forestry. Markets are emerging for new products such as woody biomass as feedstock for liquid fuels or for ecosystems services such as aquatic fisheries habitat, clean water, scenic vistas, and carbon sequestration. Demand is growing for forest managers who are capable of managing for this broader set of objectives and employing a broader set of forest and people management skills than in the past. The new degree will further prepare graduates to meet the changing needs of the geographic region and the forestry profession.

3. Accreditation

a. Accrediting body or professional society that has established standards in the area in which the program lies, if applicable.
The B.S. in Forest Management and the B.S. in Forest Operations Management are accredited by the Society of American Foresters until 2021. We do not believe that the proposed course and degree requirement changes will result in a loss of accreditation. Once all changes have been approved, we intend to submit them to the accrediting authority via a substantive change form. The proposed curricular changes were received favorably during a recent site visit by the accreditation team. Please see attached Letter of Support in the proposal.

b. Ability of the program to meet professional accreditation standards. If the program does not or cannot meet those standards, the proposal should identify the area(s) in which it is deficient and indicate steps needed to qualify the program for accreditation and date by which it would be expected to be fully accredited.

Changing the name of the degree should not affect accreditation. We do not believe that the proposed course and degree requirements will result in a loss of accreditation. Once all changes have been approved we intend to submit them to the accrediting authority via a Substantive Change form. This idea for potential name change and associated curricular changes was received favorably during a recent site visit by the accreditation team.

c. If the proposed program is a graduate program in which the institution offers an undergraduate program, proposal should identify whether or not the undergraduate program is accredited and, if not, what would be required to qualify it for accreditation.

Not applicable.

d. If accreditation is a goal, the proposal should identify the steps being taken to achieve accreditation. If the program is not seeking accreditation, the proposal should indicate why it is not.

As stated in 3b. The B.S. degrees in Forest Management and Forest Operations Management are accredited by the Society of American Foresters until 2021. Once all changes have been approved we intend to submit them to the accrediting authority.

4. Need

a. Evidence of market demand.

Graduates with a B.S. in Forest Management or Forest Operations Management currently are in high demand despite the economic downturn. We typically see 85-90% employment of those graduates seeking work in the field. Employers tell us that this demand will increase with a rebound in the economy and expected retirements in the current workforce. In addition, an expansion of the Forest Management program is intended to more broadly train forest land managers in the biological, physical, and socioeconomic factors that influence forest policies and management actions. In
addition to the forest industry, our graduates will be prepared to work for non-
industrial landowners, federal and state agencies, non-profits and non-governmental
organizations.

b. If the program’s location is shared with another similar OUS program, proposal
should provide externally validated evidence of need (e.g., surveys, focus groups,
documented requests, occupational/employment statistics and forecasts).

Not applicable.

c. Manner in which the program would serve the need for improved educational
attainment in the region and state.

The proposed Bachelor of Science degree in Forestry will educate forest land
managers in the biological, physical, and socioeconomic factors needed to manage
forest land for an array of management and policy objectives. The graduates of the
program will work for the forest industry, non-industrial forest landowners, federal and
state forest land management agencies, and non-governmental conservation
organizations and use the education that they received. The Forestry program is an
accredited program that allows students to achieve curricular outcomes and pursue
fulfilling and rewarding careers.

Nationally, the education of undergraduate students in forest management and
sciences includes interdisciplinary approaches to complex processes in addition to
the traditional, rigorous discipline-specific courses of study. In addition to traditional
forest management activities the professional forester must be knowledgeable
regarding restoration of forested landscapes, the management of forest fires, wildlife
habitat and other ecosystem services. These ecosystem services may involve the
selective, intensive management of some forested landscapes to achieve
conservation goals and sustain local landscapes and economies. Many conservation
organizations manage forest land and need the services of professional foresters.
The USDA Forest Service and USDI Bureau of Land Management hire professional
foresters with a land conservation background and the international conservation
community needs a workforce with a professional science-based education. The
proposed Forestry program will reflect, respond to, and shape this evolving field.

d. Manner in which the program would address the civic and cultural demands of
citizenship.

See 4c.

5. Outcomes and Quality Assessment

a. Expected learning outcomes of the program.

