

Biology 10-Introduction to Biology

Fall 2006

Instructor: Krista M. Granieri

Office hours: By email anytime OR by Appt

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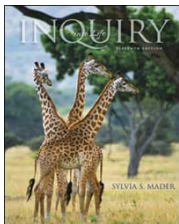
Lecture: Tuesday 6:00-9:00pm C104

Lab: Thursday 6:00-9:00pm C104

Today's Agenda

1. Course Information
2. Introduction to Life

Text:



Grading Protocol

Lecture:

Lecture Exams (3 @ 250pts)	750
Final Exam	300
Web Quizzes	210
Lecture Total	1260

A = 90-100%
B = 80-89%
C = 67-79%
D = 55-66%
F < 54%

Lab:

Lab Assignments	120
Lab Participation	25
Lab Quizzes	195
Lab Total	340

Final Exam

Tuesday, Dec. 19th at 6pm

CLASS RULES

- 1. READ THE SYLLABUS.** You are responsible for the information presented there.
- 2. ATTENDANCE.** Come to class. I will do what I can to encourage regular attendance.
- 3. NO CELL PHONES.** Turn 'em off. If vibrate-do not answer.
- 4. PARTICIPATE.** Ask questions in class. Get a study partner or group and study together.
- 5. NO "MAKE-UP" WORK.**
- 6. MISSED EXAMS.** If you miss an exam (for a valid & documented reason) and you contact me within 24hrs, you will receive a grade of your lowest exam grade minus 10%. If you miss more than one exam or if you miss the final you will not pass the course.

The Website

<http://instruct.westvalley.edu/granieri>



KRISTA M. GRANIERI
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COURSES:

Introductory Biology
(COA) Bio10
General Biology
(Ohlone) Bio130

ANATOMY &
PHYSIOLOGY Bio103A
(Ohlone)

MICROBIOLOGY
(Foothill) Bio41

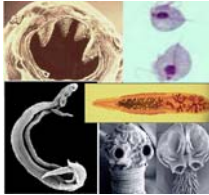
NUTRITION
(FH) Bio45

HUMAN BIOLOGY
(WV) Bio11

HUMAN BIOLOGY
(FH) Bio14

ANATOMY &
PHYSIOLOGY (Gavilan)
Bio15

PARASITOLOGY ATLAS



JOHN KYRK BIOLOGY ART

[Biology Links](#)
[Anatomy & Physiology](#)
[Microbiology](#)
[Online Research](#)
[Scholarships](#)
[Internships](#)

[Bachelor's &
Graduate Programs](#)

[Alma maters](#)

[Just for Fun](#)

NUTRITION & HEALTH

SEXUALLY TRANSMITTED DISEASE INFO



College of Alameda

Introductory Biology

BIOLOGY 10



Lecture: TUESDAY 6:00-9:00PM
Lab: THURSDAY 6:00-9:00pm



FALL 2006 Biology 10 COURSE INFORMATION

Nutrition & Health

[VITAMIN TABLE](#)

[BOSTON COLLEGE
NUTRITION SUPER-
HIGHWAY](#)

[HEALTH
CENTRAL.COM](#)

[WEIGHT LOSS &
DIET INFO](#)

[QUACKWATCH.COM](#)

Biology 10:
Introductory Biology at
College of Alameda



This is an introductory biology course designed for non-science majors. The course will begin with a basic introduction to scientific inquiry and the field of biology. We will spend the first part of the course studying the concepts that are key to understanding biology including basic chemistry, cell structure and the biochemical nature of heredity. Students will learn how the genetic material that directs conception and development has provided for continuity among all species since life began on Earth. Next, we will study the structure and function of mammals focusing on those systems that model broader biological concepts. Finally, we will study the diversity of organisms on Earth and investigate the ecological relationships between them.

STD Links

[NATIONAL
INSTITUTE OF
ALLERGY &
INFECTIOUS
DISEASE](#)

[THE BODY-HIV
INFO](#)

[UNAIDS-WORLD
HIV INFO](#)

Biology: Study of Life

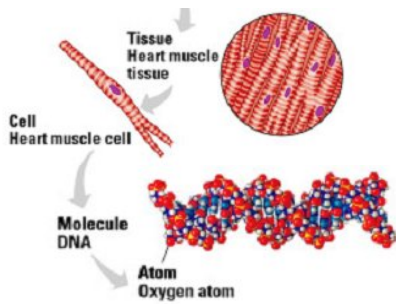
- Characteristics
- Hierarchies
- Interactions/Ecology
- Classification

