

Proposal to the Senate Educational Policy Committee

PROPOSAL TITLE: Revise Requirements for Ph.D. in Natural Resources and Environmental Sciences

SPONSOR: Dr. Jeff Brawn, Head, Natural Resources and Environmental Sciences, 333-2770, <u>jbrawn@illinois.edu</u>.

COLLEGE CONTACT: College of ACES—Dr. Bill Simmons, <u>fsimmons@illinois.edu</u>...

BRIEF DESCRIPTION: Propose changing requirements for the Ph.D. in NRES from 32 hours of thesis and 32 hours of coursework to a minimum of 12 hours of coursework and a maximum of 52 hours of thesis.

JUSTIFICATION: The NRES Ph.D. is an interdisciplinary, post-M.S. program. The education of the student is centered in the lab of the adviser.

The impetus for this proposed change emerged when it became evident that doctoral students in certain areas of emphasis within the department were doing an unusually large number of NRES 501 Special Project hours to meet the existing requirement of 32 hours of non-thesis credit. Upon further investigation, it became clear that there was no requirement in the existing program of study that would rule out fulfilling all of the non-thesis hours with satisfactory/unsatisfactory credit. The NRES faculty decided that, rather than forcing students and their advisers to engage in educationally unnecessary independent study projects when the effort might be better spent on the thesis, the department should decrease the minimum number of required non-thesis credit hours and specify a minimum number of graded non-seminar, non-independent study coursework.

As part of the process of deciding on what the requirements should be, the NRES Graduate Admission and Policy Committee examined programs in similar areas of study at comparable institutions. The committee discovered that the 32 credit hours of coursework requirement was substantially out of line with comparable programs in some areas of emphasis. The challenge for NRES is that we are interdisciplinary, and the standard requirements vary widely between institutions and programs. When we examined other doctoral programs last year, we found that the 32 hours of post-M.S. coursework we were requiring were very high compared to fish and wildlife programs, a little high for natural resource programs, and a little low for more social science oriented programs (see comparison in Appendix A). The agreement among the NRES faculty was that the doctoral requirements be revised to recognize the different patterns of graduate work in the various disciplines represented in our interdisciplinary department and allow advisers and committees to shape the plan of study to meet the expectations of their discipline.

Several members of our faculty, who are trained in a range of content areas, have worked to make sure that these revisions (as well as recent related revisions to our preliminary examination process) increase the flexibility for individual advisers and committees to craft the program of study to best prepare each student to be competitive for positions in their discipline. The committee decided that the departmental minimum course requirement should be lower while requiring students to work with their advisers and committees to identify and get approved: 1) at least three content areas in which they would be required to gain competency and 2) the coursework the students would need to complete to demonstrate those competencies satisfactorily on the preliminary examination.

It is very important to note that in NRES, the 64 required hours is IN ADDITION TO the hours required for an M.S. A student who completed the M.S. in NRES would have earned 20 hours of course credit (which can include no more than 8 hours of independent study credit) and would still have to complete an additional 12 hours graded coursework for the Ph.D. To ensure doctoral students develop broader skills and knowledge beyond their work with their adviser, NRES offers the following:

- All NRES graduate students are required to take NRES 594 Professional Orientation during their first semester in residence; this course includes numerous guest lectures from faculty across campus. Since it is only offered with Satisfactory/Unsatisfactory grading, this course cannot count toward the 12 hours of graded coursework in the new requirement.
- Our students meet with their advisory committees annually to have their activities and progress reviewed.
- Each graduate student is reviewed annually by our departmental Graduate Admissions and Policy Committee which is external to the student's advisory committee.
- Our weekly seminar program can be taken for graduate credit and is diverse with a lineup of speakers from other universities and research centers. The graduate students in the department invite and host 1-2 speakers annually and meet with all the speakers during an informal pizza-lunch.
- Our students regularly participate in the annual student symposium organized by the campus-wide "Graduate Students in Ecology and Evolutionary Biology."

