APPROVED BY SENATE 04/30/2018

EP.18.61 FINAL Approved by EPC 04/16/2018

Proposal to the Senate Educational Policy Committee

- PROPOSAL TITLE: Proposal to revise one concentration, revise and rename one concentration, terminate two concentrations, create two new concentrations, and make revisions to the list of required courses for the Bachelor of Science in Natural Resources and Environmental Sciences (B.S. in NRES), in the Department of Natural Resources and Environmental Sciences, College of Agricultural, Consumer and Environmental Sciences
- SPONSOR: Anthony Yannarell, Associate Professor and Chair of the NRES Courses and Curriculum Committee, 333-2398, acyann@illinois.edu
- COLLEGE CONTACT: Mary Lowry, Assistant Dean, College of ACES, 333-9391, lowry@illinois.edu
- **BRIEF DESCRIPTION:** This proposal makes substantial changes to the four concentrations available to students majoring in Natural Resources and Environmental Sciences (NRES): two concentrations are revised, and the other two are replaced with newly designed concentrations. The proposal also adds two courses to the list of NRES core requirements and modifies the list of courses that can fulfill the field course requirement. Finally, the proposal adds the new US Minorities Culture General Education requirement to the list of Prescribed Courses in the NRES major. The total hours to complete the degree will remain at 126. See Appendix A for specific details.
- **JUSTIFICATION:** As part of the periodic evaluations of our Program, the NRES Department has recently completed a curriculum mapping exercise. Faculty identified critical learning objectives that apply across the curriculum or within the more specialized disciplinary boundaries that define our four concentrations. All NRES instructors then rated their courses against this list, evaluating whether their course provided an introduction to, reinforcement of, or mastery of each learning objective (or whether the learning objective did not apply). This exercise helped us to identify several important educational gaps in the current curriculum. For example, some of our concentrations did not provide a clear path to mastery, having no reinforcement-level courses for certain learning objectives. Foundational classes for several learning objectives deemed important across the curriculum were only easily accessible to students in the Human Dimensions concentration. We also identified a large mismatch between the learning objectives for the Global Change and Landscape Dynamics concentration and the courses available to students in this concentration. The proposed revisions to the B.S. in NRES seeks to address the shortcomings that we identified in the current NRES curriculum. These revisions will have additional benefits to the NRES curriculum, as the proposed revisions will also (1) better align the NRES curriculum with the strengths and expertise of the NRES faculty and the expectations of employers in allied fields; and (2) more clearly differentiate

the specialties represented by the four concentrations in the major while standardizing the format of the concentration requirements. We are proposing a number of changes to address our objectives, and these changes are further justified below.

Since the NRES curriculum was last revised (effective Fall 2009), the faculty in the Department has seen substantial turnover as a result of retirements and new hires. For example, nearly all of the faculty associated with the old Forestry program have now retired; many of the faculty specializing in various soil sciences have also retired; three of the Human Dimensions faculty have left the University, while two new faculty in this area have been hired (with a third faculty search currently underway). Conversely, recent new hires have expanded the Department's expertise in areas such as wetland restoration ecology, environmental chemistry, invasive species, stream ecosystems, environmental development and policy, behavioral social sciences, remote sensing, and ecohydrology. As we discovered during our curriculum mapping exercise, this turnover has opened up some gaps in our curriculum, but it also provides new opportunities for education. One of the main goals of this proposal is to integrate the specialties of these new faculty into the curriculum to give students the benefit of their expertise and to provide students with an integrated social-environmental-ecological skillset that will better appeal to today's employers. To this end, we have added the courses that these new faculty teach to the list of required and acceptable courses available to the students in the NRES major. For example, NRES 325 Natural Resource Policy Mgmt has been added to the list of required courses across the major, reflecting the growing need for policy literacy in all of the NRESrelated fields; NRES 351 Environmental Chemistry and NRES 402 Ecohydrology and Water Management are two of three required courses for a proposed new concentration (Environmental Science and Management); NRES 362 Ecology of Invasive Species, NRES 428 Valuing Nature, NRES 485 Stream Ecosystem Management, and others are acceptable courses to fulfill elective requirements in several different concentrations. Several other classes that are no longer taught have been removed from the curriculum. Thus, all of these changes are intended to update the curriculum to reflect current faculty expertise.

The four NRES concentrations have been a source of confusion for some NRES students. Most commonly, students have trouble figuring out whether they belong in Fish and Wildlife Conservation, Global Change and Landscape Dynamics, or Resource Conservation and Restoration Ecology. The latter two have many classes in common. We have also noted that Global Change and Landscape Dynamics has struggled to come into its own, and it has consistently been the concentration with the lowest enrollment since its creation during in the previous curriculum revision. This proposal terminates two of the current NRES concentrations (Global Change and Landscape Dynamics, and Resource Conservation and Restoration Ecology) and replaces them with two newly designed concentrations. The four concentrations proposed here are more clearly differentiated in their foci:

- Environmental Science and Management (new): this concentration provides an integrative background in environmental science, with equal focus on biology, chemistry, and physics of soil and water environments. We expect that enrollment in this new concentration will be 55 students, on average, which is on par with other NRES concentrations.
- Ecosystem Stewardship and Restoration Ecology (new): this concentration focuses heavily on the biological and ecological side of the environment, and it is intended

for students interested in plant and ecosystem ecology. We expect that enrollment in this new concentration will be around 55 students, on average, based on current enrollment numbers in the Resource Conservation and Restoration Ecology concentration (the closest match).

- Fish, Wildlife and Conservation Biology: this concentration is for students interested in conservation and management of wild animals and their habitats. This concentration has been only slightly revised. We do not expect these revisions to change enrollment, which averages 60 students (current enrollment, based on Fa 2017 data, is 62 students).
- Human Dimensions of the Environment: this concentration is for students interested in environmental economics, policy, and behavior. This concentration has been revised to make it more structurally similar to the others with regard to course requirements. We do not expect these revisions to change enrollment, which averages 60 students (current enrollment, based on Fa 2017 data, is 57 students).

Current enrollment numbers, based on Fa 2017 data, for the two concentrations that we are terminating are 29 students in Global Change and Landscape Dynamics and 80 students in Resource Conservation and Restoration Ecology. As indicated above, we expect that the two new concentrations will acquire roughly half of the students who would otherwise enroll in the two concentrations that we are terminating, as the students self-sort according to their interests. Students currently enrolled in the concentrations that we are terminating will have the option to complete their B.S. in NRES under the old curriculum requirements or to transition into one of the four newly created/revised concentrations; NRES advisors will assist students with this.

We have also attempted to standardize how each of the concentrations work with respect to course requirements. Each concentration now contains 2 or 3 required courses and 3 elective courses that the students can pick from a series of 2 or 3 topical "clusters." As a result, NRES students will now typically take 19-22 credit hours in their chosen concentration, whereas in the current curriculum they would take anywhere from 20 to 26 credit hours in the concentrations.

We are also proposing an expanded pool of classes to satisfy the NRES field course requirement. In the current NRES curriculum, students are required to receive 2-3 cr. hr. in two separate field courses under the NRES 285 rubric (NRES 276, which is no longer reliably taught, could substitute for one of these). Students have often struggled to meet this requirement due to the variable offering of different NRES 285 sections. The proposed curriculum now provides more options for fulfilling the field course requirement. Students can pair an Internship or Undergraduate Research/Thesis course (NRES 293, NRES 294, or NRES 295) with one NRES 285 course to fulfill this requirement, or they may elect to take two separate sections of NRES 285. This should increase the flexibility of the major.