Verbal, written and interpersonal communication skills are emphasized, as are the
development of critical thinking and problem-solving skills. Students will be expected
to gain an awareness and understanding of differing viewpoints, and to demonstrate knowledge of international forestry, sustainable forest management, certification processes and broad ecosystems services. Students will continue to complete a work experience as part of their graduation requirements.

Learning outcomes for the proposed B.S. in Forestry program:

- Demonstrate knowledge of forest ecology and silviculture principles to understand how forests and forested watersheds respond to natural disturbances or management activities.
- Develop skills in geospatial analysis, basic surveying, mapping, and GIS.
- Demonstrate ability to measure and inventory forest vegetation with precision and accuracy.
- Develop an understanding of forestry investment analysis and be able to evaluate typical financial investments in forestry.
- Demonstrate an understanding of the development and execution of tactical and operational forest plans that support achievement of desired future stand conditions and strategic goals.
- Demonstrate an understanding of the social and political context of forestry and be able to describe current policies, laws, and regulations governing the management of forest lands.

Additional learning outcomes for the Forest Management Option:

- Demonstrate knowledge of forest vegetation modeling and the ability to forecast its development over time using models of forest growth.
- Demonstrate an understanding of the importance of communication in both planning and practice settings, and be able to communicate effectively with coworkers and stakeholders on forest resource issues and practices.
- Demonstrate understanding of interaction of vegetation, wildlife, insects, and disease on forested landscapes.
- Demonstrate ability to identify major forest ecosystems of the PNW and describe their changes over time, with and without human influence/management.
- Demonstrate knowledge of intertemporal management and planning at the forest and landscape levels, and the ability to develop alternative management scenarios for forest lands for an array of objectives including forest products, environmental services, social amenities cultural and other resource values.

Additional learning outcomes for the Forest Operations Management Option:

- Demonstrate the knowledge of the potential effects of forest operations on soils, wildlife and water resources by being able to show the tradeoffs of various harvesting systems on soils, wildlife and water resources.
- Demonstrate knowledge of business laws by being able to apply them to common business practices conducted in a contracting relationship.
• Demonstrate the ability to apply appropriate knowledge of surveying and mapping tools to implement forest operations by being able to survey and map roads, critical habitat and other common forest features.
• Demonstrate the ability to collect forest and financial data to analyze the profitability of various forest operations.
• Develop expertise with technology, equipment, and systems by selecting the systems to be used in conducting forest operations to plan and conduct activities that achieve silvicultural objectives.
• Demonstrate the ability to plan and administer safe working practices in a variety of forest operations.

b. Methods by which the learning outcomes will be assessed and used to improve curriculum and instruction.

Current methods of assessment will be continued. These involve review of course grades and student progress to graduation, student self-assessment, exit interviews of graduating students, and periodic employer and alumni surveys.

c. Program performance indicators, including prospects for success of program graduates (employment or graduate school) and consideration of licensure, if appropriate.

We expect to continue to see high employability of graduates. The proposed B.S. in Forestry program is intended to more broadly educate and train forest land managers in the biological, physical, and socioeconomic factors that influence forest policies and management actions. Our graduates will be prepared to work for the forest industry, non-industrial landowners, federal and state agencies, non-profits and non-governmental organizations. We also expect graduates to have the opportunity to pursue a greater breadth of graduate degrees in natural resources and related areas.

d. Nature and level of research and/or scholarly work expected of program faculty; indicators of success in those areas.

No change from current expectations.

6. Program Integration and Collaboration

a. Closely related programs in other OUS universities and Oregon private institutions.

The current and proposed program is unique in OUS and in the Pacific Northwest.

b. Ways in which the program complements other similar programs in other Oregon institutions and other related programs at this institution. Proposal should identify the potential for collaboration.
The proposed program will integrate the Forest Operations Management program, and better complement the Forest Engineering degree program within the same department. Students and stakeholders will be better able to differentiate between the management-focused program (as proposed) and the engineering forestry programs.

c. If applicable, proposal should state why this program may not be collaborating with existing similar programs.

Not applicable.

d. Potential impacts on other programs in the areas of budget, enrollment, faculty workload, and facilities use.

The current and proposed program is unique in OUS and in the Pacific Northwest.