BUDGETARY AND STAFF IMPLICATIONS:

- a. Additional staff and dollars needed. No impact on staff anticipated, because the only shift in enrollment likely to occur will be from independent study credit to thesis research credit. It is very unlikely to have any significant impact on the pattern of enrollment in courses.
- b. Internal reallocations (e.g., change in class size, teaching loads, student-faculty ratio, etc.): This change is very unlikely to have any effect on course enrollments within NRES or in other departments. Students whose areas of focus require less coursework at most other institutions, such as wildlife conservation, already use independent study credit with their advisers to get enough non-599 hours to meet the requirement. Students who are focusing on areas in which other programs require more coursework, such as the social sciences, will continue to complete coursework stipulated by their advisers and committees, as they currently do. The only likely significant shift will be from independent study credit to thesis research credit in

those areas of emphasis in which fewer courses is the standard in doctoral programs.

- c. Effect on course enrollment in other units and explanations of discussions with representatives of those departments: See answer to b above.
- d. Impact on the University Library: No impact.
- e. Impact on computer use, laboratory use, equipment, etc.: No impact.

DESIRED EFFECTIVE DATE: Fall 2013

STATEMENT FOR PROGRAMS OF STUDY CATALOG:

The Ph.D. program prepares students to be experts in their fields. Earning a Ph.D. involves mastering a field of study and increasing the knowledge and understanding in that field through the completion of a dissertation that makes a contribution to existing research. Students working toward the Ph.D. degree are required to demonstrate competency in at least three content areas by passing a general examination (the preliminary examination) before admission to candidacy for the doctoral degree. Students consult with their advisers to identify their competency content areas and the courses they will take, which are recorded on the Doctoral Plan of Study, which requires the approval of the guidance committee and the Graduate Coordinator. To earn the doctorate, students must successfully complete a final oral examination (thesis defense). In most cases, students earn a M.S. before starting work on a Ph.D. However, in certain cases, it is possible to take the coursework required for the M.S. as part of a Ph.D. program. Details of the B.S. to Ph.D. program are available from the graduate coordinator.

Required Courses:	Required Hours
NRES 594 (need not be repeated if taken as an NRES M.S. student)	0-1
Graded Coursework (not including NRES 501, 512 or other independent study or readings courses)	12-32
Thesis Hours Required – NRES 599 (min/max applied toward degree):	Max 52
Total Hours	64
Other Requirements:*	
Minimum GPA:	3.0
Master's Degree Required for Admission to PhD?	Yes
Qualifying Exam Required	No
Preliminary Exam Required	Yes
Final Exam/Dissertation Defense Required	Yes
Dissertation Deposit Required	Yes

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:	
13-Stx	2-18-13
Unit Representative:	Date:
Kim (. Wrable) College Representative:	
Graduate College Representative:	Date:
Council on Teacher Education Representative:	Date:

Appendix A: Comparison to Comparable Programs

Program	Coursework Required	Thesis Hours Required	Method of Ensuring Adequate Breadth and Influence of More than One Faculty Member
Proposed Revision of the Ph.D. in Natural Resources and Environmental Sciences at the University of Illinois	At least 12 hours of graded coursework (not including NRES 501 or other independent study) ¹	At least 52 hours of NRES 599	NRES 594 Professional Orientation and a Plan of Study specifying three core content areas and identifying specific courses to be taken must be approved by the entire guidance committee (see Appendix B).
Ph.D. in Ecology, Evolution and Conservation Biology at the University of Illinois at Urbana-Champaign	IB 546A and 546B (A to be taken each semester of enrollment) for a total of 1-10 hours.	8 minimum	Faculty constituting the Advisory Committee must come from two or more departments. Student designates three core areas of emphasis for preliminary examination.
Ph.D. in Soil, Environment and Atmospheric Sciences at the University of Missouri	At least 15 hours of course work at the 8000 and 9000 levels (exclusive of research, problems and independent study experiences). A minimum of two credit hours of graduate seminar must be included. In soil science, at least 12 credit hours of soil science courses at the 7000, 8000 and 9000 levels are required.	Not specified, but a total of 72 credit hours is required.	"The curriculum is developed by a doctoral program committee and requires a minimum of 72 semester hours beyond the baccalaureate degree."
Ph.D. in Fisheries and Wildlife Sciences at the University of Missouri	At least 15 hours of course work at the 8000 and 9000 levels (exclusive of research, problems and independent study experiences).	Not specified, but a total of 72 credit hours is required.	No discussion of this.
Ph.D. in Environmental Science at Indiana University	The Ph.D. degree requires the completion of at least 90 credit hours in advanced study and research beyond the bachelor's degree. A student must complete a minimum of 30 credit hours of advanced course work to provide breadth in environmental science.	A minimum of 30 credit hours of research.	The exact nature and amount of course work in each of three areas: • Principal field of study • Breadth in environmental science • Research methods will be determined by the advisory committee after review and approval of the student's plan of study in each of these areas.
Ph.D. in Natural Resources and Environment at the University of Michigan	Rackham Graduate College requires 18 credit hours for a Ph.D. Students must take NRE 741 Research Paradigms, two analytic courses (or have taken them previously) and at least 4 hours of graduate-level coursework in a field outside the focus of the doctoral work (which is usually met by the student's coursework at the master's level).	No mention of a specific number of hours.	Students are required to complete a course of study that lists the graduate-level courses taken or to be taken and at least one course must be taken in each of three emphasis areas (theory, methods and analytics, and applications).

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¹ Please note that the programs at Indiana University and the University of Missouri include courses taken for the M.S. in their totals. When calculated in the same way, NRES students would be required take at least 32 hours of coursework (20 for the M.S. plus 12 for the Ph.D.)

Appendix B: NRES Doctoral Plan of Study

(Replace the following material with your appendix, if any.)

University of Illinois

DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL SCIENCES DOCTORAL PLAN OF STUDY

Name:		
Date First Enrolle	1 :	Expected Date of Graduation:
Institution of B.S.	(and M.S.):	
Date Plan of Stud	y Completed:	Undergraduate Major:
Primary Area of I	nterest:	
At least Three Co	re Content Areas:	
Courses Consider	ed Essential:	
Course No.	Course Title	Hours
NRES 594	Professional Orier	ntation in NRES 1
Recommended Co	ourses:	
Course No.	Course Title	Hours

Essential Courses: Recommended Cours Thesis (599): Total:	Ho es: Ho Ho Ho	urs urs
	urses are only taught in fall or sprin e cancelled because of low enrollm	ng, and others are taught only every ent, sabbatical leave, etc.)
1st Sem. FA/SP/SU Year:	2 nd Sem. FA/SP/SU Year:	3 rd Sem. FA/SP/SU Year:
4th Sem. FA/SP/SU Year:	5th Sem. FA/SP/SU Year:	6th Sem. FA/SP/SU Year:
7th Sem. FA/SP/SU Year:	8th Sem. FA/SP/SU Year:	9th Sem. FA/SP/SU Year:
signatures by the end of the 3 rd	semester.	e 2 nd semester and with all committee
Guidance Committee Member	rs: Printed Name	Signature of Approval
(Student)		
(Advisor)		
(Member)		

Appendix C: Proposed Curriculum Revisions

(Replace the following material with your appendix, if any.)

Current Requirements: NRES 594 (need not be repeated if taken as an NRES M.S. student)	Current Hours 0-1 Hours	Revised Requirements: NRES 594 (need not be repeated if taken as an NRES M.S. student)	Revised Hours 0-1 Hours
		Graded Coursework (not including NRES 501, 512 or other independent study or readings course)	Min 12 Hours
Thesis Hours Required - NRES 599 (min/max applied toward degree):	32 Hours	Thesis Hours Required – NRES 599 (min/max applied toward degree):	Max 52 Hours
Total Hours	64 Hours	Total Hours	64 Hours

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



February 28, 2013

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 proposal from the College of Applied Health Sciences to rename the Bachelor of Science in Health to the Bachelor of Science in Interdisciplinary Health.