Finally, **the proposed revision adds two courses to the NRES core requirements.** We propose to add NRES 325 Natural Resource Policy Mgmt to the core requirements, reflecting the growing importance of a policy background for students entering all NRES-related fields. We are also adding NRES 421 Quantitative Methods in NRES to the core requirements, although this change is for all intents and purposes "credit hour neutral" for the degree requirements. This is because NRES 421 is one of two possible "statistics" courses required for three of the current concentrations and one of three possible "methods" courses required for the other concentration. By moving NRES 421 to the core, we have

simply transferred these credit hours from the concentration requirements to the NRES core requirements. This move reflects, in part, a change to the way that NRES 421 has been taught in recent years, with more emphasis on experimental design, sampling theory, and regression statistics, making it an appropriate course for all NRES concentrations.

The changes proposed here will not modify the total hours necessary to complete the degree (126 credit hours). However, they will have a minor impact on how students accumulate these credit hours. Currently, NRES students take 55-65 hours of General Education credits, 25-27 hours of NRES core classes, and 20-26 hours of concentration-specific classes, leaving 8-26 hours for open elective classes. The revised curriculum proscribes 58-68 hours of General Education credits, 31-33 hours of NRES core classes, and 18-22 hours of concentration-specific classes, leaving 3-19 hours for open elective classes.

Students currently enrolled in NRES will have the option to complete their B.S. in NRES under the old curriculum requirements or to complete their degree under the revised curriculum requirements.

BUDGETARY AND STAFF IMPLICATIONS: (Please respond to each of the following questions.)

- 1) Resources
 - a. *How does the unit intend to financially support this proposal*? As detailed in sections 1a-d and 2a-d below, the proposed changes will not require the hiring of additional faculty or staff, nor will they require additional instructional space, laboratory space, technology resources, library resources, or additional capacity. All classes being added to the NRES core or the concentrations are already being taught in NRES and have room for more students. Therefore, the proposed changes will not require the Department of NRES to modify its current financial support of the B.S. in NRES, and the Department of NRES will continue to follow its current financial model in support of the revised curriculum.
 - b. *How will the unit create capacity or surplus to appropriately resource this program? If applicable, what functions or programs will the unit no longer support to create capacity?* The proposal does not necessitate the hiring of additional instructors or faculty, nor does it require additional resources with regard to equipment of instructional facilities. All of the classes being added to the NRES core or the concentrations already have capacity to accommodate any additional students that may take them as a result of the proposed changes. Thus, the Department of NRES will not need to create additional capacity to resource the proposed program, nor will it need to cease support of other functions or programs.
 - c. *Will the unit need to seek campus or other external resources?* If so, please provide a summary of the sources and an indication of the approved support. The proposal will not require the Department of NRES to seek additional campus or external resources.
 - d. *Please provide a letter of acknowledgment from the college that outlines the financial arrangements for the proposed program.* See attached letter from Dean Prasanta Kalita (Appendix B).

- 2) Resource Implications
 - a. *Please address the impact on faculty resources including the changes in numbers of faculty, class size, teaching loads, student-faculty ratios, etc.* We do not anticipate impacts on faculty resources as a result of this proposal. All of the courses in the proposed revision are currently taught by NRES faculty using resources that are currently available. The two courses that will added to the core (NRES 325 Natural Resource Policy Mgmt and NRES 421 Quantitative Methods in NRES) are currently being taught with enrollment caps of 90 students, which is sufficiently large to accommodate the class sizes that are typical of other core NRES courses. Thus, the proposed changes will not require additional faculty, nor will it alter class size, teaching loads, student-faculty ratios etc.
 - b. Please address the impact on course enrollment in other units and provide an explanation of discussions with representatives of those units. (A letter of acknowledgement from units impacted should be included.) We do not anticipate any impacts on course enrollment in other units as a result of the proposed changes. All units have been notified of the proposed changes (Appendix C.)
 - c. Please address the impact on the University Library (A letter of estimated impact from the University Librarian must be included for all new program proposals. If the impact is above and beyond normal library business practices, describe provisions for how this will be resourced.) We do not anticipate any impacts on the University Library as a result of the proposed changes (Appendix D).
 - d. *Please address the impact on technology and space (e.g. computer use, laboratory use, equipment, etc.)* The proposed changes do not require any additional computers, laboratories, or equipment, and therefore we do not anticipate any impacts on technology and space as a result of the proposed changes.

DESIRED EFFECTIVE DATE: Spring 2019

STATEMENT FOR PROGRAMS OF STUDY CATALOG:

Designed for students interested in careers at the forefront of environmental and ecological conservation, protection, and management or in pursuing advanced education in one of its many disciplinary areas, the NRES baccalaureate provides a science-based, application-oriented education. The NRES major is unique in its integration of a comprehensive physical, life, and social sciences background with coursework providing the management, decision-making, and analytical knowledge and skills required to solve the world's most pressing problems.

Students in the NRES major begin their studies by taking a set of core courses that provides the background for more focused substantive study at the upper level. The NRES core introduces students to the range of physical, life, and social science content most relevant to their future professions and equips them with tools essential for the discovery, analysis, and application of knowledge important for successful environmental management. NRES students then build upon the core by completing one of four upper-level concentrations. Courses in the concentrations

involve focused attention to the theories, data, and analytical tools of a particular set of natural resource and environmental science areas, helping students develop the necessary understanding of the complexities underlying resources management. All students in the major are required to complete a combination of field courses and at least one project-oriented capstone course.

All concentrations prepare students for graduate study as well as for multiple career paths in the public, non-profit, and private sectors. Because of its unique orientation toward integrative application of disciplinary knowledge, the NRES major prepares students for a wide range of careers involving the conservation, protection, and management of natural resources. Many occur within business or government agencies that provide services related to environmental and natural resource management. Other careers are found within social, professional, and advocacy institutions that focus on human impacts and environmental sustainability. The major also prepares students for teaching, research, or other professional activities.

Graduates from the NRES major go on to pursue careers in the direction of environmental education centers; ecological management and restoration; enforcement of laws and regulations; environmental advocacy; environmental consulting; forest and environmental economics; land use analysis and management; law; local, state, and federal government; management of parks, forests and rangelands; plant physiology; policy development and implementation; resource planning and policy analysis; social and environmental impact analysis; soil conservation, science, and testing; technical sales; watershed management; and wildlife conservation and management.

[[A table of Prescribed Courses including Campus General Education follows; please refer to Appendix A]]

Approved Concentrations:

- Environmental Science and Management
- Ecosystem Stewardship and Restoration Ecology
- Fish, Wildlife and Conservation Biology
- Human Dimensions of the Environment

[[Each item in the previous list links to a separate page containing a short description of the concentration and a table of Course Requirements; please refer to Appendix A]]

CLEARANCES: (Clearances should include signatures and dates of approval. **These signatures must appear on a separate sheet.** If multiple departments or colleges are sponsoring the proposal, please add the appropriate signature lines below.)

