

# UNIVERSITY FACULTY SENATE FORMS

## Academic Program Approval

This form is a routing document for the approval of new and revised academic programs. Proposing department should complete this form. For more information, call the Faculty Senate Office at 831-2921.

Submitted by: Judith Hough-Goldstein phone number 831-2529

Department: Entomology & Wildlife Ecology email address jhough@udel.edu

Date: Oct. 9, 2013

Action: Revise Ecology major  
(Example: add major/minor/concentration, delete major/minor/concentration, revise major/minor/concentration, academic unit name change, request for permanent status, policy change, etc.)

Effective term 14F  
(use format 04F, 05W)

Current degree BS  
(Example: BA, BACH, BACJ, HBA, EDD, MA, MBA, etc.)

Proposed change leads to the degree of: BS  
(Example: BA, BACH, BACJ, HBA, EDD, MA, MBA, etc.)

Proposed name: \_\_\_\_\_  
Proposed new name for revised or new major / minor / concentration / academic unit (if applicable)

### Revising or Deleting:

Undergraduate major / Concentration: Ecology BS  
(Example: Applied Music – Instrumental degree BMAS)

Undergraduate minor: \_\_\_\_\_  
(Example: African Studies, Business Administration, English, Leadership, etc.)

Graduate Program Policy statement change: \_\_\_\_\_  
(Must attach your Graduate Program Policy Statement)

Graduate Program of Study: \_\_\_\_\_  
(Example: Animal Science: MS Animal Science: PHD Economics: MA Economics: PHD)

Graduate minor / concentration: \_\_\_\_\_

**Note: all graduate studies proposals must include an electronic copy of the Graduate Program Policy Document, highlighting the changes made to the original policy document.**

**List new courses required for the new or revised curriculum. How do they support the overall program objectives of the major/minor/concentrations)?**

(Be aware that approval of the curriculum is dependent upon these courses successfully passing through

the Course Challenge list. If there are no new courses enter “None”)

None

**Explain, when appropriate, how this new/revised curriculum supports the 10 goals of undergraduate education:** <http://www.ugs.udel.edu/gened/>

**The revised curriculum includes 3 additional credits of oral or written communications courses, which supports the goal of having our students attain effective skills in oral and written communication**

**Identify other units affected by the proposed changes:**

(Attach permission from the affected units. If no other unit is affected, enter “None”)

**Permission from the English Department is needed for the addition of ENGL 309 and ENGL 413 to the list of possible courses that will satisfy the written communication requirement**

**Describe the rationale for the proposed program change(s):**

(Explain your reasons for creating, revising, or deleting the curriculum or program.)

**The revision reflects minor changes in the Communication Skills requirement to make it the same as the requirement in the other 2 majors in our department. The required Senior Capstone Experience (or senior thesis) is moved from the Communication group to Foundation Courses, and the Communication Skills group is increased from 6 to 9 credits. In addition a course that will no longer be taught is removed (APEC 408, currently an option for STAT 200).**

**Program Requirements:**

(Show the new or revised curriculum as it should appear in the Course Catalog. If this is a revision, be sure to indicate the changes being made to the current curriculum and **include a side-by-side comparison** of the credit distribution before and after the proposed change.)

**Revised curriculum as it should appear in the Course Catalog:**

**DEGREE: BACHELOR OF SCIENCE**

**MAJOR: ECOLOGY**

See [University and College requirements](#).

**MAJOR REQUIREMENTS**

**A minimum grade of C- is required for all ENWC credits used to satisfy departmental requirements.**

**Foundation Courses**

<a href="#">MATH 241</a>	Analytic Geometry and Calculus A (bio section available and preferable)	4
<a href="#">CHEM 103</a>	General Chemistry	4
<a href="#">CHEM 104</a>	General Chemistry	4
<a href="#">BISC 207</a>	Introductory Biology I	4
<a href="#">BISC 208</a>	Introductory Biology II	4
<a href="#">STAT 200</a>	Basic Statistical Practice	3

or		
<a href="#">BISC 643</a>	Biological Data Analysis	3
ENWC 465	Senior Capstone Experience	1
or		
UNIV 402	Senior Thesis (thesis must be completed)	3

**1. The movement of materials and energy through living communities including basic understanding of life processes**

<a href="#">CHEM 321</a>	Organic Chemistry	4
<a href="#">CHEM 322</a>	Organic Chemistry	4
<a href="#">PHYS 201</a>	Introductory Physics I	4
<a href="#">PHYS 202</a>	Introductory Physics II	4
<a href="#">BISC 403</a>	Genetic and Evolutionary Biology	3
<a href="#">BISC 495</a>	Evolution	3

**Earth Processes - Select 2 of the following: 6-8 credit hours**

<a href="#">GEOG 101</a>	Physical Geography: Climatic Processes
<a href="#">GEOG 106</a>	Physical Geography: Land Surface Processes
<a href="#">GEOG 220</a>	Meteorology
<a href="#">GEOG 342</a>	Bioclimatology
<a href="#">GEOL 107</a>	General Geology
<a href="#">GEOL 113</a>	Earth Science
<a href="#">PLSC 204</a>	Introduction to Soil Science