7. Financial Sustainability (attach the completed Budget Outline)

a. Business plan for the program that anticipates and provides for its long-term financial viability, addressing anticipated sources of funds, the ability to recruit and retain faculty, and plans for assuring adequate library support over the long term.

The marginal incremental costs associated with making this change are centered on advertising, print and web communications. There will be a more significant marketing campaign to introduce the changes to potential students and to step up current recruiting efforts. All revised courses will be taught by current faculty, and several courses are being combined to reduce/streamline workload and course delivery costs. There are no new anticipated recurring instructional costs associated with this change.

b. Plans for development and maintenance of unique resources (buildings, laboratories, technology) necessary to offer a quality program in this field.

No new anticipated costs.

c. Targeted student/faculty ratio (student FTE divided by faculty FTE).

It is difficult to assess and predict student/faculty ratio due to the sharing of teaching faculty across departments for the Forestry program. We expect the student/faculty ratio to grow slightly from the current (estimated) 20-to-1 when our goal of increased student enrollment is met.

d. Resources to be devoted to student recruitment.

There will be a significant marketing campaign to introduce the changes to potential students, including outreach to community colleges, and to step up current recruiting
efforts. This effort will lean heavily on existing faculty and student resources plus those of the College of Forestry recruiter; however, there will be nominal costs associated with the redesign of our current website and marketing materials. There are no new anticipated recurring instructional costs associated with this change.

8. External Review (if the proposed program is a graduate level program, follow the guidelines provided in External Review of new Graduate Level Academic Programs in addition to completing all of the above information)

   Not applicable.
October 5, 2012

Gary Beach
Curriculum Council Committee
Oregon State University
Office of Academic Affairs
500 Kerr Administration

Dear Gary,

I am writing to express my strong support for the Category I Proposals to change the name of the Forestry Management undergraduate program and to implement a Professional Program model for the renamed program, and the associated Category II Proposals to modify learning outcomes and restructure the curriculum to fit our current needs and teaching capabilities. These changes will integrate our Forest Operations Management program into the Forestry program, creating a larger and more integrated academic program, and eliminating a small program. The proposal will create a professional school with a 2+2 structure, which will allow us to partner with community college inside and outside of Oregon, as well as international partners. They will have tremendous benefits in recruiting new students into the program.

The proposed changes will have relatively modest budget impacts. We will hire an instructor to lead our forestry field school and some of the field labs in the program. This will have the added benefit of creating stronger graduates and making our professorial instruction more efficient. This position will be a non-tenure track position that will be funded internal to the College of Forestry. We will also be hiring a full time Marketing Director to help in the recruiting effort, and an internship coordinator. The positions are being supported by the Provost to assist the College in our mission to double on-campus enrollment and enhance student success.

The changes embodied in these proposals will allow us to offer the most innovative professional forestry program in the United States. We will maintain our strong field based education with fewer faculty resources than before. The professional school will be more cost effective for out of state students that can’t take the first two years at their home school or by ecampus. We believe the new pre-professional / profession school format will also increase student success.

Sincerely,

Thomas Maness
Cheryl Ramberg and Allyn C. Ford

BS in Forestry, CPS # 85162
November 21, 2012

Dr. Claire Montgomery
Professor and Interim Department Head
Department of Forest Engineering, Resources, and Management
Oregon State University
Corvallis, OR 97331

Dear Claire:

I apologize for being so late in getting this letter to you. I hope that it is still useful to your proposal.

I am the Chair of, and Professor in, the Department of Forest and Natural Resources Management at the SUNY College of Environmental Science and Forestry. I served as the Chair of Accreditation Team that evaluated your Society of American Foresters (SAF) program reaccreditation in 2011. I have also served as a member of the SAF Accreditation Committee for the past three years.

During our Accreditation Review, we evaluated the four degree programs in your department: (1) Bachelor of Science in Forest Engineering (FE); (2) Bachelor of Science in Forest Engineering/Civil Engineering (FE/CE); (3) Bachelor of Science in Forest Management (FM); and (4) Bachelor of Science in Forest Operations Management (FOM). At that time, the team was extremely impressed with the quality of educational opportunities provided within the forestry program and our report identified a number of strengths and a few weaknesses in your program. Overall, we felt that the College’s strong history in forestry education, top-level faculty, and high-quality curricula were models for forestry programs around the country. This was borne out by the strongly positive reaccreditation statements from the Accreditation Committee.

