Syllabus for Biology/Psychology 250
Animal Behavior
Fall 2011

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Office Hours: MWF 10:00 AM - 11:00 AM and by appointment

Class Times & Rooms:
Lecture: MWF 4a (11:45 AM-12:35 PM)
330 Pricilla Payne Hurd Academic Complex (PPHAC)
Lab A: Monday (1:15 PM-4:15 PM)
301 Collier Hall of Science
Lab B: Friday (1:15 PM-4:15 PM)
300 Collier Hall of Science

Course Description: One of science's most absorbing mysteries continues to be the varied behaviors of animals. Ethology, behavioral ecology, and sociobiology are those branches of biology which, by observing and manipulating the behaviors of animals under natural conditions, hope to better understand these processes. Broadly comprehensive in their approach, these disciplines seek to trace the outward manifestations of behaviors back through their requisite anatomical and physiological machinery. Ultimately these behaviors can be understood in light of the genetic and evolutionary mechanisms that have shaped them through time.

Course Objectives: Upon completion of this course students will be able to demonstrate:

1) knowledge of basic concepts in animal behavior, including examples of specific behaviors and their scientific justification
2) knowledge of and ability to apply the scientific process as it applies to the study of animal behavior
3) an ability to find, evaluate, & use published scientific information
4) an ability to objectively interpret data and to use quantitative methods to analyze these data
5) competence in scientific writing and oral communication
6) an ability to work together in teams
7) an ability to integrate concepts within and among disciplines of science
8) understanding of the relevance of the animal behavior to society

Text/Materials: Dugatkin, L.A. 2009. *Principles of Animal Behavior* (2nd edition). Norton & Co., NY. (ISBN: 13-978-0-393-93169-3)

Grading:	Lecture Exam 1	100 points
	Lecture Exam 2	100 points
	Lecture Final Exam	100 points
	Laboratory Reports/Attendance	200 points
	Independent Project	100 points
		600 points

Grading Scale: The grading scale is as follows:

A	=	93.0-100%	C	=	73.0-76.9%
A-	=	90.0-92.9%	C-	=	70.0-72.9%
B+	=	87.0-89.9%	D+	=	67.0-69.9%
B	=	83.0-86.9%	D	=	63.0-66.9%
B-	=	80.0-82.9%	D-	=	60.0-62.9%
C+	=	77.0-79.9%	F	=	59.9% and below

Class Attendance:

It has been my experience that students who do poorly in class generally have numerous absences. While no formal lecture attendance will be taken, I strongly suggest that you attend all sessions unless you have a valid reason not to. I will speak personally with anyone who, in my judgement, shows excessive absences and/or lateness to class. It is in your best interest, therefore, to attend and participate in class. If you are unable to take an exam on the date given you may arrange with me ahead of time to take it on an alternate date and/or time. If you miss an exam you MUST provide me with a written excuse from either the Health Center, a physician or the Dean for Academic Affairs Office.

Laboratory sessions, because they involve hands-on experiences which cannot be effectively mastered without performing them, are especially critical. Therefore, I will be taking attendance at these sessions. If you are unable to attend a laboratory session because of illness or other valid excuse please see me about the possibility of making up the session. Because of the nature of the subject matter this may not always be possible.

Course Guidelines:

All assignments must be handed in according to the due date announced for that assignment. Late work will be penalized.

All students are expected to follow the principles of academic honesty as set out in the policies of Moravian College. See the Student Handbook for details. Any and all written work must be done in your own words (with the exception of direct quotations which are clearly indicated as such), and written work must include proper citations indicating the sources for any ideas, concepts, facts, or

other information derived from others, whether or not you have restated it in your own words. Any cases of suspected cheating or plagiarism will be referred to the Academic Affairs Office. Academic dishonesty may result in a failing grade in the course.

In case of any crisis or emergency, or an extended absence from class, you must inform me directly, through Learning Services or the Academic Affairs Office.

Learning disability accommodations: students who wish to request accommodations in this class for support of learning disabilities should contact Learning Services (x1510). Accommodations cannot be provided until authorization is received from the appropriate disability support provider on campus.

These guidelines are intended for the benefit of the students as far as clarification of my expectations for the course; however, in exceptional circumstances I reserve the right to exercise discretion in the application of these guidelines to individual cases or to refer a particular case to the Academic Dean if necessary.

Classroom Expectations:

Respect for others' answers and views.

Disruptive behavior during class will result in your dismissal from the class the first time, after that, disciplinary action will be taken.

Cell phones need to be turned to OFF and put away in a purse or book bag during class. Use of cell phones in any way during class will result in dismissal from class and be counted as an absence.

Non-alcoholic drinks and non-odiferous snacks are allowed in class, other odiferous food is not.