**2. The distribution and diversity of both producers and consumers**

**Producers**

<a href="#">PLSC 201</a>	Botany II	4
<a href="#">PLSC 214</a>	Indigenous Woody Plants of the Eastern U.S.	
Or		
<a href="#">PLSC 404</a>	Plant Taxonomy	3-4

**Consumers - Select 2 of the following: 6 credit hours**

<a href="#">ENWC 406</a>	Insect Identification
<a href="#">ENWC 418</a>	Ornithology
<a href="#">ENWC 424</a>	Herpetology
<a href="#">ENWC 425</a>	Mammalogy
<a href="#">MAST 630</a>	Ichthyology

**3. Ecological interactions among organisms at different trophic levels**

<a href="#">BISC 302</a>	General Ecology	3
<a href="#">BISC/ENWC 312</a>	Field Ecology	3
<a href="#">ENWC/BISC 635</a>	Population Ecology	3

**Select 2 of the following: 6-7 credit hours**

<a href="#">BISC 306</a>	General Physiology
<a href="#">BISC 317</a>	Tropical Ecology
<a href="#">BISC 318</a>	Tropical Amphibians and Reptiles
<a href="#">BISC 321</a>	Environmental Biology
<a href="#">BISC 415/615</a>	Vertebrate Developmental Morphology
<a href="#">BISC 442</a>	Vertebrate Morphology

<a href="#">BISC 480</a>	Vertebrate Natural History
<a href="#">BISC 641</a>	Microbial Ecology
<a href="#">ENWC 419</a>	Biological Control
<a href="#">ENWC 444/BISC 440</a>	Conservation of Tropical Biodiversity
<a href="#">ENWC 452</a>	Conservation of African Wildlife
<a href="#">ENWC 453</a>	Community-Based Conservation
<a href="#">ENWC 456</a>	Conservation Biology
<a href="#">ENWC 620</a>	Behavioral Ecology
<a href="#">ENWC/MAST 314</a>	Comparative Terrestrial and Marine Ecology
<a href="#">MAST 421/621</a>	Coastal Field Biology
<a href="#">MAST 427/627</a>	Marine Biology
<a href="#">MAST 442</a>	Ecology and Evolution of Coral Reefs
<a href="#">MAST 451/651</a>	Marine Invertebrate Diversity
<a href="#">MAST 618</a>	Marine Microbial Ecology

**Communication Skills: 9 credit hours from the following**

**At least 1 of the following (3 credit hours):**

<a href="#">ENGL 301</a>	Expository Writing
<a href="#">ENGL 307</a>	News Writing & Editing
<a href="#">ENGL 309</a>	Feature and Magazine Writing
<a href="#">ENGL 312</a>	Written Com. in Business
<a href="#">ENGL 410</a>	Technical Writing
<a href="#">ENGL 413</a>	Topics in Professional Writing
<a href="#">UNIV 402</a>	Senior Thesis (thesis must be completed)

**At least 1 of the following (3 credit hours):**

<a href="#">AGRI 212</a>	Oral Com. in Ag & Natural
<a href="#">COMM 212</a>	Oral Com. in Business
<a href="#">COMM 350</a>	Public Speaking
<a href="#">LEAD 209</a>	Presentation Strategies
<a href="#">THEA 204</a>	Intro to Voice and Speech

<b>Credits to total minimum of</b>	<b>124</b>
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**Side-by side comparison of credit distribution:**

<b>Before proposed change</b>		<b>After proposed change</b>	
Requirement	# credits	Requirement	# credits
University & College requirements	13-16	University & College requirements	13-16
<u>Foundation courses</u>	23	<u>Foundation courses</u>	24-26
<a href="#">MATH 241</a> Analytic Geometry and Calculus A	4	<a href="#">MATH 241</a> Analytic Geometry and Calculus A	4
<a href="#">CHEM 103</a> General Chemistry	4	<a href="#">CHEM 103</a> General Chemistry	4
<a href="#">CHEM 104</a> General Chemistry	4	<a href="#">CHEM 104</a> General Chemistry	4
<a href="#">BISC 207</a> Introductory Biology I	4	<a href="#">BISC 207</a> Introductory Biology I	4
<a href="#">BISC 208</a> Introductory Biology II	4	<a href="#">BISC 208</a> Introductory Biology II	4
<a href="#">APEC 408</a> Statistical Research Methods	3		

