

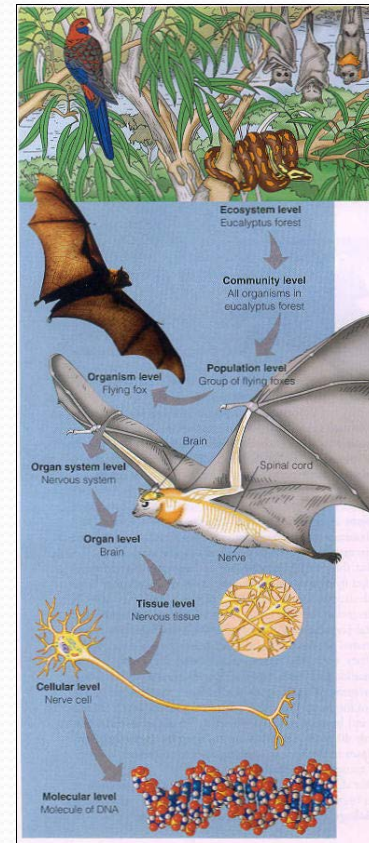
Principals of General Zoology (Zoo-103)



Zoology Department, 1434-1435H

General Information

- Dr. Ashraf Mashaly
- 2B 141
- 46-73465
- mmashely@ksu.edu.sa
- Office hours
 - Sunday, 11am – 12am
 - Also by appointment



Learning Objectives

- Structure, function and cytogenetics of the animal cell
- Different animal tissues
- Taxonomy
 - Important Phyla, Classes, Genera, and Species
- Anatomy and physiology
 - Interesting structures
 - Nutrition, digestion and metabolism
 - Blood composition and function

Assessment

- Lecture
 - 2 lecture exams (30%)
 - Cumulative final exam (40%)
 - 70% of total grade
- Laboratory
 - 2 laboratory exams
 - Lab notebook
 - Field trip or paper
 - 30% of total grade



Tips for Succeeding in Lecture

- Read assigned chapters before attending lecture (do the same for lab)
- Study at least 4 hrs per week, from notes
- See me with specific questions
- Tests are combination of multiple-choice and short answer / fill-in questions
- Test questions will be derived from both the lecture notes

Grading and “Will There Be a Curve?”

- Standard
 - A = 90% or above
 - B = 80% - 89%
 - C = 70% - 79%
 - Etc.
- Plus / Minus
 - A+ = 95% or above
 - A = 90% - 94%
 - B+ = 85% - 89%
 - Etc.

Missed / Late Exam Policy

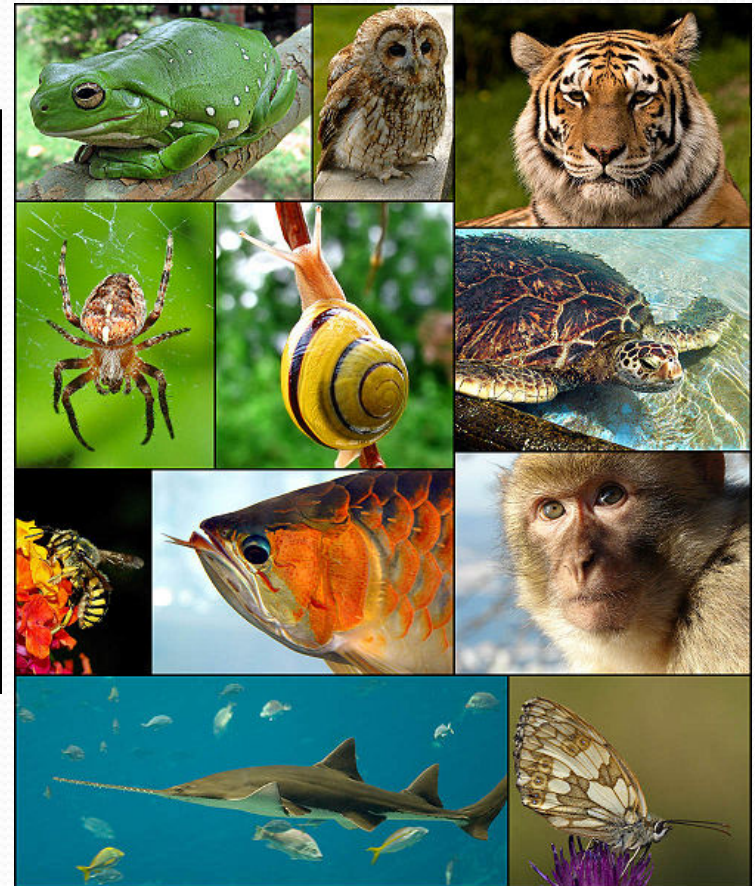
- No make-up exams, except with:
 - Medical documentation
 - Legal documentation
- Make-up exams will be essay form
- If you arrive late to an exam, and even one exam has already been turned in, you will be given an essay test

The Biological Sciences

- Biology – study of life
- Many different fields (some examples)
 - Zoology – study of animals
 - Anatomy – study of morphological structures
 - Physiology – study of how body structures (cells, organs, organ systems, etc) function
 - Evolution – study of change over time (molecular level to ecosystem level)
 - Ecology – study of how organisms interact and affect their environments, or vice versa

Zoology (Science of animal)

Is the branch **of Biology** that focuses on the structure , التركيب , function , الوظيفة , behavior , السلوك , and evolution التطور **of animals**



Subfields of zoology

- **Zoography** , علم الحيوان الوصفي also known as descriptive zoology: describes animals and their **habitats** أماكن معيشتها
- **Comparative anatomy** : علم التشريح المقارن studies the structure of animals .
- **Animal physiology** : علم وظائف الأعضاء is the study of the mechanical, physical, and biochemical functions of animals .
- **Molecular Biology** : علم البيولوجيا الجزيئية studies the common **genetic** الوراثية and developmental التطورية mechanisms of animals and plants.

Subfields of zoology

- **Behavioral ecology** علم البيئة السلوكي : is the study of the ecological and evolutionary basis for animal behavior, and the roles of behavior in enabling an animal to adapt (يتكيف) to its environment (both intrinsic داخليا and extrinsic وخارجيا).
- **Evolutionary biology** : علم البيولوجيا التطوري See of both animals and plants is considered in the articles on evolution, population genetics, heredity, variation, Mendelism, reproduction.
- **Systematics** علم التصنيف and **taxonomy** : علم التقسيم classify (يصنف) and group species (ويرتب الأنواع) via common descent and regional associations .

Subfields of zoology

- **Entomology** : علم الحشرات is the study of insects, the largest group of animals.
- **Palaeontology** : علم الحفريات is the study of prehistoric life, including organisms' evolution and interactions with each other تفاعل الكائنات فيما بينها and their environments. As a "historical science"
- **Ethology** : علم السلوك is the study of animal behavior