Agenda CALS Curriculum Committee Meeting Tuesday, February 26, 2013, 12:00 p.m. 250 Agricultural Hall

Members:		
Francisco Pelegri, (2013) Jeri Barak, (2014) Bill Bland, (2014)	Amin Fadl, (2013) Randy Jackson, (2013) Maya Hayslett, (2013)	Jack Kloppenburg, (2015) Paul Mitchell, (2013) Masarah Van Eyck, (2015)
CALS Ex Officio: Sarah Pfatteicher	CASI Ex Officio: Liv Sandberg (non-voting)	Student Reps: Tim Pearson UP&S Office: Susan Gisler Dan Statter
	MINUTES	
February 12 th , 2013 minutes		
	COURSE PROPOSALS	
Course Change Proposals		
BioChem. 510: Biochemical Princ <i>Changing prerequisites.</i>	ciples of Human and Animal Nutri	ition
BioChem. 704: Chemical Biology <i>Tabled from 01-22-13. Changing c</i>		
Pharm. Sci 890: Highlights at the Changing "repeatability." Departm	• 5•	
Pharm. Sci 891: Highlights at the Changing "repeatability." Departm	• 5•	
Food Science 603: Senior Semina Changing course description	r	
New Course Proposals		
Zoology 953: Introduction to V	Visconsin Ecology: A graduate	seminar

OTHER BUSINESS

Changing crosslisting. "This course fills a gap in all Wisconsin Ecology member departments."

Course Change Proposal

Subject Biochemistry (200) **Proposer** Catherine Ryan

Status Under Review by School/College

Basic Information

Current course number

510

Current course title

Biochemical Principles of Human and Animal Nutrition

Current published course description

Lectures in nutrition for students with a substantial background in biochemistry. Emphasis on biochemical and physiological fundamentals of nutrition. Discussion of protein, fat, carbohydrate, energy, minerals and vitamins and their roles and interrelationships in nutrition and metabolism.

Chief academic officer of this unit

Elizabeth A Craig

Designee of chief academic officer for approval authority

Catherine Ryan

Currently crosslisted with

Nutritional Sciences (694)

What is the primary divisional affiliation of the course?

Biological Sciences

When will this change go into effect?

Fall 2013-2014

Basic Changes

	Dasic Changes
Will t	the subject change?
	Current subject Biochemistry (200)
	Proposed subject
Will t	the course number change?
	Current course number 510
	Proposed course number
	Is this an honors course?
	Is this an individual instruction course such as directed study, independent study, research or thesis (i.e., a course with no group instruction)?
Will t	the title change?
	Current title Biochemical Principles of Human and Animal Nutrition
	Proposed title (max. 100 chars.)
	Proposed transcript title (max. 30 chars.)
Will t	the crosslistings change?
	Current crosslistings Nutritional Sciences (694)
	Proposed crosslistings
Will t	the "repeatability" of the course change?
	Current repeatability

Catalog Changes

Will the credits change?

No

Current minimum credits

3

Current maximum credits

3

Proposed minimum credits

Proposed maximum credits

Will the grading system change?

No

Current grading system

Proposed grading system

Will the published course description change?

No

Current course description

Lectures in nutrition for students with a substantial background in biochemistry. Emphasis on biochemical and physiological fundamentals of nutrition. Discussion of protein, fat, carbohydrate, energy, minerals and vitamins and their roles and interrelationships in nutrition and metabolism.

Proposed course description

Will the prerequisites change?

Yes

Current prerequisites and other requirements

Biochem 501 or 602 or cons inst

Proposed prerequisites and other requirements

Biomolecular Chem 314 or 503, Biochem 501 Or 507, or consent of instructor

Designation Changes

•
Will the Liberal Arts and Sciences (LAS) designation change?
What change is needed?
What is the rationale for seeking LAS credit?
Will the level of the course change for L&S attributes?
Current level: Advanced
Proposed level:
Will the L&S breadth requirement change? No
Current breadth: B-Biological Science
Proposed breadth:
Will the General Education Requirement change? No
Current GER:
Proposed GER

Additional Information

Explain the relationship and importance of the proposed change to existing or future programs (i.e., degrees, majors and certificates)

This eliminates student confusion between Biochem 510 and NutriSci 510

Are any of these programs outside your academic unit?

No

Indicate the subjects that are most closely aligned with the other academic units. The proposal will be sent to the academic units that support those subjects for review.

Specify which requirement(s) this change affects, if any (e.g. satisfies third-level language, meets the major's capstone requirement, fulfills PhD minor requirement)

Do any of these requirements affect programs (degrees, majors, certificates) outside your academic unit?

Indicate the subjects that are most closely aligned with the other academic unit. The proposal will be sent to the academic units that support those subjects for review.