Signatures:

Unit Representative:

College Representative:

3-28-18

Date:

3/29/18

Date:

Graduate College Representative:

Date:

Council on Teacher Education Representative:

Date:

Appendix A: (Proposed Curriculum Revisions)

The following tables show the proposed revisions to the curriculum course tables for, respectively, the NRES Core curriculum (including General Education requirements), two proposed new concentrations, two proposed revised concentrations, and two proposed discontinued concentrations. Where appropriate, changes are highlighted with color to indicate courses that will be removed (orange) and courses that will be added (blue) to the curriculum.

Current Requirements			Re	evised Requirements	
	hours				hours
Total Gen. Ed.	55-65		Total Gen. Ed.		58-68
NRES core	25-27		NI	RES core	31-33
NRES concentration	20-26		NI	RES concentration	18-22
General Education Require	ments		Ge	eneral Education Requiren	ients
Composition I and Speech:	6-7			omposition I and Speech:	6-7
choose either	0-7		ch	oose either	0-7
RHET 105 Writing and				RHET 105 Writing and	
Research or equivalent	4			Research or equivalent	4
AND				AND	
CMN 101 Public Speaking	g 3			CMN 101 Public	3
	5			Speaking	
OR				OR	
CMN 111 Oral and				CMN 111 Oral and	
Written Communication I	3			Written Communication I	3
AND	_			AND	
CMN 112 Oral and	3			CMN 112 Oral and	3
Written Communication II				Written Communication	3
Advanced Composition				lvanced Composition	
(campus-approved list)	3-4			impus-approved list)	3-4
Cultural Studies (campus-		-		Iltural Studies (campus-	
approved list)	6			proved list)	9
one Western culture	3			one Western culture	3
one non-Western culture	3			one non-Western culture	3
				one U.S. minority culture	3
Foreign Language:			Fo	reign Language:	
coursework at or above third				ursework at or above third	
level			lev		

NRES Major Core Requirements, including General Education

one Quantitative Reasoning I	4-5		one Quantitative Reasoning I	4-5
course	1.1		course	
MATH 220 Calculus	5		MATH 220 Calculus	5
MATH 221 Calculus I	4		MATH 221 Calculus I	4
MATH 234 Calculus for	4		MATH 234 Calculus for	4
Business			Business	
one Quantitative Reasoning	3-4		one Quantitative Reasoning	3-4
II course	5 1		II course	5.
ACE 261 Applied	4		ACE 261 Applied	4
Statistical Methods	· ·		Statistical Methods	
CPSC 241 Intro to	3		CPSC 241 Intro to	3
Applied Statistics			Applied Statistics	
ECON 202 Economic	3		ECON 202 Economic	3
Statistics I			Statistics I	
PSYC 235 Intro to	3		PSYC 235 Intro to	3
Statistics	5		Statistics	
SOC 280 Intro to Social	4		SOC 280 Intro to Social	4
Statistics			Statistics	
STAT 100 Statistics	3		STAT 100 Statistics	3
Natural Science and	19-		Natural Science and	19-
Technology	21		Technology	21
CHEM 102 and CHEM	4		CHEM 102 and CHEM	4
103 General Chemistry I	т		103 General Chemistry I	Т
CHEM 104 and CHEM	4		CHEM 104 and CHEM	4
105 General Chemistry II			105 General Chemistry II	
IB 103 Introduction to	4		IB 103 Introduction to	4
Plant Biology			Plant Biology	
IB 104 Animal Biology	4		IB 104 Animal Biology	4
			OR IB 150 + IB 151	
select one course from:			select one course from:	
GEOG 103 Earth's	4		GEOG 103 Earth's	4
Physical Systems			Physical Systems	
GEOL 107 Physical	4		GEOL 107 Physical	4
Geology			Geology	
PHYS 101 College	5	127	PHYS 101 College	5
Physics, Mech & Heat	5		Physics, Mech & Heat	5
			PHYS 211 University	4
			Physics Mechanics	
MCB 100 Introductory	3		MCB 100 Introductory	3
Microbiology			Microbiology	
Humanities and the Arts:	6		Humanities and the Arts:	6
from campus approved list	0		from campus approved list	
Social and Behavioral	6-7		Social and Behavioral	6-7
Sciences	0-7		Sciences	

	ACE 100 Agr Cons and	4			ACE 100 Agr Cons and	4
\square	Resource Econ OR				Resource Econ OR	
	ECON 102	3			ECON 102	3
	Microeconomic Principles	5			Microeconomic Principles	
	select one additional from	3			select one additional from	3
	campus approved list	5			campus approved list	5
A	CES 101 Contemporary	2		A	CES 101 Contemporary	2
Is	sues in ACES	2		Is	sues in ACES	2
N	RES Major Core Requireme	ents		N	RES Major Core Requireme	ents
	NRES 102 Introduction to				NRES 102 Introduction to	
	NRES	3			NRES	3
\square	NRES 201 Introductory				NRES 201 Introductory	
	Soils	4			Soils	4
\vdash	NRES 219 Principles of		-		NRES 219 Principles of	
	-	3			Ecosystem Mgmt	3
\vdash	Ecosystem Mgmt NRES 287 Environment		-		NRES 287 Environment	
		3			Consider and the second s	3
	and Society				and Society	
					NRES 325 Natural	3
					Resource Policy Mgmt	
	NRES 348 Fish and	3			NRES 348 Fish and	3
	Wildlife Ecology	5			Wildlife Ecology	5
					NRES 421 Quantitative	3
		1			Methods in NRES	2
	NRES 454 GIS in Natural	4			NRES 454 GIS in Natural	4
	Resource Mgmt	4			Resource Mgmt	4
	NRES 456 Integrative	2			NRES 456 Integrative	2
	Ecosystem Mgmt	3			Ecosystem Mgmt	3
Ty	vo Field Experience	LEAST ST				
100 C	urses (NRES 285 is	2-4				
	peatable)	and the second				
	NRES 285 Natural					
	Resource Field Experience	1-2				
	NRES 276 Intro to Field					
	Pedology	2				
	redology				NRES 285 Natural	
					Resource Field	1-2
						1-2
				0	Experience	
					ne additional Field	1-2
				E	xperience course	
					NRES 285 Natural	
					Resource Field	1-2
		and the second			Experience (repeatable)	
					NRES 293 Professional	1-2
					Internship	1-2
			-			
					NRES 294 Resident	1-2

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NRES 295 Undergrad

Environmental Science and Management

Proposed NEW concentration

Environmental Science and Management emphasizes the biological, chemical, and physical features of the environment. It is designed for students interested in the management of soil and water resources and in understanding how to protect and improve environmental quality. The concentration includes coursework in environmental chemistry, environmental microbiology, ecohydrology, and environmental quality, as well as courses focused more specifically on soil and water sciences.

	hours
ENVIRONMENTAL SCIENCE AND MANAGEMENT	18-21
Concentration Core Requirements	
NRES 351 Environmental Chemistry	3
NRES 475 Environmental Microbiology	3
NRES 402 Ecohydrology and Water Management	3
Concentration Elective Requirements	
Two Soil and Water Science courses	6-8
NRES 471 Pedology	3
NRES 487 Soil Chemistry	3
NRES 488 Soil Fertility and Fertilizers	3
NRES 401 Watershed Hydrology	3
GEOG 406 Fluvial Geomorphology	4
NRES 429 Aquatic Ecosystem Conservation	3
NRES 485 Stream Ecosystem Mgt	4
NRES 490 Surface Water System Chemistry	4
GEOG 459 Ecohydraulics	4
ABE 454 Environmental Soil Physics	3
One Environmental Quality course	3-4
NRES 403 Watersheds and Water Quality	3
NRES 438 Soil Nutrient Cycling	3
NRES 474 Soil & Water Conservation	3
ATMS 449 Biogeochemical Cycles	4
CPSC 336 Tomorrow's Environment	3
CPSC 431 Plants and Global Change	3
ESE 320 Water Planet, Water Crisis	3
GEOL 380 Environmental Geology	4
IB 485 Environ Toxicology & Health	3
TSM 352 Land and Water Mgt Systems	3
UP 405 Watershed Ecology and Planning	4