If you arrive late, be respectful by not disrupting a class already in progress**.**

Animal Behavior
Lecture Schedule
Fall 2011

Date		Lecture Topic	Dugatkin Chapter*
M Aug.	29	Principles of Animal Behavior	Chapter 1
W	31	Principles of Animal Behavior	Chapter 1
F Sept.	02	Natural Selection, Evolution & Behavior	Chapter 2
M	**05**	**No Class-Labor Day**	
W	07	Behavioral Genetics	Chapter 2
F	09	Adaptation	Chapter 2
M	12	Proximate Factors: Hormonal Control of Behavior	Chapter 3
W	14	Proximate Factors: Neural Mechanisms	Chapter 3
F	16	**No Lecture: Lab Section B trip to LGNC Monarch Butterfly Migration Lab (Depart @ 11:45 AM from Collier Hall of Science entrance)**	
M	19	**No Lecture: Lab Section A trip to LGNC Monarch Butterfly Migration Lab (Depart @ 11:45 AM from Collier Hall of Science entrance)**	
W	21	Habitat Selection, Territoriality, and Migration	Chapter 13
F	23	Habitat Selection, Territoriality, and Migration	Chapter 13
M	26	**No Lecture: Lab Section A trip to LGNC Monarch Butterfly Migration Lab (Depart @ 11:45 AM from Collier Hall of Science entrance)**	
W	28	Learning Behavior	Chapter 4
F	30	Learning Behavior	Chapter 4
M Oct.	03	Learning Behavior	Chapter 4
W	**05**	**Exam 1**	**Chs. 1-4, 13**
F	**07**	**No Lecture: Lab Section B trip to LGNC Monarch Butterfly Migration Lab (Depart @ 11:45 AM from Collier Hall of Science entrance)**	
M	**10**	**No Class-Fall Break**	
W	12	Cultural Transmission	Chapter 5
F	14	Cultural Transmission	Chapter 5
M	17	Kinship & Inclusive Fitness	Chapter 8
W	19	Kinship & Inclusive Fitness	Chapter 8
F	21	Cooperation and Altruism	Chapter 9
M	24	Cooperation and Altruism	Chapter 9
W	26	Optimal Foraging Theory	Chapter 10
F	28	Optimal Foraging Theory	Chapter 10
M	31	Learning & Foraging Behavior	Chapter 10
W Nov.	02	Antipredator Behavior	Chapter 11
F	04	Alarm Signals & Learning	Chapter 11
M	**07**	**Exam 2**	**Chs. 5, 8-11**

W	**09**	**Exam 2**	**Chapters 7-11**
F	11	Sexual Selection	Chapter 6
M	14	Sexual Selection	Chapter 6
W	16	Mating Systems	Chapter 7
F	18	Mating Systems	Chapter 7
M	21	Communication	Chapter 12
W	23	No Class-Thanksgiving	
F	25	No Class-Thanksgiving	
M	28	Communication	Chapter 12
W	30	Agressive Behaviors	Chapter 14
F Dec.	02	Endocrinology & Aggression	Chapter 14
M	05	Play Behavior	Chapter 15
W	07	Social Play Behavior	Chapter 15

Final Exam: Wednesday, December 14, 1:30PM **Chapters 6,7,12,14,15**

Biology/Psychology 250
Laboratory Schedule
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Lab A (Monday Lab)

August 29	Lab 1: Analysis of Behavior-Constructing an Ethogram
September 05	Labor Day-No Lab
September 12	Lab 2: Trip to Lehigh Valley Zoo-Constructing an Ethogram
September 19	Lab 3: Trip to Lehigh Gap Nature Center-Monarch Butterfly Tagging
September 26	Lab 4: Trip to Bake Oven Knob-Raptor Migration Behavior
October 03	Lab 5: Learning Behavior in Mice
October 10	Fall Break-No Lab
October 17	Lab 6: Altruism and the Evolution of Cooperative Behavior
October 24	Lab 7: Raptor Feeding Behavior: An Analysis of Owl Pellets
October 31	Lab 8: Behavior Genetics of Mice-Exploratory Behavior
November 07	Lab 9: Behavior Genetics of Mice-Agonistic Behavior
November 14	Work on Independent Project
November 21	No Lab – Thanksgiving Recess
November 28	6th Biennial Moravian College Animal Behavior Conference

Biology/Psychology 250
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Lab B (Friday Lab)

September 02	Lab 1: Analysis of Behavior-Constructing an Ethogram
September 09	Lab 2: Trip to Lehigh Valley Zoo-Constructing an Ethogram
September 16	Lab 3: Trip to Lehigh Gap Nature Center-Monarch Butterfly Tagging
September 23	NEES Conference-No Lab
September 30	Kuserk/Sipe Wedding-No Lab
October 07	Lab 4: Trip to Bake Oven Knob-Raptor Migration Behavior
October 14	Lab 5: Learning Behavior in Mice
October 21	Lab 6: Altruism and the Evolution of Cooperative Behavior
October 28	Lab 7: Raptor Feeding Behavior: An Analysis of Owl Pellets
November 04	Lab 8: Behavior Genetics of Mice-Exploratory Behavior
November 11	Lab 9: Behavior Genetics of Mice-Agonistic Behavior
November 18	Work on Independent Project
November 25	No Lab – Thanksgiving Recess
December 02	6th Biennial Moravian College Animal Behavior Conference