Address the relationship of this change to other UW-Madison courses, including possible duplication of content NA

Is there a relationship to courses outside your subject?

No

Indicate the outside affected subject(s). The proposal will be sent to the academic units that support those subjects for review.

Will any courses be discontinued as a result of this change?

No

List course number(s) and complete a course discontinuation proposal for each course

Justification Changes

Explain the need for the change

Biochem 510 is crosslisted with NutriSci 510, and they have had different pre-requisites in writing only -- not in practice -- for years. Also, the former Biochem pre-req of Biochem 602 no longer exists.

Additional comments (optional)

This change brings the written description up to speed with current practice, and has been approved by both the Biochemistry and NutriSci Departments.

Attach a syllabus

Additional attachments (optional)(please read "help" text before uploading an attachment)

Course Change Proposal

Subject Biochemistry (200) **Proposer** Catherine Ryan

Status Under Review by School/College

Basic Information

Current course number

704

Current course title

Chemical Biology

Current published course description

Biochemistry 704: "Chemical Biology" is a 2-credit graduate-level course (30 sessions) on the use of ideas and methods of chemistry to solve problems in molecular and cell biology. The course is organized around the flow of information in biological systems, and emphasizes how chemists can intervene at each step, both to elucidate and control that flow. A major goal is to empower both chemists and biologists by providing chemists with relevant new targets and biologists with useful new tools.

Chief academic officer of this unit

Elizabeth A Craig

Designee of chief academic officer for approval authority

Catherine Ryan

Currently crosslisted with

What is the primary divisional affiliation of the course?

Physical Sciences

When will this change go into effect?

Fall 2013-2014

Basic Changes

	Busic Granges
Will t	the subject change?
	Current subject Biochemistry (200)
	Proposed subject
Will t	the course number change?
	Current course number 704
	Proposed course number
	Is this an honors course?
	Is this an individual instruction course such as directed study, independent study, research or thesis (i.e., a course with no group instruction)?
Will t	the title change?
	Current title Chemical Biology
	Proposed title (max. 100 chars.)
	Proposed transcript title (max. 30 chars.)
Will t	the crosslistings change?
700	Current crosslistings
	Proposed crosslistings Chemistry (224)
Will t	the "repeatability" of the course change?
	Current repeatability

Catalog Changes Will the credits change? No **Current minimum Current maximum Proposed minimum Proposed maximum** Will the grading system change? No **Current grading system** Proposed grading system Will the published course description change? No **Current course description** Biochemistry 704: "Chemical Biology" is a 2-credit graduate-level course (30 sessions) on the use of ideas and methods of chemistry to solve problems in molecular and cell biology. The course is organized around the flow of information in biological systems, and emphasizes how chemists can intervene at each step, both to elucidate and control that flow. A major goal is to empower both chemists and biologists by providing chemists with relevant new targets and biologists with useful new tools. **Proposed course description** Will the prerequisites change? No Current prerequisites and other requirements Proposed prerequisites and other requirements

Designation Changes

Will the Liberal Arts and Sciences (LAS) designation change? No
What change is needed?
What is the rationale for seeking LAS credit?
Will the level of the course change for L&S attributes?
Current level:
Proposed level:
Will the L&S breadth requirement change?
Current breadth:
Proposed breadth:
Will the General Education Requirement change?
Current GER:
Proposed GER

Additional Information

Explain the relationship and importance of the proposed change to existing or future programs (i.e., degrees, majors and certificates)

This crosslisting doesn't really change anything; it just acknowledges that this course has become a requirement for chemical biology majors in the Department of Chemistry.

Are any of these programs outside your academic unit?

Yes

Indicate the subjects that are most closely aligned with the other academic units. The proposal will be sent to the academic units that support those subjects for review.

Chemistry (224)

Specify which requirement(s) this change affects, if any (e.g. satisfies third-level language, meets the major's capstone requirement, fulfills PhD minor requirement)

Do any of these requirements affect programs (degrees, majors, certificates) outside your academic unit?

Indicate the subjects that are most closely aligned with the other academic unit. The proposal will be sent to the academic units that support those subjects for review.

Address the relationship of this change to other UW-Madison courses, including possible duplication of content The content of this course is not changing. The crosslisting is only to make this course more readily available to those in the Chemistry Department who are required to take it.

Is there a relationship to courses outside your subject?

Indicate the outside affected subject(s). The proposal will be sent to the academic units that support those subjects for review.

Will any courses be discontinued as a result of this change?

No

List course number(s) and complete a course discontinuation proposal for each course

Justification Changes

Explain the need for the change

"Chemical Biology" has become a required course for chemistry graduate students seeking a Ph.D. degree in the departmental division of "chemical biology." Since this requirement was instituted two years ago, half of the students enrolled in the course have been chemistry graduate students. Accordingly, the course is appropriately cross-listed in the chemistry department.