Ecosystem Stewardship and Restoration Ecology Proposed NEW concentration

Ecosystem Stewardship and Restoration Ecology emphasizes the ecology, structure, and function of ecosystems, with a particular focus on plant communities and their interactions with the living and non-living parts of ecosystems. It is designed for students interested in the fundamental properties and practices underlying the restoration and management of soil, watershed, wetland, forest, and grassland ecosystems. The concentration includes coursework in the areas of restoration, landscape, and plant ecology, as well as courses focused on specific ecosystems (e.g. streams wetlands, agroecosystems), invasive species, community ecology, and ecosystem science.

×	hours
ECOSYSTEM STEWARDSHIP AND RESTORATION ECOLOGY	19-21
Concentration Core Requirements	
NRES 419 Environment and Plant Ecosystems	3
NRES 420 Restoration Ecology	4
NRES 465 Landscape Ecology	3
Concentration Elective Requirements	
Two Ecology courses	6-7
NRES 362 Ecology of Invasive Species	3
NRES 415 Native Plant ID and Floristics	4
CPSC 431 Plants and Global Change	3
IB 453 Community Ecology	3
IB 452 Ecosystem Ecology	3
IB 439 Biogeography	3
One Ecosystem or Management course	3-4
NRES 402 Ecohydrology and Water Management	3
NRES 418 Wetland Ecology and Mgmt	3
NRES 427 Modeling Natural Resources	4
NRES 429 Aquatic Ecosystem Conservation	3
NRES 485 Stream Ecosystem Mgt	4
CEE 432 Stream Ecology	3
CPSC 437 Principles of Agroecology	3
IB 361 Ecology and Human Health	3
IB 451 Conservation Biology	4
UP 405 Watershed Ecology and Planning	4
UP 406 Urban Ecology	4

Fish, Wildlife and Conservation Biology

REVISED concentration

Fish, Wildlife and Conservation Biology emphasizes the ecology, conservation, and sustainable management of fish and wildlife species and communities. It is designed for students interested in understanding interactions among humans, wild animals, and their habitats. The concentration includes coursework in conservation of threatened and endangered species, management of harvested species, aquatic ecosystem conservation, animal behavior, vertebrate natural history, identification of animals and plants, and advanced ecology.

Current Requirements			Revised Requirements				
	hours				hours		
FISH AND WILDLIFE CONSERVATION 22-			CC BI	SH, WILDLIFE AND DNSERVATION OLOGY	19-20		
Concentration Core Requirement	Concentration Core Requirements			ncentration Core Requiremen	nts		
NRES 407 Wildlife Population Ecology	4			NRES 407 Wildlife Population Ecology	4		
NRES 409 Fishery Ecol and Conservation	4 🏒			NRES 409 Fishery Ecol and Conservation	4		
NRES 421 Quantitative Methods in NRES or CPSC 440 Applied Statistical Methods I	3-4						
Concentration Elective Requirem	nents			ncentration Elective quirements			
One organismal Biology/Identification course	4			e organismal blogy/Identification course	4		
IB 368 Vertebrate Natural History	4						
IB 461 Ornithology	4			IB 461 Ornithology	4		
IB 462 Mammology	4			IB 462 Mammology	4		
IB 463 Icthyology	4			IB 463 Icthyology	4		
IB 464 Herpetology	4			IB 464 Herpetology	4		
One specialization course	3-4		On	e specialization course	3-4		
				NRES 362 Ecology of Invasive Species	3		
				NRES 418 Wetland Ecology and Mgmt	3		
NRES 419 Env and Plant Ecosystems	3			NRES 419 Env and Plant Ecosystems	3		
NRES 420 Restoration Ecology	4			NRES 420 Restoration Ecology	4		

NRES 429 Aquatic Ecosystem Conservation	3		NRES 429 Aquatic Ecosystem Conservation		3
NRES 465 Landscape Ecology	3		NRES 465 Landscape Ecology		3
IB 329 Animal Behavior	3		IB 329 Animal Behavior		3
IB 451 Conservation Biology	4		IB 451 Conservation Biology		4
e Plant Classification/ entification course	4		e Plant Classification/ entification course	4	
			NRES 302 Dendrology		4
NRES 415 Native Plant ID and Floristics	4		NRES 415 Native Plant ID and Floristics		4
IB 335 Systematics of Plants	4		IB 335 Systematics of Plants		4
			HORT 301 Woody Landscape Plants I		4

Human Dimensions of the Environment

REVISED concentration

Human Dimensions of the Environment emphasizes the social scientific interpretations of human-environment interactions at multiple levels, as well as applied policy and management implications. This concentration requires advanced coursework in behavior change science, natural resource economics, environmental and conservation psychology, communications, social impact assessment, environmental policy, and environmental law. Students who have completed degrees in this concentration have gone on to careers in natural resource management, environmental policy, law, advocacy, and education.

Current Requirements			Revised Requirements			
	hours		hours			
HUMAN DIMENSIONS OF THE ENVIRONMENT	21-25		HUMAN DIMENSIONS OF THE ENVIRONMENT19-22			
Concentration Core Requiremen	ts		Concentration Core Requirements			
ACE 210 Environmental Economics or ACE 310 Natural Resource Economics	3					
NRES 325 Natural Resource Policy Mgmt or NRES 425 Natural Resource Law & Policy	3					
NRES 340 Environ Social Sci Res Meth	3		NRES 340 Environ Social Sci Res Meth 3			
			ACE 310 Natural Resource 3			
			NRES 472 Environmental 4 Psychology			
Concentration Elective Requiren	nents		Concentration Elective Requirements			
One Analytical Methods course	3-4					
NRES 421 Quantitative Methods	3					
CPSC 440 Applied Statistical Methods I	4					
SOC 485 Intermediate Soc Stats	3					
Two Social Sciences courses	6-8		Two Social Sciences courses 6-8			
ACE 210 Environmental Economics	3		ACE 210 Environmental 3 Economics			
			MDIA 223 Watching the 3			
NRES 310 Natural Resource Economics	3					