The justification for the combining of majors and moving to an option-based Forestry Bachelor of Science degree appears to me to be a very reasonable response to insure sufficient student numbers for the Forestry degree. Declining student numbers in forestry programs around the country is a continuing concern, and the practice of segmenting degrees into more specialized degree programs has only highlighted this problem. Taking the affirmative step to consolidate these degree programs should insure sufficient student numbers and is a reasonable action. It is my opinion, based on my experience with the Accreditation Committee, that there would be no problem for the new degree and options would be able to be accredited, more than likely without another site visit.
The forestry program at Oregon State University is consistently rated among the top forestry programs in the country. The fact that the Department is making positive actions to insure its sustainability in a period of changing administrative structures should be commended. I, and many others, will look forward to how this change progresses over the years.

If you have any further questions or concerns about my statement, please do not hesitate to contact me.

Best wishes,

David Newman
Professor and Chair
Dr. Claire Montgomery
Professor and Interim Dept. Head
Dept. of Forest Engineering, Resources, and Management
College of Forestry, Oregon State University

Dear Dr. Montgomery:

Starker Forests, Inc. enthusiastically supports your vision for the College of Forestry utilizing the Professional School Model and the opportunity for students to choose the Forestry Cooperative Education Program option.

The academic standards and goals as described in the proposals for the Academic Program Name Change and for the professional Program Model are very clear and concise for incoming students. We applaud your efforts to be cost effective for both students and the university by engaging in community college partnerships and E-course opportunities.

Many professional foresters will retire in the next ten years and, with federal and state agencies and other land owners understanding the role of and need for active forest management, demand for well-trained foresters will substantially increase. With your plan in place to market the curriculum and recruit high quality students, highly trained professional foresters will be well prepared to help manage the economically significant forest resources we have in Oregon.

We like how you have incorporated math, chemistry and physics into your curriculum. The capstone classes encourage critical thinking, problem solving, and develop leadership. Your Forestry Summer Camp will help students "gel" and learn to work better as a team.

Long term, the College of Forestry is poised to become the world leader in new forestry thinking and education. With your plan and vision, tomorrow’s natural resource leaders will have the training and skill set needed for economic, biological, and social decision making.
To support your new program, the university will need to continue to recruit and hire the best instructors and scientists available and provide necessary lab space and equipment. This requires dollars. The university investment in the College of Forestry enhances not only the college but all of Oregon through excellent management of its forests.

Lastly, we applaud the academic rigor you call for and the inclusion of professional ethics training into your program.

Claire, your attention to detail and the amount of energy you and your staff have expended on this effort, and the passion with which you and they have done so, is very much appreciated.

Very best regards,

Marc Vomocil
Forestry Manager

Mark Gourley
Silviculture Forester

Starker Forests, Inc.
Category I Proposal
Guidelines for Addressing Accessibility of New Programs

Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 prohibits discrimination against individuals with disabilities and mandates the provision of reasonable accommodations to ensure access to programs and services. Oregon State University is committed to providing equal opportunity to higher education for academically qualified students without regard to a disability.

For questions and assistance with addressing access, please contact the Office of Disability and Access Services (737-4098) or the Office of Affirmative Action and Equal Opportunity (737-3558)

Title of Proposal: Renaming an Academic Program, Forestry - BS, HBS Summer 2013
Department/Program: Forest Engineering, Resources and Management
College: Forestry

☐ Faculty Guidelines (http://ds.oregonstate.edu/facultystaff.aspx?Title=ResponsibilitiesFacultyStaff)
☐ Information Technology Guidelines (http://oregonstate.edu/accessibility/)

By signing this form, we affirm that at we have reviewed the listed documents and will apply a good faith effort to ensure accessibility in curricular design, delivery, and supporting information.