Additional comments (optional)

This syllabus is from 2012, but it be virtually the same for 2013 excepting for dates.

Attach a syllabus

Additional attachments (optional)(please read "help" text before uploading an attachment)

2012 Biochem 704 Syllabus.pdf

Biochemistry 704: Chemical Biology

• Fall 2012 •

Instructors: Laura Kiessling (kiessling@chem.wisc.edu) 471 Biochemistry Addition

Ron Raines (rtraines@wisc.edu) 371C Biochemistry Addition

Teaching Assistants: Rob Presler (presler@wisc.edu) 373 Biochemistry Addition

Lectures: Tuesday and Thursday at 8:50 AM in 175 Biochemistry Addition

1	9/4	Kiessling	Information Flow in Chemistry and Biology
3	6	Kiessling	Nucleic Acids as Carriers of Biochemical Information
	11	Raines	Synthesis of Nucleic Acids and Utility of Analogs
5	13	Raines	DNA Recognition by Small Molecules
5	18	Hoskins	DNA Recognition by Proteins
6	20	Raines	RNA Structure and Folding
7	25	Ansari	Recognition Landscapes in Living Systems
8	27	Raines	RNA Aptamers; Ribozymes; Molecular Evolution
9	10/2	Raines	Translation and its Modulation by Small Molecules
10	4	Raines	Chemical Synthesis of Peptides and Proteins
11	9	Raines	Protein Folding: History and Therapeutic Intervention
12	11	Raines	Protein Stability and its Modulation by Small Molecules
13	16	Strieter	Post-Translational Modifications
14	18	Strieter	Chemoselective Reactions for Chemical Biology
15	23	Neff	Using Literature and Databases to Write and Review Proposals
16	25	Raines	Directed Evolution
17	*30	Raines	Bioimaging
18	11/1	Weibel	Secondary Metabolism
19	6	Kiessling	Chemical Glycobiology
20	8	Kiessling	Chemical Genetics
21	13	Kiessling	Signal Transduction and its Modulation by Small Molecules
22	15	Raines	Enzymatic Catalysis—Principles, Concepts, Targets
23	20	Raines	Enzymatic Catalysis—Principles, Concepts, Targets
24	22	THANKSG	IVING RECESS
25	**27	Raines	Enzymatic Catalysis—Principles, Concepts, Targets
26	29	Raines	Enzymatic Catalysis—Principles, Concepts, Targets
27	12/4	Raines	Chemical Biology in Vitro versus in Cellulo
28	12/6	ALL	IN-CLASS STUDY SECTION
29	12/11	ALL	IN-CLASS STUDY SECTION
30	12/13	ALL	IN-CLASS STUDY SECTION

^{*}SPECIFIC AIMS DUE

^{**}RESEARCH PROPOSAL DUE

Biochemistry 704: Chemical Biology

Course Description

Biochemistry 704: "Chemical Biology" is a 2-credit graduate-level course (30 sessions) on the use of ideas and methods of chemistry to solve problems in molecular and cell biology. The course is organized around the flow of information in biological systems, and emphasizes how chemists can intervene at each step, both to elucidate and control that flow. A major goal is to empower both chemists and biologists by providing chemists with relevant new targets and biologists with useful new tools.

Prerequisites

Successful completion of courses in organic chemistry (*e.g.*, Chemistry 343 *and* 345 at Wisconsin), biochemistry (*e.g.*, Biochemistry 501), physical chemistry (Chemistry 561 or 565) is assumed. You should already be able to answer questions such as

- a. Draw the mechanism (using curved arrows to indicate electron flow) for the reaction of acetone and ammonia to form CH₃–C(=NH)–CH₃ (an imine or "Schiff base") and water.
- b. Write the expression for the rate of product formation $(v = \partial [B]/\partial t)$ during the chemical reaction:

$$\begin{array}{ccc} & k_1 \\ A & \rightarrow & B \end{array}$$

c. Draw the molecular structure of each natural amino acid and nucleobase.

If you are not familiar with the above material (especially, question \underline{a}), you should not register for this course.

Grades

Grades will be based on in-class participation (10%), problem sets and quizzes (30%), an original research proposal (50%), which will be assessed during in-class "study sections", and reviews of two other research proposals during the in-class study sections (5% + 5%).