	NRES 325 Natural Resource Policy Mgmt	3				
					NRES 423 Politics of Conservation and Development	3
	NRES 424 US Environ Justice & Policy	4			NRES 424 US Environ Justice & Policy	4
	NRES 425 Natural Resource Law & Policy	3				
	NRES 426 Renewable Energy Policy	3				
	NRES 430 Comm in Env Social Movements	3		-	NRES 430 Comm in Env Social Movements	3
	NRES 472 Environmental Psychology	4				
					NRES 428 Valuing Nature	3
					ACE 210 Environmental Economics	3
	ACE 406 Environmental Law	3			ACE 406 Environmental Law	3
					GEOG 493 Democracy and Environment	3
					GEOG 496 Climate and Social Vulnerability	3
					LA 370 Environmental Sustainability	3
					RST 217 Public Recreation	3
	SOC 447 Environmental Sociology	3			SOC 447 Environmental Sociology	3
	ne				Dne	
	onservation/Development/	3-4			Conservation/Development/	3-4
	cology course NRES 401 Watershed	THE REAL PROPERTY.	1755	E	cology course	and the second
	Hydrology	3				
	NRES 407 Wildlife	4			NRES 407 Wildlife	4
	Population Ecology	4			Population Ecology	4
	NRES 409 Fishery Ecol and	4			NRES 409 Fishery Ecol and	4
-	Conservation NRES 415 Native Plant ID				Conservation NRES 415 Native Plant ID	
	and Floristics	4			and Floristics	4
	NRES 420 Restoration				NRES 420 Restoration	
	Ecology	4			Ecology	4
	NRES 429 Aquatic	3			NRES 429 Aquatic	3
	Ecosystem Conservation				Ecosystem Conservation NRES 340 Communication	
					in Env. & Soc. Movements	

NRES 439 Env and Sustainable Dev	3	NRES 439 Env and Sustainable Dev	3
NRES 474 Soil and Water Conservation	3	NRES 474 Soil and Water Conservation	3
		UP 406 Urban Ecology	4

Global Change and Landscape Dynamics DISCONTINUED concentration

	hours
GLOBAL CHANGE AND LANDSCAPE DYNAMICS	20-26
Concentration Core Requirements	
NRES 419 Env and Plant Ecosystems	3
NRES 465 Landscape Ecology	3
NRES 421 Quantitative Methods in NRES or CPSC 440 Applied Statistical Methods I	3-4
Concentration Elective Requirements	
One Ecology course	3-4
NRES 420 Restoration Ecology	4
CPSC 431 Plants and Global Change	3
IB 452 Ecosystem Ecology	3
IB 361 Ecology and Human Health	3
UP 405 Watershed Ecology and Planning	4
UP 406 Urban Ecology	4
One Geospatial Techniques course	2-4
NRES 455 Adv GIS for Nat Res Planning	2
GEOG 460 Anal & Interp Aerial Photo	3
GEOG 477 Introductory Remote Sensing	3
GEOG 412 Geospatial Tech & Society	3
UP 316 Urban Informatics II	3
One Planning & Policy course	3-4
ACE 310 Natural Resource Economics	3
NRES 325 Natural Resource Policy Mgmt	3
NRES 424 US Environ Justice & Policy	4
NRES 425 Nat Res Law & Policy	3
NRES 426 Renewable Energy Policy	3
NRES 439 Env & Sustainable Development	3
LA 446 Sustainable Planning Seminar	4
ACE 406 Environmental Law	3
One Environmental Quality course	3-4
NRES 351 Environmental Chemistry	3
NRES 403 Watersheds and Water Quality	3
NRES 438 Soil Nutrient Cycling	3
NRES 474 Soil & Water Conservation	3
NRES 475 Environmental Microbiology	3
ATMS 449 Biogeochemical Cycles	4
ESE 320 Water Planet, Water Crisis	3
GEOL 380 Environmental Geology	4

Resource Conservation and Restoration Ecology DISCONTINUED concentration

	hours
RESOURCE CONSERVATION AND	23-26
RESTORATION ECOLOGY	23-20
Concentration Core Requirements	
NRS 419 Env and Plant Ecosystems	3
NRS 420 Restoration Ecology	4
NRES 421 Quantitative Methods in NRES or	3-4
CPSC 440 Applied Statistical Methods I	5-4
Concentration Elective Requirements	
One Watershed Science course	3-4
NRES 401 Watershed Hydrology	3
NRES 403 Watersheds and Water Quality	3
GEOG 406 Fluvial Geomorphology	4
NRES 429 Aquatic Ecosystem Conservation	3
NRES 490 Surface Water System Chemistry	4
One Plant Classification/Identification course	4
NRES 415 Native Plant ID and Floristics	4
IB 335 Systematics of Plants	4
One Soil and Environmental Science course	3-4
NRES 351 Environmental Chemistry	3
NRES 471 Pedology	3
NRES 474 Soil and Water Conservation	3
NRES 475 Environmental Microbiology	3
NRES 487 Soil Chemistry	3
NRES 488 Soil Fertility and Fertilizers	3
NRES 489 Physics of Plant Environments	4
One Ecology course	3
NRES 438 Soil Nutrient Cycling	3
IB 453 Community Ecology	3
IB 452 Ecosystem Ecology	3
NRES 465 Landscape Ecology	3
CPSC 437 Principles of Agroecology	3
IB 439 Biogeography	3

Appendix B: UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

College of Agricultural, Consumer and Environmental Sciences

Academic Programs 128 Mumford Hall, MC-710 1301 West Gregory Drive Urbana, IL 61801



March 13, 2018

To Whom It May Concern:

I am writing in support of the proposal to make revisions to the B.S. in Natural Resources and Environmental Sciences, Department of Natural Resources and Environmental Sciences, College of Agricultural, Consumer and Environmental Sciences, which is being overseen by Dr. Ton Yannarell. The department has not requested funding from the college to support this proposal, and none has been made available. The courses already exist and have capacity for additional students. We don't anticipate any additional funds being needed to implement these changes. If you have any questions, please contact me.

Sincerely,

Rach

Prasanta Kalita Associate Dean and Professor

Appendix C:

Hodson, Piper

From:	Hansen, Alan Christopher
Sent:	Friday, March 09, 2018 3:48 PM
То:	Hodson, Piper
Cc:	Rausch, Kent [,] D; Rodriguez, Luis F; Sullivan, Ronda Lynn
Subject:	RE: Reply Required for Curriculum Change Impacting Your Department

Dear Piper:

I have consulted with faculty who are members of our Courses & Curriculum Committee and I am confirming our knowledge and acceptance of this revision to the curriculum of the NRES major that adds ABE 454 and TSM 352 to the Environmental Science and Management concentration. We appreciate the inclusion of these courses into the concentration.

Regards,

Alan Hansen Professor and Interim Head Director, Appropriate Scale Mechanization consortium Department of Agricultural and Biological Engineering University of Illinois at Urbana-Champaign http://abe.illinois.edu/directory/achansen Ph: 217-333-2969

From: Hodson, Piper
Sent: Friday, March 09, 2018 11:58 AM
To: Hansen, Alan Christopher <achansen@illinois.edu>
Subject: Reply Required for Curriculum Change Impacting Your Department

Dear Dr. Hansen,

I am writing you on behalf of Dr. Jeff Brawn, Head of the Department of Natural Resources and Environmental Sciences. We are revising the curriculum for the NRES major, and our revisions will impact at least one of your courses. Specifically:

- ABE 454 was added to the Environmental Science and Management concentration.
- TSM 352 was added to the Environmental Science and Management concentration.

We anticipate these changes having minimal impact on enrollment. If you want more detail on the revisions, you can see them in the document at https://uofi.box.com/s/ervky2li97ppv5dsj26uzp71uml7jpwh (please refer to Appendix A). In order for the revision to proceed, we need letters from all impacted departments indicating that they aware of the changes. Would please provide that in a response to this email?