Sign (Dept Chair/Head; Director)  10/29/12  Print (Department Chair/Head; Director)  Claire A. Montgomery
Name, Rank, Degree

Adams, Darius – Emeritus Professor, PhD
Adams, Paul – Professor/Extension Specialist, PhD
Bailey, John – Associate Professor, PhD
Betts, Matt – Associate Professor, PhD
Boston, Kevin – Associate Professor, PhD
Doescher, Paul – Professor and Interim Dept. Head (FES), PhD
Dunn, Christopher – Faculty Research Assistant, MS
Fitzgerald, Stephen, Professor and Extension Forester, MS
Grimm, Kerry – Instructor, PhD
Hailemariam, Temesgen – Associate Professor, PhD
Harmon, Mark – Professor, PhD
Hatten, Jeff – Assistant Professor, PhD
Hibbs, David E. – Emeritus Professor, PhD
Hilker, Thomas – Assistant Professor, PhD
Huntington, Geoff, Senior Instructor, JD
Jensen, Edward C., Professor and Associate Dean, PhD
Johnson, K. Norman, Professor, PhD
Kellogg, Loren D., Professor, PhD
Lachenbruch, Barb, Professor, PhD
Leshchinsky, Ben, Assistant Professor, PhD
Maguire, Doug, Professor, PhD
Maness, Thomas, Professor and Dean, PhD
Mann, John W, Director of College Forests, MS
Montgomery, Claire, Professor and Interim Department Head, PhD
Needham, Mark, Associate Professor, PhD
Pyles, Marvin R., Professor, PhD
Reuter, Ron, Associate Professor, PhD
Rose, Robin, Professor, PhD
Ross, Darrell, Professor, PhD
Salwasser, Hal, Professor, PhD
Sessions, John, Professor, PhD
Shaw, David, Associate Professor, PhD
Shelby, Bo, Professor, PhD
Shinderman, Matt, Senior Instructor, PhD
Shindler, Bruce, Emeritus Professor, PhD
Skaugset, Arne, Professor, PhD
Tappeiner, John, Emeritus Professor, PhD
Temesgen, Hailemariam, Associate Professor, PhD
Tesch, Steve, Professor and Executive Associate Dean, PhD
White, Eric, Assistant Professor—Senior Research, PhD
Wing, Michael, Assistant Professor, PhD
Woolley, Travis, Faculty Research Assistant, MS
The following is a sample list of University Programs that are accredited by the Society of American Foresters and have Baccalaureate Degree programs titled, “Forestry” [Bold Italics] without a modifier at the degree title level. BSF means Bachelor of Science in Forestry.


**Louisiana State University**, School of Renewable Natural Resources, Baton Rouge 70803-6200, [http://www.rnr.lsu.edu](http://www.rnr.lsu.edu), Contact: Dr. Mike Kaller, Coordinator of Undergraduate Programs. 1937. 2005. 2015. Forestry and Natural Resources Ecology and Management within the Forestry major, BSF and BS NREM.

**University of Maine**, College of Natural Sciences, Forestry and Agriculture, Orono 04469, [http://www.fsfa.umaine.edu](http://www.fsfa.umaine.edu) or [http://www.forest.umaine.edu/](http://www.forest.umaine.edu/), Contact: Alan Kezis, Associate Dean. 1937. 2003. 2013. Programs, BS in Forestry, BS in Forest Operations Science, and MF.


Appendix – Proposed BS Forestry Courses

Pre-professional courses:
- AREC 250 Introduction to Environmental Economics and Policy (3-4 cr)
- Or ECON 201 Principles of Microeconomics (4 cr)
- BI 212 Principles of Biology (4 cr)
- CH 231 General Chemistry (4 cr)
- CH 261 Laboratory for Chemistry 231 (1 cr)
- COMM 111 Public Speaking (3 cr)
- Or COMM 114 Argument and Critical Discourse (3 cr)
- *FE 308 Forest Surveying (#85312, FE 208) (4 cr)
- *FE 309 Forest Photogrammetry (#85315, FE 209) (4 cr)
- *FE 357 GIS and Forest Engineering Applications (#85317, FE 257) (3 cr)
- FOR 111 Introduction to Forestry (3 cr)
- FOR 112 Computing Applications in Forestry (3 cr)
- *FOR 221 Forest Biometrics and Analysis (#85365, proposed new) (4 cr)
- FOR 240 Forest Biology (4 cr)
- FOR 241 Dendrology (5 cr)
- HHS 231 Lifetime Fitness for Health, plus one activity course (3 cr)
- MTH 111 College Algebra (4 cr)
- MTH 112 Elementary Functions (4 cr)
- MTH 241 Calculus for Management and Social Science (4 cr)
- PH 201 General Physics (5 cr)
- SOIL 205 Soil Science (4 cr)
- WR 121 English Composition (3 cr)
- WR 327 Technical Writing (3 cr)
- Or WR 362 Science Writing (3 cr)
- Four Baccalaureate Core Electives or four Option courses (12-16 cr)

