



Course Approval Form

For approval of new courses and deletions or modifications to an existing course.

More information is located on page 2.

Action Requested:

Create new course Delete existing course

Modify existing course (check all that apply)

Title Credits Repeat Status Grade Type

Prereq/coreq Schedule Type Restrictions

Course Level:

Undergraduate

Graduate

College/School: Department:

Submitted by: Ext: Email:

Subject Code: Number: Effective Term: Fall

(Do not list multiple codes or numbers. Each course proposal must have a separate form.) Spring Year

Summer

Title: Current

Banner (30 characters max including spaces)

New

Credits: 3 Fixed Variable

Repeat Status: Not Repeatable (NR) Total repeatable credits allowed:

Repeatable within degree (RD)

Repeatable within term (RT)

Grade Mode: Regular (A, B, C, etc.) Satisfactory/No Credit Special (A, B C, etc. +IP)

Schedule Type Code(s): Lecture (LEC) Lab (LAB) Recitation (RCT) Internship (INT)

Independent Study (IND) Seminar (SEM) Studio (STU)

Prerequisite(s):

Corequisite(s):

Special Instructions: (restrictions for major, college, or degree; cross-listed courses; hard-coding; etc.)

Catalog Copy for NEW Courses Only (Consult University Catalog for models)

Description (No more than 60 words, use verb phrases and present tense)	Notes (List additional information for the course)
Covers the evolution, biology, ecology, and behavior of marine mammals from polar bears and sea otters to whales and dolphins. Marine mammal conservation and policy is also a major component of the course; several lecture sessions are devoted to the issue of whaling, threats to marine mammal populations, and recent conservation issues such as marine mammals and noise pollution. The course also includes a number of guest lectures from a variety of international marine mammal experts.	.
Indicate number of contact hours: Hours of Lecture or Seminar per week: <input type="text" value="3.0"/> Hours of Lab or Studio: <input type="text"/>	
When Offered: (check all that apply) <input type="checkbox"/> Fall <input type="checkbox"/> Summer <input checked="" type="checkbox"/> Spring	

Approval Signatures

Department Approval _____ Date _____ College/School Approval _____ Date _____

If this course includes subject matter currently dealt with by any other units, the originating department must circulate this proposal for review by those units and obtain the necessary signatures prior to submission. Failure to do so will delay action on this proposal.

Unit Name	Unit Approval Name	Unit Approver's Signature	Date

For Graduate Courses Only

Graduate Council Member _____ Provost Office _____ Graduate Council Approval Date _____

**Course Proposal Submitted to the Graduate Council
by
The College of Science**

1. COURSE NUMBER AND TITLE:

BIOL 454 marine mammal biology and conservation

Course Prerequisites:

BIOL 309 or BIOL 449, or permission of instructor

Catalog Description:

Covers the evolution, biology, ecology, and behavior of marine mammals from polar bears and sea otters to whales and dolphins. Marine mammal conservation and policy is also a major component of the course; several lecture sessions are devoted to the issue of whaling, threats to marine mammal populations, and recent conservation issues such as marine mammals and noise pollution. The course also includes a number of guest lectures from a variety of international marine mammal experts.

2. COURSE JUSTIFICATION:

Course Objectives:

To provide a students with an understanding of the specialist biology and ecology of marine mammals (whales, dolphin, pinnipeds, sirenians, polar bears and sea otters). Also to provide information on conservation issues (many of which are unique) that effect this specialized mammal group.

Course Necessity:

The course is currently being taught as EVPP 419, and cross-listed as a BIOL course under a special topics course code. However, due to the large number of biology student enrolments, we are seeking a BIOL course allocation.