Thank you for your prompt attention to this matter,

Piper Hodson

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

Department of Agricultural and Consumer Economics College of Agricultural, Consumer and Environmental Sciences



326 Mumford Hall, MC-710 1301 West Gregory Drive Urbana, IL 61801-3605

March 14, 2018

Dr. Jeff Brawn Department of Natural Resources and Environmental Sciences

Dear Jeff,

Thank you informing us about planned revisions in the NRES major which may impact courses in Agricultural & Consumer Economics. The specific changes which may impact us are:

- Changing ACE 210 from an option within the concentration core requirements to an option in the Social Sciences section of the *Human Dimensions of the Environment* concentration.
- Eliminating the *Global Change and Landscape Dynamics* concentration in which ACE 310 and ACE 406 were included in a list of elective courses.

These changes will likely result in some reduction in enrollment in the aforementioned courses but we agree that the expected impact should be minimal.

Sincerely,

1 For

John A. (Sean) Fox, Professor and Head seanfox@illinois.edu

Hodson, Piper

From:Rauber, Robert MSent:Friday, March 09, 2018 3:32 PMTo:Hodson, PiperSubject:RE: Reply Required for Curriculum Change Impacting Your Department

Dear Dr. Hodson,

Thank you for the information. The Department of Atmospheric Sciences is aware of the proposed changes and support them.

Sincerely,

Bob Rauber

Professor and Head

Department of Atmospheric Sciences

From: Hodson, Piper
Sent: Friday, March 9, 2018 11:58 AM
To: Rauber, Robert M <r-rauber@illinois.edu>
Subject: Reply Required for Curriculum Change Impacting Your Department

Dear Dr. Rauber,

I am writing you on behalf of Dr. Jeff Brawn, Head of the Department of Natural Resources and Environmental Sciences. We are revising the curriculum for the NRES major, and our revisions will impact at least one of your courses. Specifically:

• ATMS 449 was removed from the Global Change and Landscape Dynamics concentration and added to the Environmental Science and Management concentration.

We anticipate these changes having minimal impact on enrollment. If you want more detail on the revisions, you can see them in the document at https://uofi.box.com/s/ervky2li97ppv5dsj26uzp71uml7jpwh (please refer to Appendix A). In order for the revision to proceed, we need letters from all impacted departments indicating that they aware of the changes. Would please provide that in a response to this email?

Thank you for your prompt attention to this matter, Piper Hodson

Hodson, Piper

From: Sent: To: Subject: Tranel, Patrick J Friday, March 09, 2018 4:32 PM Hodson, Piper Re: Reply Required for Curriculum Change Impacting Your Department

Piper,

I don't have any major concerns with this. One thing you should be aware of, however, is that we may not continue to offer Hort 301 after the current instructor retires (which could be quite soon).

Pat

Patrick Tranel Ainsworth Professor and Interim Head Department of Crop Sciences University of Illinois W201 Turner Hall 1102 S Goodwin Ave Urbana, IL 61801 217-333-1531 http://cropsciences.illinois.edu/people/profile/tranel

Under the Illinois Freedom of Information Act (FOIA), any written communication to or from university employees regarding University business is a public record and may be subject to public disclosure. Additionally, please be aware that an email is generated from any voice message you send.

From: "Hodson, Piper" <phodson@illinois.edu>
Date: Friday, March 9, 2018 at 11:57 AM
To: Patrick Tranel <tranel@illinois.edu>
Subject: Reply Required for Curriculum Change Impacting Your Department

Dear Dr. Tranel,

I am writing you on behalf of Dr. Jeff Brawn, Head of the Department of Natural Resources and Environmental Sciences. We are revising the curriculum for the NRES major, and our revisions will impact at least one of your courses. Specifically:

- CPSC 336 was added to the Environmental Science and Management concentration.
- CPSC 431 was removed from the Global Change and Landscape Dynamics concentration and added to the Environmental Science and Management and Ecosystem Stewardship and Restoration Ecology concentrations.
- CPSC 437 was removed from the Resource Conservation and Restoration Ecology concentration and added to the Ecosystem Stewardship and Restoration Ecology concentration.

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- CPSC 440 was removed as an option from the four NRES concentrations.
- HORT 301 was added to the Fish, Wildlife and Conservation Biology concentration.

We anticipate these changes having minimal impact on enrollment. If you want more detail on the revisions, you can see them in the document at https://uofi.box.com/s/ervky2li97ppv5dsj26uzp71uml7jpwh (please refer to Appendix A). In order for the revision to proceed, we need letters from all impacted departments indicating that they aware of the changes. Would please provide that in a response to this email?

Thank you for your prompt attention to this matter, Piper Hodson

Hodson, Piper

From:Marshak, StephenSent:Friday, March 09, 2018 11:59 AMTo:Hodson, PiperCc:Tomkin, Jonathan HSubject:Re: Reply Required for Curriculum Change Impacting Your Department

Hi Piper,

Thanks for the heads up. I'll forward to Jonathan Tomkin who oversees the ESES major.

Best wishes,

- Steve

Stephen Marshak

Professor of Geology / Director, School of Earth, Society, & Environment University of Illinois at Urbana-Champaign Rm. 3044, Natural History Building, MC-102

1301 West Green Street, Urbana, IL 61801

217-333-7705 / smarshak@illinois.edu

> On Mar 9, 2018, at 11:57 AM, Hodson, Piper <phodson@illinois.edu> wrote:

>

> Dear Dr. Marshak,

>

> I am writing you on behalf of Dr. Jeff Brawn, Head of the Department of Natural Resources and Environmental Sciences. We are revising the curriculum for the NRES major, and our revisions will impact at least one of your courses. Specifically:

> ESE 320 was removed from the Global Change and Landscape Dynamics concentration and added to the Environmental Science and Management concentration.

>

> We anticipate these changes having minimal impact on enrollment. If you want more detail on the revisions, you can see them in the document at https://uofi.box.com/s/ervky2li97ppv5dsj26uzp71uml7jpwh (please refer to Appendix A). In order for the revision to proceed, we need letters from all impacted departments indicating that they aware of the changes. Would please provide that in a response to this email?

>

> Thank you for your prompt attention to this matter, Piper Hodson

>

> Student Services Coordinator

> Department of Natural Resources and Environmental Sciences

> phodson@illinois.edu

> 217-244-5761

Hodson, Piper

From:	Stephen R. Downie <sdownie@life.illinois.edu></sdownie@life.illinois.edu>
Sent:	Wednesday, March 14, 2018 1:03 PM
То:	Hodson, Piper
Subject:	Re: Fwd: Reply Required for Curriculum Change Impacting Your Department
Follow Up Flag:	Follow up
Flag Status:	Completed

Dear Piper Hodson,

Thank you for bringing your proposed curricula changes for the NRES major to our attention. The School of Integrative Biology can see no problem with the implementation of your changes.

