



Curriculum Proposal

Please type or select the requested information. Print completed forms, add appropriate paper attachments, and route through MSU's curricular process for recommendations and decisions.

		(Check all that apply):		Proposal #	281
College:	Arts and Humanities	<input checked="" type="checkbox"/>	Undergraduate	Effective Date of Change:	
Department:	Philosophy	<input checked="" type="checkbox"/>	Graduate	Academic Year	06-07
Program:			CIP #	(For Office Use Only)	
Type of Change Proposed:	COURSE PROPOSALS			Course Designator and Number	Number of Credits
Title Current:				Phil 481/581	3
Title Proposed:	Philosophy of Biology				
24-Char. Abbrev:	Phil. of Biol.			(if applicable)	

Include a course or program description for the Bulletin (30-40 words maximum for courses, 100 for programs):

This course examines conceptual and philosophical issues in biology, the nature and scope of biological explanation and conflicts between evolutionary and religious explanations for the origin of life.

Rationale or Justification for change:

The subject is within the expertise of one of our faculty who specializes in philosophy of science. She wants to teach the course and students have requested the course. It is an appropriate expansion of our curriculum. It has twice been taught as a Special Topics course.

*****For General Education or Cultural Diversity Courses Only*****

General Education Course:		Cultural Diversity Course:
GE Category #	GE Category Name (Maximum of 3 Categories)	(Please check one.)
N/A		<input type="checkbox"/> Core (At least 75% devoted to topics of race, gender, sexual orientation, age, class, and disabilities as they occur in United States Society.)
N/A		<input type="checkbox"/> Related (At least 25% devoted to the above topics or to a global perspective on topics related to African American, Asian, Hispanic, and Native American inhabitants of the United States.)
N/A		

? For Writing Intensive Courses, attach a description of the kind and quantity of writing.
 ? For Upper Division Courses, include a description of the respects in which it is broad and general rather than narrow and specific, and so suitable as GE.

Attach paper copies of the following:

- Syllabus or course outline.
- Course's student learning outcomes associated with each GE competency or CD designation.
- List of strategies to be used to assess students' achievement of each GE competency or CD designation.

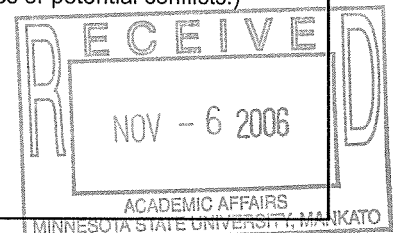
*****For New Courses*****

(Check all that apply):	Instructional Type: <input type="checkbox"/> Lecture	Course will be offered:
<input checked="" type="checkbox"/> Course is an elective.	Grading Format: <input checked="" type="checkbox"/> Grade <input type="checkbox"/> P/N	<input type="checkbox"/> Fall Semester
<input type="checkbox"/> Course is required for program		<input type="checkbox"/> Spring Semester
<input type="checkbox"/> Pre- or Co-requisites:		<input type="checkbox"/> Summer Session
<input type="checkbox"/> Other courses are being changed or eliminated. (Explain.)		

Course content or title is similar to courses in other departments. (Attach copy of letter of agreement with other program(s) contacted. Indicate the nature of the discussions and/or resolution of differences or potential conflicts.)

Attach paper copies of the following:

- Syllabus or course outline.
- Course's student learning outcomes.
- A list of resources required to offer and support this course.
- A description of how teaching this course will affect department staffing.
- If 400/500 level course, an explanation of added expectations of graduate students.



Minnesota State University, Mankato
Curriculum Proposal

Signature Page

Department

Recommended (Category/ies _____)
 Not Recommended (Category/ies _____)



 Department Chair

10/31/06

 Date

Comments:

College Curriculum Committee

Recommended (Category/ies _____)
 Not Recommended (Category/ies _____)



 Committee Chair

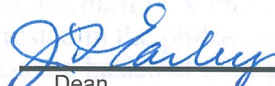
11-3-06

 Date

Comments:

College Dean

Recommended (Category/ies _____)
 Not Recommended (Category/ies _____)



 Dean

10/03/06

 Date

Comments:

General Education Subcommittee

Recommended (Category/ies _____)
 Not Recommended (Category/ies _____)

 General Education Subcommittee Chair

 Date

Comments:

Undergraduate Curriculum and Academic Policy Committee

Recommended (Category/ies _____)
 Not Recommended (Category/ies _____)



 UCAP Faculty Chair

3/1/07

 Date

Comments:

Faculty Association Graduate Committee

Recommended
 Not Recommended

 Faculty Association Graduate Chair

 Date

Comments:

Graduate Dean

Recommended
 Not Recommended

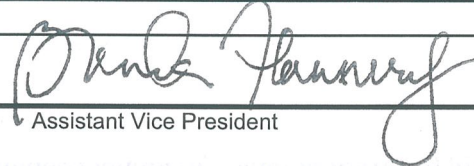
 Graduate Dean

 Date

Comments:

Academic Affairs Council

Recommended (Category/ies _____)
 Not Recommended (Category/ies _____)



 Assistant Vice President

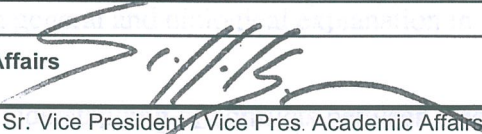
3/12/07

 Date

Comments:

Senior Vice President and Vice President for Academic Affairs

Approved (Category/ies _____)
 Not Approved (Category/ies _____)



 Sr. Vice President / Vice Pres. Academic Affairs

3/13/07

 Date

Comments:

Philosophy

Philosophy 481/581
Philosophy of Biology

NOTE: This course has previously been taught as Special Topics, PHIL
450/550

A. Course Outline

This course will examine conceptual and philosophical issues in biology. Some readings will be by biologists such as Stephen J. Gould, Richard Lewontin, Ernst Mayr and Richard Dawkins. These biologists are, however, interested in the philosophical complexities of biological inquiry. These readings will address the basics of evolutionary theory. Most of the readings will be by philosophers and will address conceptual and philosophical issues. Included among the philosophers to be read are Daniel Dennett, Michael Ruse, Ruth Millikan, David Hull¹³⁴ and Elliott Sobel. Topics (each addressed for at least a single week, some for more than a week) include (1) the varieties of scientific reasoning; (2) the nature of reasoning, explanation and prediction in biology; (3) reductive explanation in science and in biology; (4) levels of explanation: teleological vs physical vs historical; (5) 'just so' stories in evolutionary biology; (6) biological classification; are natures joints discovered or made? (7) What is the basic unit of explanation: genes, individuals, groups and species; (8) adaptation, natural selection and chance; (9) evolution vs, design; (10) evolution and mind; Is psychobiology a way to explain mental phenomena?; (11) evolution and social phenomena: Is sociobiology a way to explain social phenomena?; (12) evolution and ethics.

#2

The texts will include one edited collection of readings and one full book length treatment of the subject. In both cases there are numerous choices from which to select. The following are among the best.

Alternative texts of edited readings: *Philosophy of Biology* (Prentice Hall), edited by Michael Ruse; *Philosophy of Biology*(Oxford), edited by David Hull

Alternative book length treatments: (1) *The Philosophy of Biology: An Episodic History*, by Marjorie Green and David Depew (2) *The Philosophy of Biology* (Dimensions of Philosophy Series, Westview Press), by Elliott Sober

B. Course Learning outcomes:

- (1) Students will have a demonstrated critical understanding of contemporary and historical views about the nature scientific explanation in general and biological explanation in particular;
- (2) Students will have a demonstrated critical understanding of conflicts between scientific and religious accounts of the origin of biological life;

(3) Students will have a demonstrated critical understanding of explanatory and conceptual complexities of evolutionary theory;

(4) Students will have a demonstrated critical understanding of both the prospects for and the limitations on an understanding mental and social phenomena in biology.

Outcomes will all be assessed by classroom participation and frequent written assignments. Students will be required to write (at least) four short papers (four pages each) and one longer term paper (10-12 pages).

C. No additional resources are needed to support this course.

D. Teaching this course will not affect department staffing.

E. Graduate students will be required to write a longer term paper (15 pages) and to give a class presentation. They will be encouraged to connect both the term paper and the class presentation to interests/ topics in their field of study-- the Philosophy Department does not have a graduate program.

-----Original Message-----

From: Marg, Gregg A
Sent: Mon 10/30/2006 1:09 PM
To: Liebendorfer, Richard; Bailey, Cathryn
Subject: RE: Phil of Biology

Hi Cathryn,

Dick mentioned the new course to me at lunch and then sent the materials below. The proposed course has no significant overlap with any course taught within the Department of Biological Sciences. I think the course looks very interesting and I strongly support the proposal. Please let me know if there is anything else I can do to help.

Gregg Marg, Chairperson
Department of Biological Sciences

From: Liebendorfer, Richard
Sent: Monday, October 30, 2006 12:57 PM
To: Marg, Gregg A; Bailey, Cathryn
Subject: RE: Phil of Biology

Gregg,

Here is the course description as on the proposal:

Philosophy 481/581
Philosophy of Biology

NOTE: This course has previously been taught as Special Topics, PHIL
450/550

A. Course Outline

This course will examine conceptual and philosophical issues in biology. Some readings will be by biologists such as Stephen J. Gould, Richard Lewontin, Ernst Mayr and Richard Dawkins. These biologists are, however, interested in the philosophical complexities of biological inquiry. These readings will address the basics of evolutionary theory. Most of the readings will be by philosophers and will address conceptual and philosophical issues. Included among the philosophers to be read are