Course Relationship to Existing Programs:

Will be eligible for elective credit for the BS in Environmental Science (aquatic ecology and conservation concentrations) and the BS in biology (marine biology and environmental and conservation biology concentrations)

Course Relationship to Existing Courses:

Crosslisted with EVPP 419, and co-meets with EVPP 519 (n.b .graduate students are graded differently and receive separate assignments). Will have an optional lab/field component (BIOL 455)

3. APPROVAL HISTORY:

4. SCHEDULING AND PROPOSED INSTRUCTORS:

Semester of Initial Offering: Spring 2011

Proposed Instructors: ECM Parsons

5. TENTATIVE SYLLABUS: See attached.

MARINE MAMMAL BIOLOGY & CONSERVATION

BIOL 454

SPRING SEMESTER 2011

3.0 Credits

Monday 4:30-7:10 pm

DATE	LECTURE TOPIC
Jan 25	Polar bears
“ “	Otters
Feb 1	Mantees
“ “	Pinniped diversity & evolution
Feb 8	Pinniped adaptations
“ “	Pinniped biology
Feb 15	Pinniped behavior
“ “	Pinniped conservation
Feb 22	Evolution of cetaceans
“ “	Baleen whales
Mar 1	TEST 1
<i>Mar 8</i>	<i>SPRING BREAK</i>
Mar 15	Toothed whales
“ “	
	Dolphins & porpoises
	Cetacean adaptations
<i>Mar 22</i>	
“ “	Cetacean behavior
Mar 29	Man & cetaceans -
“ “	The history of whaling I & II
April 5	Cetacean conservation (International & US)
“ “	<i>Hot Conservation Topic: Whales and Sonar</i>
April 12	Key species: the humpback whale
“ “	Key species: the bottlenose dolphin
	Research techniques
April 19	
“ “	Marine mammal tourism
	ASSIGNMENT DUE
	Guest lecture 1+2
<i>April 26</i>	
May 3	Guest lecture 3+4
May 11	FINAL (4:30-7:15)

Optional Field Trip

There will also be a trip to the Smithsonian to meet with marine mammal scientists and to get a behind the scenes tour of the marine mammal collection. The date of this trip will be arranged during class (to avoid class schedule conflicts)

Instructor: Dr Chris Parsons 3033 David King Hall
Office hours: Monday: 11:00am - 4.00pm
E-mail: ecm-parsons@earthlink.net

Textbook

Parsons, E.C.M., Bauer, A., McAfferty, D. and Wright, A.J. *An Introduction to Marine Mammal Biology and Conservation*. Jones & Bartlett Publishing: Sudbury, MA and London, England.

Suggested reading:

W.F. Perrin, B. Würsig and J.G.M. Thewissen (eds.) *Encyclopedia of Marine Mammals* (Eds.). Academic Press, New York.

J.E Reynolds III and J. R. Twiss Jr. (Eds.) 1999. *The Biology of Marine Mammals*. Smithsonian Press, Washington DC.

A. Berta, J.L. Sumich and K.M. Kovacs. 2006. *Marine Mammals: Evolutionary Biology*. 2nd Ed. Academic Press, New York.

J.E Reynolds III and others. 2005. *Marine Mammal Research: Conservation Beyond Crisis*. The Johns Hopkins University Press, Baltimore.

Grading procedure: The mid-term and final examination are worth 100 points each. A written assignment will be given worth a further 100 points [for 300 points total]. The final exam may include comprehensive questions. University grading procedures will be followed, i.e. 90 - 100 = A; 80 - 89 = B; 70 - 79 = C etc.

Graduate students and undergraduate students taking these courses, although the courses co-meet, for grading purposes and assessments will be treated differently. For the assignment undergraduates are expected to deliver a 3000 word minimum and graduate students have a 6000 word minimum. Graduate and undergraduate assignments and exams will be graded separately and to different standards.

Materials: Copies of the lecture slides will be provided for students as ppt files on blackboard. Materials may also be emailed to students. Students are responsible for ensuring that their e-mail accounts have enough storage space to receive these files.

Tests and exams will cover lectures or presentations, and any handouts. All exams will be taken as scheduled. Make-ups will not be given except in exceptional circumstances as agreed prior to the exam date. Make-up exams will be all essay questions. Any missed exams will be scored as zero.

Honor Code: Adherence to the *GMU Honor Code* is expected of all students.