Sincerely, Stephen R. Downie Associate Director of Academic Affairs, School of Integrative Biology

----- Forwarded Message ------

Subject: Reply Required for Curriculum Change Impacting Your Department

Resent-Date: Fri, 9 Mar 2018 11:57:54 -0600

Resent-From: cecacere@illinois.edu

Date:Fri, 9 Mar 2018 17:57:50 +0000

From:Hodson, Piper cphodson@illinois.edu>

To:Caceres, Carla E <cecacere@illinois.edu>

Dear Dr. Cáceres,

I am writing you on behalf of Dr. Jeff Brawn, Head of the Department of Natural Resources and Environmental Sciences. We are revising the curriculum for the NRES major, and our revisions will impact at least one of your courses. Specifically:

- IB 150-151 was added as an option in the NRES core requirements.
- IB 335 was removed from the Resource Conservation and Restoration Ecology concentration.
- IB 361 was removed from the Global Change and Landscape Dynamics concentration and added to the Ecosystem Stewardship and Restoration Ecology concentration.
- IB 368 was removed from the Fish and Wildlife Conservation concentration.
- IB 439 was removed from the Resource Conservation and Restoration Ecology concentration and added to the Ecosystem Stewardship and Restoration Ecology concentration.

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- IB 451 was added to the Ecosystem Stewardship and Restoration Ecology concentration.
- IB 452 was removed from Global Change and Landscape Dynamics and Resource Conservation and Restoration Ecology concentrations and added to the Ecosystem Stewardship and Restoration Ecology concentration.
- IB 453 was removed from the Resource Conservation and Restoration Ecology concentration and added to the Ecosystem Stewardship and Restoration Ecology concentration.
- IB 485 was added to the Environmental Science and Management concentration.

We anticipate these changes having minimal impact on enrollment. If you want more detail on the revisions, you can see them in the document at https://uofi.box.com/s/ervky2li97ppv5dsj26uzp71uml7jpwh (please refer to Appendix A). In order for the revision to proceed, we need letters from all impacted departments indicating that they aware of the changes. Would please provide that in a response to this email?

Thank you for your prompt attention to this matter, Piper Hodson

Student Services Coordinator Department of Natural Resources and Environmental Sciences phodson@illinois.edu 217-244-5761

Stephen R. Downie, Professor Associate Director of Academic Affairs | School of Integrative Biology Director | GAANN Fellowships Department of Plant Biology | 265 Morrill Hall | 505 S Goodwin Ave University of Illinois at Urbana-Champaign | Urbana | IL 61801-3707 Telephone: (217) 333-1275 | Fax: (217) 244-7246 Email: <u>sdownie@illinois.edu</u> www.life.illinois.edu/downie/ www.life.illinois.edu/plantbio/

Hodson, Piper

From: Sent: To: Subject: Sullivan, William C Saturday, March 10, 2018 8:13 AM Hodson, Piper Re: Reply Required for Curriculum Change Impacting Your Department

Thank you, Piper.

Best, Bill

On Mar 9, 2018, at 3:56 PM, Hodson, Piper <<u>phodson@illinois.edu</u>> wrote:

Dear Dr. Sullivan,

I am writing you on behalf of Dr. Jeff Brawn, Head of the Department of Natural Resources and Environmental Sciences. We are revising the curriculum for the NRES major, and our revisions will impact at least one of your courses. Specifically:

- LA 370 was added to the Human Dimensions of the Environment concentration.
- LA 446 was removed from the Global Change and Landscape Dynamics concentration.

We anticipate these changes having minimal impact on enrollment. If you want more detail on the revisions, you can see them in the document

at<u>https://uofi.box.com/s/ervky2li97ppv5dsj26uzp71uml7jpwh</u> (please refer to Appendix A). In order for the revision to proceed, we need letters from all impacted departments indicating that they aware of the changes. Would please provide that in a response to this email?

1

Thank you for your prompt attention to this matter, Piper Hodson



Department of Sociology College of Liberal Arts and Sciences 702 S Wright Street 3120 Lincoln Hall, MC 454 Urbana, IL 61801 USA

Professor Jeff Braun Head, Department of Natural Resources and Environmental Sciences W-503 Turner Hall 1102 S. Goodwin Urbana Illinois 61801

12 March 2018

Dear Professor Braun,

It has come to my attention that the Department of Natural Resources and Environmental Sciences (NRES) is in the process of revising its curriculum and that one of the courses offered by the Department of Sociology (Sociology 485: Intermediate Social Statistics) has been removed from the Human Dimensions of the Environment concentration.

I appreciate being informed of this change and want to take this opportunity to wish you the best of luck with your curriculum revisions.

Sincerely,

Brian Dill Interim Head Associate Professor of Sociology Associate Professor of Geography and Geographic Information Science dillaillinois.edu

From:	Hodson, Piper
To:	McLafferty, Sara L
Subject:	Reply Required for Curriculum Change Impacting Your Department
Date:	Friday, March 09, 2018 11:57:00 AM
Subject:	Reply Required for Curriculum Change Impacting Your Department

Dear Dr. McLafferty,

I am writing you on behalf of Dr. Jeff Brawn, Head of the Department of Natural Resources and Environmental Sciences. We are revising the curriculum for the NRES major, and our revisions will impact at least one of your courses. Specifically:

- GEOG 402 was removed from the Resource Conservation and Restoration Ecology concentration and added to the Environmental Science and Management concentration.
- GEOG 412 was removed from the Global Change and Landscape Dynamics concentration.
- GEOG 459 was added to the Environmental Science and Management concentration.
- GEOG 460 was removed from the Global Change and Landscape Dynamics concentration.
- GEOG 477 was removed from the Global Change and Landscape Dynamics concentration.
- GEOG 493 was added to the Human Dimensions of the Environment concentration.
- GEOG 496 was added to the Human Dimensions of the Environment concentration.

We anticipate these changes having minimal impact on enrollment. If you want more detail on the revisions, you can see them in the document at

https://uofi.box.com/s/ervky2li97ppv5dsj26uzp71uml7jpwh (please refer to Appendix A). In order for the revision to proceed, we need letters from all impacted departments indicating that they aware of the changes. Would please provide that in a response to this email?

Thank you for your prompt attention to this matter, Piper Hodson

Hodson, Piper
Van Harlingen, Dale J
Reply Required for Curriculum Change Impacting Your Department
Friday, March 09, 2018 11:57:00 AM

Dear Dr. Van Harlingen,

I am writing you on behalf of Dr. Jeff Brawn, Head of the Department of Natural Resources and Environmental Sciences. We are revising the curriculum for the NRES major, and our revisions will impact at least one of your courses. Specifically:

• PHYS 211 was added as an option in the NRES core requirements.

We anticipate these changes having minimal impact on enrollment. If you want more detail on the revisions, you can see them in the document at

https://uofi.box.com/s/ervky2li97ppv5dsj26uzp71uml7jpwh (please refer to Appendix A). In order for the revision to proceed, we need letters from all impacted departments indicating that they aware of the changes. Would please provide that in a response to this email?

Thank you for your prompt attention to this matter, Piper Hodson

From:	Hodson, Piper
To:	Cole, Cheryl L
Subject:	Reply Required for Curriculum Change Impacting Your Department
Date:	Friday, March 09, 2018 11:57:00 AM

Dear Dr. Cole,

I am writing you on behalf of Dr. Jeff Brawn, Head of the Department of Natural Resources and Environmental Sciences. We are revising the curriculum for the NRES major, and our revisions will impact at least one of your courses. Specifically:

MDIA 223 was added to the Human Dimensions of the Environment concentration.

We anticipate these changes having minimal impact on enrollment. If you want more detail on the revisions, you can see them in the document at

https://uofi.box.com/s/ervky2li97ppv5dsj26uzp71uml7jpwh (please refer to Appendix A). In order for the revision to proceed, we need letters from all impacted departments indicating that they aware of the changes. Would please provide that in a response to this email?