Resources

No text is required, but the following website and books could be helpful references. www.khanacademy.org

Alberts, B. et al. *Molecular Biology of the Cell*. Routledge (2007)

Blackburn, G. M. et al. *Nucleic Acids in Chemistry and Biology*. RSC (2006)

Frey, P. A. & Hegeman, A. D. Enzymatic Reaction Mechanisms. Oxford University (2006)

Grossman, R. B. The Art of Writing Reasonable Organic Reaction Mechanisms. Springer (2007)

Jencks, W. P. Catalysis in Chemistry and Enzymology. Dover (1987)

McMurry J. & Begley, T. The Organic Chemistry of Biological Pathways. Roberts & Co. (2005)

Miller, A. & Tanner, J. Essentials of Chemical Biology. Wiley (2008)

Stanforth, S. P. Natural Product Chemistry at a Glance. Blackwell (2006)

Voet, D. & Voet, J. G. Biochemistry. John Wiley & Sons (2004)

Course Website

https://learnuw.wisc.edu

Course Change Proposal

Subject Food Science (390) **Proposer** Richard W Hartel Status Under Review by School/College

Basic Information

Current course number

603

Current course title

Senior Seminar

Current published course description

Part two of senior capstone requirement. Students will present data gathered and analyzed as part of the senior project. Outside speakers will address hot topics and emerging issues in the field.

Chief academic officer of this unit

Scott A Rankin

Designee of chief academic officer for approval authority

Jenny M Schroeder; Judy A Smith

Currently crosslisted with

What is the primary divisional affiliation of the course?

Biological Sciences

When will this change go into effect?

Summer 2013

Basic Changes

	240.0 0.14.1.900
Will No	the subject change?
	Current subject Food Science (390)
	Proposed subject
Will No	the course number change?
	Current course number 603
	Proposed course number
	Is this an honors course?
	Is this an individual instruction course such as directed study, independent study, research or thesis (i.e., a course with no group instruction)?
Will No	the title change?
	Current title Senior Seminar
	Proposed title (max. 100 chars.)
	Proposed transcript title (max. 30 chars.)
Will No	the crosslistings change?
	Current crosslistings
	Proposed crosslistings
Will No	the "repeatability" of the course change?
	Current repeatability

Catalog Changes

Will the credits change?

No

Current minimum credits

1

Current maximum credits

1

Proposed minimum credits

Proposed maximum credits

Will the grading system change?

No

Current grading system

Proposed grading system

Will the published course description change?

Yes

Current course description

Part two of senior capstone requirement. Students will present data gathered and analyzed as part of the senior project. Outside speakers will address hot topics and emerging issues in the field.

Proposed course description

Part two of senior capstone requirement. Students will present data gathered and analyzed as part of the senior project.

Will the prerequisites change?

No

Current prerequisites and other requirements

Food Sci 602

Proposed prerequisites and other requirements

Designation Changes

VIII the Liberal Art Vo	s and Sciences (LAS) designation change?
What change	is needed?
What is the ra	ationale for seeking LAS credit?
Vill the level of the	e course change for L&S attributes?
Current level	:
Proposed lev	rel:
Vill the L&S bread √o	th requirement change?
Current brea	dth:
Proposed bre	eadth:
Vill the General Ec √o	ducation Requirement change?
Current GER	:
Communication	on B
Proposed GE	:R

Additional Information

Explain the relationship and importance of the proposed change to existing or future programs (i.e., degrees, majors and certificates)

None

Are any of these programs outside your academic unit?

No

Indicate the subjects that are most closely aligned with the other academic units. The proposal will be sent to the academic units that support those subjects for review.

Specify which requirement(s) this change affects, if any (e.g. satisfies third-level language, meets the major's capstone requirement, fulfills PhD minor requirement)

Do any of these requirements affect programs (degrees, majors, certificates) outside your academic unit?

Indicate the subjects that are most closely aligned with the other academic unit. The proposal will be sent to the academic units that support those subjects for review.

Address the relationship of this change to other UW-Madison courses, including possible duplication of content *None*

Is there a relationship to courses outside your subject?

No

Indicate the outside affected subject(s). The proposal will be sent to the academic units that support those subjects for review.

Will any courses be discontinued as a result of this change?

No

List course number(s) and complete a course discontinuation proposal for each course

Justification Changes

Explain the need for the change

Minor course description change to reflect current contents. No changes that satisfying Comm B requirements.

Additional comments (optional)

Attach a syllabus

Additional attachments (optional)(please read "help" text before uploading an attachment)

Course Change Proposal

Subject Pharmaceutical Sciences (718) Status Under Review by Subject Owner

Proposer Kenneth D Niemeyer

Basic Information

Current course number

890

Current course title

Highlights at the Chemistry-Biology Interface I

Current published course description

Principles of key discoveries at the chemistry-biology interface. This course is required of all Chemistry-Biology Interface trainees.

Chief academic officer of this unit

Ronald R Burnette

Designee of chief academic officer for approval authority

Charles T Lauhon; Paul C Marker

Currently crosslisted with

What is the primary divisional affiliation of the course?

Biological Sciences

When will this change go into effect?

