## ENTOMOLOGY DEPARTMENT

# EVOLUTION - INSECTS <br> COURSE SYLLABUS 

August-December 2012

## (I)_CLASS INFORMATION

Course Code: ENTO 896 Sect. 701
Credits: $\mathbf{3}$

## (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. $4^{\text {th }}$ 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 <br> Evidence of Evolution - <br> PROJECT IDEA | QUIZ 3 Evol. Plug-In Cheddar man |
| Week 4 | SEP 10 | Qendelian genetics | QUIZ 4 Inheritance lab |
| Week 5 | SEP 17 | Selection and Mutation as <br> mechanisms of Evolution | QUIZ 5 HWE - Allele exercises |
| Week 6 | SEP 24 | QUIZ 6 Species construction |  |
| Week 7 | OCT 01 | Adaptations |  |
| Week 8 | OCT 08 | Sexual Selection |  |
| Week 9 | OCT 15 | Fall Break |  |
| Week 10 | OCT 22 | Evolution and Conservation <br> Keek 11 | OCT 29 |$\quad$| Kin selection and Behavior |
| :--- |