Thank you for your prompt attention to this matter, Piper Hodson

From:	Hodson, Piper
То:	Olshansky, Robert B
Subject:	Reply Required for Curriculum Change Impacting Your Department
Date:	Friday, March 09, 2018 11:57:00 AM

Dear Dr. Olshansky,

I am writing you on behalf of Dr. Jeff Brawn, Head of the Department of Natural Resources and Environmental Sciences. We are revising the curriculum for the NRES major, and our revisions will impact at least one of your courses. Specifically:

- UP 316 was removed from the Global Change and Landscape Dynamics concentration.
- UP 405 was removed form the Global Change and Landscape Dynamics concentration, and added to the Environmental Science and Management and Ecosystem Stewardship and Restoration Ecology concentrations.
- UP 406 was removed form the Global Change and Landscape Dynamics concentration, and added to the Ecosystem Stewardship and Restoration Ecology and Human Dimensions of the Environment concentrations.

We anticipate these changes having minimal impact on enrollment. If you want more detail on the revisions, you can see them in the document at

https://uofi.box.com/s/ervky2li97ppv5dsj26uzp71uml7jpwh (please refer to Appendix A). In order for the revision to proceed, we need letters from all impacted departments indicating that they aware of the changes. Would please provide that in a response to this email?

Thank you for your prompt attention to this matter, Piper Hodson

Hodson, Piper
Chalip, Laurence
Reply Required for Curriculum Change Impacting Your Department
Friday, March 09, 2018 11:57:00 AM

Dear Dr. Chalip,

I am writing you on behalf of Dr. Jeff Brawn, Head of the Department of Natural Resources and Environmental Sciences. We are revising the curriculum for the NRES major, and our revisions will impact at least one of your courses. Specifically:

• RST 217 was added to the Human Dimensions of the Environment concentration.

We anticipate these changes having minimal impact on enrollment. If you want more detail on the revisions, you can see them in the document at

https://uofi.box.com/s/ervky2li97ppv5dsj26uzp71uml7jpwh (please refer to Appendix A). In order for the revision to proceed, we need letters from all impacted departments indicating that they aware of the changes. Would please provide that in a response to this email?

Thank you for your prompt attention to this matter, Piper Hodson

From:	Hodson, Piper
То:	Marinas, Benito Jose
Subject:	Reply Required for Curriculum Change Impacting Your Department
Date:	Friday, March 09, 2018 11:57:00 AM

Dear Dr. Mariñas,

I am writing you on behalf of Dr. Jeff Brawn, Head of the Department of Natural Resources and Environmental Sciences. We are revising the curriculum for the NRES major, and our revisions will impact at least one of your courses. Specifically:

• CEE 432 was added to the Ecosystem Stewardship and Restoration Ecology concentration.

We anticipate these changes having minimal impact on enrollment. If you want more detail on the revisions, you can see them in the document at

https://uofi.box.com/s/ervky2li97ppv5dsj26uzp71uml7jpwh (please refer to Appendix A). In order for the revision to proceed, we need letters from all impacted departments indicating that they aware of the changes. Would please provide that in a response to this email?

Thank you for your prompt attention to this matter, Piper Hodson

From:	Hodson, Piper
To:	Johnson, Thomas M
Subject:	Reply Required for Curriculum Change Impacting Your Department
Date:	Friday, March 09, 2018 11:57:00 AM

Dear Dr. Johnson,

I am writing you on behalf of Dr. Jeff Brawn, Head of the Department of Natural Resources and Environmental Sciences. We are revising the curriculum for the NRES major, and our revisions will impact at least one of your courses. Specifically:

• GEOL 380 was removed from the Global Change and Landscape Dynamics concentration and added to the Environmental Science and Management concentration.

We anticipate these changes having minimal impact on enrollment. If you want more detail on the revisions, you can see them in the document at

https://uofi.box.com/s/ervky2li97ppv5dsj26uzp71uml7jpwh (please refer to Appendix A). In order for the revision to proceed, we need letters from all impacted departments indicating that they aware of the changes. Would please provide that in a response to this email?

Thank you for your prompt attention to this matter, Piper Hodson

Appendix D

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

University Library Office of University Librarian and Dean of Libraries 230 Main Library, MC-522 1408 West Gregory Drive Urbana, IL 61801 April 2, 2018



Prof. Anthony Yannarell Chair of the NRES Courses and Curriculum Committee Natural Resources and Environmental Sciences M/C 047

Dear Prof. Yannarell:

The University Library recently received a proposal from the Department of Natural Resources and Environmental Sciences outlining the department's plans to revise the curriculum for the Bachelor of Science in Natural Resources and Environmental Sciences (BS in NRES). This proposal included adding two core requirements, revising the requirements for two concentrations, and adding two new concentrations to the program.

Based upon the documents received and reviewed by Sarah Williams in the Funk ACES Library, it is our belief that there will be no impact on the University Library. We are already supporting this program and see no meaningful changes in our operations as a result of this move.

If additional services or materials are required as the programs further develop, we will be happy to discuss those needs as they emerge.

Sincerely,

John P. Wilkin Juanita J. and Robert E. Simpson Dean of Libraries and University Librarian

e-c: Mary Lowry, Assistant Dean for Student Success, College of ACES Thomas Teper Sarah Williams

UNIVERSITY OF ILLINOIS AT URBANA - CHAMPAIGN

Office of the Provost and Vice Chancellor for Academic Affairs Swanlund Administration Building 601 East John Street Champaign, IL 61820



March 29, 2018

Gay Miller, Chair Senate Committee on Educational Policy Office of the Senate 228 English Building, MC-461

Dear Professor Miller:

Enclosed is a copy of a request from the College of Agricultural, Consumer and Environmental Sciences to revise the Bachelor of Science in Natural Resources and Environmental Sciences as follows:

- Establish the concentration in Environmental Science and Management; •
- Establish the concentration in Ecosystem Stewardship and Restoration Ecology; •
- Rename and revise the concentration in Fish and Wildlife Conservation; •
- Revise the concentration in Human Dimensions of the Environment; •
- Eliminate the concentration in Global Change and Landscape Dynamics;
- Eliminate the concentration in Resource Conservation and Restoration Ecology; •
- Revise the core requirements for the major in Natural Resources and Environmental • Sciences.

Sincerely,

Kittingot Martin

Kathryn A. Martensen Assistant Provost

Enclosures

c: P. Kalita M. Lowry J. Brawn A. Yannarell A. Edwards E. Stuby

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

College of Agricultural, Consumer and Environmental Sciences

Academic Programs 128 Mumford Hall, MC-710 1301 West Gregory Drive Urbana, IL 61801

March 28, 2018

Kathy Martensen, Assistant Provost Office of the Provost 207 Swanlund Administration Building Campus MC-304

Dear Kathy:

I am writing to request campus-level approval for a curricular proposal from the Department of Natural Resources and Environmental Sciences. The proposal contains major revisions to the entire spectrum of NRES curricula and includes provisions for revising, renaming, and terminating currently offered concentrations, plus creating two new concentrations.

Thank you for your consideration. I look forward to receiving your reply.

Sincerely, 1eall

Prasanta K. Kalita Associate Dean ACES Academic Programs

PKK/rhc

cc: M. K. Lowry J. D. Brawn A. C. Yannarell NRES C&C Binder 1867