Fall 2013-2014

Basic Changes

	Datie Changes
Will the	e subject change?
	Current subject Pharmaceutical Sciences (718)
P	Proposed subject
Will the	e course number change?
	Current course number 390
P	Proposed course number
ls	s this an honors course?
	s this an individual instruction course such as directed study, independent study, research or thesis (i.e., a course with no group instruction)?
Will the	e title change?
	Current title Highlights at the Chemistry-Biology Interface I
P	Proposed title (max. 100 chars.)
P	Proposed transcript title (max. 30 chars.)
Will the	e crosslistings change?
C	Current crosslistings
P	Proposed crosslistings
	e "repeatability" of the course change?
Yes	
C	Current repeatability

Not repeatable for credit

Proposed repeatability

Repeatable for credit

	Catalog Changes
Vill the credits change? √o	
Current minimum c	redits
Current maximum o	redits
Proposed minimum	credits
Proposed maximum	ı credits
Vill the grading system o √o	hange?
Current grading sys	stem Stem
Proposed grading s	ystem
Vill the published course √o	description change?
Current course deservations of key discurrent course deservations of key discurrent trainees.	cription coveries at the chemistry-biology interface. This course is required of all Chemistry-Biology Interface
Proposed course de	escription
Vill the prerequisites cha √o	inge?
Current prerequisite	es and other requirements
Proposed prerequis	sites and other requirements

Designation Changes

Will the Liberal Arts and Sciences (LAS) designation change? No
What change is needed?
What is the rationale for seeking LAS credit?
Will the level of the course change for L&S attributes?
Current level:
Proposed level:
Will the L&S breadth requirement change?
Current breadth:
Proposed breadth:
Will the General Education Requirement change?
Current GER:
Proposed GER

Additional Information

Explain the relationship and importance of the proposed change to existing or future programs (i.e., degrees, majors and certificates)

This change is being made at the request of the faculty directors and administrators of the Chemistry-Biology Interface (CBI) Training Grant. Students who are CBI trainees are typically Department of Chemistry, Department of Biochemistry, or Pharmaceutical Sciences Division graduate students.

Are any of these programs outside your academic unit?

Yes

Indicate the subjects that are most closely aligned with the other academic units. The proposal will be sent to the academic units that support those subjects for review.

Biochemistry (200) Chemistry (224)

Specify which requirement(s) this change affects, if any (e.g. satisfies third-level language, meets the major's capstone requirement, fulfills PhD minor requirement)

None

Do any of these requirements affect programs (degrees, majors, certificates) outside your academic unit?

Indicate the subjects that are most closely aligned with the other academic unit. The proposal will be sent to the academic units that support those subjects for review.

Address the relationship of this change to other UW-Madison courses, including possible duplication of content *This is a graduate seminar course based on original research.*

Is there a relationship to courses outside your subject?

No

Indicate the outside affected subject(s). The proposal will be sent to the academic units that support those subjects for review.

Will any courses be discontinued as a result of this change?

No

List course number(s) and complete a course discontinuation proposal for each course

Justification Changes

Explain the need for the change

The purpose of the course is to provide an opportunity for CBI Trainees to exchange ideas and knowledge across disciplinary and departmental lines. Trainees are typically funded for 2-3 years, but remain part of the CBI community through graduation and enroll in 890 (fall) and its counterpart 891 (spring) throughout their graduate careers. Each semester the course consists of trainees discussing aspects of their research. As with most graduate seminar courses, the course should have been set up originally to allow for repeatability.

Additional comments (optional)

It is possible that the Department of Chemistry and/or the Department of Biochemistry will soon be putting forward proposals to cross-list this course with Pharmaceutical Sciences, which would be welcomed.

Attach a syllabus

Additional attachments (optional)(please read "help" text before uploading an attachment)

Course Change Proposal

Subject Pharmaceutical Sciences (718) Status Under Review by Subject Owner

Proposer Kenneth D Niemeyer

Basic Information

Current course number

891

Current course title

Highlights at the Chemistry-Biology Interface II

Current published course description

Principles of key discoveries at the chemistry-biology interface. This course is required of all Chemistry-Biology Interface trainees.

Chief academic officer of this unit

Ronald R Burnette

Designee of chief academic officer for approval authority

Charles T Lauhon; Paul C Marker

Currently crosslisted with

What is the primary divisional affiliation of the course?

Biological Sciences

When will this change go into effect?