In addition, students choosing the Forest Management Option will be required to complete before admission:
- FOR 251 Recreation Resource Management (4 cr)

In addition, students choosing the Forest Operations Management Option will be required to complete before admission:
- BA 211 Financial Accounting (4 cr)
- BA 213 Managerial Accounting (4 cr)
- BA 230 Business Law I (4 cr)
- BA 260 Introduction to Entrepreneurship (4 cr)

Common Professional School Courses:
- *FE/*FOR 312X Forestry Field School (FE #85502, FOR #85219, proposed new) (2 cr)
- FE 370 Harvesting Operations (4 cr)
- FE 434 Forest Watershed Management (4 cr)
- *FE/FOR 457 Techniques for Forest Resource Analysis (FE #85298/85503 & FOR #85526) (4 cr)
- *FE/*FOR 307 Forestry Junior Seminar (FE #85837, FOR #85840, proposed new) (1 cr)
- FOR 321 Forest Mensuration (5 cr)
- FOR 330 Forest Conservation Economics (4 cr)
- FOR 331 Forest Resource Economics II (4 cr)
- *FOR 429 Integrated Prescriptions (#85841, reduce -1 cr = 2) (3 cr)
- FOR 443 Silviculture Practices (5 cr)
- *FOR/FE 450 Forest Operations Design I (FE #85303, FOR #85286, increase +1 cr = 4) (3 cr)
- FOR 459 Forest Resource Planning and Decision Making (4 cr)
Appendix – Proposed BS Forestry Courses

Forest Management Option

- FOR 322 Forest Models (3 cr)
- FOR 341 Forest Ecology (3 cr)
- *FOR 355 Management for Multiple Resource Values (#85519, increase +1 cr = 4) (3 cr)
- FOR 460 Forest Policy (4 cr)
- FS 415 Forest Insect and Disease Management (5 cr)
- FS 453 Forest Management and Wildlife Conservation (3 cr)

Forest Operations Management Option

- BA 351 Managing Organizations (4 cr)
- BA 390 Marketing (4 cr)
- BA 460 Venture Management (4 cr)
- FE 440 Forest Operations Analysis (3 cr)
- FE 441 Production Planning (3 cr)
- FE 460 Forest Operations Regulations and Policy Issues (3 cr)
- FE 471 Harvesting Management (3 cr)

Optional:
- *FE/*FOR 411 Forestry Cooperative Education (#85842 & #85843, proposed new, repeatable) (1 cr)

*These courses will change as indicated via Category II proposals (CPS numbers indicated).
From: Montgomery, Claire  
Sent: Thursday, January 03, 2013 5:58 PM  
To: Plagmann, Sue - FORESTRY  
Subject: FW: FOR 221 -- Forest Biometrics and Analysis

Sue,

We met on December 17 as scheduled. Thomas Maness, Temesgen Hailemariam, John Bailey and I were present. We discussed possible alternatives to address the issues that Ginny Lesser and Miina Ossiander have raised. I have scheduled a meeting with them on January 8 in order to discuss some possible resolutions to our problem.

Again, the fundamental issue is that we have a set of statistics skills that we need our students to come into their junior year ready to apply. We need this set to be available to students while they are freshman and/or sophomores. We do not have 8 credits in our program that we can allot to statistics in the preprofessional program. Our proposed solution combines the basic set of statistics skills we need our students to have in a package with field collection of vegetation data (fundamental biometrics) to be analyzed in a single 4-credit course – which we entitled Forest Biometrics and Analysis to emphasize that it would be focused on a skill set specific to forestry. This course is based on a similar course that is taught in Forestry at UBC. We would also develop an Ecampus version of this course so that it could be available to students not resident at OSU.

In order for the Professional Program model to be successful for our students:

- Students must be able to complete it in two years.
- Students must enter the program ready to take Mensuration in Fall term of the junior year. This course is a fundamental forestry course which is prerequisite to practically every forest management course in the program. And it is the course with the highest expectation for statistics competency prior to entering it.

