DIVERSITY AND ECOLOGY
BIO 213
Instructor: Laura I. Gonzalez
Office hours: T, TH 15-16:30
Office: Bio Lab 114 CB
E-mail: ligg@mail.utexas.edu
Phone: 471-5368

Teaching Assistant: Krushnamegh Kunte
Office Hours: E-mail/call me and drop by
Office: Patterson 627
E-mail: krushnamegh@mail.utexas.edu
Phone: 471-4506
• **Course website:**  
  www.sbs.utexas.edu/gonzalez/bio213.htm

• **Course description:**  Bio 213 is a required course for students pursuing a Major in the Natural Sciences. It provides an introduction to the general patterns of biological diversity and the mechanisms behind it.

Lectures

- T, TH: 11:00-12:00 at TAY 2.006
- Outlines posted on course website evening before (by 6:00 PM) each scheduled lecture
Why attend lectures?

• Demonstrations of key points to learn
• Thorough explanations of novel or tricky concepts and terms
• Exams will be solely based on lecture material
Discussions

• See syllabus for schedule
• Discussion of scientific articles and lecture participations
• Articles posted on the web by TH evening (except those for week 1: https://webspace.utexas.edu/kuntekj/Bio213)
• Exam reviews
Why attend discussions?

- Designed to reinforce the lecture material
- 15% of final grade
- 11 participations worth 3 points/each for a total of 33 points
- 7 articles worth 6 points each for a total of 42 points
Discussion

• Participations: weekly quizzes on last week lectures. Remember you’ll get points even if answers are wrong!
• Questions for reading assignment posted same day article is posted
• See/e-mail TA for any scheduling conflicts
• There will be possible re-scheduling of section 46595
Exams

• Four lecture exams worth 100 points each
• Multiple choice/matching and short essay questions (samples on course web site)
• No short essays on the fourth exam
• See syllabus for schedule
• No restrooms/water/etc breaks allowed
• Student ID will be required
Exams

• Possible re-scheduling of Exam IV. Two options:
  – Maintain May 6th date
  – Move to May 12th

• Bldg and room for each exam will be posted in web site
Exams

• Missed exams only made up in EXTREME situations:
  – Family emergency
  – Health issues
  – Religious holidays
Grading

• Total of 475 points
• 400 for lectures
• 75 for discussions
• Final grade assigned on a curve
• No extra points
How to study for course

- Attend lectures and discussions
- Read book chapters before class
- Read discussion articles
- Understand article/participation questions
- Ask questions
- Don’t fall behind
Scope and organization of Course

- Diversity
  - What is life?
  - Evolution
  - Systematics
  - Ecology

- Course schedule
What is diversity?

• Life forms on Earth
  • Genetic
  • Species
  • Ecosystem
Characteristics of Life

• Organization
• Homeostasis
• Adaptation
• Complex, ordered systems
• Reproduction and heredity
• Growth and development
• Open systems: energy acquisition and release
• Interactions with environment
Evolution

ANCESTOR FINCH
(From South American mainland)

Blue-black grassquit

Large ground finch

Medium ground finch

Small ground finch

Sharp-billed ground finch

Large cactus finch

Cactus finch
Systematics

- PLANTAE (Multicellular, eukaryotic)
- ANIMALIA (Multicellular, eukaryotic)
- FUNGI (Multicellular, eukaryotic)
- PROTISTA (Eukaryotic, unicellular and multicellular)
- EUBACTERIA (Unicellular, prokaryotic)
- ARCHAEBACTERIA (Unicellular, prokaryotic)
Ecology
Bio 213, Spring 2004
Questionnaire
1. Why are you taking this course?
   a) It is a requirement in my major
   b) It is optional and wanted to learn more about the subject
2. What amount of work are you expecting from this course?
   a) A lot
   b) Medium
   c) Some
3. Are you excited about taking this course?
   a) A lot
   b) Medium
   c) Some
   d) Not really
4. Do you think taking this course will be of use in furthering your chosen area of professional/academic studies?
   a) A lot
   b) Medium
   c) Some
   d) Not really
5. Which final grade are you planning to get in this course?
   a) A  
   b) B  
   c) C  
   d) D

6. Coming to this course, what did you know about diversity? Give examples.

7. Coming to this course what did you know about ecology? Give examples.