or

STAT 200	Basic Statistical Practice	3	STAT 200	Basic Statistical Practice	3
or			or		
BISC 643	Biological Data Analysis	3	BISC 643	Biological Data Analysis	3
			ENWC 465	Senior Capstone Experience	1
			or		
			UNIV 402	Senior Thesis (thesis must be completed)	3
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Movement of materials and energy		28-30	Movement of materials and energy (no change)		28-30
Producers and consumers		13-14	Producers and consumers (no change)		13-14
Ecological interactions		15	Ecological interactions (no change)		15
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<u>Communication skills:</u>		7	<u>Communication skills: 9 credit hours from the following</u>		
ENWC 465	Sr. Capstone Experience	1			
<u>Select one of the following:</u>		3	<u>At least one of the following:</u>		3
ENGL 301	Expository Writing		ENGL 301	Expository Writing	
ENGL 307	News Writing & Editing		ENGL 307	News Writing & Editing	
			ENGL 309	Feature and Magazine Writing	
ENGL 312	Written Com. in Business		ENGL 312	Written Com. in Business	
ENGL 410	Technical Writing		ENGL 410	Technical Writing	
			ENGL 413	Topics in Professional Writing	
UNIV 402	Senior Thesis (thesis must be completed)		UNIV 402	Senior Thesis (thesis must be completed)	
<u>Select one of the following:</u>		3	<u>At least one of the following:</u>		3
AGRI 212	Oral Com. in Ag & Natural		AGRI 212	Oral Com. in Ag & Natural	
COMM 212	Oral Com. in Business		COMM 212	Oral Com. in Business	
COMM 350	Public Speaking		COMM 350	Public Speaking	
LEAD 209	Presentation Strategies		LEAD 209	Presentation Strategies	
THEA 204	Intro to Voice and Speech		THEA 204	Intro to Voice and Speech	
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Electives		19-25	Electives		14-22
Total		124	Total		124
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**ROUTING AND AUTHORIZATION:** (Please do not remove supporting documentation.)

Department Chairperson \_\_\_\_\_ Date \_\_\_\_\_

Dean of College \_\_\_\_\_ Date \_\_\_\_\_

Chairperson, College Curriculum Committee \_\_\_\_\_ Date \_\_\_\_\_

Chairperson, Senate Com. on UG or GR Studies \_\_\_\_\_ Date \_\_\_\_\_

Chairperson, Senate Coordinating Com. \_\_\_\_\_ Date \_\_\_\_\_

Secretary, Faculty Senate \_\_\_\_\_ Date \_\_\_\_\_

Date of Senate Resolution \_\_\_\_\_ Date to be Effective \_\_\_\_\_

Registrar \_\_\_\_\_ Program Code \_\_\_\_\_ Date \_\_\_\_\_

Vice Provost for Academic Affairs & International Programs \_\_\_\_\_ Date \_\_\_\_\_

Provost \_\_\_\_\_ Date \_\_\_\_\_

Board of Trustee Notification \_\_\_\_\_ Date \_\_\_\_\_

Revised 02/09/2009 /khs

**From:** [Ernest, John Richard](#)  
**To:** [Bowman, Jacob L](#)  
**Cc:** [Miller, George \(miller@english.udel.edu\)](mailto:miller@english.udel.edu)  
**Subject:** RE: Permission to list courses  
**Date:** Wednesday, October 16, 2013 1:44:02 PM

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Dear Jake,

I don't see any reason why this wouldn't work. I'm copying George Miller, Associate Chair, so that he can chime in if he sees a problem. Otherwise, though, this seems fine.

Best,  
John

John Ernest, Chair  
Department of English  
University of Delaware  
208 Memorial Hall  
Newark, DE 19716

302-831-3351

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**From:** Bowman, Jacob L  
**Sent:** Wednesday, October 16, 2013 11:35 AM  
**To:** Ernest, John Richard  
**Cc:** Hough-Goldstein, J A  
**Subject:** Permission to list courses

Dear Dr. Ernest,

The Department of Entomology and Wildlife Ecology is proposing a revision to our Ecology and Wildlife Conservation majors. Both majors have a communications group. We would like to add ENGL 413 to the Wildlife Conservation written communications group. We would like to add ENGL 309 and ENGL 413 to the Ecology written communication group. Below is how our communications group would look if you approve these additions.

Group III- Communication Skills Focus  
9 Credits: Choose at least one of the following  
ENGL 301 Expository Writing 3  
ENGL 307 News Writing and Editing 3  
ENGL 309 Feature and Magazine Writing 3  
ENGL 312 Written Com. In Business 3  
ENGL 410 Technical Writing 3  
ENGL 413 Topics in Professional Writing 3  
UNIV 402 Senior Thesis (Completed) 3

Choose at least one of the following  
AGRI 212 Oral Com. In Ag & Natural Resources 3  
COMM 212 Oral Com. In Business 3  
COMM 350 Public Speaking 3  
LEAD 209 Presentation Strategies 3  
THEA 204 Intro to Voice and Speech 3

Students only have to complete at most two ENGL courses from this focus. Because of the large number of courses offered in this group, I don't expect large requests for any one course. Are these listings acceptable to your department?

Thanks,  
Jake

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Jacob L. Bowman, Ph.D.  
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