

**College of Natural Resources
Proposed Catalog Changes
Effective Summer 2020**

Renewable Materials

1. Create the following prefix to replace the current RMA prefix (see attached memo)

FSP (Forest and Sustainable Products)

Rationale: The College of Natural Resources (CNR) has approved a proposed name change for the Renewable Materials (B.S.Renew.Mat.) degree to Forest and Sustainable Products (B.S.For.Sus.Prod.). CNR is requesting that the prefix associated with all Renewable Materials courses be changed from RMA to FSP.

2. Change the following courses:

Note: These course changes were originally part of UCC-20-016. They were tabled pending the relevant group B changes and are now being brought forward under a different agenda item number, UCC-20-025, since they are now also requesting a subject code change from RMA to FSP.

~~RMA~~ **FSP 100 Intro to ~~Renewable Resources~~ Forest & Sustainable Products**

2 credits

~~Overview of renewable building materials and bio-energy industries. Discovery laboratory in the use of renewable and recycled waste stream materials to create useful products.~~ Examination of the forest and sustainable materials industries and bioenergy products. Discovery laboratory in the use of forest and sustainable materials, including waste streams, to create marketable products. One lecture and one three-hour lab a week. ~~(Spring only)~~

Rationale: Change makes course title and description consistent with proposed change in degree name from Renewable Materials to Forest and Sustainable Products.
No additional workload.

~~RMA~~ **FSP 321 Properties of ~~Renewable Materials~~ Forest and Sustainable Products**

3 credits

Physiology, structure and physical and mechanical properties of woody ~~and other renewable plant materials~~ natural cellulosic fibers. ~~(Fall only)~~

Rationale: Change makes course title and description consistent with proposed change in degree name from Renewable Materials to Forest and Sustainable Products.
No additional workload.

~~RMAT-FSP~~ 444 Primary Forest Products Manufacturing**3 credits**

Raw materials, procurement, production methods, drying product specifications, and grading for primary products made from ~~renewable materials~~ wood and cellulosic fiber including lumber, plywood, poles, and energy products; plant layout, machines, and systems analysis; plant tours. Two lec and one 5-hr lab a wk. ~~(Spring-only)~~

Prereq: RMAT 321.

Rationale: Current title is ambiguous. Change makes course title and description consistent with proposed change in degree name from Renewable Materials to Forest and Sustainable Products.

No additional workload.

~~RMAT-FSP~~ 450 Biomaterials Deterioration and Protection**~~2~~ 3 credits**

~~Agents that cause deterioration of biomaterials; green building durability issues and design considerations; preservative systems and alternative control methods; and environmental considerations. Biotic and abiotic agents that deteriorate biomaterials; biocidal and nonbiocidal methods used to protect biomaterials from deterioration; biodegradable materials and their applications. Two one-hour lectures and one three-hour lab per week.~~ Recommended preparation: RMAT 321 ~~(Fall-only)~~

Rationale: Course is an important component in forest and sustainable products curriculum. Given an increase in the breadth of cellulosic materials being used in various building applications and the increase in number of new products exposed to deterioration agents, students need greater depth of understanding of course concepts. Increased credit will allow for greater student exposure to control methods that mitigate or eliminate biodeterioration than what is currently being taught as a two credit course.

There will be a program workload increase associated with the one additional credit. A new faculty member in the program has added teaching capacity, which easily allows for the one credit increase.

~~RMAT-FSP~~ 498 ~~Renewable Natural Resources~~ Forest and Sustainable Products Internship**Credit arranged**

Supervised field experience with an appropriate organization ~~public agency or private company~~. Graded P/F. ~~(Summer-only)~~

Prereq: Permission of advisor.

Rationale: Course title change being made to be consistent with proposed change in degree name from Renewable Materials to Forest and Sustainable Products. Course description shortened, but context not changed. Removed requirement that internship has to take place in summer since internship can take place at any time of the year.

No additional workload.

3. Make the following changes to the B.S.Renew.Mat.:

~~Renewable Materials (B.S.Renew.Mat.)~~ Forest and Sustainable Products B.S.For.Sus.Prod.

The ~~Renewable Materials~~Forest and Sustainable Products degree program is designed to fill the growing demand for professionals in the manufacture, marketing, and utilization of sustainable natural materials. Interdisciplinary coursework and project-based learning opportunities lead to a variety of career directions, including procurement of timber and other renewable materials; production management, marketing and distribution of bio-based products; green building materials selection, construction and design; and bio-based energy production systems.

