

SYSTEMATIC ZOOLOGY
BSPM/BZ 424
SPRING SEMESTER 2012

Instructor: B.C. Kondratieff
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Textbook on RESERVE:

Principles of Systematic Zoology, 2nd Edition
E. Mayr and P. D. Ashlock, 1991.
Biological Systematics. Principles and Applications.
R. T. Schuh. 2000.

Objectives of Course:

1. Gain an understanding of the principles of systematic zoology.
2. Gain an understanding of the concepts of speciation and phylogeny.

Lecture Syllabus

8:00-8:50AM MWF
120 Shepardson

For each lecture topic there will be key papers available via RamCT

1. Importance of systematics
2. Theories of biological classifications and their history
3. Species concepts, subspecies
4. Speciation theory, higher categories
5. Taxonomic characters
6. Museums, publications in systematic zoology, taxonomic keys
7. Deception among animals
8. Behavior and systematics
9. Zoological Nomenclature

Readings: International Code of Zoological Nomenclature 1999.

10. Physiological, biochemical, molecular techniques in systematics
11. Sources of variation
12. Phylogeny, biogeography
13. Cladistics, guest lecture-using phylogenetic analysis software
<http://www.cladistics.org/>
14. Phenetics
15. The future, extinction, final thoughts

Mandatory Class: January 27, 2012. “Use of Library Resources for Finding Zoological Systematic Literature.” (Morgan Library Computer Classroom 175) presented by Dr. Shannon Farrell.

Project: An outline of the systematics of a specific group of animals (see handout).

Cheating and Plagiarism Guidelines [from CSU Policies and Guiding Principles, 2011].

Cheating

There is a ZERO-TOLERANCE policy for cheating in BSPM/BZ 424. “Cheating includes using unauthorized sources of information and providing or receiving unauthorized assistance on any form of academic work. Examples include copying the work of another student on an exam, problem set, or quiz; taking an exam or completing homework for another student; possessing unauthorized notes, study sheets, answer codes, programmed calculators, or other materials during an exam; and falsifying exams or other graded paper results.”