

1. **Course Name and Title:** Biology 156 General Biology II (Lecture component)

2. **Semester:** Summer 2006 **Time:** 2nd period M-F (9:00 - 10:20 AM)

3. **Professor:** Dr. David L. Schultz; office Location 315 Gouaux Hall; Office Hours 8-9 M-F; Phone number 448-4720; e-mail address: biol-ds@nicholls.edu

4. **Catalog Description:** 4-3-3. A systematic study of the structure, function, ecology, evolution and relationships of organisms including protists, fungi, plants, and animals. This course is designed for students planning to major in biology or a related discipline. Includes laboratory experiences.

5. **Prerequisites for Course:** Completion of Biology 155 with a grade of C or better.

6. **Required Text and Other Materials:** Biology, 7th edition. 2005. P. H. Raven and G. B. Johnson, J. B. Losos, and S. R. Singer . McGraw Hill Publisher.

7. **Course Goals and Objectives:** To present to each student the following principles and concepts in biology: Fungi diversity and structure, Protista diversity and structure, Plantae diversity and structure, Animalia diversity and structure, Principles of ecology.

Upon completion of this course, each student will be able to recognize, and understand the following: (1) structure and function of the Mosses, Liverworts and Hornworts, (2) evolutionary origin and diversity of the vascular plants (3) structure and function of the seedless plants - Ferns, (4) structure and function of the seed Plants - Gymnosperms and Angiosperms, (5) how plants regulate growth and development, (6) nutrition and transport in plants, (7) Protista evolutionary origin and diversity, (8) evolutionary origin and diversity of animals - invertebrates and vertebrates, (9) animal body organization, locomotion, digestion, respiration and circulation, (10) animal homeostasis - nervous system, hormones, kidneys and immune system, (11) animal reproduction (endocrine system) and animal behavior, (12) ecological principles and processes that influence plants and animals.

8. Course Content: (Lecture Component)

I. FUNGI AND PLANTS

Introduction to diversity of life	25
Fungi	30
Evolutionary History of Plants	29
Vascular Plant Structure	35
Plant Development	36
Transport in Plants	37
Plant Nutrition	38
Plant Defenses	39
Plant Sensory Systems	40

CHAPTER

EXAM #1 (100 pts)

II. PROTISTS AND ANIMAL DIVERSITY

Protists	28
Acoelomate Animals	32
Coelomate Invertebrates	33
Vertebrates	34

EXAM #2 (100 pts)

III. ANIMAL FORM AND FUNCTION

CHAPTERS

Organization and Movement of the Animal Body	42
Fueling Body Activities: Digestion	43
Circulation and Respiration	44
The Nervous System	45
The Sensory System	46
The Endocrine System	47
The Immune System	48
Maintaining Homeostasis	49

EXAM #3 (100 pts)

IV. ANIMAL BEHAVIOR AND GENERAL ECOLOGY

Sex and Reproduction	50
Animal Behavior	52
Population Ecology	53
Community Ecology	54
Dynamics of Ecosystems	55
The Biosphere	56
Conservation Biology	57

EXAM #4 (100 pts)

(Taken during finals week)

9. Course Requirements: four (4) timed one hundred point (100 pt) exams. Assigned readings from text.

10. Methods of Evaluation: The lecture component of the course is worth 75% of final grade. The laboratory component of the course is worth 25% of final grade. Grading is on the 10-point scale, 100-90%=A, 89-80%=B, etc.

11. Make-up Procedures: Make-up exams will be given at the end of the semester only if the student has an acceptable excuse. The instructor will determine if an excuse is acceptable. The student has the right to disagree with the instructor's decision and request a meeting with the Department Head and instructor.

12. Academic Honesty Policy: dishonest, disorderly, and disruptive behavior will be dealt with as detailed in the Code of Student Conduct.

13. Attendance Policy: Students must attend class. Students must have an excuse to reenter class. Three or more unexcused absences may result in student being dropped from course.

14. Course web site: www.nicholls.edu/biol-ds/Biol156 - has general course information, lectures, and supplemental information

Course Withdrawal: July 13, 2006. This is last day to drop the course with a "W" grade.