Spring 2013-2014

Basic Changes

	Basic Grianges
Will the subject chanç <i>No</i>	je?
Current subject Pharmaceutical S	Sciences (718)
Proposed subje	ct
Will the course number	er change?
Current course i	number
Proposed cours	e number
Is this an honors	s course?
	lual instruction course such as directed study, independent study, research or thesis (i.e., a group instruction)?
Will the title change?	
Current title Highlights at the	Chemistry-Biology Interface II
Proposed title (r	nax. 100 chars.)
Proposed transc	cript title (max. 30 chars.)
Will the crosslistings	change?
Current crosslis	tings
Proposed cross	listings
Will the "repeatability Yes	" of the course change?
700	
Current repeatal	pility

Not repeatable for credit

Proposed repeatability

Repeatable for credit

Catalog Changes	
Vill the credits change? √o	
Current minimum credits	
Current maximum credits	
Proposed minimum credits	
Proposed maximum credits	
Vill the grading system change? √o	
Current grading system	
Proposed grading system	
Vill the published course description change? √o	
Current course description Principles of key discoveries at the chemistry-biology interface. This course is required of all Chemistry-Biology Interfaction trainees.	ice
Proposed course description	
Vill the prerequisites change? No	
Current prerequisites and other requirements	
Proposed prerequisites and other requirements	

Designation Changes

Will the Liberal Arts and Sciences (LAS) designation change? No
What change is needed?
What is the rationale for seeking LAS credit?
Will the level of the course change for L&S attributes?
Current level:
Proposed level:
Will the L&S breadth requirement change?
Current breadth:
Proposed breadth:
Will the General Education Requirement change?
Current GER:
Proposed GER

Additional Information

Explain the relationship and importance of the proposed change to existing or future programs (i.e., degrees, majors and certificates)

This change is being made at the request of the faculty directors and administrators of the Chemistry-Biology Interface(CBI) Training Grant. Students who are CBI trainees are typically Department of Chemistry, Department of Biochemistry, or Pharmaceutical Sciences Division graduate students.

Are any of these programs outside your academic unit?

Yes

Indicate the subjects that are most closely aligned with the other academic units. The proposal will be sent to the academic units that support those subjects for review.

Biochemistry (200) Chemistry (224)

Specify which requirement(s) this change affects, if any (e.g. satisfies third-level language, meets the major's capstone requirement, fulfills PhD minor requirement)

None

Do any of these requirements affect programs (degrees, majors, certificates) outside your academic unit?

Indicate the subjects that are most closely aligned with the other academic unit. The proposal will be sent to the academic units that support those subjects for review.

Address the relationship of this change to other UW-Madison courses, including possible duplication of content *This is a graduate seminar course based on original research.*

Is there a relationship to courses outside your subject?

Indicate the outside affected subject(s). The proposal will be sent to the academic units that support those subjects for review.

Will any courses be discontinued as a result of this change?

No

List course number(s) and complete a course discontinuation proposal for each course

Justification Changes

Explain the need for the change

The purpose of the course is provide an opportunity for CBI Trainees to exchange ideas and knowledge across disciplinary and department lines. Trainees are typically funded for 2-3 years, but remain part of the CBI community through graduation and enroll in 891 (spring) and its counterpart 890 (fall) throughout their graduate careers. Each semester the course consists of trainees discussing aspects of their research. As with most graduate seminar courses, the course should have been set up originally to allow for repeatability.

Additional comments (optional)

It is possible that the Department of Chemistry and/or the Department of Biochemistry will soon be putting forward proposal(s) to crosslist this course with Pharmaceutical Sciences, which would be welcomed.

Attach a syllabus

Additional attachments (optional)(please read "help" text before uploading an attachment)

New Course Proposal

Subject Zoology (970)
Proposer Nazan Atilla Gillie

Status Under Review by School/College

Basic Information

Course Title

Introduction to Wisconsin Ecology: A graduate seminar

Transcript Title (limit 30 characters)

Intr. to WI Ecol.: Grad Sem

Three-digit course number

953

Is this an honors course?

No

Is this an individual instruction course such as directed study, independent study, research or thesis (i.e., a course with no group instruction)?

No

Will this course be crosslisted?

Yes

Note the crosslisted subjects

Forest And Wildlife Ecology (396) Botany (208) Envir St - Gaylord Nelson Inst (360) Entomology (355) Geography (416)

What is the primary divisional affiliation of this course?

Biological Sciences

Is this a topics course?

No

Can students enroll in this course more than once for credit?

No

If yes, please justify

Typically Offered

Fall

Catalog Information

Minimum credits

1

Maximum credits

2

Grading System

Satisfactory/Unsatisfactory (certain graduate-level courses only)

Course Description (will be published in Course Guide)

This seminar course will introduce new graduate students to the diversity of ecologists across Wisconsin Ecology departments. Course meetings will include discussions of key topics in professional development, one-time research presentations by faculty members, and discussions of assigned papers with senior graduate students.

Does the course have prerequisites or other requirements?

