

#### ENTOMOLOGY DEPARTMENT

# **EVOLUTION - INSECTS**

**COURSE SYLLABUS** 

**August-December 2012** 

### (I)\_CLASS INFORMATION

Course Code: ENTO 896 Sect. 701 Credits: 3

## (II) INSTRUCTOR INFORMATION

Dr. Helena Puche ♦ Email: hpuche2@unl.edu ♦ Prerequisites: None

#### (III) COURSE DESCRIPTION

Using many insects as examples, this course in evolution will give participants a chance to discuss and learn new ideas about current and foundational issues in evolution starting with Darwin's voyage of the Beagle and the Darwinian Natural Selection Theory. The course will cover the mechanisms of evolution, Mendelian genetics in populations, the genetics of homology and evo-devo, adaptations, speciation, sexual & king selection, and social behavior.

### (IV)\_LEARNING RESOURCES & TEXT

Freeman, S. & J.C. Herron. 2007. Evolutionary Analysis. 4<sup>th</sup> ed. Pearson Benjamin Cummings.

# (V)\_COURSE CONTENTS

	DATES	TOPIC	LAB ACTIVITY
Week 1	AUG 20	Welcome - Read materials	QUIZ 1 Pre-assessment
Week 2	AUG 27	Evolutionary Theory	QUIZ 2 Answer threads
Week 3	SEP 03	Darwinian Natural Selection	
Week 4	SEP 10	Evidence of Evolution – PROJECT IDEA	QUIZ 3 Evol. Plug-In Cheddar man
Week 5	SEP 17	Mendelian genetics	QUIZ 4 Inheritance lab
Week 6	SEP 24	Selection and Mutation as mechanisms of Evolution	QUIZ 5 HWE - Allele exercises
Week 7	OCT 01	Adaptations	QUIZ 6 Species construction
Week 8	OCT 08	Sexual Selection	
Week 9	OCT 15	Fall Break	BREAK
Week 10	OCT 22	Evolution and Conservation	
Week 11	OCT 29	Kin selection and Behavior	PROJECT DRAFT DUE
Week 12	NOV 05	Speciation	QUIZ 7 Lizards allopatry
Week 13	NOV 12	Reconstructing Evolutionary trees	QUIZ 8 Evolutionary trees
Week 14	NOV 19	Development and Evolution	
Week 15	NOV 26	Evolution and Society	
Week 16	DEC 03	Final Project Presentations	QUIZ 9 Post-assessment