I am interested to see whether my Jan 8 meeting will generate new ideas. I am hopeful that we can resolve this. But we do not intend to sidetrack the whole proposal over a single course, so I expect that compromise is inevitable. In fact, we are not eager to add courses to our teaching load that can be satisfactorily delivered elsewhere on campus.

I will keep you posted,

Claire

***************
* Claire A. Montgomery  
* Professor and Interim Department Head  
* Department of Forest Engineering, Resources, and Management  
* Oregon State University  
* Corvallis, OR 97331  
*  
* Phone: 541-737-5533  
* Email: claire.montgomery@oregonstate.edu
* Web:  ferm.forestry.oregonstate.edu/facstaff/montgomery-claire

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From: Montgomery, Claire
Sent: Thursday, December 06, 2012 3:49 PM
To: Maness, Thomas; Pyles, Marvin R.; Hailemariam, Temesgen; Bailey, John (John.Bailey@oregonstate.edu)
Cc: Haney, Angela
Subject: FOR 221 -- Forest Biometrics and Analysis

Hi all,

I'd like to sit down with all of you to discuss our proposed forest biometrics and analysis course – and possible alternatives. We unfortunately submitted the syllabus for the UBC course in error – it is a straight stat class with no forestry content – and, not surprisingly, got very negative feedback from Math:

" Mina Ossiander - Professor / Mathematics
This proposal should be denied. The proposed course, though listed in Forestry, does not have forestry content. The content is entirely statistical and mathematical in nature. There is almost total overlap of the material in the syllabus with an existing class taught by the Statistics Department, Stat 351. Duplicating an existing Stat course doesn't seem like a wise use of university resources.

Why wasn't anyone from Statistics asked to comment on this? (Responded on Nov 29, 2012)"

Sue is replacing the syllabus with the correct one (attached) and I will send it to Mina directly with an explanation. Nonetheless, I think we can anticipate additional pushback. Before I go to battle for the new class, I want to make sure that I understand all of the thinking that went into our original proposal – and consider alternatives that might work for us if we can’t get approval.

Angela will be checking with you to schedule this meeting.

Thanks much! Claire

******************************************************
* Claire A. Montgomery
* Professor and Interim Department Head
* Department of Forest Engineering, Resources, and Management
* Oregon State University
* Corvallis, OR 97331
* Phone: 541-737-5533
* Email: claire.montgomery@oregonstate.edu
* Web: ferm.forestry.oregonstate.edu/facstaff/montgomery-claire

******************************************************
Proposal to establish a Professional Program Model [PPM] for the Forestry BS degree

Executive Summary

Institution: Oregon State University
College/School: College of Forestry
Department: Department of Forest Engineering, Resources, and Management

This proposal to establish a Professional Program Model [PPM] for the BS in Forestry degree program, is supplemental to a Category I proposal for a change in academic program name from a BS in Forest Management to a BS in Forestry. Curriculum changes are being processed through the Category II process, and reflect a restructuring of the program into a professional program model, a streamlining of the course offerings, and the addition of a Cooperative Education program and a two-week field school. This change is designed to reflect a broadening of the program focus to respond to the changing desires of prospective students and to the changing needs of state and federal agency and non-governmental organization employers, as well as forest industry employers.

The proposed changes are driven specifically by an increased need for:

• Efficiency in curriculum delivery to bring the teaching portion of the budget more in line with the available allocation from the University;

• Closer relationships with Ecampus and community colleges, which are educating more and more of our students before their “professional” schooling at OSU;

• A higher, targeted number of graduates per year (~35), who have achieved the learning outcomes and who will compete successfully for desired forestry positions upon completion of their program.

We anticipate that adoption of a Professional Program Model for the Forestry degree program will lead to:

• Improvement in the quality of the program, resulting from a more formal approach to acceptance of students into upper division courses;

• More cost-effective management of courses to meet student demand, resulting from better enrollment control;

• Reductions in costs to students and teaching obligations in high cost skills courses, resulting from a larger percentage of Forestry students employing a community college pathway, supplemented by Ecampus courses, to the Forestry Professional Program;

• Improved ability to meet the workforce needs of the forestry profession by increasing the number of successful graduates of our professional forestry program.