

# Comparative Psychology and Animal Behavior

**PSY 316**

**ID: 2646**

Fall 2010

Instructor: Elena Kosterina, MA

Office: AUCA Main Building, 209

Office phone: 663309 (\*239)

Email: [elena.kosterina@gmail.com](mailto:elena.kosterina@gmail.com)

Course language: English

Classes: W. 14-10

Office hours: by appointment

Prerequisites: PSY 111, 110/102/105, PSY 122.

Number of credits: 2

Course status: required

**Course description:** The course will provide general overview of basic theoretical concepts of ethology and evolutionary psychology. The course will focus specifically on a range of animal behavioral traits, such as foraging, mating strategies, communication and many others. The main objective of the course is to provide students with the opportunity to see the study of animal behavior as an essential part of contemporary psychological science and perceive the importance of insights in evolutionary psychology for development of psychology and understanding human behavior.

## **Required reading:**

L.A. Dugatkin. *Principles of Animal Behavior*. QL 751 D 748 2009

Wallace, R.A. *The Ecology and Evolution of Animal Behavior*. Goodyear publishing company, inc.

QL 751 W 253 1979 (AUCA library reading hall)

Sinnervo, B. *Animal Behavior*. (to be distributed)

Goldsmith, T. H., 1991. *The Biological Roots of Human Nature*. (to be distributed)

Mayr, E. 1970. *Populations, Species and Evolution*. QH 371 M33 1970

## **Recommended reading (Ebrary resources):**

Ploger, B.J., Yasukama, K. 2003 *Exploring Animal Behavior in Laboratory and Field*.

Zuk, M. *Sexual Selections: what we can and can't learn about sex from animals*.

Dugatkin, L.A., Reeve, H.K. *Game theory and animal behavior*.

Alverdes, F. *Social Life in the Animal World*.

## **Course requirements and evaluation:**

1. **Attendance – 5%.** It is recommended that students attend all the classes (missing of more than 2 classes will effect this grade).
2. **Participation – 10%.** Classes of the course are designed to facilitate discussion of the material covered on the previous lecture in the first part of the class, and proceed with new material or presentations in the final part of the class. Participation in discussions and exercises will help students to understand the material of the course and to prepare for exams.

3. **Discussion leading – 20%**. There are **five (5) discussions** planned for the course. For each discussion, there will be **discussion leaders**. Discussion leaders will have to prepare **outline and questions for the discussions**, preparation of some related materials or illustrations is encouraged. It is required that discussion leaders consult with the instructor about discussion materials.

4. **Research grant proposal – 30%**. Students will be asked to prepare a term paper in the form of a grant proposal. Example version of the proposal can be found **in the Recourses folder**.

**Format:** 5 pages, 1,5 space 12 font Times New Roman, standard indentation, APA style formatting.

**Content:** hypothetical (but realistic) research in animal behavior. Please choose the problem or aspect of animal behavior you want to study (specific trait in a specific animal); provide overview of literature focusing on this topic (on this species and on this trait in different species); state the significance of your study (why exactly it is important to research the aspect of behavior you have chosen); formulate the hypothesis of the study; describe the methods and approaches you will use to do the research; **describe and explain expected outcomes of your study**. Keep in mind: you should write the study in a way that should give you more chances to receive a grant for your research; this will help you to be even more motivated!

**Specified content:** 1. Introduction. (significance of the topic)

2. Literature review and hypothesis statement.

3. Methods.

4. Expected outcomes of the research.

5. References.

**Deadlines:** The **draft** of proposal should be submitted anytime before the 24<sup>th</sup> of November. I **will not** accept late drafts. The draft of the proposal is worth **5% of the final grade**.

The **final version** is due on the 10<sup>th</sup> of December.

Proposal grading criteria:

Draft (submission on time and structured content of the work) – 5%

Introduction (overview of the topic, applicability, significance) – 5%

Literature review – 5%

Hypothesis – 2%

Methods (applicability) – 3%

Outcomes (conclusions based on literature review, the reasons to expect such outcomes, the areas to apply your study to) – 7%

Formatting – 3%

5. **Exams – 35% (midterm exam – 15% and final exam – 20%)**. Exams will contain multiple-choice questions, open questions and a couple of short essay questions. The exemplary tasks will be provided before the exam for students to get prepared for the format of the test.

6. **Home assignments**. During the course students will be offered various home tasks and in-class assignments in different forms. These will be graded **as part of participation grade**. The essays, topics of which are provided in the lectures, should be at least **300 words** long. **No late assignments** will be accepted.

**Grade conversion scale:**

A	91 – 100%	C	61 – 65%
A-	86 – 90%	C-	56 – 60%
B+	81 - 85%	D+	51 – 55%
B	76 – 80%	D	46 – 50%
B-	71 – 75%	D-	41 – 45%
C+	66 – 70%	F	40 and less % of the final grade.

**Class schedule:**

Date	Topic	Readings	Discussion topics
25.08	<b>Introduction.</b> <b>Foundations of ethology and ecology.</b> <b>Human sociobiology.</b>	Dugatkin, L.A. ch 1.	
1.09	<b>Level of behavioral analysis: proximate, ultimate factors.</b>	Dugatkin, L.A. ch 2,3. Goldsmith, T.H. ch. 1, 4.	
8.09			<i>Speciation mechanisms.</i> <i>Human beings as a biological species.</i> Ernst Mayr ch.5. ch.6 p. 76-81. Sinervo, B. ch.5 p. 81-82, 83-84.
15.09	<b>Individual learning and Cultural transmission.</b>	Dugatkin, L.A. ch 4,5. Goldsmith, T.H. ch. 6.	
22.09	<b>Communication.</b>	Dugatkin, L.A. ch 12.	
29.09	<i>Prisoner's Dilemma experiment.</i> (Ploger, B.J. ch 33.) <b>Cooperation.</b> <b>Kinship.</b>	Dugatkin, L.A. ch 8,9.	<b>Quick discussion:</b> <i>True altruism in animal and human psychology.</i>
6.10			<i>Insights and problems of application of Emlen's family evolutionary theory to human species.</i> <u>Emlen, S. <i>Evolutionary theory of the family.</i> 1995</u> <u>Davis, J. Daly, M. <i>Evolutionary theory of the human family.</i> 1997</u>
<b>13.10</b>	<b>Midterm exam.</b>		
<b>Fall break</b>			
27.10	<b>Mating systems and sexual selection.</b>	Dugatkin, L.A. ch 7,6.	
3.11			<i>Evolution of mate choice and sexual selection. Application to human behavioral patterns.</i>

11.11	<i>Optimal foraging theory experiment.</i> (Ploger, B.J. ch 34.) <b>Foraging.</b> <b>Antipredator behavior.</b>	Dugatkin, L.A. ch 10. Dugatkin, L.A. ch 11.	
17.11	<b>Habitat choice, territoriality, migration.</b> <b><u>Proposal draft deadline.</u></b>	Dugatkin, L.A. ch 13.	
24.11			<i>Should animals be used in psychological research?</i> (Ploger, B.J. appendix A, p.399.)
1.12	<b>Animal personalities.</b> <b>Animal cognition.</b>	Dugatkin, L.A. ch 15,17.	
8.12			<i>Autism and animal behavior insights.</i> <i>Discussion of the book “<b>Animals in Transition</b>” by Temple Grandin..</i>
<b>Final exam.</b>			