No

List the prerequisites and other requirements for the course

Indicate the component(s) that comprise the course. Check all that apply Seminar

Administrative Information

Chief Academic Officer

Jeffrey D Hardin

Designee of chief academic officer for approval authority

Nada Wigand; Nazan Atilla Gillie

If there are additional contacts, please list

Peter McIntyre

Will any courses be discontinued as a result of this proposal?

No

List course number(s) and complete a course discontinuation proposal for each course

Beginning Term

Fall 2013-2014

Academic/Program Information

Is this course intended for a new academic program for which UAPC approval has not yet been finalized? No

Which program?

Explain the relationship and importance of the proposed course to existing programs or future programs. (A program is a certificate, major or degree.)

There is no standing course in any Wisconsin Ecology department that introduces first year graduate students to the program, the human resources of UW-Madison, and to the complexities of professional development for graduate students. Thus, there is no redundancy with existing courses.

Are any of these programs outside your academic unit?

Indicate the subjects that are most closely aligned with the other academic units. The proposal will be sent to the academic units that support those subjects for review.

Specify which requirement(s) this course meets, if any (e.g. satisfies third-level language, meets the major's capstone requirement, fulfills PhD minor requirement).

This course would become part of the curriculum for graduate certificate in Ecology planned by Wisconsin Ecology.

Do any of these requirements affect programs (degrees, majors, certificates) outside your academic unit? *No*

Indicate the subjects that are most closely aligned with the other academic units. The proposal will be sent to the academic units that support those subjects for review.

Course Content

Describe the course content

The course will meet once or twice per week, depending on the number of credit hours and instructor preference. Students will read one assigned scientific paper per week, and co-lead the discussion once during the course of the semester. Desired outcomes of these meetings include the following: 1) a strong cohort bond among new graduate students across departmental boundaries, 2) awareness of the breadth and depth of ecological research at UW, 3) dialogue between new and senior graduate students, 4) strategic thinking and sense of ownership regarding professional development. The first few meetings will be roundtable discussions on basic issues of professional conduct, including time management, developing a positive relationship with your advisor, seeking grants for graduate research, and communicating with broad audiences. The remainder of the course meetings will introduce students to a variety of faculty and approaches to ecological research. The first weekly meeting will follow a 'faculty-on-parade' model; one professor will discuss her/his conceptual interests, scientific approach, and research results, followed by questions from students. Faculty presenters will be selected to represent the full range of subdisciplines, departments, and personal backgrounds within Wisconsin Ecology. The course instructor will act as moderator for these meetings, which will last for 1 hour per week. When offered for a two credits rather than one credit, the weekly course meeting will either be extended to last 2 hours, or a second meeting day will be selected for a second 1-hour meeting. The additional meeting time will generally be devoted to discussion of one published paper written by the faculty presenter from that week. Discussion will be led by the new graduate students, and a senior graduate student from the faculty presenter's lab will help explain the work and offer a personal perspective on the research process from a student viewpoint. Students also will be encouraged to discuss other aspects of graduate life with the senior graduate student. The atmosphere in both weekly meetings will be casual, with priority placed on interaction among new students and with the visiting faculty and senior graduate students. Ecological research will be broadly construed, including evolutionary, conservation, and social science perspectives.

Address the relationship of this course to other UW-Madison courses, including possible duplication of content

This course is explicitly designed for incoming PhD students in Wisconsin Ecology departments. There is no standing course in any of these departments designed to introduce new students to the Wisconsin Ecology program, jumpstart their networking with faculty and senior graduate students, and generate a cohort bond and support structure for new students across departments. While various departments occasionally offer graduate seminars on professional development and allied topics, most such courses are intended for mid-level or finishing graduate students. This class is specifically for first-year students. No existing courses utilize the combination of faculty seminars, literature discussions with senior students, and professional development discussions that will be featured in the proposed course.

Is there a relationship to courses outside your subject?

No

Indicate the outside affected subject(s). The proposal will be sent to those subjects for review.

List the instructor name and title (list multiple if applicable)

Peter McIntyre, primary, one faculty member will teach the course each fall semester, with rotation among 4-5 faculty members representing both L&S and CALS departments.

If the instructor is not a tenured or tenure-track faculty member at UW-Madison, please explain the instructor's qualifications here. Then, go to the "Justifications" tab and upload the instructor's c.v. in the "Additional Attachments" section.

Attach a syllabus. See "help" for an explanation of what must be included in the syllabus. 957.pdf

Justifications

Explain how this course contributes to strengthening your curriculum

This course fills a gap in all Wisconsin Ecology member departments. We have no consistent mechanism for helping our new graduate students get situated at UW-Madison during their first year. This new course will accomplish three objectives for graduate education: a) introducing new graduate students to faculty from across the Wisconsin Ecology program, b) introducing new graduate students to senior graduate students from across the Wisconsin Ecology program, c) providing formal guidance on time management, professional conduct, and funding opportunities to new graduate students, and d) fostering a cohort bond and support network for new students. As such, it will be the cornerstone of the new Ecology certificate program sponsored by Wisconsin Ecology. It will also be notable for covering topics that fall within a wide range of departments; this breadth will help expand the perspective of our new students, and foster awareness of the variety of ecological research in the physical, natural, and social sciences at UW-Madison.