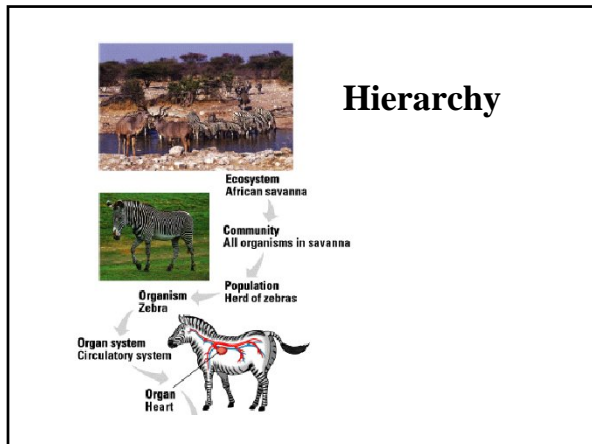
Characteristics of Life

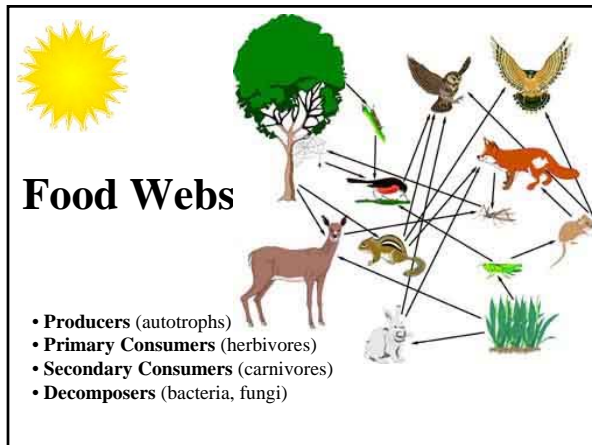
What makes something alive?

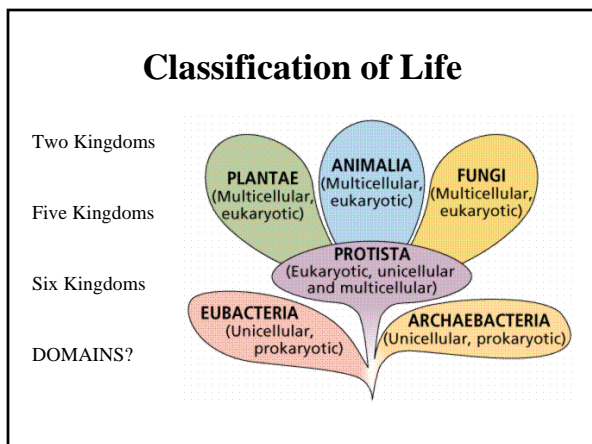
Organization/Hierarchy
Homeostasis
Growth/development
Interactions
Metabolism
Adaptation
Reproduction
Response to stimuli

Hierarchy

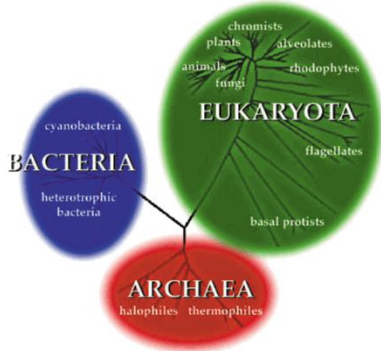




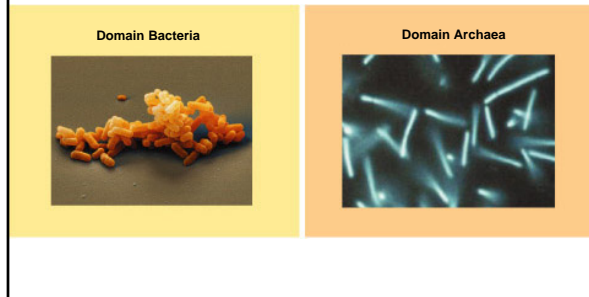




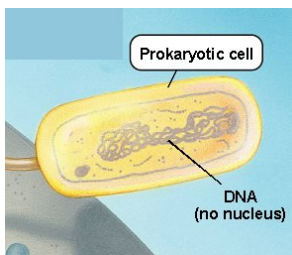
Classification of Life



Bacteria and Archaea are Prokaryotic Domains



Prokaryotic Cells are Small & Simple



- DNA
- Plasmids
- Asexual reproduction
- Cell membrane
- No nucleus
- No organelles
- No compartments
- Small single cells

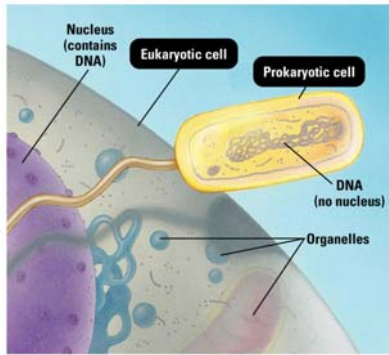
The Eukaryotic Domain - 4 Kingdoms

- Protista
- Plantae
- Fungi
- Animalia



Eukaryotic Cells are Large & Complex

- DNA
- Large cells
- Cell compartments
- Organelles
- Nucleus
- Ability to specialize
- Can be multicellular
- sexual or asexual reproduction



Classification Scheme

- Domain
- Kingdom
- Phylum
- Class
- Order
- Family
- Genus
- Species

Genus species
Ex. *Homo sapien*
Mycobacterium tuberculosis