Required course work includes the university requirements (see regulation J-3) and:

ACCT 201	Introduction to Financial Accounting	3
ACCT 202	Introduction to Managerial Accounting	3
<u>ACCT 482</u>	<u>Enterprise Accounting</u>	<u>3</u>
BIOL 102	Biology and Society	3
BIOL 102L	Biology and Society Lab	1
BLAW 265	Legal Environment of Business	3
CHEM 275 or CHEM 277	Carbon Compounds Organic Chemistry I	3
COMM 101	Fundamentals of Oral Communication	2
ECON 202 <u>Or ECON 272</u>	Principles of Microeconomics <u>Foundations of Economic Analysis</u>	3 <u>4</u>
ENGL 313 or ENGL 317	Business Writing Technical Writing	3
<u>FOR 221/REM 221/WLF 220</u>	Principles of Ecology	3
FOR <u>NRS</u> 235	Society and Natural Resources	3
FOR 375	Introduction to Spatial Analysis for Natural Resource Management	3
MATH 160 or MATH 170	Survey of Calculus Calculus I	4
NR 101	Exploring Natural Resources	2
NRS 383	Natural Resource and Ecosystem Service Economics	3
PHYS 111	General Physics I	3
PHYS 111L	General Physics I Lab	1
RMAT <u>FSP</u> 100	Intro to Renewable Resources	2
RMAT <u>FSP</u> 321	Properties of Renewable Materials	3
RMAT <u>FSP</u> 401	Undergraduate Research	1-3
RMAT <u>FSP</u> 436	Biocomposites	3
RMAT <u>FSP</u> 438	Introduction to Lignocellulosic Chemistry	1

RMAT FSP 444	Primary Products Manufacturing	3
RMAT FSP 450	Biomaterials Deterioration and Protection	2 3
RMAT FSP 491	Biomaterial Product and Process Development Lab	2
RMAT FSP /MKTG 495	Product Development and Brand Management	3
RMAT FSP 498	Renewable Natural Resources Internship	1-16
STAT 251	Statistical Methods	3
Select one of the following:		4
CHEM 101 & 101L	Introduction to Chemistry and Introduction to Chemistry Laboratory	
CHEM 111 & 111L	General Chemistry I and General Chemistry I Laboratory	
Second major, academic minor, or area of Emphasis[±]		18
Total Hours		88-105 72-90

Courses to total 120 credits for this degree

[±] ~~Degree candidates are required to complete a second major, an academic minor or area of emphasis of at least 18 credits. The emphasis area must be approved by the student's academic advisor.~~

Distance Education: 50% or more of curricular requirements **cannot** be completed via distance
Geographical Area: Moscow

Rationale: Requirement of second major, academic minor, or area of emphasis removed to increase student likelihood of completing their degree in four years. Majority of students obtaining degree are either transfer students or students that have changed their major while attending the University of Idaho. Second major, academic minor, or area of emphasis requirement was resulting in several these students having to extend education beyond four years to meet degree requirements. Removal of second major, academic minor, or area of emphasis requirement is expected to have no impact on the employability of students and adds flexibility for students to pursue other academic interests.

Replacing ACCT 201/202 with ACCT 482 is more consistent with the product development/entrepreneurial orientation of degree. ECON 272 is being added as an alternative to ECON 202 to eliminate substitutions forms being sent to the Registrar for students completing ECON 272. A separate Change a Course Form is being submitted for RMAT 450 to increase course credits from 2 to 3.

A detailed assessment plan for the curriculum is available on the university's PLO Assessment Plan and Report System. No elements of the assessment plan are affected by the proposed curriculum changes (e.g., the removal of the second major, academic minor, or area of emphasis) and therefore the plan will remain in place.

**FOREST, RANGELAND
AND FIRE SCIENCES**

College of Natural Resources
875 Perimeter Drive MS 1133
Moscow ID 83844-1133

MEMORANDUM

TO: University Curriculum Committee

FROM: Charles Goebel, Department Head **PCG**

DATE: September 10, 2019

RE: Change of prefix associated with Renewable Materials courses

The College of Natural Resources (CNR) has approved a proposed name change for the Renewable Materials (B.S. Renew. Mat.) degree to Forest and Sustainable Products (B.S. For. Sus. Prod.).

Assuming the proposed name change is approved, CNR is requesting that the prefix associated with all Renewable Materials courses be changed from RMAT to FSP.