Provide an estimate of the expected enrollment

The course would be offered every fall, with expected enrollment of 15-20 first-year PhD students.

Justify the number of credits, following the federal definition of a credit hour (see help). Include the number of contact hours or, if contact hours are not an accurate measure of credit, provide an explanation of how credits are measured The class will meet twice a week for 50 minutes or over the course of the semester it will be 1500 minutes for 2 credits.

If this is a variable credit course, provide rationale

Not a variable credit course.

Additional comments (optional)

There is no standing course in any Wisconsin Ecology department that introduces first year graduate students to the program, the human resources of UW-Madison, and to the complexities of professional development for graduate students. Thus, there is no redundancy with existing courses.

Additional attachments (optional) (please read " help" before uploading an attachment)

L&S Designations

Should the course be reviewed for L&S liberal arts and science (LAS) credit?

Yes

What is the rationale for seeking LAS credit?

LAS credit automatically granted because this is an L&S course

Level of the course, for L&S attributes (value required for all L&S courses and courses requesting LAS credit)

Advanced

Should the course be reviewed for L&S breadth requirements? *No*

Indicate which:

General Education Designations

Should the course be reviewed for the general education requirement?

No

Which requirements?





Introduction to Wisconsin Ecology: A Graduate Seminar

Zoology 955, "Limnology Seminar"; 1 credit Pete McIntyre, pmcintyre@wisc.edu, 890-3416



Meetings: Tuesday & Thursday 4:00-5:30 pm, Center for Limnology (Hasler) Room 210

Target audience: This seminar is designed specifically for incoming PhD students who are adjusting to graduate life at UW. Enrollment will be capped at 22 students. If space remains, incoming M.S. students and second-year PhD students will be considered.

This seminar course will introduce new graduate students to the diversity of ecologists across Wisconsin Ecology departments. Desired outcomes of the seminar include the following:

- 1) a strong cohort bond among new graduate students across departmental boundaries,
- 2) awareness of the breadth and depth of ecological research at UW,
- 3) dialogue between new and senior graduate students,
- 4) strategic thinking and sense of ownership regarding professional development.

We will make the most of two 90-minute meetings per week, with minimal outside work load. The Tuesday meeting will follow the 'faculty-on-parade' model; one professor will discuss her/his conceptual interests, scientific approach, and research results for an hour, followed by 30 minutes of student-led questions. Faculty presenters will be selected to represent the full range of subdisciplines, departments, and personal backgrounds within Wisconsin Ecology. I will act as moderator for all Tuesday meetings.

After reading one paper on the faculty presenter's research, the Thursday meeting will be a discussion with a senior graduate student from that lab. Discussion of the paper will be led by two of the new graduate students, with the senior graduate student helping to explain the work and offering a personal perspective on the research process from a student viewpoint. Students also will be encouraged to discuss other aspects of life as a graduate student. No faculty will be present during the Thursday conversation, encouraging students to talk freely.

The atmosphere in both weekly meetings will be casual, with priority placed on interaction among new students and with the visiting faculty and senior graduate students. Ecological research will be broadly construed, including evolutionary, conservation, and social science perspectives.

Although we are using a Zoology course number, the presenting faculty will represent a wide cross-section of ecological subdisciplines and departments. The intent is for this seminar to become an annual offering, serving as a cornerstone course for ecologically-minded PhD students as they begin their degree program. To that end, we will be seeking designation of this seminar as a new, cross-listed course beginning in Fall 2013.





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Schedule overview:

- 4 September Introductions, and discussion of time management (no meeting on 6 Sept)
- 11 & 13 September Care and maintenance of your advisor; Communicating to broad audiences
- 18 &20 September Faculty presenter & senior graduate student
- 25 & 27 September Faculty presenter & senior graduate student
- 2 & 4 October Faculty presenter & senior graduate student
- 9 & 11 October Faculty presenter & senior graduate student
- 16 & 18 October Faculty presenter & senior graduate student
- 23 & 25 October Faculty presenter & senior graduate student
- 30 October & 1 November Faculty presenter & senior graduate student
- 6 & 8 November Faculty presenter & senior graduate student
- 13 & 15 November Faculty presenter & senior graduate student
- 20 November Grants for graduate student research
- 27 & 29 November Faculty presenter & senior graduate student
- 4 & 6 December Faculty presenter & senior graduate student
- 11 & 13 December Communicating to broad audiences revisited; feedback on this course