This proposal has been approved by the College of Applied Health Sciences Educational Policy Committee. It now requires Senate review.

Sincerely,

Kristi A. Kuntz Assistant Provost

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KAK/njh

Enclosures

c: K. Ritten

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

FEB 2 1 2013 Office of the Provest

College of Applied Health Sciences Office of the Dean 110 Huff Hall, MC-586 1206 South Fourth Street Champaign, IL 61820



February 20, 2013

Kristi Kuntz Assistant Provost Swanlund Administration Building MC-304

Dear Kristi:

Please find attached the approved proposal to the Senate Educational Committee.

 Request to change the name of the Bachelor of Science Degree in Health to the Bachelor of Science in Interdisciplinary Health

If further information is needed, please let me know. Thank you.

Sincerely,

Kim Graber, Ph.D.

Associate Professor/Associate Head

Kim C. Fraher

cc: Kathi Ritten Indria Clay



Senate Educational Policy Committee Proposal Check Sheet

PROPOSAL TITLE: Request to change the name of the Bachelor of Science degree in Health to the Bachelor of Science in Interdisciplinary Health Sciences.

PROPOSAL TYPE (Please select all that apply below):

Α. [Program and degree proposals
1.	This proposal is for a graduate program or degree
	Yes X No
2.	Degree proposal (e.g. B.S., M.A. or Ph.D.)
	☐ New degree — please name the new degree:
	Revision of an existing degree — please name the existing degree to be revised:
3.	Major proposal (disciplinary focus, e.g., Mathematics)
	New major — please name the new major:
	Revision of an existing major — please name the existing major to be revised:
4.	Concentration proposal (e.g. Financial Planning)
	New concentration — please name the new concentration:
	Revision of an existing concentration — please name the existing concentration to be revised:
5.	Minor proposal (e.g. Cinema Studies)
	New minor — please name the new minor:
	Revision of an existing minor — please name the existing minor to be revised:

	6. X Proposal for renaming an existing degree, major, concentration, or minor					
		degree	X major	concentration	minor	
		Please provide the current name: Bachelor of Science degree in Health				
		Please provide Interdisciplina	the proposed ne ry Health Science	ew name: <u>Bachelor of Sc</u>	ience degree in	
	7. Proposal for terminating an existing degree, major, concentration, or min					
		Please name th	e, major, concentration,	or minor:		
	8. Proposal for a multi-institutional degree between Illinois (UIUC) and a fo institution					
		Please name th	e existing Illino	is degree or program:		
		Please name th	e partnering inst	itution:		
В.		Proposal for renar program)	ning existing ac	ademic units (college, s	chool, department, or	
		Please provide the	unit's current na	me:		
		Please provide the	unit's proposed i	new name:		
C.		Proposal for reorg	anizing existing	units (colleges, schools	, departments, or programs)	
		Change in status department)	s of an existing a please indicate	and approved unit (e.g. cl current unit name includi	nange from a program to ng status:	
☐ Transfer an existing unit						
	Please provide the current unit's name and home: Please provide the new home for the unit:					
		☐ Merge two or m	ore existing unit	s (e.g., merge departmen	t A with department B)	
		Please provide	the name and col	llege of unit one to be me	erged:	
		Please provide t	he name and col	lege of unit two to be me	erged:	
		☐ Terminate an ex	isting unit — ple	ease provide the current u	unit's name and status:	
D.		Other educational p	policy proposals	(e.g., academic calenda	r, grading policies, etc.)	
		Please indicate the r	nature of the prop	oosal:		